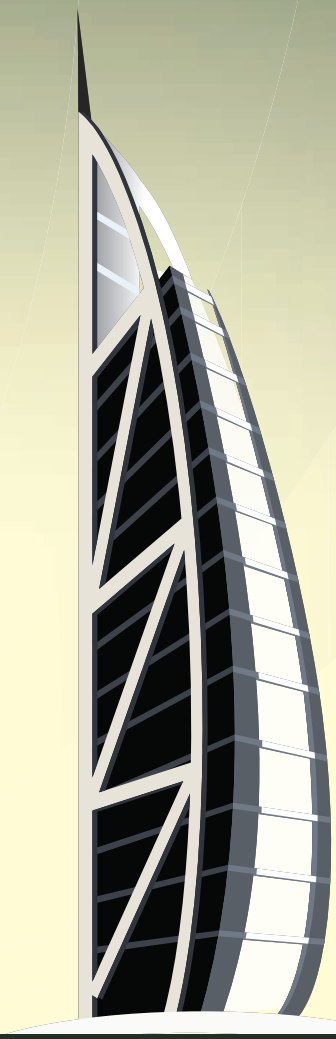
International Telecommunication Union



Final Report

World Telecommunication Development Conference (WTDC-14)

Dubai, United Arab Emirates, 30 March to 10 April 2014

International Telecommunication Union

FINAL REPORT

WORLD TELECOMMUNICATION DEVELOPMENT CONFERENCE

Dubai, United Arab Emirates
30 March – 10 April 2014

Table of Contents

OUTLINE OF THE REPORT OF WTDC-14

Page

Page

Page

Page

Page

Page

Page

Page

Page

Page

Page

INTRODUCTION

Conference Preparation, Official Opening and Conference Structure

1 Background

The sixth World Telecommunication Development Conference (WTDC-14) of the International Telecommunication Union (ITU) was held from 30 March to 10 April 2014 in Dubai, United Arab Emirates. It attracted over 1 300 participants, including over 1 100 government delegates from 137 countries and 9 representatives from Palestine; 89 representatives from 42 public and private-sector entities; 32 participants representing 14 telecommunication-related entities; and 73 representatives from 33 regional and international organizations. The list of participants for the conference, as well as all contributions made to the conference, can be found on the WTDC-14 website at http://www.itu.int/md/D10-WTDC14-C-0119/en.

World telecommunication development conferences (WTDC) give the membership the opportunity to debate the latest trends in telecommunication/ICT development and to establish the priorities of the ITU Telecommunication Development Sector (ITU-D) for the interval between two WTDCs. They also provide the opportunity to consider the initiatives developed at the regional level during the preparatory process and to integrate them into worldwide development efforts and plans. WTDC-14 prepares the way forward for ITU-D and the Telecommunication Development Bureau (BDT) for the period 2015-2018.

The purposes of the conference were to:

- Adopt the Dubai Declaration, highlighting the main conclusions and priorities established by the conference, and reinforcing the political support towards ITU's development mission and strategic objectives.

- Agree on the input of ITU-D to the strategic plan of ITU for 2016-2019, to be considered by the next plenipotentiary conference to be held in Busan, Republic of Korea in October 2014.

- Adopt the Dubai Action Plan (DuAP) that aligns the work of ITU-D with the strategic objectives of ITU so as to assist the ITU membership, and particularly developing countries, in harnessing the full benefits of ICTs, including, on the basis of the result-based management approach:

  - Outputs to fulfil the strategic objectives of ITU-D, as well as their expected results and key performance indicators (KPI);

  - Regional initiatives for Africa, the Americas, the Arab States, Asia and the Pacific, the Commonwealth of Independent States (CIS) and Europe, as well as guidelines for their implementation;

  - New and revised resolutions and recommendations to support the fulfilment of the objectives;

  - New and revised Questions to be studied by ITU-D study groups during the next study period.

2 Preparatory process for WTDC-14

ITU-D organized a series of six regional preparatory meetings (RPMs) in 2013 as part of the preparation for the conference, as requested by WTDC-10 Resolution 31 (Rev. Hyderabad, 2010), as shown in the following table:

Region	Meetings		Chairman	Reports
Africa	Accra (Ghana)	2-4 October 2013	Mr Paarock Van Percy, Director General, National Communication Authority, **Ghana**	Report of the Accra meeting[1]
Americas	Montevideo (Uruguay)	20-22 August 2013	Mr Roberto Kreimerman, Minister of Industry, Energy and Mining, **Uruguay**	Report of the Montevideo meeting[2]
Arab States	Manama (Bahrain)	29-31 October 2013	Dr Mohammed Al Amer, Chairman of the Board, Telecommunication Regulatory Authority (TRA), **Bahrain**	Report of the Manama meeting[3]
Asia-Pacific	Phnom Penh (Cambodia)	30 April – 2 May 2013	Mr Chin Bun Sean, Secretary of State, Ministry of Posts and Telecommunications, **Cambodia**	Report of the Phnom Penh meeting[4]
CIS	Chisinau (Moldova)	19-21 February 2013	Mr Pavel Petrovich Filip, Minister of Information Technologies and Communications, **Moldova**	Report of the Chisinau meeting[5]
Europe	Belgrade (Serbia)	26-28 November 2013	Mr Stefan Lazarević, State Secretary, Ministry of Foreign and Internal Trade and Telecommunications, **Serbia**	Report of the Belgrade meeting[6]

1 http://www.itu.int/md/D10-RPMAFR-C-0021/en

2 http://www.itu.int/md/D10-RPMAMS-C-0061/en

3 http://www.itu.int/md/D10-RPMARB-C-0033/en

4 http://www.itu.int/md/D10-RPMASP-C-0040/en

5 http://www.itu.int/md/D10-RPMCIS-C-0029/en

6 http://www.itu.int/md/D10-RPMEUR-C-0021/en

Following the successful organization of the six RPMs for WTDC-14, the chairman and vice-chairmen of each RPM met on 9 December 2013 in Geneva to consider, as required by *resolves* 2 of Resolution 31 (Rev. Hyderabad, 2010), how best to consolidate the outcomes of the RPMs in preparation for WTDC-14. The meeting elected Dr Mohammed Al Amer from the Kingdom of Bahrain as chairman. The meeting adopted the report of the Chairman of the RPM Coordination Meeting to the Telecommunication Development advisory Group (TDAG)[7].

The outcome of each RPM followed the same structure and approach: programmes (number, titles and priority areas), regional initiatives (objectives and expected results), study group matters (proposals for new or revised Questions, working methods, structure) and proposals for new or revised resolutions.

As required by *resolves* 3 of Resolution 31 (Rev. Hyderabad, 2010), the last TDAG meeting of the 2011-2014 cycle (18th meeting of TDAG) was convened from 11 to 13 December 2013, in order to study, discuss and adopt the consolidated report presenting the outputs of the six RPMs in final form, as a basic document to be included, once approved by TDAG, in the report on the application of this resolution for submission to WTDC.

Two events took place on the eve of the conference.

Information Session on Strategic planning and results-based management

The WTDC Information Session on Strategic planning and results-based management (RBM), a methodology being implemented throughout the United Nations system, was held on Saturday, 29 March 2014. The presentation provided a comprehensive introduction to the ITU-D strategic planning process, highlighting the key components of the ITU results-based management framework. The fundamental aims of RBM to improve the effectiveness, efficiency, transparency and accountability were also described, as well as how the shift in focus from activities to results will help to better articulate strategic goals, objectives, outcomes and outputs, and better evaluate their achievement using indicators and targets.

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[7] http://www.itu.int/md/D10-TDAG18-C-0010/en

Executive Strategic Dialogue on Broadband for sustainable development

The Executive Strategic Dialogue on Broadband for sustainable development was held on Saturday, 29 March and provided delegates with a platform for interactive debate on the trends, challenges and opportunities of the telecommunication/ICT sector. In particular, it focused on the strategies and policies directed towards broadband development worldwide, and the challenges and opportunities offered via high-speed networks and e-services.

3 Official opening of the conference

The conference opened with a welcoming statement by the Chairman of the United Arab Emirates Telecommunication Regulatory Authority, Mr Mohamed Al Qamzy, who recalled several ITU conferences held in Dubai in recent years and thanked the Union for entrusting UAE with the task hosting such important events.

The conference observed a minute of silence for delegates and ITU colleagues who had passed away since WTDC-10 in Hyderabad, India.

A Short Documentary was shown to conference participants giving concrete examples of how ITU-D is helping countries around the world to ensure that all segments of their respective societies have access to the benefits of ICTs.

Filmed in Bulgaria, Costa Rica, Japan, Jordan, Moldova and Tanzania, the documentary focuses on the role of ICT in saving lives, particularly in the immediate aftermath of disasters. It also illustrates, for example, how ITU-D assistance is helping remote schools and communities in developing countries to access the Internet, to bridge the gender connectivity gap by enabling increasing numbers of girls and women to acquire ICT skills, and to enable persons with disabilities to better integrate into society. In another example, a man in Costa Rica explained how he was able to quit smoking through access to an ITU-WHO joint m-health initiative known as m-cessation. The sequence in Japan focused on ITU assistance in providing mobile satellite communication equipment to help authorities coordinate the relief operation in the wake of the earthquake and tsunami which struck the country in 2011.

Speaking at the opening session of ITU's sixth quadrennial World Telecommunication Development Conference, the theme of which is "Broadband for sustainable development", the ITU Secretary-General, Dr Hamadoun I. Touré, called on participants to work together with ITU to ensure universal broadband connectivity, stressing the importance of public-private partnerships towards achieving this goal.

"What we decide and define here over the next two weeks will shape not just the future of ICT development over the next four years, but the future shape of the very world we live in," Dr Touré stated.

"ICTs – and in particular broadband networks – offer perhaps the greatest opportunity we have ever had to make rapid and profound advances in global social and economic development.

This is of tremendous and timely importance, as we approach the cusp between the Millennium Development Goals next year, and the beginning of the post-2015 development process."

The conference heard from Dr Touré how the ICT landscape had evolved in "extraordinary and unexpected ways" since WTDC-10. He noted, for example, how the fall in the number of fixed-line subscriptions had contrasted with the exponential growth of mobile-cellular subscriptions, which had increased by almost 2.2 billion over the same period.

"And the great news for this conference", Dr Touré added, "is that almost all of this growth has been in the developing world, which accounted for 90 per cent of the net additions."

He noted that the same pattern had occurred with the Internet, with 817 million of the 1 billion new Internet users over the past four years coming from the developing world.

The ITU Secretary-General cautioned, however, that much remained to be done to reduce the digital divide. He recalled, for example, that more than two thirds of people in the developed world have access to the Internet, compared to less than one third of the populations in less developed countries. He also noted that fixed- and mobile-broadband penetration rates at the beginning of 2014 stood at 27.2 per cent and 74.8 per cent, respectively, in developed countries, compared to 6.1 per cent and 19.8 per cent in developing countries.

"And this is why 'Broadband for sustainable development' has been chosen as the theme for WTDC this year. Like you, I am convinced that by extending access to broadband, countries will quickly accelerate sustainable social and economic progress.

By delivering efficiencies across so many areas – from education and healthcare to transportation, water and energy – broadband networks can quickly pay for themselves, creating a virtuous circle of investment, productivity and human development," he added.

To achieve these goals, Dr Touré said he is confident that the public and private sectors will work together to invest in and roll out the necessary infrastructure. "They did this so well in the creation of mobile-cellular networks in the developing world, and I expect to see the pattern continued for broadband. I am also convinced that, in partnership, they will also help create the necessary services that people need, and that we will quickly see enriched content developed and created that will start off a virtuous circle in stimulating demand. As this happens, we will rapidly see broadband reach the remotest corners of our planet," he said.

In his closing remarks the ITU Secretary-General called on the conference participants to "dream big. Let's be bold. Let's work together to develop the programmes and projects that will ensure ICTs really do deliver a better quality of life – for all the world's people."

The Director of the ITU Telecommunication Development Bureau (BDT), Brahima Sanou, also noted the rapid growth of ICTs over the past four years, and recalled that he would be giving a 'Hyderabad to Dubai' progress report at a later stage of the conference that would provide a solid foundation for the Dubai Plan of Action designed to cover the next four-year cycle.

Among ITU's achievements over the past four years, Mr Sanou observed that ITU had:

- continued to convene the world's largest gathering of regulators and to track and influence the ICT regulatory environment;
- continued to provide assistance in disaster risk reduction, preparedness and response, through the design of national emergency telecommunication plans, the setting up of emergency early-warning systems and the development of emergency telecommunication equipment;
- trained over 1 million women in the use of ICTs under a women's digital literacy campaign launched in partnership with the Telecentre.org Foundation;
- quantified for the first time the size of the digital gender gap;
- assisted 25 countries in transitioning from analogue to digital broadcasting and 43 countries in spectrum management and monitoring.

The Director of BDT made special mention of three initiatives he has launched which have met with considerable success, namely the m-Powering Development initiative, to extend the benefits of mobile technology to all segments of society; the Smart Sustainable Development Model, to establish a link between rural telecommunication and ICT development and disaster risk reduction and management; and the ITU Academy, which integrates all ITU training activities under one umbrella and serves as a platform for sharing training opportunities in the ICT sector.

Mr Sanou recalled, however, that there are people who had "never seen a phone, people who do not know what the Internet is, and people who do not know that ICTs can change their lives" and that 92 per cent of those not online were in in developing countries. "And that is the reason why we are here. Our mission is far from over."

"Building confidence and security in the use of ICTs is also at the top of our agenda," he said. "We must continue to work together towards creating enabling environments that foster a transparent legal and regulatory framework to stimulate investment and promote universal, ubiquitous and affordable access to ICTs," he concluded.

The full texts of the opening remarks may be found in the annexes section of this report.

4 Conference structure

WTDC-14 adopted the following conference structure at its first plenary meeting.

Meeting of heads of delegation

Terms of reference: In accordance with No. 49 of the General Rules of conferences, assemblies and meetings of the Union, the inaugural meeting of the conference shall be preceded by a meeting of heads of delegation. At this meeting, the heads of delegation shall prepare the agenda for the first plenary meeting and make proposals for the organization, chairmanships and vice-chairmanships of the conference, its committees and, as appropriate, working group(s) of the plenary.

Committee 1: Steering Committee

Terms of reference: To coordinate all matters connected with the smooth execution of work and to plan the order and number of meetings, avoiding overlap wherever possible in view of the limited number of members of some delegations.

This committee is made up of the chairman and vice-chairmen of the conference, as well as the chairmen and vice-chairmen of the committees and working group(s) of the plenary.

Committee 2: Budget Control

Terms of reference: To determine the organization and facilities available to the delegates, to examine and approve the accounts for expenditure incurred throughout the duration of the conference and to report to the plenary meeting on the estimated total expenditure of the conference, as well as an estimate of the costs that would be entailed by the execution of the decisions taken by the conference.

Committee 3: Objectives

Terms of reference: To review and approve the agenda and make proposals for the organization of work; to review and approve the outputs, key expected results and key performance indicators for the objectives; to review and agree on the related study group Questions and regional initiatives and establish appropriate guidelines for their implementation; to review and agree on relevant resolutions; and to ensure that the output is in accordance with a results-based management approach aiming to improve management effectiveness and accountability.

Committee 4: ITU-D Working Methods

Terms of reference: To review and approve the agenda and make proposals for the organization of work; to examine proposals and contributions relating to cooperation among members; to evaluate the working methods and functioning of the ITU-D study groups; to assess and identify options for maximizing programme delivery and to approve appropriate changes thereto with a view to strengthening the synergies between study group Questions, programmes and regional initiatives.

Committee 5: Editorial Committee

Terms of reference: To harmonize the texts relating to the conclusions of the conference, as defined in Article 22 of the ITU Constitution, in the six official languages of ITU, without altering the sense, with a view to their submission to the plenary meeting for approval.

Working Group: ITU-D Strategic Plan and Declaration

Terms of reference: To draw up a draft Declaration and the ITU-D input to the Union's strategic plan to be adopted at the next plenipotentiary conference.

Explanatory note

In accordance with No. 63 of the General Rules of conferences, assemblies and meetings of the Union, the plenary meeting of the World Telecommunication Development Conference may set up committees to consider matters referred to the conference.

5 Presiding officers of WTDC-14

Following adoption of the conference structure at its first plenary meeting, WTDC-14 elected the following officers:

Chairman of the conference:	Mr Mohamed Al Ghanim (United Arab Emirates)	
Vice-chairmen of the conference:	Ms Margaret Chalwe-Mudenda (Republic of Zambia)	
	Ms Hillary Stuart-Alexander (Jamaica)	
	Ms Nermine El Saadany (Arab Republic of Egypt)	
	Mr Chakrya Moa (Kingdom of Cambodia)	
	Mr Rashid Ismailov (Russian Federation)	
	Mr Frédéric Riehl (Confederation of Switzerland)	
Committee 1 (Steering Committee)	Composed of the chairman and vice-chairmen of the conference and the chairmen and vice-chairmen of the committees	
Committee 2 (Budget Control Committee)	Chairman:	Mr Paarock Van Percy (Ghana)
	Vice-chairmen:	Mr Meshari Al Saab (Kingdom of Saudi Arabia)
		Mr Soichiro Seki (Japan)
		Mr Sohrab Yarahmadov (Republic of Azerbaijan)

Committee 3 (Objectives)	Chairman:	Mr Mário Canazza (Federative Republic of Brazil)
	Vice-chairmen:	Mr Patrick Mwesigwa (Republic of Uganda)
		Mr Mohamed Ben Amor (Tunisia)
		Mr Kishore Babu (Republic of India)
		Mr Almaz Tilenbaev (Kyrgyz Republic)
Committee 4 (ITU-D Working Methods)	Chairman:	Ms Nur Sulyna Abdullah (Malaysia)
	Vice-chairmen:	Ms Lolia Emakpore (Federal Republic of Nigeria)
		Mr Cecil McCain (Jamaica)
		Mr Adel Darwish (Kingdom of Bahrain)
		Mr Vadym Kaptur (Ukraine)
Committee 5 (Editorial Committee)	Chairman:	Ms Laurence Barriac (France)
	Vice-chairmen:	Mr Paul Najarian (United States of America)
		Mr Babiker Saeed (Republic of the Sudan)
		Ms Yapeng Wang (People's Republic of China)
		Mr Vladimir Minkin (Russian Federation)
		Ms Blanca Gonzalez (Spain)
Working Group on ITU-D Strategic Plan and Declaration	Chairman:	Mr Fabio Bigi (Italy)
	Vice-chairmen:	Mr Abraham Djékou (Republic of Côte d'Ivoire)
		Ms Jinane Karam (Lebanon)
		Ms Carmen Ball (Australia)
		Mr Daryn Tuyakov (Republic of Kazakhstan)

6 High-Level Segment policy statements

During the first three days of the World Telecommunication Development Conference in Dubai (WTDC-14), four plenary sessions were dedicated to the High-Level Segment, a special platform for high-ranking officials from Member States and Sector Members to express their views on emerging trends and on matters of strategic importance to the development of the telecommunication and information and communication technology sector. The interest in the High-Level Segment was overwhelming, with no fewer than 72 registered speakers.

A total of 62 high-level speakers addressed the conference (with nine having their statements delivered on their behalf). From the initial list of 72, seven speakers were unable to attend the conference, while three others submitted their policy statements as part of the High-Level Segment, but did not deliver them in the interest of time.

Speakers for the most part were ministers (22 of the 29 ministers from the initial list delivered their statements), or deputy ministers or vice-ministers (six speakers), the remainder being ambassadors, chairmen or directors-general of regulatory bodies, and secretaries-general and chief executive officers from ITU-D member organizations. There were 19 speakers on the first day of the conference (30 March), 35 speakers on the second day (31 March) and eight on the third day (1 April).

The following policy statements were delivered in plenary as part of the High-Level Segment of WTDC-14:

1) Egypt – H.E. Mr Atef Helmy, Minister of Communications and Information Technology

2) United States – H.E. Ambassador Daniel Sepulveda, United States Coordinator for International Communications and Information Policy

3) Azerbaijan – H.E. Dr Ali Abbasov, Minister of Communications and Information Technologies

4) Burkina Faso – H.E. Mr Jean Koulidiati, Minister of Development, Digital Economy and Posts

5) Côte d'Ivoire – H.E. Mr Bruno Nabagné Koné, Minister of Post and Information and Communication Technologies

   Statement delivered on his behalf by Mr Bile Diéméléou, Director General of the Regulatory Authority of Côte d'Ivoire

6) Tunisia – H.E. Mr Tawfik Jelassi, Minister of Higher Education, Scientific Research and Information and Communication Technologies

   Statement delivered on his behalf by Mr Mohamed Ben Amor, Special Adviser to the Minister in charge of International Cooperation

7) Iran (Islamic Republic of) – H.E. Mr Mahmoud Vaezi, Minister of Information and Communication Technology

8) Uganda– H.E. Mr John Nasasira, Minister of Information and Communication Technology

9) Qatar – H.E. Dr Hessa Al-Jaber, Minister of Information and Communication Technology

10) Senegal – H.E. Mr Cheikh Mamadou Abiboulaye Diéye, Minister of Communication and the Digital Economy

11) Mali – H.E Mr Jean-Marie Idrissa Sangaré, Minister of Communication and New Information Technologies

12) Nepal (Republic of) – H.E. Dr Minendra Prasad Rijal, Minister of Information and Communications

13) Montenegro – H.E. Dr Vujica Lazovic, Deputy Prime Minister and Minister for Information Society and Telecommunications

14) Pakistan – H.E. Ms Anusha Rahman Ahmad Khan, Minister of State for Information Technology

15) Afghanistan – H.E. Eng. Amirzai Sangin, Minister of Communications and Information Technology

16) Algeria – H.E. Mrs Zohra Derdouri, Minister of Post and Information and Communication Technologies

17) Kiribati – H.E. Mr Rimeta Beniamina, Minister of Communications, Transport and Tourism Development

18) Sudan – H.E. Dr Tahani Abdalla Attia, Minister of Science and Communications

19) Malaysia – H.E. Mr Ahmad Shabery Cheek, Minister of Communications and Multimedia

20) Mauritania – H.E. Dr Ismail Boddé Cheikh Sidiya, Minister of Employment, Training and Information and Communication Technologies

21) Papua New Guinea – H.E. Mr Jimmy Miringtoro, Minister of Communication and Information Technology

22) Somalia – H.E. Dr Mohamed Ibrahim, Minister of Information, Posts and Telecommunications

    Statement delivered on his behalf by Ibrahim Abdullahi Addo, Director, International Relations, Ministry of Posts and Telecommunications

23) Japan – H.E. Mr Masahiro Yoshizaki, Vice-Minister for Policy Coordination

    Statement delivered on his behalf by Mr Soichiro Seki, Director-General for International Affairs, Global ICT Strategy Bureau

24) Saudi Arabia – H.E. Mr Abdullah Al-Darrab, Governor of Communications and Information Technology Commission

25) China – H.E. Mr Bing Shang, Vice-Minister of Industry and Information Technology

26) Korea (Republic of) – H.E. Mr Jong-lok Yoon, Vice Minister of Science, ICT and Future Planning

27) Bulgaria – H.E. Mr Georgi Todorov, Deputy Minister of Transport, Information Technology and Communications

28) Moldova – H.E. Mr Vitalie Tarlev, Deputy Minister of Information Technology and Communications

29) Greece – H.E. Mr Michalis Papadopoulos, Deputy Minister of Infrastructure, Transport and Networks of the Hellenic Republic

30) Palestine – H.E. Dr Safa Nasser Eldin, Minister of Telecommunication and Information Technology

31) Poland – Ms Magdalena Gaj, President of the Office of Electronic Communications

32) Lebanon – Dr Imad Hoballah, Chairman and CEO, Telecommunications Regulatory Authority

33) Rwanda – Mr François Régis Gatarayiha, Director General, Rwanda Utilities Regulatory Authority

34) Bahrain – Dr Mohammed Al Amer, Chairman of the Board of the Telecommunications Regulatory Authority

35) Canada – Ms Pamela Miller, Director General, Telecommunications Policy, Industry Canada

36) Russian Federation – Mr Rashid Ismailov, Director of the Department for International Cooperation, Ministry of Telecom and Mass Communications

37) India – Mr M.F. Farooqui, Chairman Telecom Commission and Secretary (Telecom)

38) Switzerland – H.E. Mr Frédéric Riehl, Ambassador and Head of International Relations, *Office fédéral de la communication* (OFCOM)

39) Internet Society – Ms Kathy Brown, Chief Executive Officer

40) Arab Information and Communication Technology Organization (AICTO) – Ms Khédija Ghariani, Secretary-General

41) Intel Corporation – Mr Peter Pitsch, Executive Global Director and Associate General Counsel

42) Fibre to the Home Council Middle East and North Africa (FTTH Council MENA) – Dr Suleiman Al-Hedaithy, Chairman

Statement delivered on his behalf by Mr Tony Al-Makdissi, Board Member, FTTH Council MENA

43) Alcatel-Lucent – Ms Gabrielle Gauthey, President, Global Government Sector

44) Nigeria – H.E. Ms Omobola Johnson, Minister of Communication Technology

45) Benin – H.E. Mr Komi Koutché, Minister of Communication and Information and Communication Technologies

Statement delivered on his behalf by H.E. Ambassador Issa Moussa Touré, Embassy of Benin in the United Arab Emirates

46) Djibouti – H.E. Mr Ali Hassan Bahdon, Minister of Communication Responsible for Posts and Telecommunications

47) Niger – H.E. Mr Abdou Mani, Minister of Posts, Telecommunications and the Digital Economy

Statement delivered on his behalf by Mr Iro Sani, President of the Telecommunications Regulatory Agency of Niger

48) Ghana – H.E Mr Edward Omane Boamah, Minister of Communications

Statement delivered on his behalf by Mr Kwaku Ofosu-Adarkwa, Chief Director, Ministry of Communications, Ghana

49) Kenya – H.E. Mr Fred Matiangi, Minister of Information, Communication and Technology

Statement delivered on his behalf by Mr Francis W. Wangusi, Director General, Communications Commission of Kenya

50) Turkey – Dr Tayfun Acarer, Chairman of the Board and President of the Information and Communication Technologies Authority

51) Bosnia and Herzegovina – Dr Kemal Huseinovic, Director General of the Communication Regulatory Agency

52) Kazakhstan – Mr Rizat Nurshabekov, Chairman of the Communication and Informatization Committee, Ministry of Transport and Communications

53) Jordan – Mr Alansari Almashagbah, Member of the Board of Commissioners of the Telecommunications Regulatory Commission

54) Indonesia – Prof. Dr Kalamullah Ramli, Director-General of Posts and Information Technology Affairs, Ministry of Communication and Information Technology

55) Cameroon – H.E. Mr Jean-Pierre Biyiti Bi Essam, Minister of Posts and Telecommunications

56) Ibero-American Association of Research Centres and Telecommunications Firms – Mr Pablo Bello, Secretary-General

57) Higher Multinational School of Telecommunications (based in Dakar, Senegal) – Mr Mohamadou Arabani Saibou, Chief Executive Officer

58) Viet Nam – Mr Doan Quang Hoan, Director-General, Ministry of Information and Communications, Authority of Radio Frequency Management

59) France – Mr David Martinon, Special Representative for International Negotiations on the Information Society and the Digital Economy, Ministry of Foreign Affairs

60) Brazil – Mr Jeferson Fued Nacif, Head, International Affairs National Telecommunications Agency (*Agência Nacional de Telecomunicações* – ANATEL)

61) Argentina – Mr Nicolás Karavaski, Deputy Controller of the National Communications Commission

62) United Arab Emirates – Mr Majed Al Mesmar, Deputy Director General of the Telecommunications Regulatory Authority (Telecom Sector)

The following policy statements were submitted as part of the High-Level Segment of WTDC-14, but were not delivered in plenary:

1) International Federation for Information Processing – Mr Leon Strous, President

2) African Telecommunications Union – Mr Abdoulkarim Soumaila, Secretary General

3) Avanti Communications Group, United Kingdom – Mr Kumar Singarajah, Director of Regulatory Affairs and New Business

All policy statements received can be found on the conference website at the following address:
http://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC14/Pages/PolicySatements.aspx

7 Telecommunication Development Advisory Group Bureau

In application of Resolution 61 (Rev. Dubai, 2014), WTDC-14 adopted the composition of the TDAG Bureau and appointed the TDAG chairman and vice-chairmen, as follows:

Chairman: Mr Vladimir Minkin (Russian Federation)

Vice-chairmen:
Ms Roxanne McElvane (Chairman Study Group 1)
Mr Ahmad Reza Sharafat (Chairman Study Group 2)
Mr Elie Djerambete (Republic of Chad)
Mr Ahmadou Traoré (Republic of Mali)
Mr Nicolás Karavaski (Argentine Republic)
Mr Héctor Edmundo Valdés Moreno (Mexico)
Mr Mohamed Saeed Ali Al Muathen Al Mazrooei (United Arab Emirates)
Mr Al-Ansari Al-Mashagbah (Hashemite Kingdom of Jordan)
Mr Bohyun Seo (Republic of Korea)
Mr Kishore Babu (Republic of India)
Mr Rufat Taghizadeh (Republic of Azerbaijan)
Ms Nurzat Bolzhobekova (Kyrgyz Republic)
Mr Fabio Bigi (Italy)
Mr Dominique Würges (France)

8 For the record

1. The Budget Control Committee, in line with its mandate, estimated the costs that would be entailed by the execution of the decisions taken by the conference. In this regard, the Chairman of Committee 2 reminded the delegates that the actions called for in the above decisions should be undertaken subject to the availability of financial resources. Full details are provided in the Report of the Budget Control Committee to the plenary (Document WTDC-14/97).

2. During the consideration by WTDC-14 of the proposed revisions to Resolution 18, the delegation of the United States of America requested that their statement be included in the final report of the meeting. Accordingly, the statement from the United States related to Resolution 18 (Rev. Dubai, 2014) on special technical assistance to Palestine is set out in Annex D.

3. In considering Resolution 1, it was noted that it might be necessary to improve the resolution between the two WTDCs using TDAG for this purpose. The conference therefore instructed to take the required action by establishing a correspondence group to study the matter and recommend areas of improvement. This is necessary due to the complexity of the resolution and the fact that during WTDC-14 there was little time. It was indicated that this would be in line with the practice adopted by ITU-R and the Radiocommunication Advisory group (RAG), which is assigned such tasks between assemblies. Dealing with Resolution 1 between WTDCs facilitates the work of the subsequent conference. The Russian Federation supported this proposal and requested that this be documented in the minutes of the plenary.

4. WTDC-14 noted that during the consideration of some documents in plenary, certain modifications were proposed and agreed by the plenary. It was further noted that these modifications may have unintended consequences, impacting on areas in other parts of the Final Report dealing with the same issues.

In order to avoid any inconsistency between various parts of the WTDC-14 Final Report, the plenary requested Committee 5 to review the above-mentioned report and, in consultation with the Director of BDT, identify areas that need to be harmonized in order to avoid such inconsistencies.

5. Following the approval of Document WTDC-14/111, the delegation of the United States of America requested that a statement be included in the final report of the meeting. Accordingly, the statement from the United States of America related to capacity building in Internet governance is set out in Annex D.

PART A
Dubai Declaration

The World Telecommunication Development Conference (Dubai, 2014), which took place from 30 March to 10 April 2014 in Dubai, United Arab Emirates, under the theme "Broadband for sustainable development",

recognizing that

a) universal and affordable access to telecommunications/information and communication technologies (ICTs) is essential for the world's economic, social and cultural development, and contributes to building a global economy and information society;

b) robust telecommunication/ICT infrastructure is considered to be an underpinning and enabling platform that should be universally available and accessible to all people to enhance a global economy and information society, and high-speed communication networks directly promote innovation throughout economies as much as electricity and transport networks, among others;

c) widespread conformance and interoperability of telecommunication/ICT equipment and systems through the implementation of relevant programmes, policies and decisions can increase market opportunities and reliability and encourage global integration and trade;

d) broadband access technologies, broadband-enabled services and ICT applications offer new opportunities for interaction among people, for sharing the world's knowledge resources and expertise, for transforming peoples' lives and for contributing to inclusive and sustainable development across the world;

e) opportunities provided by telecommunications/ICTs should be fully exploited, with the aim of ensuring equitable access to telecommunications/ICTs and innovations that foster sustainable socio-economic development, poverty alleviation, job creation, entrepreneurship and promoting digital inclusion and empowerment for all, particularly for women, youth, children, indigenous people and persons with disabilities, including age-related disabilities;

f) with the implementation of the five previous four-year action plans since 1994, the Connect the World initiative and follow-up on Action Lines C2, C5 and C6 subsequent to the World Summit on the Information Society (WSIS), the ITU Telecommunication Development Sector (ITU-D), together with partners and other stakeholders, has made significant progress in enhancing universal access and contributing to the emerging global economy and information society;

g) despite all the progress made during past years, the digital divide still remains, and is compounded by disparities in access, use and skills between and within countries, in particular between urban and rural areas, as well as in the availability of accessible and affordable telecommunications/ICTs, particularly for women, youth, children, indigenous people and persons with disabilities, including age-related disabilities;

h) developing telecommunication/ICT infrastructure in rural and remote areas and ensuring the availability of affordable and accessible ICTs is a key priority for many countries, for which effective, innovative and affordable solutions need to be identified;

i) widespread access to and accessibility of telecommunication/ICT applications and services provide new socio-economic opportunities for all people: in particular, governments, in collaboration with other stakeholders, should strive to provide ICT-based applications and services to people, ranging from e-government, e-health and e-education to e-waste management, which improve transparency, accountability, optimum utilization of resources and access to and use of public services;

j) the growing use of telecommunication/ICT applications provides innovative and beneficial services for users, but also increases the challenge of building confidence and trust in the availability, reliability, security and use of telecommunications/ICTs, bearing in mind the ethical dimension of the information society;

k) all stakeholders play an important role in sustainable development, *inter alia*, through innovation and investment,

therefore declares that

1 Promoting and making available affordable and accessible broadband infrastructure, with appropriate policy and strategy, is a fundamental enabling platform that fosters innovation and drives the development of national and global economies and the information society.

2 Access to affordable, reliable and secure telecommunication/ICT networks, including broadband, and to related services and applications, can facilitate economic, social and cultural development and implement digital inclusion through these means.

3 With convergence, policy-makers and regulators should continue to promote widespread, affordable access to telecommunications/ICTs, including Internet access, through fair, transparent, stable, predictable and non-discriminatory enabling policy, legal and regulatory environments, including common approaches to conformance and interoperability that promote competition, increase consumer choices, foster continued technological and service innovation and provide investment incentives at national, regional and international levels.

4 Increased participation of developing countries in ITU activities to bridge the standardization gap is needed in order to ensure that they experience the economic benefits associated with technological development, and to better reflect the requirements and interests of developing countries in this area.

5 Given the increasing demands for limited radio-frequency spectrum and satellite-orbit resources, effective and efficient spectrum management, including measures for avoiding harmful interference, and the transition from analogue to digital broadcasting are critical issues for policy-makers, regulators, operators, broadcasters and other parties.

6 Building widespread telecommunication/ICT literacy as well as human and institutional capacity in the development and use of telecommunication/ICT networks, applications and services are key to enabling people to access and contribute to information, ideas and knowledge. ICT-based life skills should be further strengthened not only through vocational and education training, including training dispensed in local languages, but also through international ICT volunteer programmes or initiatives. It is very important to take advantage of all facilities, such as schools, libraries, content providers, multipurpose community centres and public access points, in close partnership with all stakeholders. The development of multilingual digital content for software-based applications and the creation of local content as well as content in local languages by stakeholders will help foster an inclusive information society.

7 New and innovative opportunities that the telecommunication/ICT ecosystem can bring to development should empower youth for employment or self-employment.

8 Transparent and collaborative collection and dissemination of quality indicators and statistics that measure and provide comparative analysis of advancements in the use and adoption of ICTs continue to be a major factor for supporting socio-economic growth. These indicators and their analysis provide governments and stakeholders with a mechanism to better understand key drivers of telecommunication/ICT adoption and assist in ongoing national policy formulation. They also serve to monitor the digital divide, as well as progress towards achievement of internationally agreed goals in the post-2015 development agenda.

9 The ITU-D study groups should continue to contribute towards knowledge sharing and capacity building to be made available to the international community. In support of this objective, cooperation among the three ITU Sectors and with other organizations and expert groups should be further enhanced.

10 Building confidence, trust and security in the use of telecommunications/ICTs is a priority, with a need for international cooperation and coordination between governments, relevant organizations, private companies and entities in building capacity and exchanging best practices for the development of related public policies and legal, regulatory and technical measures that address, *inter alia*, personal data protection and child online protection. Stakeholders should work together to ensure the reliability and security of ICT networks and services.

11 Telecommunications/ICTs play a critical role in disaster risk reduction, prediction, preparedness, mitigation and response. It is important for Member States to develop telecommunication/ICT disaster preparedness plans and strategies, taking account of the need for resilient and redundant infrastructures and systems.

12 ITU should support Member States in building capacity regarding the use of telecommunications/ICTs in preparing for and responding to disasters, including in the area of early-warning and disaster preparedness plans, and in encouraging regional and international cooperation, collaboration and information sharing.

13 Telecommunications/ICTs can make a substantial contribution to monitoring, predicting, mitigating and adapting to the adverse effects of climate change. All countries, particularly least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDCs) and low-lying coastal countries, which are vulnerable to global climate change and rising sea levels, should have the means to use telecommunications/ICTs to mitigate and address the effects of climate change, exploring all opportunities provided by telecommunications/ICTs in reducing the negative impact of human activities on the environment.

14 The LDCs, SIDS, LLDCs and countries with economies in transition face the most challenges in the development and use of telecommunications/ICTs. The World Telecommunication Development Conference (Dubai, 2014) reaffirms the ITU-D global commitment to address the special telecommunication/ICT needs of LDCs, SIDS and LLDCs.

15 The regions have articulated their specific priorities in a set of regional initiatives, which can be found in the Dubai Action Plan adopted by this conference. The implementation of these regional initiatives deserve high priority on the part of ITU-D and development partners.

16 Public-private partnerships (PPP) need to be further strengthened in order to explore and further develop new and innovative ways of investing and financing development initiatives and projects, in close collaboration and partnership with all parties from international to regional and national financing and investment institutions.

17 The Dubai Action Plan resulting from this conference is a comprehensive package that promotes the equitable, affordable, inclusive and sustainable development of telecommunication/ICT networks, applications and services. It consists of a set of five strategic objectives supported by 15 outputs.

18 Through the actions taken by its global membership to implement the Dubai Action Plan, ITU-D will impact the progress of telecommunications/ICTs in the world. ITU-D must therefore focus its resources to address the significant disparity in access to telecommunications/ICTs, and particularly broadband, experienced by developing countries, including LDCs, with clarity and deliberation.

19 Accordingly, we, the delegates to the World Telecommunication Development Conference (Dubai, 2014), declare our commitment to accelerate the expansion and use of telecommunication/ICT infrastructure, services and applications, and in particular broadband, as powerful tools for economic growth and innovation.

20 The World Telecommunication Development Conference (Dubai, 2014) calls upon ITU Member States, Sector Members, Associates, Academia and all other partners and stakeholders to contribute towards the successful implementation of the Dubai Action Plan.

PART B
ITU-D Contribution to the Draft ITU Strategic Plan

1 Introduction

WTDC-14 endorsed the ITU-D contribution to the ITU strategic plan for 2016-2019 as presented in this document.

2 Structure of the strategic plan for the Union for 2016-2019

The core of the proposed strategic plan for 2016-2019 consists of the following main elements:

– ITU vision, mission and values

– Strategic goals and targets of the Union

– Strategic risk management and mitigation

– Sector and intersectoral objectives/outcomes/outputs

– Implementation and evaluation.

While the vision, mission, values, goals and targets are defined at the level of the Union (see sections 3, 4 and 5 respectively, hereafter), the Sectors have been called upon to contribute their specific objectives to the strategic plan. A preliminary agreement of the definitions has also been reached (Annex to this document).

Outputs have been endorsed as an important component of the strategic plan.

WTDC-14 endorsed this structure of the strategic plan for the Union for 2016-2019.

3 Vision (ITU)

The ITU-wide vision, endorsed by WTDC-14, is "An information society, empowered by the interconnected world, where telecommunications/information and communication technologies enable and accelerate social, economic and environmentally sustainable growth and development for everyone."

4 Mission (ITU)

The ITU-wide mission, endorsed by WTDC-14, is "To promote, facilitate and foster affordable and universal access to telecommunication/information and communication technology networks, services and applications and their use for social, economic and environmentally sustainable growth and development."

5 Goals (ITU)

The ITU-wide goals, endorsed by WTDC-14, are:

1) Growth – Enable and foster access to and increased use of telecommunications/ICTs.

2) Inclusiveness – Bridge the digital divide and provide broadband for all.

3) Sustainability – Manage challenges resulting from telecommunication/ICT development.

4) Innovation and partnership – Lead, improve and adapt to the changing telecommunication/ICT environment.

6 Situational analysis of ITU-D

Telecommunications/ICTs are increasingly being recognized by governments around the world as the key engine for economic growth and social development. Furthering development of telecommunications/ICTs around the world has long been at the core of the work of ITU, as a United Nations specialized agency, but has become even more vital over recent years, when technological developments have given telecommunications/ICTs an essential role in every aspect of human lives. Telecommunications/ICTs are not just an end in themselves, but are the key enablers of the other sectors.

The progress that has been made since the establishment of the Millennium Development Goals (MDGs) in 2000 and of the telecommunication/ICT connectivity targets set by WSIS in 2003 and 2005 has been extremely important. Providing the right conditions is key to fully meeting these goals. The priority shall be the development of infrastructure, in particular for broadband communications, and the provision of telecommunication/ICT applications and services. The enhancement of human capacity building and a robust, predictable, enabling regulatory environment will ensure that technological development is sustainable.

Having regard to the importance of local content and its role in developing the use of broadband, countries with language and cultural barriers should pay adequate attention to the significant proportion of local content. Therefore, generating local content as an enabler for developing deployment of broadband services and enhancing its penetration, developing e-health, e-learning and e-commerce to satisfy demand for local content and encouraging countries with similar or common culture and language to construct local content could help speed up continuing access to broadband services.

In view of the borderless nature of the cyberspace community, ITU-D acknowledges the importance of international cooperation in enhancing reliability, availability and security in the use of ICTs. Therefore, ITU-D recognizes that there is an urgent need to support countries in developing specific measures in the implementation of their national cybersecurity frameworks to address the concerns of different stakeholders in this regard and to enable and assist in the sharing of best practices at the global level. Accordingly, ITU will play a key role in facilitating the above-mentioned cooperation.

Among those standing to derive the greatest benefit from telecommunications/ICTs are least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDCs) and countries with economies in transition, all of which deserve special attention. Emergency telecommunications and gender issues are also priority areas in ITU-D work. Given the magnitude of the task, success will depend on working closely with ITU members and mobilizing resources through public-private partnerships.

There is a need to encourage a culture of innovation in ITU-D. Constantly examining BDT's activities under the lens of how products and services can be more innovative leads to critical consideration of its competitive position among telecommunication/ICT development agencies and provides the motivation to pursue new opportunities for improvement. The growing importance of innovation is recognized worldwide. Innovation is essential if countries and firms are to recover from the global economic downturn and thrive in today's highly competitive and connected global economy. Innovation is a powerful engine for development and for addressing social and economic challenges. Innovative broadband-fuelled services such as m-payments, m-health and m-education can be literally "life-changing" for individuals, communities and societies at large. Access to telecommunications/ICTs can empower hundreds of millions of people in developing countries to directly enhance their own social and economic well-being.

The ITU-D mission is not just about connectivity for connectivity's sake, but is more to aim at seeing innovative uses of telecommunications/ICTs that fundamentally improve people's lives for the better.

7 Objectives (ITU-D)

Reflecting the outcomes of the six RPMs that took place in 2013, the following objectives were endorsed by WTDC-14:

1) Foster international cooperation on telecommunication/ICT development issues.

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.

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

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

5) Enhance environmental protection, climate-change adaptation and mitigation, and disaster-management efforts through telecommunications/ICTs.

8 Objectives and outputs (ITU-D)

Based on the five ITU-D objectives endorsed, and reflecting the outcomes of the six RPMs that took place in 2013, the following outputs were endorsed by WTDC-14:

1) Foster international cooperation on telecommunication/ICT development issues.

   1.1) World Telecommunication Development Conference (WTDC)

   1.2) Regional preparatory meetings (RPMs)

   1.3) Telecommunication Development Advisory Group (TDAG)

   1.4) Study groups.

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.

   2.1) Policy and regulatory frameworks

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

2.3) Innovation and partnership.

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

3.1) Building confidence and security in the use of ICTs

3.2) ICT applications and services.

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

4.1) Capacity building

4.2) Telecommunication/ICT statistics

4.3) Digital inclusion of people with specific needs

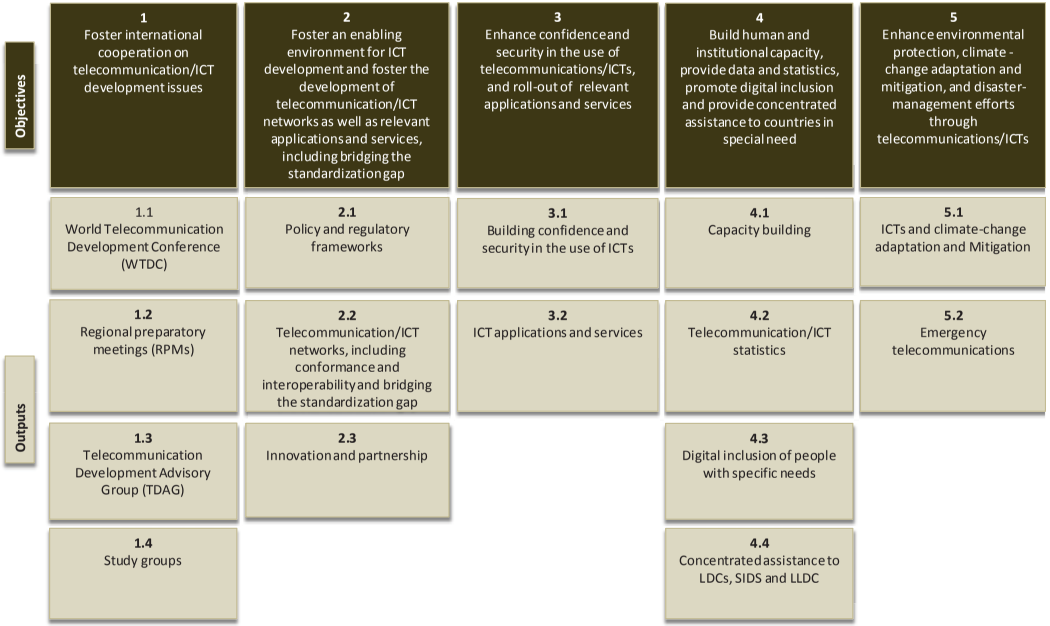
4.4) Concentrated assistance to LDCs, SIDS and LLDCs.

5) Enhance environmental protection, climate-change adaptation and mitigation, and disaster-management efforts through telecommunications/ICTs.

5.1) ICTs and climate-change adaptation and mitigation

5.2) Emergency telecommunications.

Figure 1 – Input to the draft strategic plan for 2016-2019



9 Outcomes

Outcomes provide an indication of whether an objective is being achieved. Outcomes are usually partly, but not entirely, within the control of the organization. The following outcomes have been endorsed by WTDC-14 for each of the five Objectives proposed in section 7 above:

Objective 1
Foster international cooperation on telecommunication/ICT development issues

Outcomes	Related output
Draft strategic plan for 2016-2019	1.1
WTDC Declaration	1.1
WTDC Action Plan	1.1
Resolutions and recommendations	1.1
New and revised Questions for study groups	1.1
Increased level of agreement on priority areas	1.2
Assessment of the implementation of the Action Plan and of the WSIS Plan of Action	1.2
Identification of regional initiatives	1.2
Increased number of contributions and proposals for the Action Plan	1.2
Enhanced review of priorities, programmes, operations, financial matters and strategies	1.3
Work programme	1.3
Comprehensive preparation of progress report to the Director of BDT on the implementation of the work programme	1.3
Enhanced knowledge-sharing and dialogue among Member States and Sector Members (including Associates and Academia) on emerging telecommunication/ICT issues for sustainable growth	1.4
Strengthened capacity of members to develop and implement ICT strategies and policies as well as to identify methods and approaches for the development and deployment of infrastructure and applications	1.4

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.

Outcomes	Related output
Enhanced dialogue and cooperation among national regulators, policy-makers and other telecommunication/ICT stakeholders on topical policy, legal and regulatory issues to help countries achieve their goals of creating a more inclusive information society	2.1
Improved decision-making on policy and regulatory issues and conducive policy, legal and regulatory environment for the ICT sector	2.1
Enhanced awareness and capability of countries to enable planning, deployment, operation and maintenance of sustainable, accessible and resilient ICT networks and services, including broadband infrastructure, and improved knowledge of available broadband transmission infrastructure worldwide	2.2
Enhanced awareness and capability of countries to participate in and contribute to the development and deployment of ITU Recommendations and put in place sustainable and appropriate conformance and interoperability programmes, on the basis of ITU Recommendations, at national, regional and subregional levels by promoting the establishment of mutual recognition agreement (MRA) regimes and/or building testing labs, as appropriate	2.2
Enhanced awareness and capability of countries in the fields of frequency planning and assignment, spectrum management and radio monitoring, in efficient utilization of tools for managing the spectrum and in measurement and regulation related to human exposure to electromagnetic fields (EMF)	2.2
Enhanced awareness and capability of countries in the transition from analogue to digital broadcasting and in post-transition activities, and effectiveness of implementation of the guidelines prepared	2.2
Strengthened members' capacity to integrate telecommunication/ICT innovation in national development agendas	2.3
Enhanced public-private partnership to foster the development of telecommunications/ICTs	2.3

Objective 3 Enhance confidence and security in the use of telecommunications/ICTs, and roll-out of relevant applications and services	
Outcomes	**Related output**
Strengthened capacity of Member States to incorporate and implement cybersecurity policies and strategies into nationwide ICT plans, as well as appropriate legislations	3.1
Enhanced ability of Member States to respond to cyberthreats in a timely manner	3.1
Enhanced cooperation, information exchange and know-how transfer among Member States and with relevant players	3.1
Improved capacity of countries for the planning of national sectoral e-strategies to foster the enabling environment for upscaling ICT applications	3.2
Improved capacity of countries to leverage ICT/mobile applications to improve the delivery of value-added services in high-priority areas (e.g. health, governance, education, payments, etc.) in order to provide effective solutions for various challenges in sustainable development through public-private collaboration	3.2
Enhanced innovation, knowledge and skills of national institutions to use ICT and broadband for development	3.2

Objective 4

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

Outcomes	Related output
Enhanced capacity building of membership in international Internet governance	4.1
Improved knowledge and skills of ITU membership in the use of telecommunications/ICTs	4.1
Enhanced awareness of the role of human and institutional capacity building for telecommunications/ICTs and development for the ITU membership	4.1
Enhanced information and knowledge of policy-makers and other stakeholders on current telecommunication/ICT trends and developments based on high-quality, internationally comparable telecommunication/ICT statistics and data analysis	4.2
Enhanced dialogue between telecommunication/ICT data producers and users and increased capacity and skills of producers of telecommunication/ICT statistics to carry out data collections at the national level based on international standards and methodologies	4.2
Strengthened capacity of Member States to develop and implement digital inclusion policies, strategies and guidelines to ensure telecommunication/ICT accessibility for people with specific needs and the use of telecommunications/ICTs for the social and economic empowerment of people with specific needs	4.3
Improved capacity of members to provide people with specific needs with digital literacy training and training on the use of telecommunications/ICTs for social and economic development	4.3

Outcomes	Related output
Improved 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	4.3
Improved access to and use of telecommunications/ICTs in LDCs, SIDS, LLDCs and countries with economies in transition	4.4
Enhanced capacity of LDCs, SIDS and LLDCs in telecommunication/ICT development	4.4

Objective 5

Enhance environmental protection, climate-change adaptation and mitigation, and disaster-management efforts through telecommunications/ICTs

Outcomes	Related output
Improved availability of information and solutions for Member States, regarding climate-change adaptation and mitigation	5.1
Enhanced capacity of Member States in relation to climate-change adaptation and mitigation policy and regulatory frameworks	5.1
Development of e-waste policy	5.1
Developed standards-based monitoring and early-warning systems linked to national and regional networks	5.2
Collaboration to facilitate emergency disaster response	5.2
Established partnerships among relevant organizations dealing with the use of telecommunication/ ICT systems for the purpose of disaster preparedness, prediction, detection and mitigation	5.2
Increased awareness of regional and international cooperation for easy access to, and sharing of, information related to the use of telecommunications/ICTs for emergency situations	5.2

Annex
Glossary of the strategic plan for the Union for 2016-2019

Term	Working Version
Activities	Activities are various actions/services for transforming resources (inputs) into outputs.
Financial plan	The Financial plan covers a four-year period and sets up the financial basis from which biennial budgets can be elaborated. The financial plan is elaborated within the context of Decision 5 (Revenue and expenses for the Union) which reflects, *inter alia*, the amount of the contributory unit approved by the Plenipotentiary Conference. It should be aligned with the strategic plan.
Inputs	Inputs are resources, such as financial, human, material and technological resources, used by activities to produce outputs.
Mission	Mission refers to the main overall purposes of the Union, as per the Basic Instruments of ITU.
Objectives	Objectives refer to the specific aims of the Sector and intersectoral activities in a given period.
Operational plan	The operational plan is prepared on a yearly basis by each Bureau in consultation with the relevant advisory group and by the General Secretariat in accordance with the strategic and financial plans. It contains the detailed plan for the subsequent year and a forecast for the following three-year period for each Sector and the General Secretariat. The Council reviews and approves the four-year rolling operational plans.
Outcomes	Outcomes provide an indication as to whether the objective is being achieved. Outcomes are usually partly, but not entirely, within the control of the organization.
Outputs	The outputs are the final tangible results, deliverables, products and services achieved by the Union in the implementation of the operational plans. Outputs are cost objects and are represented in the applicable cost accounting system by internal orders.
Performance indicators	Performance indicators are the criteria used to measure the achievement of outputs or outcomes. These indicators may be qualitative or quantitative.
Processes	Set of consistent activities intended to meet an intended objective/goal.
Results-based budgeting (RBB)	Results-based budgeting (RBB) is the programme budget process in which (a) the programme is formulated in order to meet a set of predefined objectives and outcomes; (b) the outcomes justify resource requirements, which are derived from and linked to outputs produced to achieve the outcomes; and (c) actual performance in achieving outcomes is measured by outcome indicators.

Term	Working Version
Results-based management (RBM)	Results-based management (RBM) is a management approach that directs organizational processes, resources, products and services towards the achievement of measurable results. It provides the management frameworks and tools for strategic planning, risk management, performance monitoring and evaluation and financing activities based on targeted results.
Results framework	A results framework is the strategic management tool used to plan, monitor, evaluate and report within the RBM methodology. It provides the necessary sequence to achieve desired results (results chain) – beginning with inputs, moving through activities and outputs, to outcomes – at the level of Sector and intersectoral objectives, and desired impact – at the level of ITU-wide strategic goals and targets. It explains how results are to be achieved, including causal relationships and underlying assumptions and risks. The results framework reflects strategic level thinking across the entire organization.
Strategic goals	Strategic goals refer to the Union's high-level targets to which the objectives contribute, directly or indirectly. These relate to the whole of ITU.
Strategic plan	The strategic plan defines the strategy of the Union for a four-year period in order to fulfil its mission. It defines strategic goals and objectives and represents the plan of the Union within that period. It is the main instrument embodying the Union's strategic vision. The strategic plan should be implemented within the context of the financial limits established by the Plenipotentiary Conference.
Strategic risks	Strategic risks refer to the uncertainties and untapped opportunities that affect an organization's strategy and strategy execution.
Strategic risk management (SRM)	Strategic risk management (SRM) is a management practice that identifies and focuses action on uncertainties and untapped opportunities that affect an organization’s ability to deliver on its mission.
Strategic target	Strategic targets are the expected results during the period of the strategic plan; they provide an indication as to whether the goal is being achieved. Targets may not always be achieved for reasons that may be beyond the control of the Union.
Values	ITU's shared and common beliefs that drive its priorities and guide all decision-making processes.
Vision	The better world ITU wants to see.

List of terms in all six official languages

English	Arabic	Chinese	French	Russian	Spanish
Activities	الأنشطة	活动	Activités	Виды деятельности	Actividades
Financial plan	الخطة المالية	财务规划	Plan financier	Финансовый план	Plan Financiero
Inputs	المدخلات	投入，输入意见（取决于上下文）	Contributions	Исходные ресурсы	Insumos
Mission	الرسالة	使命	Mission	Миссия	Misión
Objectives	الأهداف [/الغايات]	部门目标	Objectifs	Задачи	Objetivos
Operational plan	الخطة التشغيلية	运作规划	Plan opérationnel	Оперативный план	Plan Operacional
Outcomes	النتائج	结果	Résultats	Конечные результаты	Resultados
Outputs	النواتج	输出成果	Produits	Намеченные результаты деятельности	Productos
Performance indicators	مؤشرات الأداء	绩效指标	Indicateurs de performance	Показатели деятельности	Indicadores de Rendimiento
Processes	العمليات	进程	Processus	Процессы	Procesos
Results-based budgeting	الميزنة على أساس النتائج	基于结果的预算制定	Budgétisation axée sur les résultats	Составление бюджета, ориентированного на результаты	[Elaboración del] Presupuesto basado en los resultados
Results-based management	الإدارة على أساس النتائج	基于结果的管理	Gestion axée sur les résultats	Управление, ориентированное на результаты	Gestión basada en los resultados
Results framework	إطار النتائج	结果框架	Cadre de présentation des résultats	Структура результатов	Marco de resultados
Strategic goals	الغايات الاستراتيجية	总体战略目标	Buts stratégiques	Стратегические цели	Metas estratégicas
Strategic plan	الخطة الاستراتيجية	战略规划	Plan stratégique	Стратегический план	Plan Estratégico
Strategic risks	المخاطر الاستراتيجية	战略风险	Risques stratégiques	Стратегические риски	Riesgos estratégicos
Strategic risk management	إدارة المخاطر الاستراتيجية	战略风险管理	Gestion des risques stratégiques	Управление стратегическими рисками	Gestión de riesgos estratégicos
Strategic target	المقاصد الاستراتيجية	具体战略目标	Cible stratégique	Стратегический целевой показатель	Finalidad estratégica
Values	القيم	价值/价值观	Valeurs	Ценности	Valores
Vision	الرؤية	愿景	Vision	Концепция	Visión

PART C
Dubai Action Plan

Section 1 – Introduction

1 Introduction

In line with Resolution 71 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, the objectives and outputs of the strategic plan for the ITU Telecommunication Development sector (ITU-D) will be implemented through the implementation framework agreed in this Dubai Action Plan. The ITU-D strategic plan includes five objectives and 15 related outputs. The Dubai Action Plan follows a results-based structure, in which outcomes are identified for the objectives, and key performance indicators (KPIs) are identified for each output. Outputs are all the products and services ITU-D will develop and deliver to members through the implementation framework agreed in this Dubai Action Plan in order to achieve the related ITU-D strategic objectives.

The Dubai Action Plan implementation framework encompasses programmes, regional initiatives, study group Questions, resolutions and recommendations, and facilitation of World Summit for the Information Society (WSIS) action lines. This plan aims to provide a simple, comprehensive but functional instrument for the implementation of the objectives, outcomes and outputs of ITU-D. The Dubai Action Plan delineates the ITU-D mandate for the period 2015-2018, and may be updated or modified by the Telecommunication Development Advisory Group (TDAG) to reflect changes in the telecommunication/information and communication technology (ICT) environment and/or as a result of the performance evaluation to be conducted each year. The Dubai Action Plan structure follows the structure of the strategic plan, so as to ensure a consistent planning hierarchy and linkage across the different planning tools and instruments within ITU (strategic, financial and operational planning).

2 Structure of the Dubai Action Plan

The Dubai Action Plan follows a results-based structure based on the objectives of the ITU-D contribution to the ITU strategic plan. It is organized as follows:

For each of the objectives, the following information is provided:

– Title of the objective
– Outcomes
– Description of the related outputs
– Key performance indicators for each output
– An implementation framework including, as relevant:
  - Programmes
  - Regional initiatives
  - Study group Questions
  - WSIS action line facilitation
  - WTDC resolutions and recommendations.

ITU-D will develop products and services through the programmes, regional initiatives, study group Questions, WSIS action line facilitation and WTDC resolutions and recommendations. The implementation framework guidelines in § 4 below will apply to all elements of the implementation framework.

The products and services to be developed by study groups will be defined in the work plan of each study group Question.

3 Definitions of programmes, regional initiatives and study groups

3.1 Programmes

Programmes provide a coordination mechanism among all elements of the implementation framework and are responsible for assisting the membership to develop products – such as model policies, regulations, strategies, plans, frameworks, procedures, guidelines, manuals, toolkits and learning-management systems; economic and financial mechanisms; network and frequency planning tools, and spectrum-management tools; conformity assessment and interoperability testing guidance; research and analysis of relevant trends, including through reports, case studies, benchmarks and

websites; collection and sharing of relevant best practices and technical standards; data and resource collection and dissemination; database development and development of other online resources, such as learning platforms and portals; and capacity-building materials, – and for providing these products for use by members.

In addition, programmes provide services to members, such as capacity building, legal, policy, regulatory and technical advice, providing platforms to foster cooperation among and exchanges between members and partners on relevant issues and raising awareness among members on key issues and trends. The products and services developed by programmes can be for use by members on a national, subregional, regional or global basis. Programmes can be implemented in partnership with other organizations, including Sector Members, Academia, non-governmental organizations and other United Nations agencies.

3.2 Regional initiatives and other projects

Regional initiatives are intended to address specific telecommunication/ICT priority areas, through partnerships and resource mobilization to implement small-, medium- and large-scale projects. Under each regional initiative, projects are developed and implemented to meet the region's needs. The products and services to be developed through regional initiatives, in order to achieve related objectives and outcomes under the ITU-D contribution to the ITU strategic plan, will be identified in relevant project documents to be prepared following WTDC-14.

In fulfilling 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, ITU-D offers, organizes and coordinates technical cooperation assistance through regional initiatives and projects.

3.3 Study group Questions

ITU-D study groups are responsible for developing reports, guidelines and recommendations based on input received from the membership for review by their members. Information is gathered through surveys, contributions and case studies, and is made available for easy access by the membership using content-management and web-publication tools. The study groups examine specific task-oriented telecommunication/ICT questions of priority to developing countries, to support them in achieving their development goals.

Outputs agreed on in the ITU-D study groups, and related reference material, are used as input for the implementation of policies, strategies, projects and special initiatives in Member States. These activities also serve to strengthen the shared knowledge base of the membership. Sharing of topics of common interest is carried out through face-to-face meetings, online e-forums and remote participation, in an atmosphere that encourages open debate and exchange of information as well as input from experts on the topics under study. The products to be developed under study group Questions will be defined in the work plan of each study group Question.

4 Implementation framework guidelines

The programmes, regional initiatives, study group Questions, WSIS action lines and resolutions and recommendations encompassed in the Dubai Action Plan implementation framework comprise the outputs, or products and services, which the Telecommunication Development Bureau (BDT) develops to support Member States and Sector Members in achieving the objectives of the ITU-D contribution to the ITU strategic plan. All elements of the Dubai Action Plan implementation framework should be guided by the following implementation framework guidelines:

When undertaking actions under programmes, regional initiatives, study group Questions, resolutions and recommendations, BDT should continue to work in close cooperation with Member States and Sector Members. Moreover, close coordination should be ensured among all elements of the implementation framework, in order to avoid duplication of resources and work.

4.1 Coordination within ITU

For each relevant element of the Dubai Action Plan implementation framework, the Director of BDT should liaise with the ITU Radiocommunication Sector (ITU-R), the ITU Telecommunication Standardization Sector (ITU-T) and the General Secretariat, as appropriate and as needed, including through the internal coordination mechanisms established by ITU, such as the ITU Gender Task Force, the ITU Accessibility Task Force, the ITU Intersectoral Resource Mobilization Group and the WSIS Task Force, as well as maintaining close collaboration with the ITU regional offices.

The ITU regional offices should continue to place increased priority on attracting new Sector Members, identifying their needs and considering the provision of capacity building and information on partnership opportunities.

4.2 Coordination with study groups

Each output identifies relevant study Questions. Actions under programmes, regional initiatives and projects shall, whenever possible, seek close interaction and systematic cooperation with related study group Questions adopted under WTDC Resolution 2 (Rev. Dubai, 2014). Relevant programmes and regional initiatives will provide input to related study Questions, including through written contributions based on the results of implementation of the programmes and regional initiatives, as well as through workshops, seminars and other activities on related topics. Regional directors will provide information to the study Questions on relevant ITU projects in the region. Likewise, the work undertaken under related study Questions will be used by the relevant programmes. ICT accessibility for persons with disabilities and a gender perspective will be incorporated into all relevant study Questions. The work of the study groups will seek to reduce duplication across study Questions.

4.3 Coordination with the membership

BDT will facilitate easy access by the membership to information about the products and services it develops by regularly updating the BDT website with relevant information for each of the BDT programmes, regional initiatives, study group Questions and projects. Successful information-dissemination programmes such as the ITU-D Sector Membership Portal and similar initiatives should continue and be enhanced.

4.4 Mainstreaming the empowerment of women and girls and persons with disabilities in all outputs of the Dubai Action Plan

The inclusion of a gender perspective and ICT accessibility for persons with disabilities, including age-related disabilities, should be ensured in the implementation of all relevant outcomes of WTDC-14. BDT will also ensure that each ITU-D programme, project or activity takes into account the use of telecommunications/ICTs for women's empowerment and telecommunication/ICT accessibility for persons with disabilities, including age-related disabilities.

4.5 Partnerships

Information on partnership activities, including those in which BDT plays a catalytic role, should continue to be updated on a dedicated page on the website, including summaries of projects that BDT has assisted parties in elaborating, and of resources generated and expended. This webpage should also include information on upcoming projects and on how interested parties may obtain additional information.

BDT will develop partnerships with a wide range of stakeholders, including other United Nations agencies, and endeavour to mobilize resources from funding agencies, international financial institutions, ITU Member States and ITU-D Sector Members and other relevant partners. In executing projects, available local and regional expertise should be taken into account.

BDT will extend its reach towards potential Academia partners by proposing activities such as scientific and academic conferences and publications in partnership with current and potential Academia participants, Member States and other relevant institutions.

4.6 Promotion

Promotional activities are key to enhancing awareness and understanding of the work of ITU-D and to keeping the ITU membership informed about the Sector's activities. Promotional tools include the ITU-D website, new media and various communication products, such as videos, information kits, brochures, featured articles and fact-sheets.

To this end, the Director of BDT will continue to issue, on a regular basis, a newsletter, known as the "ITU-D Flash", to ITU members, and include a section on the ITU-D website featuring success stories on how ITU-D makes a difference in people's lives. BDT should also use social media to promote success stories and current activities.

BDT should also launch promotional campaigns to promote successful projects. These campaigns should involve the production of leaflets, press releases and web content, as well as the organization of press conferences and panel discussions.

Dubai Action Plan

Section 2 – Objectives and outputs

Objective 1 – Foster international cooperation on telecommunication/ICT development issues

Outcomes

Outcomes	Related output
Draft strategic plan for 2016-2019	1.1
WTDC Declaration	1.1
WTDC Action Plan	1.1
Resolutions and recommendations	1.1
New and revised Questions for study groups	1.1
Increased level of agreement on priority areas Assessment of the implementation of the Action Plan and of the WSIS Plan of Action	1.2
Identification of regional initiatives	1.2
Increased number of contributions and proposals for the Action Plan	1.2
Enhanced review of priorities, programmes, operations, financial matters and strategies	1.3
Work programme	1.3
Comprehensive preparation of progress report to the Director of BDT on the implementation of the work programme	1.3
Enhanced knowledge-sharing and dialogue among Member States and Sector Members (including Associates and Academia) on emerging telecommunication/ICT issues for sustainable growth	1.4
Strengthened capacity of members to develop and implement ICT strategies and policies as well as to identify methods and approaches for the development and deployment of infrastructure and applications	1.4

Output 1.1: World Telecommunication Development Conference (WTDC)

Background

Held every four years, the World Telecommunication Development Conference (WTDC) is a high-level platform for Member States to develop priorities, strategies and action plans to guide the work of ITU-D over the following four-year period. WTDC is a direct service to members that provides the pre-eminent high-level forum for discussion, information-sharing and consensus-building on telecommunication/ICT developmental, technical and policy issues.

Key performance indicators (KPIs)

KPIs
• Implementation rate of the action plans above 90%
• Declaration approved – Level of support/agreement
• Level of membership understanding and sharing of the ITU-D objectives and outputs
• Implementation rate within available resources
• Appropriateness of the outcomes/recommendations from study group work (number of Recommendations, number of Questions settled)

WTDC resolutions and recommendations related to Output 1.1

The implementation of WTDC Resolutions 1, 30, 31, 37 and 53 will contribute to Output 1.1.

Output 1.2: Regional preparatory meetings (RPMs)

Background

Resolution 31 (Rev. Hyderabad, 2010) of WTDC instructs the Director of BDT to organize, within the financial limitations, one regional development conference or preparatory meeting per region for each of the six regions (Africa, Americas, Arab States, Asia-Pacific, CIS and Europe), in a reasonable time-frame, prior to the last meeting of TDAG and before the next WTDC, avoiding overlap with other relevant ITU-D meetings, and making full use of the regional offices to facilitate such conferences or meetings.

Regional preparatory meetings (RPMs) are direct services to members and are organized to achieve greater regional coordination and engage members early on in the WTDC preparation process. They also seek to identify issues, at the regional level, that need to be addressed to foster the development of telecommunications/ICTs, taking into account the expression of pressing needs facing Member States and Sector Members of the region. The RPMs are expected to identify top-priority areas, which are essential for the telecommunication/ICT development of countries of the region.

Key performance indicators (KPIs)

KPIs
• Indicators of regional cooperation – Level of consensus
• Level of endorsement by membership – Effective level of implementation
• Number of proposals for the future action plans – Level of agreement around proposals

WTDC resolutions and recommendations related to Output 1.2

The implementation of WTDC Resolutions 1, 30, 31, 37 and 53 will contribute to Output 1.2.

Output 1.3: Telecommunication Development Advisory Group (TDAG)

Background

The role of the Telecommunication Development Advisory Group (TDAG) is to advise the Director of BDT on the implementation of the WTDC Action Plan, including issues relating to the BDT budget and the ITU-D operational plan.

One annual TDAG meeting is planned for the next four-year period, in order to continue to maintain and strengthen cooperation among all Member States and Sector Members.

Key performance indicators (KPIs)

KPIs
• Effective level of implementation of advice to the Director
• Level of compatibility with WTDC outcomes
• Timely availability – Proportion of actions implemented

WTDC resolutions and recommendations related to Output 1.3

The implementation of WTDC Resolutions 1, 5, 21, 24, 30, 31, 37, 53, 59 and 61 will contribute to Output 1.3.

Output 1.4: Study groups

Background

ITU-D study groups provide an opportunity for all Member States and Sector Members (as well as Associates and Academia) to share experiences, present ideas, exchange views and achieve consensus on appropriate strategies to address ICT priorities. ITU-D study groups are responsible for developing reports, guidelines and Recommendations based on input received from the membership. Information is gathered through surveys, contributions and case studies, and is made available for easy access by the membership using content-management and web-publication tools.

Pursuant to WTDC Resolution 2 (Rev. Dubai, 2014), the mandate of Study Group 1 is to study "Enabling environment for the development of telecommunications/ICTs", and of Study Group 2to study "ICT applications, cybersecurity, emergency telecommunications and climate-change adaptation". The working procedures to be followed by the ITU-D study groups are set out in WTDC Resolution 1 (Rev. Dubai, 2014). Continuous efforts are made to mainstream gender equality and accessibility into the ITU-D study groups.

Key performance indicators (KPIs)

KPIs
– Work programmes undertaken in response to: Resolution 2 (Rev. Dubai, 2014); work assigned by WTDC; ITU-D resolutions addressing specific areas of study through ITU-D study groups – Meetings and documentation for meetings processed in accordance with Resolution 1 (Rev. Dubai, 2014) (and working guidelines) and in accordance with decisions of WTDC – Increased use of electronic tools to progress the work on the study group work programmes
– Timely and efficient preparation of expected major deliverables – Recommendations, reports, guidelines – with appropriate level of quality, through ITU-D study groups – Effective and representational participation of members in the work of the study groups (number of meeting participants, number of contributions received from members in countries in the regions) – Members' feedback on the ITU-D study group process (satisfaction surveys for meetings/tools) – Number of website downloads and views of reports, guidelines, recommendations, case studies, etc.

WTDC resolutions and recommendations related to Output 1.4

The implementation of WTDC Resolutions 1, 2, 5, 21, 24, 30, 31, 37, 53, 59 and 61 will contribute to Output 1.4.

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

Outcomes

Outcomes	Related output
Enhanced dialogue and cooperation among national regulators, policy-makers and other telecommunication/ICT stakeholders on topical policy, legal and regulatory issues to help countries achieve their goals of creating a more inclusive information society	2.1
Improved decision-making on policy and regulatory issues and conducive policy, legal and regulatory environment for the ICT sector	2.1
Enhanced awareness and capability of countries to enable planning, deployment, operation and maintenance of sustainable, accessible and resilient ICT networks and services, including broadband infrastructure, and improved knowledge of available broadband transmission infrastructure worldwide	2.2
Enhanced awareness and capability of countries to participate in and contribute to the development and deployment of ITU Recommendations and put in place sustainable and appropriate conformance and interoperability programmes, on the basis of ITU Recommendations, at national, regional and subregional levels by promoting the establishment of mutual recognition agreement (MRA) regimes and/or building testing labs, as appropriate	2.2
Enhanced awareness and capability of countries in the fields of frequency planning and assignment, spectrum management and radio monitoring, in efficient utilization of tools for managing the spectrum and in measurement and regulation related to human exposure to electromagnetic fields (EMF)	2.2

Outcomes	Related output
Enhanced awareness and capability of countries in the transition from analogue to digital broadcasting and in post-transition activities, and effectiveness of implementation of the guidelines prepared	2.2
Strengthened capacity of members to integrate telecommunication/ICT innovation in national development agendas	2.3
Enhanced public-private partnership to foster the development of telecommunications/ICTs	2.3.

Output 2.1: Policy and regulatory frameworks

Background

The ICT sector is experiencing tremendous change. With the ever-escalating global demand for ubiquitous, always-on, rapid and easy access to data and applications, led by the deployment of broadband networks that facilitate convergence of information, communications and broadcasting, the way in which services are delivered to and accessed by consumers has radically changed. Communications no longer just connect people: the Internet of things (IoT) is fast becoming a reality.

In evolving towards a digital economy, ICTs, and in particular broadband, are increasingly recognized as critical to social and economic growth and competitiveness of countries. Therefore, a sound and clear policy and regulatory environment is needed to ensure that all can benefit from ICT services.

An enabling environment must take into consideration all areas that have an impact on the spread and uptake of ICTs, including the elaboration, implementation and review of national ICT policies, plans and guidelines. Regulators need to continue to be kept informed of current costing issues, as well as financial mechanisms and economic modelling, in order to be able to measure the impact and implications for a national competitive environment. In the midst of the profusion of services and platforms, regulators and policy-makers need to continue to pay attention to fostering infrastructure development, investment in high-speed networks, innovation and efficient use of scarce resources, while at the same time focusing increasingly on consumer protection (privacy, data protection, etc.) and ensuring affordable access for all to ICTs and the digital economy.

Key performance indicators (KPIs)

KPIs
Timely release of the annual questionnaires to members (regulatory, economics and finance) and of data on the PREF knowledge centre (policy, regulation, economics and finance) and the ICT Eye database
Number of website views/downloads of regulatory and financial data and information on the ICT Eye online platform
Number of publications, best-practice guidelines, online resources and toolkits developed and released on ICT policy and regulation as well as on economics and finance

Implementation framework

Programme: Policy and regulatory environment

In order to assist the membership in the formulation, review and effective implementation of telecommunication/ICT policies, legislation and regulations, as well as allowing countries to make evidence-based policy and strategy decisions, this programme will conduct global and regional research and analysis on the latest policy, regulatory, economic, financial and market trends in telecommunications/ICTs, and measure their impact on social and economic development, based on information and data gathered through annual surveys and other means.

This will also include the development, analysis and dissemination of reports, studies and benchmarking tools for monitoring the evolution of the ICT economic and regulatory environment, as well as the formulation of recommendations and guidelines, the identification of best practices and the provision of country assistance on matters such as regulatory and institutional reform, competition, ex-ante to ex-post regulation, investment and financing, new business models, high- and ultra-high-speed broadband deployment and implementation, consumer protection (online security and safety), data (IoT, M2M, etc.), cost modelling for cost-based regulated services (wholesale and retail), scarce resources (e.g. spectrum), telephone numbering and signalling point codes, infrastructure sharing, including use of smart grids, cost-effective solutions for remote and rural areas, number portability, IP interconnection, mobile roaming, universal and affordable access to ICT services and smart cities. These include the annual publication Trends in telecommunication/ICT reform, the ICT regulation toolkit, the Broadband series of thematic reports and the Regulatory and tariff policies database.

The programme will further provide global platforms for policy-makers, regulators and the private sector to address topical issues as identified above, share experiences and best practices and discuss ways to help countries achieve their goals of growing digital economies. This includes the organization of global and regional events, forums, training workshops and seminars, such as the Global Symposium for Regulators, the regional economics and finance forums, as well as online platforms.

Synergies will be developed in the implementation of relevant regional initiatives, study group Questions, WSIS action lines, resolutions and projects. Cross-sectoral issues will also be addressed as needed.

Relevant regional initiatives

The following regional initiatives will contribute to Output 2.1, consistent with WTDC Resolution 17 (Rev. Dubai 2014):

Region
AFR region
Strengthening and harmonizing policy and regulatory frameworks for the integration of African telecommunication/ICT markets **Objective:** To facilitate and promote the reform of Africa's national telecommunication/ICT sectors and the implementation of telecommunication/ICT strategies in order to achieve subregional and regional integration of telecommunication/ICT infrastructure, services and markets.
Development of broadband access and adoption of broadband **Objective:** To assist Member States in the development of broadband infrastructure and access thereto in urban and rural areas, with particular emphasis on subregional and continental interconnection.
AMS region
Development of broadband access and adoption of broadband **Objective:** To provide assistance to Member States in the development of policies to increase broadband access and uptake.
Reduction of telecommunication service prices and Internet access costs **Objective:** To provide assistance Member States in defining and coordinating policies, ways and means to reduce the cost of access and interconnection, as well as the prices of telecommunication and Internet services and Internet for users, through necessary investments.

Region
ARB region
Development of broadband access and adoption of broadband **Objective:** To assist Arab States (particularly least developed countries[1]) in the implementation and development of broadband infrastructure in urban and rural areas, and to develop, facilitate and spread access to broadband networks and services in the Arab States, including issues related to the conformance and interoperability.
ASP region
Development of broadband access and adoption of broadband **Objective:** To assist Member States in the development of broadband access in urban and rural areas and to support system construction to resolve social issues leveraging the benefits of telecommunication/ICT applications.
Policy and regulation **Objectives:** To assist Member States in developing appropriate policy and regulatory frameworks, enhancing skills, increasing information sharing and strengthening regulatory cooperation.
CIS region
Development of broadband access and adoption of broadband **Objective:** To assist interested Member States in developing broadband access, including in rural and remote areas, using energy-efficient technologies.
EUR region
Development of broadband access and adoption of broadband **Objective:** Due to significant differences within European countries, there is an urgent need to take steps and assist administrations in every aspect of the practical implementation and development of high-speed networks. This action may also comprise the establishment of local/regional broadband roll-out plans. The development of communication networks would be boosted by using the experience in infrastructure-sharing with the energy sector (smart grids) and should aim to benefit from cross-sectoral synergies. The degree of progress in this field varies considerably between Member States in the region, and therefore sharing the best practices and regulatory policies and providing assistance would help to use resources most effectively.

[1] There are six LDCs in the Arab region, namely: Comoros, Djibouti, Somalia, Yemen, Mauritania and Sudan.

Study group Questions

The following study group Questions will contribute to Output 2.1:

Study Group 1 Questions
Question 4/1: Economic policies and methods of determining the costs of services related to national telecommunication/ICT networks, including next-generation networks
Question 6/1: Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks
Question 1/1: Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, OTT services and the implementation of IPv6
Question 3/1: Access to cloud computing: Challenges and opportunities for developing countries

WTDC resolutions and recommendations related to Output 2.1

The implementation of WTDC Resolutions 8, 17, 22, 23, 30, 32, 37, 48, 64, 71, 77, 78, and 79 and Recommendations ITU-D 15 and ITU-D 16 will contribute to Output 2.1.

WSIS action lines related to Output 2.1

WSIS Action Line C6 of the Geneva Plan of Action and §§ 112-119 of the Tunis Agenda for the Information Society will contribute to Output 2.1.

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

Background

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

The ICT sector is characterized by rapid technological change, and by convergence of technological platforms for telecommunications[1], information delivery, broadcasting and computing. The deployment of common broadband technology and network infrastructures for multiple telecommunication services and applications and the evolution to all IP-based wireless and wired next-generation networks (NGNs) and their evolutions open up opportunities but also imply significant challenges for developing countries.

The rapid deployment of wireless and mobile technologies indicates the growing importance of radio spectrum management and the role it plays in the socio-economic development of countries. Also notable is the worldwide transition from analogue to digital broadcasting, enabling more efficient use of spectrum and higher quality audio and video delivery.

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

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

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

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1 "Telecommunications" includes sound and television broadcasting.

Key performance indicators (KPIs)

KPIs
Number of guidelines/handbooks and publications finalized for the relevant subjects
Number of assessment studies conducted for assessing the status of effective application of ITU Recommendations
Number of countries included in the interactive transmission maps
Number of experts participating in training for conformance and interoperability
Enhanced version of SMS4DC prepared
Number of SMS4DC subscribers
Number of trainings conducted and satisfaction of participants
Number of ITU regional seminars and meetings
Number of participants in these events, and their satisfaction
Number of regional study group chairmen and vice-chairmen supported for participating in bridging the standardization gap activities in the regions

Implementation framework

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

The objective of this programme is to assist ITU Member States and ITU-D Sector Members and Associates in maximizing the use of appropriate new technologies for the development of their information and communication infrastructures and services

Specific areas of work include:

Spectrum management and radio monitoring

Wireless technology has changed our lives drastically, and has great potential to improve our quality of life. The introduction and expansion of new services is seriously impeded in the absence of effective spectrum-management structures. BDT works to strengthen national regulatory bodies in frequency planning and assignment, management and monitoring. It provides assistance in various aspects of spectrum management, including specialized tools for this purpose.

This will involve, in particular:

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

Broadcasting

The transition from analogue to digital broadcasting, already begun in many developing countries, is expected to reach peak level in the next cycle in Regions 2 and 3 and to be finalized in Region 1. The objective of BDT work in this area is to enable developing countries to achieve smooth migration from analogue to digital broadcasting and to follow, with the countries, the post-transition activities, such as the introduction of new broadcasting services and allocation of the digital dividend. In particular, BDT is providing assistance on policy and regulatory frameworks for digital broadcasting and organizing regional meetings for ITU members on the use of spectrum for broadcasting or other services.

In particular, activities will be focused on:

- providing assistance on policy and regulatory frameworks for digital terrestrial broadcasting, including frequency planning and optimization of spectrum use; digital broadcasting guidelines and master plans for the transition from analogue to digital broadcasting; conversion of analogue to digital archives; and new broadcasting services and technologies;

- organizing regional meetings between ITU members on the use of spectrum for broadcasting services and other services.

Next-generation networks

The architecture of information and communication infrastructures is continuously changing to accommodate new requirements for a growing number of ICT-enabled services and applications, along with evolution to next-generation networks (NGN) and further evolutions, including NGN evolution and future networks. The objective of BDT's work in this area is to assist Member States in the implementation of evolution to these future network architectures and technologies, in accordance with the applicable standards (Recommendations) developed in ITU-T and ITU-R, for bridging the standardization gap, making better use of and managing infrastructure and resources as well as addressing interconnection issues of emerging networks.

Activities will be focused on:

- providing assistance to Member States on deployment and migration of their existing networks to NGN and further evolutions;
- assisting countries in planning the introduction and continuous adoption of new network elements and applications by making use of specialized planning tools;
- assisting countries in the digitization of analogue networks and in applying affordable wired and wireless technologies, including interoperability of ICT infrastructure.

Broadband networks: Wired and wireless technologies, including IMT

Broadband technology allows for high-speed transmission of voice, video and data over networks and ICT applications. The introduction of different broadband access technologies, community antennas, optical fibre and submarine cables, which are becoming cost-effective and providing high bandwidth, satellite and fixed and mobile wireless has enabled traditional and new forms of telecommunications to become a reality throughout the world. It is therefore important to provide developing countries with an understanding of the different technologies available for broadband using both wired and wireless technologies for terrestrial and satellite telecommunications, including International Mobile Telecommunications (IMT).

Activities will be focused on:

- providing assistance to developing countries in their medium- to long-term planning for the implementation and development of national ICT broadband network plans, also considering the low frequency bands, bringing benefit to operators in terms of investment efficiency and supplying cheap broadband services to citizens in developing countries at acceptable price and quality in urban, rural and remote areas;

- collecting and disseminating information and analyses on the current status of broadband backbone and submarine cables, in order to assist members in network planning, avoiding duplication of efforts and resources and disseminating information on different countries' experiences with the use of different technologies and services;

- promoting Internet exchange points (IXPs) as a long-term solution to advance connectivity, and supporting ITU members with deployment of/transition to IPv6-based networks and applications, in collaboration with relevant expert organizations.

Rural communications

Rural areas of countries continue to be sparsely covered, and are not considered as a viable business case by telecommunication operators. Recent growth of teledensity in urban areas, fuelled by mobile technology, has meant that the digital gap between rural and urban areas has widened.

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

The key challenges for the provision of telecommunication services in rural areas are driven by both technological and economic considerations. Setting up backhaul connectivity remains a high-cost exercise. Erratic power supply or complete lack of energy sources is a major barrier, although photovoltaic power supply is increasingly becoming a viable alternative. Another key element is to eliminate the gap between digital technology and standardization.

The focus in this area can be summarized as follows:

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

Conformance and interoperability (C&I)

Conformance with international standards maximizes the probability that an ICT vendor's products will interoperate with those of other vendors.

This interoperability is addressed by international standards such as ITU Recommendations, which enable communications between the ICTs of different manufacturers, countries and continents. Mutual recognition arrangements (MRAs) between the test centres of different countries or regions encourage consumer confidence in tested products, increase market opportunities, encourage trade and technology transfer and contribute to the removal of technical barriers to trade. The ITU Conformance and Interoperability (C&I) programme seeks to increase conformance with ITU Recommendations and, in turn, the interoperability of ICTs globally (assessed according to international ISO/IEC standards). Cooperation with international organizations, industry and conformity assessment, accreditation and certification bodies is key to the success of the ITU C&I programme.

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

- educating technicians, policy-makers and businesses on the importance of C&I procedures and testing, mobilizing the resources required to implement regional and national C&I programmes, in cooperation with other relevant regional and international organizations;

- providing assistance to developing countries in the establishment of national, regional or subregional C&I programmes, and conducting assessment studies for facilitating the establishment of common conformance and interoperability regimes at national, regional and subregional level;

- preparing guidelines on this process which outline the technical and human resources required and the international standards to be applied.

Relevant regional initiatives

The following regional initiatives will contribute to Output 2.2, consistent with WTDC Resolution 17 (Rev. Dubai, 2014):

Region
AFR region
Spectrum management and transition to digital broadcasting **Objective:** To assist Member States in the transition to digital broadcasting and spectrum management.
Development of broadband access and adoption of broadband **Objective:** To assist Member States in the development of broadband infrastructure and access thereto in urban and rural areas, with particular emphasis on subregional and continental interconnection.
AMS region
Spectrum management and transition to digital broadcasting **Objective:** To provide assistance to ITU Member States in the transition to digital broadcasting and spectrum management.
Development of broadband access and adoption of broadband **Objective:** To provide assistance to Member States in the development of policies to increase broadband access and uptake.
ARB region
Development of broadband access and adoption of broadband **Objective:** To assist Arab States (particularly least developed countries) in the implementation and development of broadband infrastructure in urban and rural areas, and to develop, facilitate and spread access to broadband networks and services in the Arab States, including issues related to conformance and interoperability.
ASP region
Harnessing the benefits of new technologies **Objective:** To assist ITU Member States in utilizing new technologies and address human and technical capacity challenges related to issues such as those identified in the expected results, among others.

Region
Development of broadband access and adoption of broadband **Objective:** To assist Member States in the development of broadband access in urban and rural areas and to support system construction to resolve social issues leveraging the benefits of telecommunication/ICT applications.
CIS region
Development of broadband access and adoption of broadband **Objective:** To assist interested Member States in developing broadband access, including in rural and remote areas, using energy-efficient technologies.
EUR region
Spectrum management and transition to digital broadcasting **Objective:** To foster regional cooperation, mainly supplemented by direct assistance to the administrations in the process of analogue TV switch-off, and management of the frequencies in the digital dividend bands, which are to be utilized bearing in mind the most effective use of radio spectrum.
Development of broadband access and adoption of broadband **Objective:** Due to significant differences in European countries, there is an urgent need to take steps and assist administrations in every aspect of the practical implementation and development of high-speed networks. This action may also comprise the establishment of local/regional broadband roll-out plans. The development of communication networks would be boosted by using the experience in infrastructure-sharing with energy sector (smart grids) and should aim to benefit from cross-sectoral synergies. The degree of progress in this field varies considerably between Member States in the region, and therefore sharing best practices and regulatory policies and providing assistance would help to use resources most effectively.

Study group Questions

The following study group Questions will contribute to Output 2.2:

Study Group 1 Questions
Resolution 9: Participation of countries, particularly developing countries, in spectrum management
Question 1/1: Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, OTT services and the implementation of IPv6
Question 8/1: Examination of strategies and methods of migration from analogue to digital terrestrial broadcasting and implementation of new services
Question 5/1: Telecommunications/ICTs for rural and remote areas
Question 2/1: Broadband access technologies, including IMT, for developing countries
Study Group 2 Questions
Question 4/2: Assistance to developing countries for implementing conformance and interoperability programmes
Question 7/2: Strategies and policies concerning human exposure to electromagnetic fields

WTDC resolutions and recommendations related to Output 2.2

The implementation of WTDC Resolutions 9, 10, 11, 15, 17, 18, 20, 21, 30, 32, 33, 35, 37, 39, 43, 47, 50, 51, 52, 53, 57, 62, 63 and 77 and Recommendations ITU-D 17, ITU-D 19 and ITU-D 22 will contribute to Output 2.2.

WSIS action lines related to Output 2.2

WSIS Action Lines C2, C3, C7 (e-science) 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 will contribute to Output 2.2.

Output 2.3: Innovation and partnership

Background

The national ability of rapid innovation is seen as the key factor for facilitating the overall competitiveness of countries in a globally interconnected world of ICT-based services. Further, encouraging strategic partnerships is vital in mobilizing resources and rolling out capital-intensive telecommunication/ICT networks. There is a need to assist Member States through ITU's efforts and strategic partnerships in, *inter alia*, a) developing policy-coherent approaches to ICT innovation, based on best practices, to be integrated into national development agendas; b) developing internationally comparable measurement of ICT innovation capabilities at national levels; c) fostering ICT innovation in the public sector at all levels of government to enhance the delivery of public services, improve efficiency, coverage and equity, and create positive externalities in the rest of the economy; d) undertaking initiatives that support entrepreneurship and the start-up and expansion of new ICT firms; and e) developing cooperation and partnerships among developed and developing countries and other organizations, to encourage and support innovation and creativity methodologies and mobilize resources, as well as the adoption of cost-effective ICT solutions.

Key performance indicators (KPIs)

KPIs
Number of innovative initiatives and projects (e.g. youth, entrepreneurship, incubators, innovation parks and/or labs, etc.) within/between ITU membership and stakeholders.
Number of public-private partnerships to foster the development of telecommunication/ICT networks as well as relevant applications and services
Number of partnerships and projects translated into action
Resources mobilized through partnerships

Implementation framework

Programme: Innovation and partnership

This programme will identify policy-coherent approaches to ICT innovation, based on best practices, to be integrated into national development agendas, and identify comprehensive ways and means for developing partnerships among various organizations, considering the focus on a New Global Partnership as part of the post-2015 development agenda. The programme will develop internationally comparable measurements of ICT innovation capabilities for use at national level. In this process, the programme will develop guidelines on fostering ICT innovation in the public sector at all levels of government, to enhance the delivery of public services, improve efficiency, coverage and equity, and create positive externalities in the rest of the economy, as well as guidelines on creating ICT incubators, including guidelines on the gender responsiveness and sustainability of ICT incubators and guidelines on how to enhance the competitiveness and sustainability of small and medium ICT enterprises. Acknowledging the importance of the Connect the World series of summits aimed at mobilizing human, technical and financial resources for connecting the world, and recalling the ITU-D mandate to promote, especially by means of partnerships, the development, expansion and operation of telecommunication networks and services, particularly in developing countries, taking into account the activities of other relevant organizations, the programme places special emphasis on partnership development in the telecommunication/ICT ecosystem, considering intensive capital and synergetic requirements. The programme will also promote cooperation and partnerships between developed and developing countries, to encourage and support ICT innovation and creative methodologies as well as the adoption of cost-effective ICT solutions.

The programme will, *inter alia*, carry out a study covering the gamut of "mobilization of resources through partnerships and collaboration" and "access to investment financing in ICTs" in the face of challenges to effective partnership development, with the objective of developing a strategy and furthering ITU-D's objectives. The study will focus, among other things, on effectiveness and challenges in translating MoUs and partnerships into actual resource mobilization and project implementation, with the emphasis on developing countries; status of and approach to preferential and favourable lines of credit for the developing countries from various sources, including international and regional financial and developmental institutions; and the provision of recommendations on developing a strategy for building effective partnerships.

Relevant regional initiatives

The following regional initiatives will contribute to Output 2.3, consistent with WTDC Resolution 17 (Rev. Dubai, 2014):

Region
EUR region
Entrepreneurship, innovation and youth **Objective:** To foster creation of an enabling environment and build capacities at the regional level, aimed at growth of entrepreneurship and increased innovation in the ICT ecosystem, while encouraging empowerment of young men and women and creating new opportunities for them in the ICT sector. Strengthened cooperation with diverse stakeholders, including academia and the private sector will be necessary.

Study group Questions

The following study group Questions will contribute to Output 2.3:

Study Group 1 Questions
Question 1/1: Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, OTT services and the implementation of IPv6
Question 5/1: Telecommunications/ICTs for rural and remote area
Question 8/1: Examination of strategies and methods of migration from analogue to digital terrestrial broadcasting and implementation of new services
Study Group 2 Questions
Question 1/2: Creating the smart society: Social and economic development through ICT applications
Question 2/2: Information and telecommunications/ICTs for e-health
Question 5/2: Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response
Question 6/2: ICT and climate change

WTDC resolutions and recommendations related to Output 2.3

The implementation of WTDC Resolutions 15, 17, 21, 30, 32, 34, 35, 37, 50, 52, 53, 58, 66 and 82 will contribute to Output 2.3.

WSIS action lines related to Output 2.3

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 will contribute to Output 2.3.

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

Outcomes

Outcomes	Related output
Strengthened capacity of Member States to incorporate and implement cybersecurity policies and strategies into nation-wide ICT plans, as well as appropriate legislation	3.1
Enhanced ability of Member States to respond to cyberthreats in a timely manner	3.1
Enhanced cooperation, information exchange and know-how transfer among Member States and with relevant players	3.1
Improved capacity of countries for the planning of national sectoral e-strategies to foster the enabling environment for upscaling ICT applications	3.2
Improved capacity of countries to leverage ICT/mobile applications to improve the delivery of value-added services in high-priority areas (e.g. health, governance, education, payments, etc.) in order to provide effective solutions for various challenges in sustainable development through public-private collaboration	3.2
Enhanced innovation, knowledge and skills of national institutions to use ICT and broadband for development	3.2

Output 3.1: Building confidence and security in the use of ICTs

Background

ICTs are integral to the economic and social development of all nations as well as to the development of the information society. Security is an essential element of the operation and use of ICTs, and requires that all persons involved be aware of security and take action appropriate to their role.

As the use of ICT continues to grow, cybersecurity and combating the transmission of e-mail spam continues to be a priority among members. During the last four years, ITU-D continued to work in this area.

BDT undertook many activities that offer development assistance to members and encourage cooperation among members, while under Question 22/1 products and materials were elaborated to support countries in developing national cybersecurity capabilities, to convene experts and to contribute to ongoing information-sharing on best practices. The Question also identified key areas of common concern, as well as gaps, based on contributions to a compendium and a survey, respectively.

Key performance indicators (KPIs)

KPIs
• Number of partnerships established between BDT and industry (including Sector membership)
• Number of CIRTs that BDT has contributed to establishing
• Number of countries that BDT assisted using ITU-D study group outputs

Programme: Cybersecurity

The main purpose of this programme is to support the ITU membership, in particular developing countries, in building trust and confidence in the use of ICTs.

Cybersecurity should be dealt with taking into consideration the global, transnational nature of cyberthreats, and in accordance with existing frameworks and coursework developed under Question 22 in previous study periods, as well as by other relevant expert organizations.

Major challenges remain ahead for ITU Member States – especially developing countries – in achieving improved cybersecurity. The programme on cybersecurity should support Member States with specific capacity-building and outreach initiatives and activities related to legal measures, technical and procedural measures, organizational structures and international cooperation, as described in this section. Priority should be given to assisting least developed countries (LDCs).

The programme shall seek in all cases to collaborate with all relevant organizations, including, but not limited to, FIRST, AP-CERT, OAS, OECD, MAAWG, RIRs and NOGs, in order to avoid duplication of effort. Where possible, workshops will be collocated with other relevant activities. The programme shall call upon the breadth of the community to assist in achieving its objectives. All endeavours should be undertaken with a view to realizing broad partnerships. It is not necessary for the programme to lead an activity to achieve success, but merely to bring the necessary leaders together, or collaborate with others to do so.

Main areas of work

- Support ITU Member States in the development of their national and/or regional cybersecurity strategies as an essential step towards building national capabilities for dealing with cyberthreats, within the principles of international cooperation, taking into account the relevant United Nations General Assembly resolutions on cybersecurity, including Resolution 55/63, 56/121, 57/239, 58/199 and 64/211.

- Support ITU Member States, and in particular LDCs, in their efforts to build capacity:

    1. To facilitate Member States' access to resources developed by other relevant international organizations working on national legislation to combat cybercrime.

    2. To support ITU Member States' national and regional efforts to build capacity in this area, in collaboration with one another, as well as with relevant stakeholders. Specifically, consistent with the national legislations of Member States referred to above, assisting Member States, in particular developing countries, in the elaboration of appropriate and workable legal measures relating to protection against cyberthreats at national, regional and international levels, taking into account the information referred to item 1 above.

    3. To facilitate activities under relevant cybersecurity Questions, including reporting of all relevant activities by the programme to those Questions, disseminating the Questions' results, including course materials, and providing feedback to the Questions, based on comments received from Member States and others.

    4. To establish technical and procedural measures, aimed at securing national ICT infrastructures, taking into account the work of the relevant ITU-T study groups and other relevant technical and expert organizations.

5. To establish organizational structures, such as computer incident response teams (CIRTs), to identify, manage and respond to cyberthreats, and participate in cooperation mechanisms at the regional and international level.

6. To contribute to the implementation of ITU's ongoing and future global initiatives to combat cyberthreats, with the support provided by the ITU membership as active partners/contributors.

7. To contribute also to the implementation of ITU's child online protection initiatives, with the cooperation and support of the ITU membership as active partners/contributors.

8. To encourage Member States, under Question 3/2, to provide and share their best practices for securely managing various assets for the implementation of Recommendations issued by ITU, such as Recommendations ITU-T X.1057 and ITU-T X.1055.

9. To encourage Member States, under Question 3/2, to share national experiences in preventing, mitigating, responding to and recovering from cyberincidents, in order to assist developing countries in protecting their telecommunication/ICT networks against cyberattacks and cyberthreats.

Main deliverables and/or products and services

For all of the above-mentioned priority areas, the anticipated deliverables fit within the following six categories:

- Creation of tools

- Training material, in collaboration with relevant expert organizations and taking into account elements referred in Output 4.1 on capacity building

- Assistance to members
- Information sharing
- Partnerships
- Technical workshops.

These categories are complementary and interlinked, as they contribute to the overall success of each of the priority areas identified above.

Relevant regional initiatives

The following regional initiatives will contribute to Output 3.1, consistent with WTDC Resolution 17 (Rev. Dubai 2014):

Region
AFR region
Building confidence and security in the use of telecommunications/ICTs **Objective:** To assist Member States in defining and implementing appropriate strategies for the protection of ICT infrastructure and building confidence in the use of ICTs and applications.
AMS region
Capacity building to engage in global ICT policy, with special focus on improving cybersecurity and developing countries' participation in the existing Internet governance institutions **Objective:** To enhance the capacity building of Member States, especially developing countries, with a view to promoting an enabling environment, supporting the implementation of ICT initiatives and encouraging developing countries to participate actively in forums on global ICT policy, in close collaboration with existing institutions.
ARB region
Building confidence and security in the use of telecommunications/ICTs **Objective:** To build confidence and security in the use of telecommunications/ICTs and e-commerce in the Arab region and combat all forms of cyberthreats, including the misuse of ICTs.

Region
ASP region
Harnessing the benefits of new technologies **Objective:** To assist ITU Member States in utilizing new technologies and address human and technical capacity challenges related to issues such as those identified in the expected results, among others.
CIS region
Creating a child online protection centre for the CIS region **Objective:** To provide ITU Member States in the CIS region with centralized advisory and technical assistance on various aspects of child online protection.
Building confidence and security in the use of telecommunications/ICTs **Objective:** To build the capacity of Member States in the CIS region in building confidence and security in the use of ICTs, within the framework of the concept of information ecology for sustainable development and combating the potential negative consequences of the impact of the information environment.
EUR region
Building confidence and security in the use of telecommunications/ICTs **Objective:** To build trust and confidence in use of ICTs among children and young people in Europe.

Study group Questions

The following study group Questions will contribute to Output 3.1:

Study Group 2 Questions
Question 3/2: Securing information and communication networks: Best practices for developing a culture of cybersecurity

WTDC resolutions and recommendations related to Output 3.1

The implementation of WTDC Resolutions 17, 21, 30, 32, 37, 45, 50, 52, 53, 67, 69 and 80 will contribute to Output 3.1.

WSIS Action Lines related to Output 3.1

WSIS Action Line C5 of the Geneva Plan of Action will contribute to Output 2.3.

Output 3.2: ICT applications and services

Background

The proven contribution of ICTs to national socio-economic development has been the subject of numerous studies. ICTs and associated applications, including mobile applications, which have come to be known as "e-government", "e-agriculture", "e-education", "e-health", "e-entrepreneurship", etc., contribute to development by enabling access to and exchange of information and services anywhere and anytime, by supporting the rapid processing and storage of information and by improving the provision of public and private services, including education and professional development, health, transport, industry, human rights, environmental protection, trade, road safety, urban management, transfer of information for social welfare, agriculture information and services, government services, entertainment, information services, and commerce in general, making them much more effective, efficient, accessible and affordable**,** especially for poor and marginalized populations. ICTs also enhance access to markets, and increasingly facilitate direct democratic participation. They provide more cost-efficient and effective ways to preserve and promote local culture. They not only bring down the costs of economic and social activities, for example by replacing transport and postal services, but open up entirely new business opportunities.

ICT applications and services are an important demand-side driver that can encourage the adoption of broadband services and can create a virtuous circle for broadband infrastructure development, where new types of content and applications drive an ever-increasing need for more bandwidth. It is well recognized that access to broadband networks and services is critical to countries' economic growth. Broadband is essential for generating new skills and fuelling economic growth and technological change across all sectors and for opening up a whole range of new applications and opportunities to better serve citizens' needs. In order to associate broadband with sustainable development, it is necessary to promote both ICT infrastructure development and ICT utilization and application in parallel.

The added value of ICT applications and services is also greatly increasing due to several technological advances that have been achieved in the field of telecommunication/ICT infrastructure, including cloud computing, the Internet of things (IoT), high-volume data exchange, and machine-to-machine (M2M) communications in addition to spectacular developments in the field of public consumer applications such as social network media.

For ICT for Development initiatives, however, there has long been a realization that building information societies requires an *ecosystem approach*, supporting elements of which include an enabling environment, infrastructure build-out, capacity building and broad availability of ICT applications and services.

In order to take advantage of the potential benefits of the progress that has been made, developing countries need capacity and information on strategies, best practices, sources of expertise and financial support, as well as on the types of applications and technological platforms for e-applications that would provide the most benefits to their citizens, based on the country's needs and current capabilities.

Key performance indicators (KPIs)

KPIs
• Number of toolkits published and downloaded for the development of national sectoral e-strategies
• Number of partnership agreements signed
• Number of ICT for Development best practice reports published • Number of ICT for Development events/workshops/seminars and respective number of participants

Implementation framework

Programme: ICT applications and services

The main purpose of this programme is to support the ITU membership, in collaboration and partnership with other United Nations organizations and the private sector, in fostering the use of telecommunications/ICTs in the various facets of information-society development, in particular in underserved and rural areas, for sustainable development and attaining the UN Millennium Development Goals (MDGs) and the World Summit on the Information Society (WSIS) targets, by:

- Elaborating national strategic planning frameworks and associated toolkits for selected ICT applications and services, in close collaboration with related UN specialized agencies and programmes and other international organizations with expertise in these domains. These frameworks and toolkits facilitate the elaboration of national sectoral e-strategies and build capacity among the ITU membership to articulate national visions, objectives, strategies, action plans and performance indicators to support the implementation of large-scale ICT applications and services that leverage existing infrastructure more effectively. This will result in effective harnessing of ICTs to better serve socio-economic development.

- Supporting the deployment of ICT/mobile applications to improve the delivery of value-added services in high-potential areas like disaster management, e-health including mobile health, education, agriculture, governance, environmental protection, mobile payment applications, etc., and to demonstrate and introduce the most suitable ICT utilization and applications to solve the existing challenges in sustainable development. The programme will act as a catalyst by launching appropriate partnership platforms – involving public and private partners – in order to foster the deployment of innovative ICT applications.

- Continuing to conduct detailed studies and facilitating the sharing of knowledge and best practices on various ICT applications, particularly using broadband, mobile communication, open source and new technology advances and innovations such as cloud computing, sensor networks, Internet of things, M2M communications, intelligent terminals, social networks, etc., with the aim of improving citizens' access to value-added services in areas like health, education, agriculture, governance, etc., and taking into consideration the means available for implementation (whether wireline, wireless, terrestrial, satellite, fixed, mobile, narrowband or broadband).

Relevant regional initiatives

The following regional initiatives will contribute to Output 3.2, consistent with WTDC Resolution 17 (Rev. Dubai 2014):

Region
ARB region
Use of telecommunications/ICTs for smart and sustainable development and protection of the environment **Objective:** To raise awareness of the importance of sustainable development and environmental protection, and formulate legislation and regulatory frameworks in order to achieve smart and sustainable development.
Smart learning **Objective:** To bring about a shift from traditional methods of teaching in schools and universities, using books and paper-based sources, to smart learning with the use of tablet computers, the latest software and modern telecommunication/ICT techniques to provide access to a range of academic information, resources and subject matters.
ASP region
Harnessing the benefits of new technologies **Objective:** To assist ITU Member States in utilizing new technologies and address human and technical capacity challenges related to issues such as those identified in the expected results, among others.
Development of broadband access and adoption of broadband **Objective:** To assist Member States in the development of broadband access in urban and rural areas and to support system construction to resolve social issues leveraging the benefits of telecommunication/ICT applications.

Study group Questions

The following study group Questions will contribute to Output 3.2:

Study Group 2 Questions
Question 1/2: Creating the smart society: Social and economic development through ICT applications
Question 2/2: Information and telecommunications/ICTs for e-health

WTDC resolutions and recommendations related to Output 3.2

The implementation of WTDC Resolutions 17, 21, 30, 32, 37, 50, 52, 53 and 54 will contribute to Output 3.2.

WSIS action lines related to the ICT Applications and Services Output

WSIS Action Line C7 of the Geneva Plan of Action for the Information Society will contribute to Output 3.2.

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

Outcomes

Outcomes	Related output
Enhanced capacity building of membership in international Internet governance	4.1
Improved knowledge and skills of ITU membership in the use of telecommunications/ICTs	4.1
Enhanced awareness of the role of human and institutional capacity building for telecommunications/ICTs and development for the ITU membership	4.1
Enhanced information and knowledge of policy-makers and other stakeholders on current telecommunication/ICT trends and developments based on high-quality, internationally comparable telecommunication/ICT statistics and data analysis	4.2
Enhanced dialogue between telecommunication/ICT data producers and users and increased capacity and skills of producers of telecommunication/ICT statistics to carry out data collections at the national level based on international standards and methodologies	4.2
Strengthened capacity of Member States to develop and implement digital inclusion policies, strategies and guidelines to ensure telecommunication/ICT accessibility for people with specific needs* and the use of telecommunications/ICTs for the social and economic empowerment of people with specific needs *people with specific needs are indigenous peoples, persons with disabilities, including age-related disabilities, youth, women and girls	4.3

Outcomes	Related output
Improved capacity of members to provide people with specific needs with digital literacy training and training on the use of telecommunications/ICTs for social and economic development	4.3
Improved 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	4.3
Improved access to and use of telecommunications/ICTs in LDCs, SIDS, LLDCs and countries with economies in transition	4.4
Enhanced capacity of LDCs, SIDS and LLDCs in telecommunication/ICT development	4.4

Output 4.1: Capacity building

Background

ITU, as the lead United Nations agency for telecommunication/ICT issues, is an important source of information, education and training in this field. This ITU leadership position carries with it a responsibility to ensure that human and institutional capacity building is of the utmost quality, is available worldwide, and represents the cutting edge of rapidly emerging technologies and changes taking place in the sector. It is thus important to provide opportunities for all, and especially developing countries, to acquire the specialized knowledge and skills they need to engage in and benefit from the telecommunication/ICT sector. This requires the promotion of an enabling environment and supporting the implementation of telecommunication/ICT initiatives.

Capacity building continues to be a cross-cutting issue that informs and enhances the overall ITU-D mission. Therefore, it requires cooperation and partnerships between countries and broad stakeholder participation. These partnerships should include, among others, academia, experienced professionals and experts, as well as organizations with relevant expertise in the capacity-building activities.

Telecommunication/ICT-based education and training is particularly fundamental for developing countries. It will help them to improve skills and enable them to establish and develop their national e-strategies for sustainable development. Therefore, research undertakings and the development of specialized training programmes in priority areas for the membership are required. Furthermore, the introduction of telecommunications/ICTs into education and human resources development for all groups is needed.

It is also essential to enhance human potential through the use of distance-learning technologies and other developments in telecommunications/ICTs.

To facilitate coordination of its capacity-building support to the membership, ITU has established the ITU Academy, an online platform that integrates all ITU capacity-building activities. The ITU Academy is also enhancing human potential through provision of distance-learning solutions.

Centres of excellence (CoEs) and Internet training centres (ITCs) are equally important platforms for education and information-sharing, which therefore fulfil an important role in ITU capacity-building activities under the ITU Academy.

A new strategy for CoEs has been developed under WTDC-10 Resolution 73. Through this strategy, there is alignment between the training provided and the priorities of the membership as decided at various WTDCs. The strategy takes effect after WTDC-14. ITU has also intensified the development of high-level training materials that will be available to CoEs, academia and other stakeholders. These training programmes are designed in such a manner that they can be delivered by accrediting institutions, leading to certification as part of degree programmes.

Regional, subregional and global forums and other capacity-building events remain important platforms for exchanging and sharing information among all stakeholders. These events provide developing countries with practical skills and hands-on learning, as well as offering opportunities for networking and creation of partnerships.

Key performance indicators (KPIs)

KPIs
• Number and level of individuals trained
• Number of participants who pass the training assessment
• Number of participants who are satisfied with the training
• Number of high-level training programmes developed
• Number of training courses available online through the ITU Academy platform
• Number of experts from academia engaged in capacity-building work
• Research and publications on capacity building carried out and/or published
• Number of website hits on the ITU Academy platform.

Implementation framework

Programme: Capacity building

This programme seeks to develop the necessary capacity-building policies and strategies in telecommunications/ICTs and guidelines and deliver them to members, especially in developing countries, in order to assist them in enhancing and strengthening their human and institutional capacity and in setting up national programmes. It will raise awareness among governmental and private-sector decision-makers on the importance of capacity building.

The programme will also undertake necessary steps in order to develop standards for ITU human capacity-building activities.

The programme will implement a wide scope of capacity-building interventions, as follows:

- Training as a core capacity-building tool for enhancing the capacity of ITU-D members, especially in developing countries, in order to apply telecommunications/ICTs effectively.

- Distance and face-to-face learning opportunities (both synchronous and asynchronous), as well as blended solutions, will be provided for all stakeholders.

- Delivering and promoting "train-the-trainer" activities to support telecommunication/ICT instructional and institutional sustainability will also play an important role in programme implementation.

- Development of high-level training materials undertaken in collaboration with ITU subject matter experts, partners from academia, research institutions and other organizations, who will also ensure their quality control.

- Encouraging the establishment of cooperative partnerships in multistakeholder fashion with all stakeholders specializing in telecommunication/ICT education, training and development activities, and engagement of qualified and experienced experts from academia, the private sector, government and international organizations, in order to build human and institutional capacity.

- Continued enhancement of the ITU Academy portal and related services. The programme will also support development of documented administrative and technical procedures to ensure quality control of materials made available on the ITU Academy portal.

- The programme will continue to promote the CoE network and ITCs as important indispensable components of ITU capacity building.
- Continued organization of knowledge-sharing platforms, lifelong learning, skills development and other capacity-building components will be pursued through periodic regional and global meetings, workshops and seminars.
- Development of a training programme through the ITU regional offices in collaboration with relevant stakeholders, within their respective roles, to provide human capacity building in order to equip ITU members with a higher degree of knowledge of Internet governance.

The programme will further promote and support research on and analysis of the latest sector trends and priorities, thorough regular surveys and data collection. This will help to identify the membership's needs and provide required solutions. It will also promote linkages between educational institutions and the telecommunication/ICT sector to ensure that graduates are better matched with sector needs.

All these capacity-building products and services will assist the membership at the global, regional, subregional or national level. This will also contribute to the implementation of relevant activities and projects.

Relevant regional initiatives

The following regional initiatives contribute to Output 4.1, consistent with WTDC Resolution 17 (Rev. Dubai, 2014):

Region
AFR region
Strengthening human and institutional capacity building **Objective:** To provide stakeholders in Africa, on a sustainable basis, with human resources and skills needed for harmonious development of the telecommunication/ICT sector.

Region
AMS region
Capacity building to engage in global ICT policy, with special focus on improving cybersecurity and developing countries' participation in the existing Internet governance institutions
Objective: To enhance the capacity building of Member States, especially developing countries, with a view to promoting an enabling environment, supporting the implementation of ICT initiatives and encouraging developing countries to participate actively in forums on global ICT policy, in close collaboration with existing institutions.
CIS region
Introduction of training technologies and methods using telecommunications/ICTs for human capacity building
Objective: To assist ITU Member States in the CIS region in setting up and developing national programmes for introducing telecommunications/ICTs into education.

Study group Questions

There are no study group Questions specific to capacity building.

WTDC resolutions and recommendations related to Output 4.1

The implementation of WTDC Resolutions 11, 17, 21, 30, 32, 35, 37, 40, 46, 48, 50, 52, 53, 55, 56, 58, 67 and 73 will contribute to Output 4.1.

WSIS action lines related to Output 4.1

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 contribute to Output 4.1.

Output 4.2: Telecommunication/ICT statistics

Background

With the growing recognition of ICTs as a driver for social development and economic growth, and as more and more people join the global information society and high-speed communication networks become an indispensable infrastructure, the tracking and measurement of developments in telecommunications/ICTs remain as relevant as ever. While there will be almost 7 billion mobile-cellular subscriptions globally and close to 3 billion people using the Internet worldwide by the end of 2014, there are still more than 4 billion people who are not yet connected to the Internet, mostly those living in rural areas of developing countries, for whom broadband Internet services are still unavailable or unaffordable.

ITU is recognized all over the world as the main source of internationally comparable data and statistics on telecommunications/ICTs. The statistical standards, definitions and methodologies developed by ITU are widely used by countries in their production of telecommunication/ICT statistics. Reliable, comprehensive and comparable statistics are indispensable to identify progress and gaps, track information-society developments at the national and global levels and support government and industry in making informed and strategic decisions to ensure equal access, use and impact of telecommunications/ICTs.

While the availability of comparable telecommunication/ICT statistics has considerably improved in recent years, major data gaps remain, in particular in developing countries, and in covering important areas such as measuring broadband speed and quality, international Internet bandwidth, investment and revenue in the ICT sector, household access to ICTs, individuals' use of ICTs, or gender equality in access and use of ICTs and access to ICTs by persons with disabilities. Countries are therefore encouraged to produce high-quality data based on internationally agreed standards and methodologies, which illustrate national digital divides as well as the efforts made through various programmes to close the gap, showing, as much as possible, the social and economic impact.

Key performance indicators (KPIs)

KPIs
• Timely release of ITU WTI database
• Number of data points and indicators available in database
• Number of downloads, citations, website hits and purchases of BDT statistical and research products and online resources
• Number of countries trained or advised on telecommunication/ICT statistics
• Number of participants in the World Telecommunication/ICT Indicators Symposium and in statistical expert groups; satisfaction rates of participants
• Updated statistical manuals and guidelines

Implementation framework

Programme: Telecommunication/ICT statistics

The programme on Telecommunication/ICT statistics will ensure that ITU maintains its global leadership as the main source of international telecommunication/ICT data and statistics, taking into consideration new and emerging telecommunication/ICT trends. This will be done by delivering the following services and products:

- Collecting, harmonizing and disseminating data and official statistics in the area of telecommunications/ICTs using a variety of data sources and dissemination tools, such as the World Telecommunication/ICT Indicators (WTI) database, the ICT Eye ITU online portal, the UN Data portal and others.

- Analysing telecommunication/ICT trends and producing regional and global research reports, such as the Measuring the Information Society (MIS) report as well as statistical and analytical briefs.

- Benchmarking telecommunication/ICT developments and clarifying the magnitude of the digital divide (using tools such as the ICT Development Index and the ICT Price Basket) and measuring the impact of ICTs on development and the gender digital divide.

- Developing international standards, definitions and methodologies on telecommunication/ICT statistics, in close cooperation with other regional and international organizations, including the United Nations, Eurostat, OECD and the Partnership on Measuring ICT for Development, for consideration by the United Nations Statistical Commission.

- Providing a global forum for discussing information society measurements for ITU members and other national and international stakeholders, by organizing the World Telecommunication/ICT Indicators Symposium and its related statistical expert groups.

- Encouraging Member States to bring together different stakeholders in government, academia and civil society in raising national awareness about the importance of production and dissemination of high-quality data for policy purposes.

- Contributing to the monitoring of internationally agreed goals and targets, including the MDGs and WSIS targets as well as the targets set by the Broadband Commission, and developing related measurement frameworks.

- Maintaining a leading role in the global Partnership on Measuring ICT for Development and its relevant task groups.

- Providing capacity building and technical assistance to Member States for the collection of telecommunication/ICT statistics, in particular by means of national surveys, through the delivery of training workshops and the production of methodological manuals and handbooks.

The products and services developed through this programme may be used at the global, regional, subregional or national level, and will support implementation of relevant regional initiatives, study group Questions, WSIS action lines, resolutions and projects. The programme will also ensure coordination with relevant United Nations agencies and networks to leverage the impact of the products and services developed under the programme.

Relevant regional initiatives

There are no regional initiatives directly related to Output 4.2.

Study group Questions

There are no study group Questions related to Output 4.2.

WTDC resolutions and recommendations related to Output 4.2

The implementation of WTDC Resolutions 8, 30, 37 and 53 will contribute to Output 4.2.

WSIS action lines related to Output 4.2

ICT statistics are relevant to monitoring the implementation of all WSIS action lines of the Geneva Plan of Action and are referred to in §§ 112-119 of the Tunis Agenda for the Information Society.

Output 4.3: Digital inclusion of people with specific needs

Background

Digital inclusion means ensuring the accessibility of telecommunications/ICTs and the use of telecommunications/ICTs for the social and economic development of people with specific needs.

Despite the increasing deployment of telecommunication/ICT networks, equipment and applications, many people remain excluded from the information society. Furthermore, telecommunications/ICTs are not exploited to promote economic and social development of women and girls, persons with disabilities, including age-related disabilities, youth, children and indigenous peoples, who have specific needs that must be addressed to enable them to use telecommunications/ICTs. Special measures are required to ensure the inclusion of people with specific needs in the information society and to promote their social and economic development through telecommunications/ICTs.

Globally, fewer women than men have access to telecommunications/ICTs, in particular access to the Internet and broadband services. This gender divide is more apparent in developing countries. There is a need for national strategies to ensure that women and men enjoy equal access to telecommunications/ICTs, and that telecommunications/ICTs can be used for the social and economic empowerment of women and girls.

People with specific needs often face barriers to using telecommunications/ICTs. Persons with disabilities, including age-related disabilities, require accessible telecommunications/ICTs (including mobile phones, tablets, computers, websites and TVs) that they can perceive and understand and on which they can input commands. Legal, policy, regulatory and business practices can be implemented to ensure that accessible telecommunications/ICTs are widely available and affordable for persons with disabilities in ITU Member States.

Youth, women, persons with disabilities, including age-related disabilities, and indigenous peoples often require training in both basic and advanced digital literacy skills in order to participate actively in the information society. Despite the rise of digital natives in developing countries, the majority of youth worldwide are not currently digital natives. Once equipped with telecommunication/ICT skills, people with specific needs can harness the power of telecommunications/ICTs for their empowerment, including employment, entrepreneurship and lifelong learning. This is especially timely in the face of global youth unemployment and the skills mismatch between what youth learn in school and the telecommunication/ICT skills sought by employers, as well as the gender divide in telecommunication/ICT skills development. Young people can develop these skills where they are incorporated into national education plans and where schools are connected to the Internet, equipped with ICTs and possess teachers trained to impart such skills.

Such skills can also be developed in community ICT centres, including those funded by universal service/access funds. Community access strategies are at a crossroads, moving from mere provision of Internet access and basic digital literacy training to development of innovation hubs, where members of the community create their own telecommunication/ICT solutions to social and economic challenges. Likewise, universal access/service mandates and funds require updating to ensure they are used to promote accessibility and digital inclusion of people with specific needs. Using telecommunications/ICTs to ensure the digital inclusion of all peoples for social and economic development requires comprehensive national digital inclusion policies, strategies and guidelines, as well as national broadband plans that promote accessibility and digital inclusion of people with specific needs.

Key performance indicators (KPIs)

KPIs
• Number of model digital inclusion policies, strategies and guidelines published for national digital inclusion policy and strategy development
• Number of members aware of and advised on digital inclusion policies, strategies and guidelines
• Number of digital inclusion training materials (e.g. on digital literacy) developed for national training programmes
• Number of trainers trained to provide digital inclusion training (e.g. training persons with disabilities on using accessible telecommunications/ICTs)
• Number of train-the-trainers materials developed to provide digital inclusion training for people with specific needs (e.g. training persons with disabilities on using accessible telecommunications/ICTs)
• Number of guidelines developed on using telecommunications/ICTs for social and economic development
• Number of website hits on ITU-D digital inclusion websites

Implementation framework

Programme: Digital inclusion

This programme will develop relevant policies, strategies and guidelines and deliver them to members. These include:

- policies, strategies and guidelines to ensure that accessible telecommunications/ICTs for persons with disabilities and aging populations are available in ITU Member States;

- public policy recommendations for the development of telecommunications/ICTs in indigenous communities;

- model national strategies to ensure that women and men enjoy equal access to telecommunications/ICTs so that telecommunications/ICTs can be used for the social and economic empowerment of women and girls;

- gender mainstreaming guidelines for regulatory agencies and ministries of communication, and guidelines for gender-sensitive project development and evaluation in the telecommunication sector;

- guidelines on updating universal access/service mandates and funds to promote accessibility and digital inclusion of people with specific needs;

- comprehensive digital inclusion policies, strategies and guidelines, including input to national broadband plans; and

- policies, strategies and guidelines on the use of telecommunications/ICTs to address key social and economic challenges, such as the need to promote youth employment and entrepreneurship and the empowerment of women and girls.

The programme will also develop products and services to enhance the ability of members to provide people with specific needs with digital literacy training and to develop national programmes on the use of telecommunications/ICTs for social and economic development. These include:

- digital literacy training programmes for use by members as part of their national digital inclusion strategies;

- train-the-trainer materials for use by members on the use of accessible telecommunications/ICTs by persons with disabilities; and

- training to enable the implementation of local communication networks administered and operated by indigenous peoples.

The programme will also raise awareness among members of the need for and importance of promoting digital inclusion, including through the collection and dissemination of information related to gender issues and telecommunications/ICTs.

The products and services developed through the programme may be used at the global, regional, subregional or national level, and will support the implementation of relevant regional initiatives, study group Questions, WSIS action lines, resolutions and projects. The programme will also ensure coordination with relevant United Nations agencies and networks to leverage the impact of the products and services developed under the programme.

Relevant regional initiatives

The following regional initiatives will contribute to Output 4.3, consistent with WTDC Resolution 17 (Rev Dubai 2014):

Region
ARB region
Ensuring access to telecommunications/ICTs, in particular for persons with disabilities **Objective:** To ensure the right of access to telecommunications/ICTs for persons with disabilities in the Arab region.
ASP region
Harnessing the benefits of new technologies **Objective:** To assist ITU Member States in utilizing new technologies and address human and technical capacity challenges related to issues such as those identified in the expected results, among others.
CIS region
Ensuring access to telecommunication/ICT services for persons with disabilities **Objective:** To assist ITU Member States in the CIS region in developing regulations and technical solutions, as well as in implementing specialized training programmes to ensure the accessibility and user-friendliness of ICTs for persons with disabilities.
EUR region
Ensuring access to telecommunications/ICTs, in particular for persons with disabilities **Objective:** To further promote e-accessibility in the ICT ecosystem, and provide the administration with the most suitable solutions available. Both objectives may comprise assistance to national regulatory authorities and sharing of best practices in cooperation with relevant institutions.
Entrepreneurship, innovation and youth **Objective:** To foster the creation of an enabling environment and build capacities at the regional level, aimed at growth of entrepreneurship and increased innovation in the ICT ecosystem, while encouraging empowerment of young men and women and creating new opportunities for them in the ICT sector. Strengthened cooperation with diverse stakeholders, including academia and private sector will be necessary.

Study group Questions

The following study group Questions will contribute to Output 4.3:

Study Group 1 Questions
Question 7/1: Access to telecommunication/ICT services by persons with disabilities and with specific needs

WTDC resolutions and recommendations related to Output 4.3

The implementation of WTDC Resolutions 11, 17, 21, 30, 32, 37, 46, 50, 52, 53, 55, 58, 68, 76 and 82 will contribute to Output 4.3.

WSIS action lines related to Output 4.3

WSIS Action Lines C2, C4 and C7 and C8 of the Geneva Plan of Action and § 90 of the Tunis Agenda for the Information Society will contribute to Output 4.3.

Output 4.4: Concentrated assistance to LDCs, SIDS and LLDCs

Background

ITU assistance to the least developed countries (LDCs) goes back to 1971, when the Union accorded special assistance to LDCs through the implementation of relevant plenipotentiary conference resolutions. In 2002, direct assistance to LDCs was delivered for the first time to a small group of countries on a biennial basis. This assistance facilitated monitoring and evaluation of the impact made by the concentrated assistance to beneficiary countries. In 2006, the programme was expanded to include small island developing states (SIDS) and emergency telecommunications. In 2010, WTDC (Hyderabad, 2010) approved the inclusion of landlocked developing countries (LLDCs) and countries with economies in transition in this programme. Every decade, the United Nations holds a special conference on LDCs, SIDS and LLDCs. For the decade 2004-2014, the fourth United Nations Conference on LDCs was held in Turkey in 2011, and adopted the Istanbul Programme of Action. In 2014, the third international conference on SIDS will be held in Samoa in September, and the ten-year review of the Almaty Plan of Action for LLDCs will be carried out in November 2014.

Output 4.4 will deliver targeted and highly differentiated assistance to countries with specific needs, including LDCs, SIDS, LLDCs and countries with economies in transition, in a number of key priority areas.

WTDC Resolution 16 (Rev. Hyderabad 2010) and Resolution 30 (Guadalajara, 2010) of the Plenipotentiary Conference, on special measures for LDCs, SIDS, LLDCs and countries with economies in transition, which highlight the role of ICTs as enablers of national socio-economic development, provide BDT with a mandate to pay special attention to these categories of countries through concentrated assistance.

BDT is committed to fulfilling its mandate and striving to reach its commitments under the Istanbul Programme of Action (IPoA) in regard to ICTs for LDCs, the Barbados Plan of Action (BPoA) for SIDS and the Almaty Plan of Action (APoA) for LLDCs. Each of these plans of action will be mainstreamed into the Dubai Action Plan.

Key performance indicators (KPIs)

KPIs
• Number of countries receiving concentrated assistance, with improved connectivity
• Number of countries that received assistance and have adopted telecommunication/ICT policy and regulatory frameworks
• Number of fellowships requested and number of fellowships awarded
• Number of countries with improved availability of telecommunication/ICT information as a result of concentrated assistance
• Number of countries with improved affordability of telecommunications/ICTs as a result of concentrated assistance

Implementation framework

Programme: Concentrated assistance to LDCs, SIDS and LLDCs

In line with Resolution 30 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, this programme will provide concentrated assistance to LDCs, SIDS, LLDCs and countries with economies in transition:

- The programme will provide quality and timely delivery of assistance for the general socio-economic development of countries in special need through telecommunications/ICTs, focusing on the specific needs of LDCs and countries in special need for the development of broadband infrastructure, ICT applications and cybersecurity, policy and regulatory frameworks and human capacity building.
- The programme will promote universal access to telecommunications/ICTs in LDCs, SIDS and LLDCs, and provide assistance to developing countries in disaster monitoring and mitigation, with the aim of helping these countries attain internationally agreed development goals, such as the Millennium Development Goals, by the year 2015. With this improved access, these countries could use telecommunications/ICTs as a development enabler.

Relevant regional initiatives

The following regional initiatives will contribute to Output 4.4, consistent with WTDC Resolution 17 (Rev. Dubai 2014):

Region
ASP region
Special consideration for least developed countries, small island developing states, including Pacific island countries, and landlocked developing countries **Objective:** To provide special assistance to LDCs, SIDS, including Pacific island countries and LLDCs in order to meet their priority ICT requirements.

WTDC resolutions and recommendations related to Output 4.4

The implementation of WTDC Resolutions 16, 17, 18, 21, 25, 26, 30, 33, 36, 37, 50, 51, 52, 53, 57 and 60 will contribute to Output 4.4.

WSIS action lines related to Output 4.4

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 will contribute to Output 4.4.

Objective 5 – Enhance environmental protection, climate-change adaptation and mitigation and disaster-management efforts through telecommunications/ICTs

Outcomes

Outcomes	Related output
Improved availability of information and solutions for Member States, regarding climate-change adaptation and mitigation	5.1
Enhanced capacity of Member States in relation to climate-change adaptation and mitigation policy and regulatory frameworks	5.1
Development of e-waste policy	5.1
Developed standards-based monitoring and early-warning systems linked to national and regional networks Collaboration to facilitate emergency disaster response	5.2
Established partnerships among relevant organizations dealing with the use of telecommunication/ICT systems for the purpose of disaster preparedness, prediction, detection and mitigation	5.2
Increased awareness of regional and international cooperation for easy access to, and sharing of, information related to the use of telecommunications/ICTs for emergency situations	5.2

Output 5.1: ICTs and climate-change adaptation and mitigation

Background

The process established by the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) and the ongoing negotiations of its Intergovernmental Negotiating Committee are important international actions aimed at addressing the threat of climate change, mitigating its adverse impacts and assisting all ITU Member States. Climate change will see climate/weather-related events occurring more frequently and having an intense impact on water resources, land use and marine ecosystems, thus in turn affecting the economies of all ITU Member States.

The critical importance of using telecommunications/ICTs to mitigate climate change and adapt to its adverse impact is widely recognized. This is why Member States should share best practices regarding sustainable telecommunication/ICT development and take into account the positive contribution of telecommunications/ICTs for sustainable development in other sectors of the economy.

Key performance indicators (KPIs)

- Number of Member States assisted by BDT for increasing awareness on the impact of climate change and on promoting the use of telecommunications/ICTs to mitigate its negative effects
- Number of Member States assisted by BDT in developing their climate-change strategies, policy and legislative frameworks
- Number of Member States receiving assistance for increasing awareness on using telecommunications/ICTs for greening the environment
- Number of Member States assisted by BDT in developing e-waste strategy, policy and regulatory frameworks

Implementation framework

Programme: ICTs and climate-change adaptation and mitigation

This programme implements BDT's mandate as laid down in WTDC Resolution 66 (Rev. Dubai, 2014) to provide assistance to developing countries in the use of ICTs to mitigate and address the effects of climate change, taking into account the impact of ICTs on the environment. ICTs can help developing countries to unlock opportunities in this regard, and to overcome the challenges posed by climate change through e-enabled adaptation and mitigation responses.

In view of the various impacts of climate-change, assistance is provided to countries on the following:

- mapping areas vulnerable to natural disasters and developing information systems covering the results of surveys, assessments and observations, as part of the development of adequate response strategies, mitigation and adaptation policies and measures to minimize the impact of climate change and climate variability;

- formulating comprehensive strategies and measures for providing assistance to developing countries in formulating the use of ICTs to help mitigate and respond to the devastating effects of climate change;

- using data from active and passive satellite-based remote sensing systems and other relevant systems/applications for climate monitoring, disaster prediction, detection and mitigation of the negative effects of climate change;

- facilitating Member States' participation in bilateral, regional and global research, assessments, monitoring and mapping of climate impacts, and development of response strategies;

- adopting metrics and common standards for evaluating the environmental impact of the use of telecommunications/ICTs, as well as the positive contribution telecommunications/ICTs can make to the broader economy;
- taking into account the impact of e-waste when evaluating the contributions of telecommunications/ICTs to greenhouse gas (GHG) emission.

Relevant regional initiatives

There are no regional initiatives related to Output 5.1.

Study group Questions

The following study group Questions will contribute to Output 5.1:

Study Group 2 Questions
Question 6/2: ICT and climate change

WTDC resolutions and recommendations related to Output 5.1

The implementation of WTDC Resolutions 17, 21, 30, 32, 37, 50, 52, 53 and 66 will contribute to Output 5.1.

WSIS action lines related to Output 5.1

Action Line C7 (e-environment) of the Geneva action Plan will contribute to Output 5.1.

Output 5.2: Emergency telecommunications

Background

Countries throughout the world are experiencing increased numbers of natural and man-made disasters, with a disproportionate impact on developing countries. LDCs, SIDS and LLDCs are particularly vulnerable to the impact that disasters can have on their economies and infrastructures, and such countries often lack the capacity to respond to disasters.

The critical importance of using telecommunications/ICTs to respond to these devastating phenomena is widely recognized. Because of the role telecommunications/ICTs play in all phases of a disaster – prediction, detection, mitigation and relief – it is important to develop disaster telecommunications preparedness plans and strategies, including taking account of the need for resilient and redundant infrastructures and systems as part of disaster risk reduction and early warning.

Because disasters often extend beyond the borders of a State, effective disaster management may involve the deployment of efforts by more than one country in order to prevent loss of human life and regional crisis. Prior coordination and collaboration among disaster-management experts, including governments, the private sector, international organizations and non-governmental organizations, before disasters increases the probability of saving human life when rescue operations are conducted and thereby mitigates the consequences of a disaster.

Member States should take account of a diverse range of telecommunication/ICT solutions that are appropriate and commonly available for disaster response and mitigation, including those provided by amateur radio services and satellite and terrestrial network services/facilities, taking into account persons with disabilities and specific needs.

Key performance indicators (KPIs)

KPIs
• Number of Member States assisted by BDT regarding the use of telecommunications/ICTs in support of disaster management
• Number of Member States where BDT assisted with disaster relief efforts, through both the provision of equipment and infrastructure damage assessments in the aftermath of a disaster, and in reconstructing and rehabilitating telecommunication infrastructure
• Number of Member States that received BDT assistance in developing and installing early-warning systems
• Number of Member States that received BDT assistance in developing national emergency communications plans
• Number of regions provided with support, through ITU regional offices, to increase collaboration and cooperation in disaster preparedness and response

Implementation framework

Programme: Emergency telecommunications

This programme is a global priority area for all ITU Member States. It seeks to ensure that assistance is provided to ITU Member States regarding the use of telecommunications/ICTs in preparing for and responding to disasters, including the area of early-warning and disaster-preparedness plans, and encouraging regional and international cooperation, collaboration and information-sharing.

The programme will implement interventions in collaboration with Member States including, but not limited to:

- ensuring that disaster-resilient features are incorporated in telecommunication networks and infrastructure;
- carrying out infrastructure damage assessments after disasters strike, and assisting countries to reconstruct and rehabilitate telecommunication infrastructure;

- providing training to Member States on how to use emergency telecommunication equipment when disaster strikes;
- strengthening and expanding ICT-based initiatives for providing medical (e-health) and humanitarian assistance in disasters and emergencies;
- developing partnerships with vendors dealing with emergency telecommunication equipment and renewable energy solutions.

The programme will further promote and support research on, and analysis of, the latest sector trends and priorities through regular surveys and data collection.

Assistance in predicting, preparing for, monitoring, mitigating and responding to emergencies will provide products and services that will assist the membership at the global, regional, subregional or national level. This will also contribute to the implementation of relevant activities and projects.

Relevant regional initiatives

The following regional initiatives will contribute to Output 5.2, consistent with WTDC Resolution 17 (Rev. Dubai, 2014):

Region
AMS region
Emergency telecommunications **Objective:** To provide assistance to Member States at all phases of disaster management, i.e. disaster preparedness including early warning, disaster response/relief and rehabilitation of telecommunication networks.
ASP region
Emergency telecommunications **Objective:** To provide assistance to Member States at all phases of disaster management, i.e. disaster preparedness including early warning, disaster response/relief and rehabilitation of telecommunication networks.

Study group Questions

The following study group Questions will contribute to Output 5.2:

Study Group 2
Question 5/2: Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response
Question 8/2: Strategies and policies for the proper disposal or reuse of telecommunication/ICT waste material

WTDC resolutions and recommendations related to Output 5.2

The implementation of WTDC Resolutions 17, 21, 30, 32, 34, 37, 50, 52 and 53 will contribute to Output 5.2.

WSIS action lines related to Output 5.2

WSIS Action Line C7 (e-environment) of the Geneva Plan of Action will contribute to Output 5.2.

Dubai Action Plan

Section 3 – Regional Initiatives

AFRICA REGIONAL INITIATIVES

AFR1: Strengthening human and institutional capacity building

Objective: To provide stakeholders in Africa, on a sustainable basis, with human resources and skills needed for harmonious development of the telecommunication/ICT sector.

Expected results

1) Enhanced skills and human capacity in the design and development of telecommunication/ICT strategies, including conformity and interoperability

2) Increased local expertise through cooperation between countries

3) Increased access to training resources, including training manuals, for all stakeholders in the African telecommunication/ICT sector

4) Promotion of technical cooperation between telecommunication/ICT training institutions in regard to capacity and resources

5) Increased availability of public access to knowledge, in particular by raising public and consumer awareness

6) Forums for exchanging and sharing information between the various groups having a stake in the telecommunication/ICT sector in Africa, in particular young people, women and persons with disabilities and specific needs

7) Enhanced human capacity building on legal aspects in order to address security and trust in the use of telecommunications/ICTs, particularly where cyberthreats are concerned

8) Greater availability, development and usage of local content and languages, and corresponding webpage development

9) Improved specialized skills development to meet the ICT needs of persons with disabilities and specific needs in order to promote ICT usage, particularly in regard to Internet applications

10) Promotion of research and development (R&D) in African countries.

AFR2: Strengthening and harmonizing policy and regulatory frameworks for the integration of African telecommunication/ICT markets

Objective: To facilitate and promote the reform of Africa's national telecommunication/ICT sectors and the implementation of telecommunication/ICT strategies in order to achieve subregional and regional integration of telecommunication/ICT infrastructure, services and markets.

Expected results

1) Implementation of the reference framework for harmonization of telecommunication/ICT regulatory policies in Africa

2) Development of competitive African telecommunication/ICT markets

3) Harmonized technical standards to provide increased connectivity of networks and services

4) Establishment of a harmonized policy to reduce the level of intra-continental traffic routed by extra-continental transit centres

5) Development of a harmonized strategy for universal access, taking into account the needs of young people, women, persons with disabilities and specific needs, and indigenous peoples

6) Development of high-quality and affordable telecommunication/ICT services

7) Establishment of a regional framework for cooperation (training, internships, mutual assistance) on e-waste

8) Development and harmonization of national and regional regulations on cybersecurity and ICT applications

9) Harmonization of the quality-of-service regulatory framework at regional level to ensure consumer satisfaction

10) Development of a set of tools and mechanisms for measurement of a consumer satisfaction index.

AFR3: Development of broadband access and adoption of broadband

Objective: To assist Member States in the development of broadband infrastructure and access thereto in urban and rural areas, with particular emphasis on subregional and continental interconnection.

Expected results

1) National telecommunication/ICT master plans to meet the requirements of developing countries

2) Improved broadband backbone infrastructure and access to affordable telecommunication/ICT services in urban and rural areas

3) Guidelines on rural connectivity, including policy, appropriate technologies and power supply issues, and best practices

4) Enhanced human capacities in the area of broadband communication networks

5) Interconnection of countries by means of high-capacity links, including access to undersea cables for landlocked countries, as part of the follow-up to the Connect Africa summit

6) Development of mechanisms and tools to facilitate the use of ICTs by persons with disabilities and specific needs

7) Ease of access to submarine cables for all countries, and especially landlocked countries, on fair terms

8) Promoting the establishment of national and regional Internet exchange points (IXPs)

9) Promoting the development of local content and localized access

10) Promoting IPv4 to IPv6 migration.

AFR4: Spectrum management and transition to digital broadcasting

Objective: To assist Member States in the transition to digital broadcasting and spectrum management.

Expected results

1) Support for the elaboration of spectrum-management plans at the national, regional and global levels, including the transition to digital broadcasting

2) Assistance in using the tools to support the developing countries in improving the international coordination of terrestrial services in border areas

3) Capacity building in spectrum management and digital broadcasting technologies

4) Elaboration of studies, benchmarks and guidelines on the economic and policy aspects of the assignment and use of the radio-frequency spectrum, taking into account Resolution 9 (Rev. Hyderabad 2010) of the World Telecommunication Development Conference

5) Assistance to countries in fostering people-inclusive strategies in digital broadcasting, to include the availability of universal broadcasting receivers for commercial use at affordable prices

6) Assistance to Member States in meeting the deadline for the analogue-to-digital switchover.

AFR5: Building confidence and security in the use of telecommunications/ICTs

Objective: To assist Member States in defining and implementing appropriate strategies for the protection of ICT infrastructure and building confidence in the use of ICTs and applications.

Expected results

1) Enhanced coordination and sustained national and regional approaches to cybersecurity

2) Support for institutional and organizational mechanisms at national and regional levels to effectively implement cybersecurity strategies

3) Development of appropriate measures to protect consumers, children and other vulnerable persons in the use of ICTs

4) Creating awareness of cyberthreats, cybersecurity measures and quality of service in the use of ICTs

5) Adoption of measures for privacy and personal data protection

6) Promoting the development of national and regional computer incident response teams (CIRTs)

7) Development of a harmonized strategy to strengthen information security and combat spam and cyberthreats.

AMERICAS REGIONAL INITIATIVES

AMS1: Emergency telecommunications

Objective: To provide assistance to Member States at all phases of disaster management, i.e. disaster preparedness including early warning, disaster response/relief and rehabilitation of telecommunication networks, particularly in small island developing states (SIDS) and the least developed countries (LDCs).

Expected results

1) Identification of suitable technologies to be used for emergency communications

2) Improving linkages and information sharing on emergency communications in order to maximize resources, lead to more innovative and effective programmes for the Americas region and allow, *inter alia*, coordinated actions in border areas

3) Design of national and subregional emergency communication plans and early-warning systems, with special focus on SIDS and LDCs, taking into account the impact of climate change

4) Development of appropriate policy, regulatory and legislative frameworks on emergency communications at national and regional level

5) Increased human capacity skills on emergency communications

6) Temporary availability of emergency communication equipment in the Americas region, at the initial stage of a disaster intervention, as part of ITU cooperation in cases of emergency.

AMS2: Spectrum management and transition to digital broadcasting

Objective: To provide assistance to ITU Member States in the transition to digital broadcasting and spectrum management.

Expected results

1) Support for the elaboration of spectrum-management plans at the national, regional and global levels, including the transition to digital broadcasting

2) Assistance in using the tools to support the developing countries in improving the international coordination of terrestrial services in border areas

3) Capacity building on spectrum management and digital broadcasting technologies

4) Elaboration of studies, benchmarks and guidelines on the policy and economic aspects of the assignment and use of the radio-frequency spectrum, taking into account Resolution 9 (Rev. Hyderabad 2010) of the World Telecommunication Development Conference

5) Assistance to countries in fostering people-inclusive strategies in digital broadcasting, to include the availability of universal broadcasting receivers for commercial use at affordable prices.

AMS3: Development of broadband access and adoption of broadband

Objective: To provide assistance to Member States in the development of policies to increase broadband access and uptake.

Expected results

1) Development or improvement of national broadband plans to guide policies for increasing access to broadband services and promoting investment in networks

2) Improved access to broadband infrastructure, services and applications in urban and rural areas, especially access for landlocked developing countries

3) Assistance to countries in promoting access to ICTs in public social service institutions, such as educational centres, health centres and social rehabilitation centres, and the use of ICTs by the population to access these social services

4) Capacity building in broadband communication networks and in the development of ICT applications that address local needs, including applications relating to e-government, e-medicine, e-education and e-commerce, in the light of prevailing social, economic and demographic conditions

5) Support to non-profit cooperatives that provide services in underserved rural and suburban areas

6) Consolidation and dissemination of information related to the deployment and operation of networks based on interoperable international mobile telecommunications (IMT), satellite networks and fibre-optic networks suited to providing enhanced broadband coverage and connectivity in rural areas at affordable prices to the users.

AMS4: Reduction of telecommunication service prices and Internet access costs

Objective: To provide assistance to Member States in defining and coordinating policies, ways and means to reduce the cost of access and interconnection, as well as the prices of telecommunication and Internet services and Internet for users, through necessary investments.

Expected results

1) Studies of policies that enable reduction of the prices paid by users for the different telecommunication services

2) Study of legal and regulatory options and actions at the regional, subregional and local levels to be implemented in order to achieve an effective reduction in the cost of international mobile roaming for the user

3) Study of the policy and regulatory aspects for enabling the implementation of Internet exchange points (IXPs)

4) Promoting the development, as appropriate, of national, subregional and regional IXPs, subject to national decision

5) Promotion of cooperation and information sharing

6) Reduced cost of access to the international fibre-optic network, especially for landlocked developing countries and small island developing states

7) Capacity building for the administration and management of IXPs.

AMS5: Capacity building to engage in global ICT policy, with special focus on improving cybersecurity and developing countries' participation in the existing Internet governance institutions

Objective: To enhance the capacity building of Member States, especially developing countries, with a view to promoting an enabling environment, supporting the implementation of ICT initiatives and encouraging developing countries to participate actively in forums on global ICT policy, in close collaboration with existing institutions.

Expected results

1) Enhanced coordination and sustained national and regional approaches to cybersecurity
2) Support for institutional and organizational mechanisms at the national and regional levels for the effective implementation of cybersecurity strategies
3) Strengthened ability of developing countries to fully engage in existing Internet governance forums in collaboration with the existing Internet institutions.

ARAB STATES REGIONAL INITIATIVES

ARB1: Development of broadband access and adoption of broadband

Objective: To assist Arab States (particularly least developed countries[1]) in the implementation and development of broadband infrastructure in urban and rural areas, and to develop, facilitate and spread access to broadband networks and services in the Arab States, including issues related to conformance and interoperability.

Expected results

Assistance to the countries in the following:

1) Establishment of national and regional strategic plans and work programmes for the telecommunication/ICT sector to meet the needs of the Arab countries in this field

[1] There are six LDCs in the Arab region, namely: Comoros, Djibouti, Somalia, Yemen, Mauritania, and Sudan.

2) Improving broadband network infrastructure, including the deployment and connection of optical fibre cables, for the provision of good-quality and affordable telecommunication/ICT services in urban and rural areas, including migration to next-generation networks (NGN) and future networks (FN), keeping pace with the rapid developments in this vital, developing field

3) Development of ICT applications that can support multilingualism and address local needs, particularly to cater for the specific needs of persons with disabilities and inhabitants of remote regions in relation to broadband networks

4) Development of human resources, through training programmes and workshops to exchange expertise, in order to address regulatory, technical and economic issues related to broadband communication networks, NGN and FN, and migration thereto

5) Implementation of national programmes on conformance and interoperability, establishing cooperation agreements with regional laboratories to assist in this regard, and setting guidelines in accordance with international best practices, including regulatory frameworks that need to be considered

6) Development of guidelines and recommendations with regard to regional cloud computing taking into consideration regulatory frameworks.

ARB2: Building confidence and security in the use of telecommunications/ICTs

Objective: To build confidence and security in the use of telecommunications/ICTs and e-commerce in the Arab region and combat all forms of cyberthreats, including the misuse of ICTs.

Expected results

Assistance to the countries in the following:

1) Formulation of national and regional regulatory and technical policies and frameworks and legal measures to ensure data privacy and combat the different forms of cyberthreats in the Arab region, thereby ensuring optimal and secure use of the Internet and its various applications and building confidence in the Internet

2) Establishment of national computer incident response teams (CIRTs) in the Arab region (in particular in least developed countries) and optimal coordination both among them and between them and CIRTs in the other regions

3) Protection of Arab children and youth from harmful and abusive content on the Internet and making them aware of its risks, through the launch of awareness-raising campaigns and workshops, training curricula and study of the possibility of establishing a regional centre to prepare special awareness programmes to protect Arab children and youth from the risks of ICTs.

ARB3: Use of telecommunications/ICTs for smart and sustainable development and protection of the environment

Objective: To raise awareness of the importance of sustainable development and environmental protection, and formulate legislation and regulatory frameworks in order to achieve smart and sustainable development.

Expected results

Assistance to the countries in the following:

1) Formulation of strategic plans and regulatory frameworks for the transition to smart and sustainable development in various relevant spheres

2) Exchange of expertise between Arab countries in the field of smart and sustainable development in various spheres, and study of the negative effects resulting from e-waste and finding appropriate solutions to deal with it

3) Addressing the challenges of scarce resources, for example water, in the Arab region by means of smart management of those resources using telecommunication/ICT applications

4) Use of telecommunications/ICTs to confront the consequences of climate change for the Arab region, formulation of mechanisms to control emissions of harmful gases, and gradual transitioning to clean and sustainable energy

5) Exchange of expertise in the field of policy for smart, sustainable and green cities in the Arab region, ensuring the gradual transformation of Arab cities to smart and sustainable cities.

ARB4: Smart learning

Objective: To bring about a shift from traditional methods of teaching in schools and universities, using books and paper-based sources, to smart learning with the use of tablet computers, the latest software and modern telecommunication/ICT techniques to provide access to a range of academic information, resources and subject matters.

Expected results

Assistance to the countries in the following:

1) Eradication of digital illiteracy in the Arab region

2) Finding smart and low-cost computing devices, either with the support of Arab governments or by concluding agreements with manufacturers to provide such devices

3) Development of Arab educational e-content for schools and universities in the Arab region.

ARB5: Ensuring access to telecommunications/ICTs, in particular for persons with disabilities

Objective: To ensure the right of access to telecommunications/ICTs for persons with disabilities in the Arab region.

Expected results

Assistance to the countries in the following:

1) Formulation and updating of national and regional regulatory policies and frameworks to ensure access for persons with disabilities of all kinds to telecommunications/ICTs, facilitating their involvement in the community and enabling them to enjoy their full rights

2) Development of ICT applications and software that enable persons with disabilities to access information, references and other resources for education and leisure, and provision of specialized national and regional applications for libraries, databases and other purposes via the Internet and other telecommunication/ICT media

3) Participation of persons with disabilities in Arab workshops, training courses and conferences, by providing all the requirements and facilities and removing all the obstacles.

ASIA-PACIFIC REGIONAL INITIATIVES

ASP1: Special consideration for least developed countries, small island developing states, including Pacific island countries, and landlocked developing countries

Objective: To provide special assistance to least developed countries (LDCs), small island developing states (SIDS), including Pacific island countries, and landlocked developing countries (LLDCs) in order to meet their priority ICT requirements.

Expected results

1) Improved infrastructure and enhanced access to affordable ICT services

2) Improved enabling environment to facilitate ICT development

3) Appropriate national, subregional and regional frameworks for cybersecurity

4) Enhanced skills of relevant human resources

5) Addressing specific issues and challenges in the Pacific island countries

ASP2: Emergency telecommunications

Objective: To provide assistance to Member States at all phases of disaster management, i.e. disaster preparedness including early warning, disaster response/relief and rehabilitation of telecommunication networks.

Expected results

1) Identification of suitable technologies to be used for emergency communications

2) Creation of common databases to share information on emergency communications

3) Design of national and subregional emergency communication plans, taking into account the impact of climate change

4) Development of appropriate policy, regulatory and legislative frameworks on emergency communications at national and regional level

5) Availability of a dedicated set of equipment for emergency radio communication in the Asia-Pacific region

6) Capacity building in relation to emergency telecommunications and disaster preparedness

7) Mechanism for sharing information and best practices on utilizing ICTs for disaster preparedness, disaster response/relief and reconstruction among countries in the region and others.

ASP3: Harnessing the benefits of new technologies

Objective: To assist ITU Member States in utilizing new technologies and address human and technical capacity challenges related to issues such as those identified in the expected results, among others.

Expected results

1) Assistance in the development of frameworks for new and emerging technical issues as well as for utilizing new technologies in, but not limited to, the following areas:

   a) Digitization of broadcasting

   b) Next-generation network

   c) Transition to IPv6

   d) Digital literacy and inclusion for all (e.g. people with disabilities, etc.)

   e) ICT applications

   f) Multilingual local content

g) Accredited laboratory

h) Spectrum management and monitoring

i) Cybersecurity, including issues such as combating spam and protection of children and other vulnerable groups, and the protection of personally identifiable information

j) Number misuse

k) Issues related to climate change and e-waste

l) Over-the-top (OTT) services

m) Cloud computing

n) Quality of service

o) International mobile roaming

p) Cable landing stations

2) Raised awareness and enhanced skills in relation to new technologies and technical issues as identified and others as requested

3) Expert and technical assistance to members on resolving technical issues as identified and others as requested

4) Identification of new and emerging technical issues which could be the focus of further expertise, assistance and capacity-building exercises.

ASP4: Development of broadband access and adoption of broadband

Objective: To assist Member States in the development of broadband access in urban and rural areas and to support system construction to resolve social issues leveraging the benefits of telecommunication/ICT applications.

Expected results

1) National broadband policies to meet the requirements of developing countries

2) Improved broadband infrastructure and access to affordable ICT services in urban and rural areas, including remote and hilly terrains as well as remote islands

3) Development of telecommunication/ICT applications that can support multilingualism and address local needs

4) Enhanced skills in the area of broadband communication networks for the relevant human resources

5) Implementation of solutions providing cost-effective broadband infrastructure addressing the deployment and operational challenges in rural and remote areas, including remote islands

6) International cooperation on multistakeholder empowerment of ICT volunteers

7) Capacity building and deployment of cost-effective e-health services in rural and remote areas, thereby reducing operational and administrative costs

8) Accelerating the evolution and deployment of next-generation network infrastructure, including mobile/wireless communication networks, land/submarine optical fibre cable networks and Internet networks, for both national and regional connectivity

9) Studies and assistance on effective utilization and optimization of optical fibre cable networks, especially submarine cable networks

10) Studies on traffic categorization and offering of necessary content bundles to reach more lower income groups.

ASP5: Policy and regulation

Objectives: To assist Member States in developing appropriate policy and regulatory frameworks, enhancing skills, increasing information sharing and strengthening regulatory cooperation.

Expected results

1) Development of appropriate policy, regulatory and legislative frameworks relating to the regional initiatives where necessary

2) Enhancing the skills of relevant human resources

3) Promotion of regulatory cooperation and information sharing.

CIS REGIONAL INITIATIVES

CIS1: Creating a child online protection centre for the CIS region

Objective: To provide ITU Member States in the CIS region with centralized advisory and technical assistance on various aspects of child online protection.

Expected results

1) Distance-training courses on safe use of Internet resources, with provision for testing children, parents, teachers, etc.

2) National systems for updating and disseminating lists of useful Internet resources for children, as well as lists of other Internet resources flagged as unsuitable

3) Provision of more complete information for representatives of administrations, law-enforcement agencies, educational establishments and the private sector regarding the current legal/regulatory and organizational/technical frameworks in the area of child online protection

4) A database with data on existing technical solutions for child online protection

5) Provision of recommendations for any interested party on selecting the best solution for child online protection for a given organization

6) Training courses on solutions for child online protection as part of school and university programmes

7) Trial areas for systems restricting access to inappropriate resources for educational establishments in the region.

CIS2: Ensuring access to telecommunication/ICT services for persons with disabilities

Objective: To assist ITU Member States in the CIS region in developing regulations and technical solutions, as well as in implementing specialized training programmes to ensure the accessibility and user-friendliness of ICTs for persons with disabilities.

Expected results

1) Recommendations and regulations setting out infrastructure and content requirements in terms of accessibility and user-friendliness of ICTs for persons with disabilities

2) Recommendations on adapting web resources to make them as accessible as possible to persons with disabilities

3) Community access points for persons with disabilities, equipped with specialized IT equipment and software

4) IT training centre for persons with disabilities in the CIS region

5) Methodology for training persons with disabilities to give them telecommunication/ICT user skills, and training for trainers in the use of these methodologies.

CIS3: Introduction of training technologies and methods using telecommunications/ICTs for human capacity building

Objective: To assist ITU Member States in the CIS region in setting up and developing national programmes for introducing telecommunications/ICTs into education.

Expected results

1) Further training courses, training sessions and seminars on introducing telecommunications/ICTs into education and human capacity building, including in rural areas

2) Development of distance-learning technologies and methods in areas including the protection of ethnic minorities' rights to receive education in their own languages by providing additional educational opportunities

3) Development of methods for assessing personality traits in order to select the most suitable teaching methods for individual students using telecommunications/ICTs

4) Recommendations on methods of setting up national programmes for the introduction of telecommunications/ICTs into education

5) Comprehensive human capacity building through education using modern developments in telecommunications/ICTs.

CIS4: Development of broadband access and adoption of broadband

Objective: To assist interested Member States in developing broadband access, including in rural and remote areas, using energy-efficient technologies.

Expected results

1) Recommendations for Member States on the development of national ICT plans to meet the demands of populations in participating countries

2) Improved infrastructure for broadband access to ICT services of acceptable price and quality, in urban, rural and remote areas

3) Measures to promote the development of broadband access with a view to connecting state social institutions, training centres, and healthcare and social rehabilitation centres, and to promote the use of ICTs by the general public in order to access social services

4) Improved skills in the use of broadband access networks; this will involve online training seminars and other activities

5) Recommendations on selecting the most suitable technologies for constructing broadband networks for countries with regions with low population density

6) Assistance in the construction of satellite networks for broadband Internet access in countries with low population density.

CIS5: Building confidence and security in the use of ICTs

Objective: To build the capacity of Member States in the CIS region in building confidence and security in the use of ICTs, within the framework of the concept of information ecology for sustainable development and combating the potential negative consequences of the impact of the information environment.

Expected results

1) Human capacity building in the countries of the region in building confidence and security in the use of ICTs, with adaptation for age, health condition and area of activity, including for effective use of e-government services

2) Helping CIS countries participate collectively in global Internet governance policy

3) Parameters of the information environment and criteria for assessing their impact on humans

4) Recommendations on conducting information-ecology expert analyses of ICT projects and the information environment in which they are applied (region, country, town, etc.)

5) Continuous professional development courses, training, seminars on monitoring the status of the information environment and its effect on humans, including building confidence and security in the use of ICTs.

EUROPE REGIONAL INITIATIVES

EUR1: Spectrum management and transition to digital broadcasting

Objective: To foster regional cooperation, mainly supplemented by direct assistance to the administrations in the process of analogue TV switch-off, and management of the frequencies in the digital dividend bands, which are to be utilized bearing in mind the most effective use of radio spectrum.

Expected results

Assistance to the countries in need in the following:

1) Transition from analogue to digital terrestrial broadcasting and switch-off process

2) Capacity building in spectrum management, including in the digital dividend band

3) Elaboration of studies, benchmarks and guidelines on the economic and policy aspects of the assignment and use of the radio-frequency spectrum.

EUR2: Development of broadband access and adoption of broadband

Objective: Due to significant differences in European countries, there is an urgent need to take steps and assist administrations in every aspect of the practical implementation and development of high-speed networks. This action may also comprise the establishment of local/regional broadband roll-out plans. The development of communication networks would be boosted by using the experience in infrastructure-sharing with energy sector (smart grids) and should aim to benefit from cross-sectoral synergies. The degree of progress in this field varies considerably between Member States in the region, and therefore sharing best practices and regulatory policies and providing assistance would help to use resources most effectively.

Expected results

Assistance to the countries in need in the following:

1) Creation of new legislative paradigms fostering broadband development, including cost-effective solutions for remote and rural areas and models for infrastructure-sharing, including applications of smart grids

2) Establishment of national and local/regional broadband roll-out plans and monitoring of the implementation and elaboration of relevant cross-sectoral policies and strategies, including setting up national coordination mechanisms

3) Development of plans for broadband infrastructure roll-out, including in remote and rural areas

4) Mapping of broadband infrastructure across the region

5) Monitoring of the quality of services and consumer protection.

EUR3: Ensuring access to telecommunications/ICTs, in particular for persons with disabilities

Objective: To further promote e-accessibility in the ICT ecosystem, and provide the administrations with the most suitable solutions available. Both objectives may comprise assistance to national regulatory authorities and sharing of best practices in cooperation with relevant institutions.

Expected results

Assistance to the countries in need in the following:

1) Formulation of strategic plans and regulatory frameworks promoting e-accessibility and building confidence in ICT use at the national level

2) Creating the environment for the deployment of solutions for e-accessibility, including television/ICT applications for people with disabilities

3) Capacity building and promoting e-education solutions.

EUR4: Building confidence and security in the use of telecommunications/ICTs

Objective: To build trust and confidence in the use of ICTs among children and young people in Europe.

Expected results

Assistance to the countries in need in the following:

1) Utilizing the existing knowledge on risk and vulnerabilities to which children are exposed in cyberspace and providing best practices

2) Providing a platform to raise awareness on child online protection (COP) and safety issues

3) Developing and implementing roadmaps for national or regional COP initiatives.

EUR5: Entrepreneurship, innovation and youth

Objective: To foster the creation of an enabling environment and build capacities at the regional level, aimed at growth of entrepreneurship and increased innovation in the ICT ecosystem, while encouraging empowerment of young men and women and creating new opportunities for them in the ICT sector. Strengthened cooperation with diverse stakeholders, including academia and the private sector will be necessary.

Expected results

Assistance to the countries in need in the following:

1) A stronger and expanded regional network of ICT incubators

2) Improved performance, gender-responsiveness and sustainability of ICT incubators across the region

3) Enhanced competitiveness and sustainability of small and medium enterprises (SMEs) in the region

4) Integration of ICT professionals, including young people and students, into the employment market by providing them with appropriate skills and knowledge and promoting self-development to help them find employment or create their own businesses.

Dubai Action Plan

Section 4 – Resolutions and Recommendations

RESOLUTION 1 (Rev. Dubai, 2014)

Rules of procedure of the ITU Telecommunication Development Sector

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) the provisions of Article 21 of the ITU Constitution concerning the specific functions of the ITU Telecommunication Development Sector (ITU-D);

b) the general working arrangements of ITU-D defined in the ITU Convention,

considering also

a) that ITU-D shall work, among others, through telecommunication development study groups, the Telecommunication Development Advisory Group (TDAG) and regional and world meetings organized within the framework of the Sector's Action Plan;

b) that, in accordance with No. 207A of the Convention, the World Telecommunication Development Conference (WTDC) is authorized to adopt the working methods and procedures for the management of the Sector's activities in accordance with No. 145A of the Constitution,

resolves

that, for ITU-D, the general provisions of the Convention referred to in *considering b)* and *considering also b)* should be supplemented by the provisions of this resolution and its annexes, bearing in mind that, in the case of inconsistency, the Constitution, the Convention and the General Rules of conferences, assemblies and meetings of the Union (in that order) shall prevail over this resolution.

SECTION 1 – World Telecommunication Development Conference

1.1 The World Telecommunication Development Conference (WTDC), in undertaking the duties assigned to it in Article 22 of the ITU Constitution, Article 16 of the ITU Convention and the General Rules of conferences, assemblies and meetings of the Union, shall conduct the work of each conference by setting up committees and one or more groups to address organization, work programme, budget control and editorial matters, and to consider other specific matters if required.

1.2 It shall establish a steering committee, presided over by the chairman of the conference, and composed of the vice-chairmen of the conference and the chairmen and vice-chairmen of the committees and any group(s) created by the conference.

1.3 WTDC shall establish a budget control committee and an editorial committee, the tasks and responsibilities of which are set out in the General Rules of conferences, assemblies and meetings of the Union (General Rules, Nos 69-74):

a) The Budget Control Committee, *inter alia*, examines the estimated total expenses of the conference and estimates the financial needs of the ITU Telecommunication Development Sector (ITU-D) up to the next WTDC and the costs entailed by the execution of the decisions of the conference.

b) The Editorial Committee perfects the wording of texts arising from WTDC deliberations, such as resolutions, without altering their sense and substance, and aligns the texts in the official languages of the Union.

1.4 In addition to the steering, budget control and editorial committees, the two following committees are set up:

a) The Committee on Working Methods of ITU-D, the terms of reference of which are to examine proposals and contributions relating to cooperation among members; to evaluate the working methods and functioning of the ITU-D study groups; to assess and identify options for maximizing programme delivery and to approve appropriate changes thereto with a view to strengthening the synergies between study group Questions, programmes and regional initiatives; and to submit to the plenary meeting reports, including proposals on the ITU-D working methods for implementation of the ITU-D work programme, on the basis of the Telecommunication Development Advisory Group (TDAG) and study group reports submitted to the conference and the proposals of ITU Member States, ITU-D Sector Members and Academia.

b) The Committee on Objectives, the terms of reference of which are to review and approve the outputs and outcomes for the objectives; to review and agree on the related study group Questions and regional initiatives and establish appropriate guidelines for their implementation; to review and agree on relevant resolutions; and to ensure that the output is in accordance with a results-based management approach aiming to improve management effectiveness and accountability.

1.5 The plenary meeting of a WTDC may set up other committees or groups that meet to address specific matters, if required, in accordance with No. 63 of the General Rules. The terms of reference should be contained in the establishing resolution.

1.6 All committees and groups referred to in §§ 1.2 to 1.5 above shall normally cease to exist with the closing of WTDC except, if required and subject to the approval of the conference and within the budgetary limits, the Editorial Committee. The Editorial Committee may therefore hold meetings after the closing of WTDC to complete its tasks as assigned by the conference.

1.7 Prior to the inaugural meeting of WTDC, in accordance with No. 49 of the General Rules, the heads of delegation shall meet to prepare the agenda for the first plenary meeting and make proposals for the organization of the conference, including proposals for chairmanships and vice-chairmanships of WTDC and its committees and groups.

1.8 The programme of work of WTDC shall be designed to provide adequate time for consideration of the important administrative and organizational aspects of ITU-D. As a general rule:

1.8.1 WTDC shall consider reports from the Director of the Telecommunication Development Bureau (BDT) and, pursuant to No. 208 of the Convention, shall establish work programmes and guidelines for defining telecommunication development questions and priorities and shall provide direction and guidance for the ITU-D work programme. It shall decide on the need to maintain, terminate or establish study groups, allocate to each of them the Questions to be studied and, taking into account consideration by the heads of delegation, appoint the chairmen and vice-chairmen of study groups, of TDAG and of any other groups it has established, taking account of Article 20 of the Convention. The study group chairmen themselves shall, during the conference, be at the disposal of WTDC to provide information on matters relating to the study group they chair.

1.8.2 WTDC shall establish a declaration, a plan of action, including programmes and regional initiatives, ITU-D's contribution to the draft ITU strategic plan, ITU-D study group Questions, as well as resolutions and recommendations.

1.9 A WTDC may express its opinion relating to the duration or agenda of a future WTDC.

1.10 During WTDC, the heads of delegation shall meet:

a) to consider the proposals concerning the work programme and the constitution of study groups in particular;

b) to draw up proposals concerning the designation of chairmen and vice-chairmen of study groups, TDAG and any other groups established by WTDC (see section 2).

1.11 In those cases indicated in § 1.8.1, a WTDC may be asked to consider the approval of one or more Recommendations. The report of any study group(s) or TDAG proposing such action should include information on why such action is proposed.

1.12 WTDC texts are defined as follows:

a) *Declaration*: Statement of the main outcomes and priorities established by WTDC. The declaration is usually named after the conference venue.

b) *Action Plan*: A comprehensive package that will promote the equitable and sustainable development of telecommunication/ICT networks and services. It consists of study group Questions, programmes and regional initiatives that address the specific needs of the regions. The action plan is usually named after the conference venue.

c) *Objectives/programmes*: Key elements of the Action Plan, constituting components of the toolkit BDT uses when solicited by Member States and Sector Members to support their efforts to build the information society for all. In the implementation of objectives/programmes, account should be taken of the resolutions, decisions, recommendations and reports emanating from WTDC.

d) *Resolution/decision*: A WTDC text containing provisions on the organization, working methods and programmes of ITU-D.

e) *Question*: Description of an area of work to be studied, normally leading to the production of new or revised Recommendations, guidelines, handbooks or reports.

f) *Recommendation*: An answer to a Question or part of a Question, which, within the scope of existing knowledge and the research carried out by study groups and adopted in accordance with established procedures, may provide guidance on technical, organizational, tariff-related and operational matters, including working methods, may describe a preferred method or proposed solution for undertaking a specific task, or may recommend procedures for specific applications. These Recommendations should be sufficient to serve as a basis for international cooperation.

g) *Report*: A technical, operational or procedural statement, prepared by a study group on a given subject related to a current Question. Several types of reports are defined in § 11.1 of section 2.

1.13 Voting

Should there be a need to vote at WTDC, the vote will be conducted according to the relevant sections of the Constitution, Convention and General Rules.

1.14 In accordance with No. 213A of the Convention, and the provisions of Article 17A of the Convention, WTDC may assign specific matters within its competence to TDAG for advice on the action required on those matters.

1.15 TDAG is authorized in accordance with Resolution 24 (Rev. Dubai, 2014) of WTDC to act on behalf of WTDC in the period between conferences.

1.16 TDAG shall report to the next WTDC on progress in matters that may be included in agendas of future WTDCs as well as on the progress of ITU-D studies in response to requests made by previous conferences.

SECTION 2 – Study groups and their relevant groups

2 Classification of study groups and their relevant groups

2.1 The World Telecommunication Development Conference (WTDC) establishes study groups, each studying telecommunication matters of interest to the developing countries in particular, including the issues referred to in No. 211 of the ITU Convention. Study groups shall observe strictly Nos 214, 215, 215A and 215B of the Convention.

2.2 To facilitate their work, the study groups may set up working parties, rapporteur's groups and joint rapporteur's groups to deal with specific Questions or parts of thereof.

2.3 Where appropriate, regional groups may be set up within the study groups to study Questions or problems, the specific nature of which makes it desirable that they be studied within the framework of one or more regions of the Union.

2.4 The establishment of regional groups should not give rise to duplication of work being carried out at the global level by the corresponding study groups, their relevant groups or any other groups established pursuant to No. 209A of the Convention.

2.5 Joint rapporteur's groups (JRG) may be established for Questions requiring the participation of experts from more than one study group. Unless otherwise specified, the working methods of JRGs should be identical to those of rapporteur groups. At the time a JRG is established, its terms of reference, reporting lines and final decision-making authority should be clearly identified.

3 Chairmen and vice-chairmen

3.1 Appointment of chairmen and vice-chairmen by WTDC shall be primarily based upon proven competence both in matters considered by the study group concerned and in terms of the management skills required, taking into account the need to promote gender balance in leadership positions and equitable geographical distribution, in particular promoting the participation of developing countries through Member States and Sector Members.

3.2 The mandate of the vice-chairmen shall be to assist the chairman in matters relating to the management of the study group, including substitution for the chairman at official ITU Telecommunication Development Sector (ITU-D) meetings or replacement of the chairman should he or she be unable to continue with study group duties.

3.3 Study group vice-chairmen may in turn be selected as chairmen of working parties or as rapporteurs, with the sole limitation that they may not occupy more than two posts at the same time in the study period.

3.4 There is a need to appoint only the relevant number of vice-chairmen for study groups and working parties in line with Resolution 61 (Rev. Dubai, 2014) of WTDC.

4 Rapporteurs

4.1 Rapporteurs are appointed by a study group in order to progress the study of a Question and to develop new and revised reports, opinions and Recommendations. A rapporteur may have responsibility for only one Question.

4.2 Because of the nature of the studies, rapporteur appointments should be based both on expertise in the subject to be studied and on the ability to coordinate the work. Elements of the expected work done by the rapporteurs are described in Annex 5 to this resolution.

4.3 Clear terms of reference for the work of the rapporteur, including expected results, should be added to the corresponding Question, by the study group, as required.

4.4 One rapporteur and one or more vice-rapporteurs are appointed, as appropriate, by a study group for each Question. The vice-rapporteur automatically takes over the chairmanship when the rapporteur is not available. This also includes the case of rapporteurs who are no longer representing the Member State or ITU-D Sector Member which nominated them as participant in accordance with § 7.1 below. Vice-rapporteurs may be representatives from Member States, Sector Members, Associates or Academia[1]. When a vice-rapporteur is called upon to replace a rapporteur for the rest of the study period, a new vice-rapporteur is nominated from among the membership of the study group concerned.

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[1] These include colleges, institutes, universities and associated research institutions interested in telecommunication/ICT development.

5 Powers of the study groups

5.1 Each study group may develop draft Recommendations for approval either by WTDC or pursuant to section 6 below. Recommendations approved in accordance with either procedure shall have the same status.

5.2 Each study group may also adopt draft Questions in accordance with the procedure described in § 17.2 of section 4 below or for approval by WTDC.

5.3 In addition to the above, each study group shall be competent to adopt guidelines and reports.

5.4 In cases where the implementation of the results obtained is through activities of the Telecommunication Development Bureau (BDT), such as workshops, regional meetings, or surveys, these activities should be reflected in the annual operational plan and conducted in coordination with the relevant study Question.

5.5 In the cases where the terms of reference of a rapporteur group are completed prior to the end of the study period, the study group should issue guidelines, reports, best practices and Recommendations promptly for review by the membership.

6 Meetings

6.1 The study groups and their relevant groups shall normally meet at ITU headquarters.

6.2 Study groups and their relevant groups may meet outside Geneva if invited by Member States, ITU-D Sector Members, or entities authorized in this respect by a Member State of the Union, having regard to facilitating the attendance of developing countries[2]. Such invitations shall normally be considered only if they are submitted to WTDC, to the Telecommunication Development Advisory Group (TDAG) or to an ITU-D study group meeting. If such invitations cannot be submitted to any of these meetings, the decision to accept the invitation rests with the Director of BDT in consultation with the chairman of the study group concerned. They shall be finally accepted after consultation with the Director if they are compatible with the resources allocated to ITU-D by the Council.

6.3 Regional and subregional meetings offer a valuable opportunity for information exchange and for the development of management and technical experience and expertise. Every opportunity should be taken to provide additional opportunities for experts (study group participants) from developing countries to gain experience by participating in regional and subregional meetings which deal with study group work. To this end, invitations to regional and subregional meetings organized on topics dealt with by study groups should be extended to participants of the rapporteur's groups concerned.

6.4 The invitations referred to in § 6.2 above shall be issued and accepted, and the corresponding meetings outside Geneva organized, only if the conditions laid down in Resolution 5 (Kyoto, 1994) of the Plenipotentiary Conference and ITU Council Decision 304 are met. Invitations to hold meetings of the study groups or their relevant groups away from Geneva shall be accompanied by a statement indicating the host's agreement to defray the additional expenditure involved and that it will provide at least adequate premises and the necessary furniture and equipment free of charge, except that in the case of developing countries, equipment need not necessarily be provided free of charge by the host government, if the government so requests.

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[2] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

6.5 Relevant groups of study groups may benefit from meetings held via teleconference, having regard to the possibilities of developing countries and their ability to participate by teleconference, or other alternative arrangements, rather than at ITU headquarters or in a region. A request by a rapporteur for such a meeting should be submitted to and approved by the parent study group.

6.6 The dates, place and agenda for meetings of relevant groups shall be agreed by the parent study group.

6.7 Should an invitation be cancelled for any reason, it shall be proposed that the meeting be convened in Geneva, in principle on the date originally planned.

7 Participation in meetings

7.1 Member States, Sector Members, Associates, Academia and other entities duly authorized to participate in ITU-D activities shall be represented, in the study groups and subordinate groups in whose work they wish to take part, by participants registered by name and chosen by them as representatives to make an effective contribution to the study of the Questions entrusted to those study groups. Chairmen of meetings may, in accordance with No. 248A of Article 20 of the ITU Convention, invite individual experts, as appropriate, to present their specific point of view at one or more meetings, without taking part in the decision-making process and without giving the expert the right to participate in any other meetings to which a specific invitation by the chairman has not been extended.

7.2 The Director of BDT shall keep up to date a list of the Member States, Sector Members, Associates, Academia and other entities participating in each study group.

7.3 To the extent possible and practicable, study groups and their relevant groups shall endeavour to use remote participation technologies as part of efforts to encourage and enable broader participation in the work of the study groups by all Member States, Sector Members, Associates and Academia, especially for persons with specific needs, such as persons with disabilities.

7.3 The rapporteur of each study Question shall coordinate and keep up to date a list of focal points from Member States, Sector Members, Associates and Academia in order to facilitate the communication and exchange of information on specific matters in the context of study.

8 Frequency of meetings

8.1 The study groups shall in principle meet at least once a year during the interval between two WTDCs, preferably in the second half of the year so that working parties and rapporteur groups may meet in the first half of the year to prepare the necessary reports and submit them to the parent study group. However, additional meetings may take place with the approval of the Director of BDT, having regard to the priorities laid down by the preceding WTDC and the resources of ITU-D.

8.2 Working parties and their associated rapporteur groups shall in principle meet twice a year, at least in the period between two WTDCs, the second meeting being held in conjunction with the parent study group. However, additional meetings may be held with the consent of the parent study group and with the approval of the Director, having regard to the priorities laid down by the preceding WTDC and the resources of ITU-D.

8.3 Working parties should preferably meet back to back, although a working party may meet individually if the need arises or if the holding of a meeting is desirable (e.g. in association with seminars).

8.4 To ensure the best possible use of the resources of ITU-D and of those participating in its work, the Director, in collaboration with the study group chairmen, shall establish and publish a timetable of meetings well in advance. The timetable shall take account of such factors as the capacity of the ITU conference services, document requirements for meetings and the need for close coordination with the activities of the other Sectors and other international or regional organizations.

8.5 In the establishment of the work plan, the timetable of meetings must take into account the time required for participating bodies to prepare contributions and documentation.

8.6 All study groups shall meet sufficiently in advance of WTDC in order to enable the final reports and draft Recommendations to be disseminated within the required deadlines.

9 Establishment of work plans and preparation of meetings

9.1 After each WTDC, a work plan shall be proposed by each study group chairman and rapporteurs, with the assistance of BDT. The work programme shall take account of the programme of activities and priorities adopted by WTDC. As an informational resource to support the development of the work plans, the Director of BDT shall, through the appropriate BDT staff (e.g. regional directors, focal points), prepare information about all ITU projects relevant to the particular study Question or issue, including those being implemented by the regional offices and in the other Sectors. This information should be provided to the study group chairmen and rapporteurs prior to the development of their work plans so as to allow them to take full advantage of new, existing and ongoing ITU work that could contribute to the study of their Questions.

9.2 The implementation of the work plan will, however, depend to a large extent on the contributions received from Member States, Sector Members, Associates and Academia, duly authorized entities or organizations, and BDT, as well as on the opinions expressed by participants in the meetings.

9.3 A circular with an agenda of the meeting, a draft work plan and a list of the Questions to be studied shall be prepared by BDT with the help of the chairman of the study group concerned.

9.4 The circular must reach the bodies participating in the work of the study group concerned at least three months before the opening of the meeting.

9.5 Details on registration, including a link to the online registration form, shall be included in the circular so that the representatives of the entities concerned can announce their intention to participate in the meeting. The form shall contain the names and addresses of intended participants and an indication of the languages required by participants. The form shall be submitted no less than 45 calendar days prior to the opening of the meeting, in order to secure interpretation and translation of documents in the requested languages.

10 Study group management teams

10.1 Each ITU-D study group has a management team composed of the chairman and vice-chairmen of the study group, the chairmen and vice-chairmen of working parties and the rapporteurs and vice-rapporteurs.

10.2 Study group management teams should maintain contact among themselves and with BDT by electronic means to the extent practicable. Appropriate liaison meetings should be arranged, as necessary, with study group chairmen from the other Sectors.

10.3 The ITU-D study group management team should meet prior to the meeting of the study group, in order to properly organize the coming meeting, including the review and approval of a time-management plan. To support these meetings and identify any efficiencies, the Director of BDT shall, through the appropriate BDT staff (e.g. regional directors, focal points), provide information to study group rapporteurs on all relevant existing and planned ITU projects, including those being implemented by the regional offices and in the other Sectors.

10.4 A joint management team will be established, chaired by the Director, composed of the ITU-D study group management teams and the chairman of TDAG.

10.5 The role of the joint management team of the ITU-D study groups is to:

a) advise BDT management on the estimation of the budget requirements of the study groups;

b) coordinate issues common to study groups;

c) prepare joint proposals to TDAG or other relevant bodies in ITU-D as required;

d) finalize the dates of subsequent study group meetings;

e) deal with any other issue that may arise.

11 Preparation of reports

11.1 Reports of the study group's work can be of four major types:

a) Meeting reports

b) Progress reports

c) Output reports

d) Chairman's report to WTDC.

11.2 Meeting reports

11.2.1 Prepared by the study group chairman, the working party chairman or the rapporteur, assisted by BDT, meeting reports shall contain a summary of the outcome of the work. They must also indicate items which require further study at the next meeting or a recommendation for conclusion or completion of the work of a study Question or consolidation with another Question. The reports should also include reference to contributions and/or meeting documents, the main results (including Recommendations and guidelines), directives for future work (including referral of output reports to BDT for incorporation into relevant BDT programme activities as appropriate), planned meetings of working parties, if any, rapporteur's groups and joint rapporteur's groups, and liaison statements endorsed at the study group level.

11.2.2 The report of a study group's first meeting in the study period shall include a list of the chairmen and vice-chairmen of working parties and/or rapporteur's groups, if any, and of any other groups that may have been created, and of the rapporteur and vice-rapporteurs appointed. This list shall be updated, as required, in subsequent reports.

11.3 Progress reports

11.3.1 The following list of items is suggested for inclusion in progress reports:

a) brief summary of the status and draft outline of the output report;

b) conclusions or titles of reports or Recommendations to be endorsed;

c) status of work with reference to the work plan, including baseline document, if available;

d) draft new or revised reports, guidelines or Recommendations, or reference to source documents containing the Recommendations;

e) draft liaison statements in response to or requesting action by other study groups or organizations;

f) reference to normal or delayed contributions considered part of assigned study and a summary of contributions considered;

g) reference to submissions received in response to liaison statements from other organizations;

h) major issues remaining for resolution and draft agenda of future approved meetings, if any;

i) reference to the list of attendees at meetings held since the last progress report;

j) reference to the list of normal contributions or temporary documents containing the reports of all working party and rapporteur's group meetings since the last progress report.

11.3.2 The progress report may make reference to meeting reports in order to avoid duplication of information.

11.3.3 Progress reports by working parties and rapporteur's groups shall be submitted to the study group for approval.

11.4 Output reports

11.4.1 Such reports represent the expected deliverable, i.e. the principal results of a study. The items to be covered are indicated in the expected output of the Question concerned. Such reports shall normally be limited to a maximum of 50 pages, including annexes and appendices, with relevant electronic references as needed. When reports exceed the 50-page limit, and after consultation with the study group chairman concerned, annexes and appendices may be included without translation when they are considered of particular relevance and provided that the body of the report is within the 50-page limit. All reports shall be translated up to the number of pages agreed upon in the terms of reference for a Question, to the extent possible and within the available budget.

11.4.2 To help maximize the use of study group final output reports, study groups may place final output reports and associated annexes in an online library accessible from the ITU-D homepage as well as the study group document registry, until the study group decides that they have become outdated. Study group outputs should be incorporated into BDT programme and regional office activities and form part of the implementation of ITU-D strategic objectives.

11.4.3 To help ascertain the extent to which the Member States, and in particular the developing countries, benefit from the outputs of studies and to obtain feedback from the Member States on the outputs of studies, it would be useful for study group chairmen, with the help of the working party chairmen and Question rapporteurs, to prepare a survey or questionnaire to be sent to Member States before the end of the study period, the results of which will serve to prepare for the next study period.

11.5 Chairman's reports to WTDC

11.5.1 The chairman's report of each study group to WTDC shall be the responsibility of the chairman of the study group concerned, with the assistance of BDT, and shall be limited to:

a) a summary of the results achieved by the study group during the study period in question, describing the work of the study group and the outcome achieved, including discussion of the ITU-D strategic objectives that are linked to the study group's activities;

b) reference to any new or revised Recommendations approved by correspondence by Member States during the study period;

c) reference to any Recommendations deleted during the study period;

d) reference to the text of any Recommendations submitted to WTDC for approval;

e) a list of any new or revised Questions proposed for study during the next study period;

f) a list of any Questions proposed for deletion, if any;

g) summary of collaboration between the programmes and regional offices in undertaking the activities of the study group.

11.5.2 The preparation of Recommendations should follow the general practice of the Union. Examples include the recommendations and resolutions of WTDCs. A Recommendation should stand alone. Information may be annexed to the Recommendations, in order to accomplish this. A model Recommendation is set out in Annex 1 to this resolution.

SECTION 3 – Submission, processing and presentation of contributions

12 Submission of contributions

12.1 Contributions should be submitted not later than 30 calendar days before the opening of a world telecommunication development conference (WTDC), and in any event the submission deadline for all contributions to WTDC shall be no later than 14 calendar days before the opening of the conference to allow for their timely translation and thorough consideration by delegations. The Telecommunication Development Bureau (BDT) shall immediately publish all contributions submitted to WTDC in their original language(s) on the WTDC website, even before their translation into the other official languages of the Union. All contributions shall be published not less than seven calendar days before WTDC.

12.2 The submission of contributions to the meetings of TDAG, the study groups and their relevant groups shall be as follows:

12.2.1 Member States, Sector Members, Associates, Academia, duly authorized entities and organizations and the chairmen and vice-chairmen of study groups or their relevant groups should submit their contributions to current ITU-D studies to the Director using the official templates made available online.

12.2.2 Such contributions should, *inter alia*, deal with the results of experience gained in telecommunication development, describe case studies and/or contain proposals for promoting balanced worldwide and regional telecommunication development.

12.2.3 In order to facilitate the study of certain Questions, BDT may submit consolidated documents relevant to the Question or the results of case studies, including information on existing programme and regional office activities. Such documents will be treated as contributions.

12.2.4 In principle, documents submitted to the study groups as contributions should not exceed five pages. For existing texts, cross-references should be used instead of repeating material *in extenso*. Information material can be placed in annexes or provided on request as an information document. An example of the form for the submission of contributions is set out in Annex 2 to this resolution.

12.2.5 Contributions should be submitted to BDT using the online form in order to fast-track their processing by minimizing their reformatting, without any modification to the content of the text. Any contribution submitted by participants shall be immediately transmitted by BDT to the chairman of the study group and to the rapporteur in accordance with § 15.1 below.

12.2.6 The collaboration between members of study groups and their relevant groups should be, as far as possible, by electronic means. BDT should provide all study group members with appropriate access to electronic documentation for their work, and promote the provision of appropriate systems and facilities to support the conduct of study group work by electronic means in all the official languages of ITU.

13 Processing of contributions

Input to study group, working party or rapporteur's group meetings may be of three types:

a) Contributions for action

b) Contributions for information

c) Liaison statements.

13.1 Contributions for action

13.1.1 All contributions for action received 45 calendar days before a meeting shall be translated and published not less than seven calendar days before the said meeting. Beyond this 45-day deadline, the contributor may submit the document in the original language and in any official language into which it may have been translated by the author.

13.1.2 After consultation with the chairman of the study group or rapporteur's group concerned, it may be agreed to accept contributions for action which go beyond the page-limit of five pages. In such cases, it may be agreed to publish a summary, which shall be drawn up by the author of the contribution.

13.1.3 All contributions received less than 45 calendar days but at least 12 calendar days before a meeting shall be published but not translated. The secretariat shall publish these delayed contributions as soon as possible and not later than three working days after receipt.

13.1.4 Contributions received by the Director of BDT less than 12 calendar days before a meeting shall not be entered on the agenda. They shall not be distributed but held for the next meeting. Exceptionally, contributions judged to be of extreme importance and urgency might be admitted by the chairman, in consultation with the Director, in derogation to the above deadlines, provided that these contributions are available to participants at the opening of the meeting. For such late contributions, no commitment can be made by the secretariat to ensure the document will be available at the opening of the meeting in all the required languages.

13.1.5 No contributions for action shall be accepted after the opening of the meeting.

13.1.6 The Director should insist that authors follow the rules established for the presentation and form of documents set out in this resolution and annexes and the timing given therein. A reminder should be sent out by the Director whenever appropriate. The Director, with the agreement of the study group chairman, may return to the author any document that does not comply with the general directives set out in this resolution so that it may be brought into line with those directives.

13.2 Contributions for information

13.2.1 Contributions submitted to the meeting for information are those which do not require any specific action under the agenda (e.g. descriptive documents submitted by Member States, Sector Members, Associates, Academia or duly authorized entities and organizations, general policy statements, etc.), as well as other documents considered by the study group chairman and/or the rapporteur, in consultation with the author, as being for information. They should be published in the original language only (and in any other official language into which they may have been translated by the author) and appear under a separate numbering scheme from the contributions submitted for action.

13.2.2 Information documents considered to be of extreme importance might be translated after the meeting if requested by more than 50 per cent of the participants at the meeting, within the budgetary limit.

13.2.3 The secretariat shall prepare a list of information documents that provides summaries of the documents. This list shall be available in all the official languages.

13.3 Liaison statements

Liaison statements are documents that provide a response to a question raised by another study group of any Sector of the Union, or request action by other study groups or organizations. Liaison statements shall be approved by the chairman of the study group concerned before their transmission to the study group or organization concerned. Incoming liaison statements shall not be translated. A template for liaison statements is set out in Annex 4 to this resolution.

14 Other documents

14.1 Background documents

Reference documents containing only background information relating to issues addressed at the meeting (data, statistics, detailed reports of other organizations, etc.) should be available upon request in the original language only and, if available, also in electronic format.

14.2 Temporary documents

Temporary documents are documents produced during the meeting to assist in the development of the work.

15 Electronic access

15.1 BDT will post all input and output documents (e.g. contributions, draft Recommendations, liaison statements and reports) as soon as electronic versions of these documents are available.

15.2 A website dedicated to the study groups and their relevant groups shall be constantly updated to include all input and output documents as well as information related to each of the meetings. While the website of the study groups shall be in six languages, those of specific meetings shall be in the languages of the meeting concerned as per § 9.5 above.

15.3 It must be ensured that the website dedicated to the study groups is available in the six languages of the Union on an equal footing and constantly updated.

16 Presentation of contributions

16.1 Contributions for action shall be relevant to the Question or the subject under discussion as agreed by the chairman, the rapporteur for the Question, the coordinator of the study group and the author. Contributions must be clear and concise. Documents that are not directly related to the Questions under study should not be submitted.

16.2 Articles that have been or are to be published in the press should not be submitted to ITU-D, unless they relate directly to Questions under study.

16.3 Contributions that include passages of an unduly commercial nature shall be deleted by the Director of BDT in agreement with the chairman; the author of the contribution shall be advised of any such deletions.

16.4 The cover page shall indicate the relevant Question(s), agenda item, date, source (originating country and/or organization, address, telephone number, fax number, and possible e-mail address of the author or contact person of the submitting entity), as well as the title of the contribution. Indication should also be made as to whether the document is for action or for information and the action required, if any, and an abstract should be provided. A model is set out in Annex 2 to this resolution.

16.5 If existing text needs to be revised, the number of the original contribution shall be indicated and revision marks (track changes) shall be used in the original document.

16.6 Contributions submitted to the meeting for information only (see § 13.2.1 above) should include a summary prepared by the author. When summaries have not been provided by authors, BDT shall, to the extent possible, prepare such summaries.

SECTION 4 – Proposal and adoption of new and revised Questions

17 Proposal of new and revised Questions

17.1 Proposed new Questions for the ITU Telecommunication Development Sector (ITU-D) shall be submitted at least two months prior to a world telecommunication development conference (WTDC) by Member States, Sector Members and Academia authorized to participate in the activities of the Sector.

17.2 However, an ITU-D study group may also propose new or revised Questions at the initiative of a member of that study group if there is consensus on the subject. These proposals shall be submitted to the Telecommunication Development Advisory Group (TDAG) for endorsement.

17.3 Each proposed Question should state the reasons for the proposal, the precise objective of the tasks to be performed, the urgency of the study and any contacts to be established with the other two Sectors and/or other international or regional bodies. Authors of Questions should use the online template for the submission of new and revised Questions based on the outline found in Annex 3 to this resolution, in order to ensure that all relevant information is included.

18 Adoption of new and revised Questions by WTDC

18.1 Before a WTDC, TDAG shall meet to examine proposed new Questions and, if necessary, recommend amendments to take account of ITU-D's general development policy objectives and associated priorities, and to review the reports of the ITU regional preparatory meetings for WTDC.

18.2 At least one month before a WTDC, the Director of the Telecommunication Development Bureau shall communicate to Member States and Sector Members a list of the Questions proposed, together with any changes recommended by TDAG, and make these available on the ITU website.

19 Adoption of proposed new and revised Questions between two WTDCs

19.1 Between two WTDCs, Member States, Sector Members, Academia and duly authorized entities and organizations participating in ITU-D activities may submit proposed new and revised Questions to the study group concerned.

19.2 Each proposed new and revised Question should be based on the template/outline referred to in § 17.3 above.

19.3 If the study group concerned agrees by consensus to study the proposed new and revised Question and some Member States, Sector Members or other duly authorized entities and organizations (normally at least four) have committed themselves to supporting the work (e.g. by contributions, provision of rapporteurs or editors and/or hosting of meetings), it shall address the draft text thereof to the Director of BDT with all the necessary information.

19.4 The Director, after endorsement by TDAG, shall inform Member States, Sector Members, Academia and other duly authorized entities of the new and revised Questions by circular.

SECTION 5 – Deletion of Questions

20 Introduction

Study groups may decide to delete Questions. In each individual case, it has to decide which of the following alternative procedures is the most appropriate.

20.1 Deletion of a Question by the World Telecommunication Development Conference (WTDC)

Upon agreement by the study group, the chairman shall include the request to delete a Question in the report to WTDC, for decision.

20.2 Deletion of a Question between WTDCs

20.2.1 At a study group meeting, it may be agreed, by consensus among those present, to delete a Question, e.g. because work has been terminated. Notification of this agreement, including an explanatory summary about the reasons for the deletion, shall be provided to Member States and Sector Members by circular. If a simple majority of the Member States has no objection to the deletion within two months, the deletion comes into force. Otherwise the issue is referred back to the study group.

20.2.2 Those Member States that indicate disapproval are invited to provide their reasons and to indicate the possible changes that would facilitate further study of the Question.

20.2.3 Notification of the result will be given in a circular, and the Telecommunication Development Advisory Group will be informed by a report from the Director of the Telecommunication Development Bureau. In addition, the Director shall publish a list of deleted Questions whenever appropriate, but at least once by the middle of a study period.

SECTION 6 – Approval of new or revised Recommendations

21 Introduction

After adoption at a study group meeting, Member States can approve Recommendations, either by correspondence or at a world telecommunication development conference (WTDC).

21.1 When the study of a Question has reached a mature state resulting in a draft new or revised Recommendation, the approval process to be followed is in two stages:

– adoption by the study group concerned (see § 21.3);

– approval by the Member States (see § 21.4).

The same process shall be used for the deletion of existing Recommendations.

21.2 In the interest of stability, revision of a Recommendation should not normally be considered for approval within two years, unless the proposed revision complements rather than changes the agreement reached in the previous version.

21.3 Adoption of a new or revised Recommendation by a study group

21.3.1 A study group may consider and adopt draft new or revised Recommendations, when the draft texts have been prepared and made available in all the official languages sufficiently in advance of the study group meeting.

21.3.2 A rapporteur's group or any other group which feels that its draft new or revised Recommendation(s) is (are) sufficiently mature can send the text to the study group chairman to start the adoption procedure according to § 21.3.3 below.

21.3.3 Upon request of the study group chairman, the Director of the Telecommunication Development Bureau shall explicitly indicate, in a circular, the intention to seek approval of new or revised Recommendations under this procedure for adoption at a study group meeting. The circular shall include the specific intent of the proposal in summarized form. Reference shall be provided to the document where the text of the draft new or revised Recommendation may be found.

This information shall be distributed to all Member States and Sector Members and should be sent by the Director so that it shall be received, so far as practicable, at least two months before the meeting.

21.3.4 Adoption of a draft new or revised Recommendation must be unopposed by any Member State present at the study group meeting.

21.4 Approval of new or revised Recommendations by Member States

21.4.1 When a draft new or revised Recommendation has been adopted by a study group, the text shall be submitted for approval by Member States.

21.4.2 Approval of new or revised Recommendations may be sought:

– at a WTDC;

– by consultation of the Member States as soon as the relevant study group has adopted the text.

21.4.3 At the study group meeting during which a draft is adopted, the study group shall decide to submit the draft new or revised Recommendation for approval, either at the next WTDC or by consultation of the Member States.

21.4.4 When it is decided to submit a draft to WTDC, the study group chairman shall inform the Director and request the Director to take the necessary action to ensure that it is included in the agenda of the conference.

21.4.5 When it is decided to submit a draft for approval by consultation, the conditions and procedures hereafter will apply.

21.4.6 At the study group meeting the decision of the delegations to apply this approval procedure must also be unopposed by any Member State present.

21.4.7 Exceptionally, but only during the study group meeting, delegations may request more time to consider their positions. Unless advised of formal opposition from any of these delegations within a period of one month after the last day of the meeting, the approval process by consultation shall continue. In this case, the draft shall be submitted to the next WTDC for consideration.

21.4.8 For the application of the approval procedure by consultation, within one month of the adoption of a draft new or revised Recommendation by a study group, the Director shall request Member States to indicate within three months whether they approve or do not approve the proposal. This request shall be accompanied by the complete final text, in the official languages, of the proposed new or revised Recommendation.

21.4.9 The Director shall also advise Sector Members participating in the work of the relevant study group under the provisions of Article 19 of the ITU Convention that Member States are being asked to respond to a consultation on a proposed new or revised Recommendation, but only Member States are entitled to respond. This advice should be accompanied by the complete final texts, for information only.

21.4.10 If 70 per cent or more of the replies from Member States indicate approval, the proposal shall be accepted. If the proposal is not accepted, it shall be referred back to the study group.

21.4.11 Any comments received along with responses to the consultation shall be collected by the Director and submitted to the study group for consideration.

21.4.12 Those Member States which indicate that they do not approve are encouraged to state their reasons and to participate in the future consideration by the study group and its relevant groups.

21.4.13 The Director shall promptly notify, by circular, the results of the above consultation approval procedure.

21.4.14 Should minor, purely editorial amendments or correction of evident oversights or inconsistencies in the text as presented for approval be necessary, the Director may correct these with the approval of the chairman of the relevant study group.

21.4.15 ITU shall publish the approved new or revised Recommendations in the official languages as soon as practicable.

22 Reservations

If a delegation elects not to oppose the approval of a Recommendation but wishes to enter reservations on one or more aspects, such reservations shall be mentioned in a concise note appended to the text of the Recommendation concerned.

SECTION 7 – Support to the study groups and their relevant groups

23 The Director of the Telecommunication Development Bureau (BDT) should ensure that, within the limits of existing budgetary resources, the study groups and their relevant groups have appropriate support to conduct their work programmes as outlined in the terms of reference and as envisioned by the World Telecommunication Development Conference's work plan for the Sector. In particular, support may be provided in the following forms:

a) appropriate administrative and professional staff support from BDT and the other two Bureaux and the General Secretariat, as appropriate;

b) contracting of outside expertise, as necessary;

c) coordination with relevant regional and subregional organizations.

SECTION 8 – Other groups

24 As far as applicable, the same rules of procedure for study groups in this resolution should also apply to other groups referred to in No. 209A of the ITU Convention and their meetings, for example with respect to the submission of contributions. However, these groups shall not adopt Questions nor deal with Recommendations.

SECTION 9 – Telecommunication Development Advisory Group

25 In accordance with No. 215C of the ITU Convention, the Telecommunication Development Advisory Group (TDAG) shall be open to representatives of administrations of Member States and representatives of Sector Members of the ITU Telecommunication Development Sector (ITU-D) and to chairmen and vice-chairmen of the study groups and other groups. Its principal duties are to review priorities, programmes, operations, financial matters and strategies in ITU-D; to review the implementation of the operational plan of the preceding period, progress in the implementation of the regional initiatives, priorities in the execution of those initiatives, the assigned resources and their linkage with the strategic and operational plans, in order to identify areas in which the Telecommunication Development Bureau (BDT) has not achieved or was not able to achieve the objectives laid down in that plan, so as to advise the Director of BDT on the necessary corrective measures; to review progress in the implementation of its work programme; to provide guidelines for the work of the study groups, recommending measures, *inter alia*, to foster and give effect to cooperation and coordination with the Radiocommunication Sector, the Telecommunication Standardization Sector and the General Secretariat, as well as with other relevant development and financial institutions.

26 A world telecommunication development conference shall appoint the TDAG bureau, comprising the chairman and the vice-chairmen of TDAG. The chairmen of ITU-D study groups are members of the TDAG bureau.

27 In appointing the chairman and the vice-chairmen, particular consideration shall be given to the requirements of competence and the need to promote gender balance in leadership positions and equitable geographical distribution, and to the need to promote more efficient participation by developing countries.

28 The World Telecommunication Development Conference (WTDC) may assign temporary authority to TDAG to consider and act on matters specified by WTDC. TDAG may consult with the Director on these matters, if necessary. WTDC should assure itself that the special functions entrusted to TDAG do not require financial expenses exceeding the ITU-D budget. The report on TDAG activity on the fulfilment of specific functions shall be submitted to the next WTDC. Such authority shall terminate when the following WTDC meets, although WTDC may decide to extend it for a designated period.

29 TDAG holds regular scheduled meetings, included in the ITU-D timetable of meetings. The meetings should take place as necessary, but at least once a year. The timing of meetings should be such as to allow TDAG to effectively review the draft operational plan before its adoption and implementation. TDAG meetings should not take place in conjunction with the study group meetings. Meetings of the advisory groups of the three Sectors of the Union should preferably be held back to back whenever possible.

30 In the interest of minimizing the length and costs of the meetings, the chairman of TDAG should collaborate with the Director in making appropriate advance preparation, for example by identifying the major issues for discussion.

31 In general, the same rules of procedure as for study groups in this resolution should also apply to TDAG and its meetings, for example in respect of the submission of contributions. However, at the discretion of the chairman, written proposals may be submitted during the TDAG meeting, provided they are based on ongoing discussions taking place during the meeting and are intended to assist in resolving conflicting views which exist during the meeting.

32 The TDAG bureau should maintain contact among themselves and with BDT by electronic means to the extent practicable and meet not less than once per year, including one meeting prior to the meeting of TDAG, in order to properly organize the coming meeting, including the review and approval of a time-management plan.

33 In order to facilitate its task, TDAG may complement these working procedures with additional procedures. It can establish other groups to study a particular topic, where appropriate, as provided in Resolution 24 (Rev. Dubai, 2014) of WTDC and within existing financial resources.

34 After each TDAG meeting, a concise summary of conclusions shall be drawn up by the secretariat to be distributed in accordance with normal ITU-D procedures. It should contain only TDAG proposals, recommendations and conclusions in respect to the above items.

35 In accordance with No. 215JA of the Convention, at its last meeting prior to WTDC, TDAG shall prepare a report for WTDC. This report should summarize TDAG's activities on the matters assigned to it by WTDC, including linkages to the strategic and operational plans, and offer advice on allocation of work, proposals on ITU-D working methods, strategies and relations with other relevant bodies inside and outside ITU, as appropriate. Likewise, it shall offer advice on the implementation of the regional initiatives. This report shall be transmitted to the Director for submission to the conference.

SECTION 10 – Regional and world meetings of the Sector

36 In general, the same working methods found in this resolution, and in particular those relating to the submission and processing of contributions, apply, *mutatis mutandis*, to other regional and world meetings of the Sector, with the exception of those referred to in Articles 22 of the ITU Constitution and 16 of the ITU Convention.

ANNEX 1 TO RESOLUTION 1 (Rev. Dubai, 2014)

Model for drafting Recommendations

The ITU Telecommunication Development Sector (ITU-D) (general terminology applicable to all Recommendations),

The World Telecommunication Development Conference (terminology only applicable to Recommendations approved at a WTDC),

considering

This section should contain various general background references giving the reasons for the study. The references should normally refer to ITU documents and/or resolutions.

recognizing

This section should contain specific factual background statements such as "the sovereign right of each Member State" or studies which have formed a basis for the work.

taking into account

This section should detail other factors that have to be considered, such as national laws and regulations, regional policy decisions and other applicable global issues.

noting

This section should indicate generally accepted items or information that support the recommendation.

convinced

This section should contain details of factors that form the basis of the Recommendation. These could include objectives of government regulatory policy, choice of financing sources, ensuring fair competition, etc.

recommends

This section should contain a general sentence, leading into detailed action points:

specific action point

specific action point

specific action point

etc.

Note that the above list of *action verbs* is not exhaustive. Other *action verbs* may be used when appropriate. Existing Recommendations provide examples.

ANNEX 2 TO RESOLUTION 1 (Rev. Dubai, 2014)

Model for submission of contributions for action/for information[1]

Venue and date of meeting	**Document No./Study Group-E**
	Date
	Original language
	FOR ACTION Indicate which is appropriate
	FOR INFORMATION

QUESTION:

SOURCE:

TITLE:

Revision to previous contribution (Yes/No)

If yes, please indicate the document number

Any changes in a previous text should be indicated with revision marks (track changes)

Action required

Please indicate what is expected from the meeting (for contributions submitted for action only)

Abstract

Include here a summary of a few lines outlining your contribution

Start your document on the following page
(maximum 4 pages)

Contact: Name of author submitting the contribution:
Phone number:
E-mail:

[1] This model outlines the information to be submitted and the format of the contribution. The contribution is, however, submitted through an online template.

ANNEX 3 TO RESOLUTION 1 (Rev. Dubai, 2014)

Template/outline for proposed Questions and issues for study and consideration by ITU-D

* *Information in italics describes the information which should be provided by the author under each heading.*

Title of Question or issue (the title replaces this heading)

1 Statement of the situation or problem *(the notes follow these headings)*

* *Provide an overall general description of the situation or problem which is proposed for study, with specific focus on:*

– *the implications for developing countries and LDCs;*

– *gender perspective; and*

– *how a solution will benefit these countries. Indicate why the problem or situation warrants study at this time.*

2 Question or issue for study

* *State the Question or issue that is proposed for study, expressed as clearly as possible. The tasks should be tightly focused.*

3 Expected output

* *Provide a detailed description of the expected output of the study. This should include a general indication of the organizational level or status of those who are expected to use and to benefit from the output. Outputs may include a set of actions, activities, work and work products specific to the work of the study Question, including those undertaken pursuant to programmes and regional initiatives that are relevant to the work of the Question (e.g. documented best practices, guidelines, workshops, capacity-building events, seminars, etc.). More specifically, study outputs may promote gender equality and greater access by women to communications technologies and as well as to employment, health and education.*

4 Timing

** Indicate the required timing, noting that the urgency of the output will influence both the method used to carry out the study and the depth and breadth of the study. Outputs and the work of a Question may be completed in less than the four-year study cycle.*

5 Proposers/sponsors

** Identify by organization and contact point those proposing and supporting the study.*

6 Sources of input

** Indicate what types of organizations are expected to provide contributions to further the work, e.g. Member States, Sector Members, Associates, other UN agencies, regional groups, other ITU Sectors, BDT focal points, as appropriate, etc.*

** Also include any other information, including potentially useful resources, such as expert organizations or stakeholders, that will be helpful to those responsible for carrying out the study.*

7 Target audience

* *Indicate expected types of target audience, by noting all relevant points on the matrix which follows:*

	Developed countries	Developing countries*
Telecom policy-makers	*	*
Telecom regulators	*	*
Service providers/operators	*	*
Manufacturers	*	*
ITU-D programme		

Where appropriate, please provide explanatory notes as to why certain matrix points were included or excluded.

a) Target audience – Who specifically will use the output

* *Indicate as precisely as possible which individuals/groups/regions within the target organizations will use the output. In addition, indicate as precisely as possible which ITU-D programmes, regional initiatives and strategic objectives the work of the study Question could/will be relevant to, and how the results of the work of the study Question can/could be used to fulfil the objectives of those relevant programmes, regional initiatives and strategic objectives.*

b) Proposed methods for the implementation of the results

* *In the author's opinion, how should the results of this work best be distributed to and used by the target audience and the specified relevant programmes and/or regional offices.*

---

* These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

a) How?

* *Indicate the suggested handling of the proposed Question or issue*

1) Within a study group:

   – Question (over a multi-year study period) ☐

2) Within regular BDT activity (*indicate which programmes, activities, projects, etc. will be involved in the work of the study Question*):

   – Programmes ☐

   – Projects ☐

   – Expert consultants ☐

   – Regional offices ☐

3) In other ways – *describe* (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.) ☐

b) Why?

* *Explain why you selected the alternative under a) above.*

9 Coordination and collaboration

* *Include, inter alia, the requirements for coordination of the study with all of:*

– regular ITU-D activities (including those of the regional offices);

– other study group Questions or issues;

– regional organizations, as appropriate;

– work in progress in the other ITU Sectors;

– expert organizations or stakeholders, as appropriate.

** The Director shall, through the appropriate BDT staff (e.g. regional directors, focal points), provide information to rapporteurs on all relevant ITU projects in the regions. This information should be provided to the meetings of the rapporteurs when work of the programmes and regional offices is in the planning stages and when it is completed.*

** Identify which programmes, regional initiatives and strategic objectives are related to the work of the Question and list specific expectations for collaboration with the programmes and regional offices.*

10 BDT programme link

** Note the programme and regional initiatives of the Action Plan that would best contribute to, help facilitate and make use of the outputs and results of this Question, and list specific expectations for collaboration with the programmes and regional offices.*

11 Other relevant information

** Include any other information that will be helpful in establishing how this Question or issue should best be studied, and on what schedule.*

ANNEX 4 TO RESOLUTION 1 (Rev. Dubai, 2014)

Template for liaison statements

Information to be included in the liaison statement:

1) List the appropriate Question numbers of the originating and destination study groups.

2) Identify the study group or rapporteur's group meeting at which the liaison was prepared.

3) Include a concise and clear subject. If this is in reply to a liaison statement, make this clear, e.g. "Reply to the liaison statement from (*source and date*) concerning...".

4) Identify the study group(s), if known, or other organizations to which sent.

NOTE – Can be sent to more than one organization.

5) Indicate the level of approval of such liaison statement, e.g. study group, or state that the liaison statement has been agreed at a rapporteur's group meeting.

6) Indicate if the liaison statement is sent for action or comments, or for information only.

NOTE – If sent to more than one organization, indicate this for each one.

7) If action is requested, indicate the date by which a reply is required.

8) Include the name and address of the contact person.

NOTE – The text of the liaison statement should be concise and clear using a minimum of jargon.

NOTE – Liaison statements among ITU-D groups should be discouraged and problems should be solved through informal contacts.

Example of a liaison statement:

QUESTIONS: A/1 of ITU-D Study Group 1 and B/2 of ITU-D Study Group 2

SOURCE: Chairman of ITU-D Study Group X or Rapporteur's Group for Question B/2

MEETING: Geneva, September 2014

SUBJECT: Request for information/comments by [deadline when it is an outgoing liaison statement] – Reply to liaison statement from ITU-R/ITU-T WP 1/4

CONTACT: Name of chairman or rapporteur for Question [number]
Tel./fax/e-mail

ANNEX 5 TO RESOLUTION 1 (Rev. Dubai, 2014)

Rapporteur's checklist

1 Establish a work plan in consultation with the group of collaborators. The work plan should be reviewed periodically by the study group and contain the following:

– list of tasks to be completed;

– target dates for milestones;

– results anticipated, including titles of output documents;

– liaison required with other groups, and schedules for liaisons, if known;

– proposed meeting(s) of rapporteur's group and estimated dates, with request for interpretation, if any.

2 Adopt work methods appropriate to the group. Use of electronic document handling (EDH), electronic and facsimile mail to exchange views is strongly encouraged.

3 Act as chairman at all meetings of the group of collaborators. If special meetings of the group of collaborators are necessary, give appropriate advance notice.

4 Delegate portions of the work to vice-rapporteurs or other collaborators, depending on the workload.

5 Keep the study group management team regularly informed of the work progress. In case no progress can be reported on a given Question between two study group meetings, the rapporteur should nevertheless submit a report indicating the possible reasons for the lack of progress. To allow the chairman and BDT to take the necessary steps for the work to be done on the Question, reports should be submitted at least two months before the study group meeting.

6 Keep the study group informed of the progress of work through reports to study group meetings. The reports should be in the form of white contributions (when substantial progress has been made such as completion of draft Recommendations or a report) or temporary documents.

7 The progress report mentioned in §§ 5 and 6 above should, as far as applicable, comply with the format given in § 11.3 of section 2 of this resolution.

8 Ensure that liaison statements are submitted as soon as possible after all meetings, with copies to the study group chairmen and BDT. Liaison statements must contain the information described on the *Template for liaison statements* described in Annex 4 to this resolution. BDT may provide assistance in distributing the liaison statements.

9 Oversee the quality of texts up to and including the final text submitted for approval.

RESOLUTION 2 (Rev. Dubai, 2014)

Establishment of study groups

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that the mandate for each study group needs to be clearly defined, in order to avoid duplication between study groups and other groups of the ITU Telecommunication Development Sector (ITU-D) established pursuant to No. 209A of the ITU Convention and to ensure the coherence of the overall work programme of the Sector as provided for in Article 16 of the Convention;

b) that, for carrying out the studies entrusted to ITU-D, it is appropriate to set up study groups, as provided for in Article 17 of the Convention, to deal with specific task-oriented telecommunication questions of priority to developing countries, taking into consideration the ITU strategic plan and goals for 2016-2019, and prepare relevant outputs in the form of reports, guidelines and/or Recommendations for the development of telecommunications/information and communication technologies (ICTs);

c) the need as far as possible to avoid duplication between studies undertaken by ITU-D and those carried out by the other two Sectors of the Union;

d) the successful results of the studies under the Questions adopted by the World Telecommunication Development Conference (Hyderabad, 2010) and assigned to the two study groups,

resolves

1 to create within the Sector two study groups, with a clear responsibility and mandates as set out in Annex 1 to this resolution;

2 that each study group and their relevant groups will study the Questions adopted by this conference and assigned to it as shown in Annex 2 to this resolution, and those adopted between two world telecommunication development conferences in accordance with the provisions of Resolution 1 (Rev. Dubai, 2014) of this conference;

3 that the study group Questions and BDT programmes should be directly linked in order to enhance awareness and use of the BDT programmes and the study group output documents, so that the study groups and the BDT programmes benefit from each other's activities, resources and expertise;

4 that the study groups should make use of the relevant outputs of the other two Sectors and the General Secretariat;

5 that the study groups may also consider other ITU materials relevant to their mandates, as appropriate;

6 that each Question will consider all aspects related to the topic, objectives and expected output in line with the related programme;

7 that the study groups will be managed by the chairmen and vice-chairmen as shown in Annex 3 to this resolution.

ANNEX 1 TO RESOLUTION 2 (Rev. Dubai, 2014)

Scope of ITU-D study groups

1 Study Group 1

Enabling environment for the development of telecommunications/ICTs

– National telecommunication/ICT policy, regulatory, technical and strategy development which best enables countries to benefit from the impetus of telecommunications/ICTs, including broadband, cloud computing and consumer protection, as an engine for sustainable growth

– Economic policies and methods of determining costs of services related to national telecommunications/ICTs

– Access to telecommunications/ICTs for rural and remote areas

– Access to telecommunication/ICT services by persons with disabilities and specific needs

– The needs of developing countries in spectrum management, including the ongoing transition from analogue to digital terrestrial television broadcasting and the use of the digital dividend, in addition to any future digital switchover.

2 Study Group 2

ICT applications, cybersecurity, emergency telecommunications and climate-change adaptation

– Services and applications supported by telecommunications/ICTs

– Building confidence and security in the use of ICTs

– The use of telecommunications/ICTs in mitigating the impact of climate change on developing countries, and for natural disaster preparedness, mitigation and relief, as well as conformance and interoperability testing

– Human exposure to electromagnetic fields and safe disposal of electronic waste

– The implementation of telecommunications/ICTs, taking into account the results of the studies carried out by ITU-T and ITU-R, and the priorities of developing countries.

ANNEX 2 TO RESOLUTION 2 (Rev. Dubai, 2014)

Questions assigned by the World Telecommunication Development Conference to ITU-D study groups

Study Group 1

- **Question 1/1:** Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, OTT services and the implementation of IPv6
- **Question 2/1:** Broadband access technologies, including IMT, for developing countries
- **Question 3/1:** Access to cloud computing: Challenges and opportunities for developing countries
- **Question 4/1:** Economic policies and methods of determining the costs of services related to national telecommunication/ICT networks, including next-generation networks
- **Question 5/1:** Telecommunications/ICTs for rural and remote areas
- **Question 6/1:** Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks
- **Question 7/1:** Access to telecommunication/ICT services by persons with disabilities and with specific needs
- **Question 8/1:** Examination of strategies and methods of migration from analogue to digital terrestrial broadcasting and implementation of new services

Resolution 9: Participation of countries, particularly developing countries, in spectrum management

Study Group 2

Questions related to ICT applications and cybersecurity

– **Question 1/2:** Creating the smart society: Social and economic development through ICT applications

– **Question 2/2:** Information and telecommunications/ICTs for e-health

– **Question 3/2:** Securing information and communication networks: Best practices for developing a culture of cybersecurity

– **Question 4/2:** Assistance to developing countries for implementing conformance and interoperability programmes

Questions related to climate change, environment and emergency telecommunications

– **Question 5/2:** Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response

– **Question 6/2:** ICT and climate change

– **Question 7/2:** Strategies and policies concerning human exposure to electromagnetic fields

– **Question 8/2:** Strategies and policies for the proper disposal or reuse of telecommunication/ICT waste material

– **Question 9/2:** Identification of study topics in the ITU-T and ITU-R study groups which are of particular interest to developing countries

NOTE – The full definition of the Questions can be found in section 5 of the Dubai Action Plan.

ANNEX 3 TO RESOLUTION 2 (Rev. Dubai, 2014)

List of chairmen and vice-chairmen

Study Group 1

Chairman: Ms Roxanne McElvane (United States of America)

Vice-chairmen:

Ms Regina Fleur Assoumou-Bessou (Republic of Côte d'Ivoire)
Mr Peter Ngwan Mbengie (Republic of Cameroon)
Mr Victor Martinez (Republic of Paraguay)
Ms Claymir Carozza Rodriguez (Bolivarian Republic of Venezuela)
Mr Wesam Al-Ramadeen (Hashemite Kingdom of Jordan)
Mr Ahmed Abdel Aziz Gad (Arab Republic of Egypt)
Mr Nguyen Quy Quyen (Socialist Republic of Viet Nam)
Mr Yasuhiko Kawasumi (Japan)
Mr Vadym Kaptur (Ukraine)
Mr Almaz Tilenbaev (Kyrgyz Republic)
Ms Blanca González (Spain)

Study Group 2

Chairman: Mr Ahmad Reza Sharafat (Islamic Republic of Iran)

Vice-chairmen:

Ms Aminata Kaba-Camara (Republic of Guinea)
Mr Christopher Kemei (Republic of Kenya)
Ms Celina Delgado (Nicaragua)
Mr Nasser Al Marzouqi (United Arab Emirates)
Mr Nadir Ahmed Gaylani (Republic of the Sudan)
Ms Ke Wang (People's Republic of China)
Mr Ananda Raj Khanal (Federal Democratic Republic of Nepal)
Mr Evgeny Bondarenko (Russian Federation)
Mr Henadz Asipovich (Republic of Belarus)
Mr Petko Kantchev (Republic of Bulgaria)

RESOLUTION 5 (Rev. Dubai, 2014)

Enhanced participation by developing countries[1] in the activities of the Union

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) Resolutions 25 and 123 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on strengthening the ITU regional presence and bridging the standardization gap between developing and developed countries;

b) Resolution 30 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on special measures for the least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDCs) and countries with economies in transition;

c) Resolutions 166, 167, 169 and 170 (Guadalajara, 2010) of the Plenipotentiary Conference, to encourage and facilitate the participation of developing countries and their Sector Members and academia in the activities of the Union;

d) Resolution 135 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the role of ITU in the development of telecommunications/information and communication technologies, in providing technical assistance and advice to developing countries, and in implementing relevant national, regional and interregional projects;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

e) Resolution ITU-R 7 (Rev. Geneva, 2012) of the Radiocommunication Assembly, on telecommunication development including liaison and collaboration with the ITU Telecommunication Development Sector (ITU-D);

f) Resolutions 54, 59 and 74 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on the need to improve the participation of developing countries and their Sector Members in the work of the ITU Telecommunication Standardization Sector (ITU-T);

g) Resolution 82 (Dubai, 2012) of WTSA, on the strategic and structural review of ITU-T with a view to enhancing the participation of developing countries in the activities of the Union,

recognizing

a) the multifarious difficulties encountered by the developing countries, in particular LDCs, SIDS, LLDCs and countries with economies in transition, as well as countries under stringent budgetary restrictions, in ensuring their effective and efficient participation in the work of ITU-D and the study groups;

b) that harmonious and balanced development of the worldwide telecommunication network is of mutual advantage to the developed and the developing countries;

c) the need to identify a mechanism for developing countries to participate in and contribute to the work of the ITU-D study groups;

d) the importance of bringing the work of the ITU-D study groups closer to developing countries, especially in those cases where it is not possible to establish a physical presence;

e) the encouraging results attained through the remote participation pilot test undertaken in the last study period by the Telecommunication Development Bureau (BDT),

convinced

a) of the need to enhance the participation and attendance of developing countries in the work of ITU;

b) of the integrating role the ITU regional and area offices may take on in this task,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to ensure that ITU-D study group meetings and forums/seminars/workshops are held, to the extent practicable, and within the available financial limits, outside Geneva, limiting their deliberations to subjects stipulated in their agendas and reflecting the actual needs and priorities of the developing countries;

2 to ensure that ITU-D, including the Telecommunication Development Advisory Group (TDAG), at both the headquarters and regional level, participates in the preparation and implementation of world telecommunication policy forums, and invites the study groups to participate therein,

further instructs the Director of the Telecommunication Development Bureau

1 in close collaboration with the Directors of the Radiocommunication and Telecommunication Standardization Bureaux, to consider and implement the best ways and means to assist developing countries in preparing for and participating actively in the work of the three Sectors, and notably in the Sector advisory groups, assemblies and conferences and in the study groups of relevance to developing countries, particularly in relation to the work of the ITU-T study groups, in line with the resolutions mentioned under *considering* above;

2 to conduct studies on how to increase the participation of developing countries, Sector Members and other telecommunication players from developing countries in the work of ITU-D;

3 to extend, within the financial limitations and taking into account other possible sources of financing, the granting of fellowships to participants from developing countries attending study group meetings, the advisory groups of all three Sectors and other important meetings, including conference preparatory meetings, combining, wherever applicable, attendance at more than one successive event;

4 to continue promoting remote participation and meetings and electronic working methods so as to encourage and facilitate the full participation of developing countries in the work of ITU-D,

invites the Director of the Radiocommunication Bureau and the Director of the Telecommunication Standardization Bureau

to encourage meetings to be held outside Geneva where this will facilitate greater participation of local experts from countries and regions distant from Geneva,

invites Member States, Sector Members and Associates

1 to participate or increase their participation in the activities of the Union based on procedures approved under Resolutions 169 and 170 (Guadalajara, 2010);

2 subject to the relevant provisions of the ITU Constitution and Convention, to consider the appointment of candidates to chairmanships and vice-chairmanships of the Sector advisory groups, study groups and other groups, based on an equitable distribution method approved under Resolution 166 (Guadalajara, 2010);

3 to strengthen their cooperation with the ITU regional offices in relation to implementation of this resolution,

requests the Secretary-General

to report to the Plenipotentiary Conference on the expected financial implications of the implementation of this resolution, proposing also other possible sources of financing,

invites the Plenipotentiary Conference

1 to give the necessary attention to implementation of this resolution when establishing the basis for the budget and related financial limits;

2 when adopting the financial plan of the Union, to provide the necessary funds to BDT in order to facilitate the wider attendance and participation of developing countries in the activities of ITU-D.

RESOLUTION 8 (Rev. Dubai, 2014)

Collection and dissemination of information and statistics

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 8 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference;

b) Resolution 131 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the information and communication technology (ICT) index and community connectivity indicators,

considering

a) that the ITU Telecommunication Development Sector (ITU-D), as the main source of international information and statistics on telecommunications/ICTs, performs a key role in the collection, coordination, exchange and analysis of information;

b) the importance of the existing Telecommunication Development Bureau (BDT) databases, in particular the World Telecommunication/ICT Indicators (WTI) database and the regulatory database;

c) the usefulness of analytical reports published by ITU-D, such as the World Telecommunication/ICT Development Report, the Measuring the Information Society report and the Trends in Telecommunication Reform report,

considering further

a) that the ICT sector at the national level is reforming at an incredible pace;

b) that policy approaches vary and countries can benefit from the experiences of others,

recognizing

a) that, by acting as a clearing house for the exchange of information and statistics, BDT will be able to assist Member States in making informed national policy choices;

b) that the countries must participate actively in this endeavour in order to make it successful;

c) that § 116 of the Tunis Agenda for the Information Society stresses that all indices and indicators must take into account different levels of development and national circumstances, bearing in mind that statistics need to be improved in a collaborative, cost-effective and non-duplicative fashion,

recognizing further

a) that ICT statistics are extremely useful for the work of the study groups and in assisting ITU to monitor and evaluate ICT developments and measure the digital divide;

b) the new responsibilities to be held by ITU-D in relation to this subject, pursuant to the Tunis Agenda, in particular §§ 112 to 120 thereof,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to continue to support this activity by providing adequate resources and according it the necessary priority;

2 to continue to work closely with Member States for the sharing of best practices concerning policy and national ICT strategies;

3 to continue to survey countries and produce world and regional analytical reports which highlight country lessons and experiences, in particular on:

- trends in telecommunication sector reform;

- world telecommunication developments at regional and international level;

- trends on tariff policies, in collaboration with the ITU Telecommunication Standardization Sector;

4 to rely primarily on official data provided by Member States based on internationally recognized methodologies; only in the absence of such information, other sources could be used;

5 to establish and collect community connectivity indicators and to participate in the development of core indicators to measure efforts to build the information society and, by doing so, to illustrate the scale of the digital divide and the efforts of developing countries to close the gap;

6 to monitor the development and improvement of methodologies relevant to indicators and methods of data collection, through consultation with Member States and experts, particularly by means of World Telecommunication/ICT Indicators Symposium (WTIS);

7 to review, revise and further develop benchmarking and ensure that ICT indicators and the single ICT Development Index (IDI) and the ICT Price Basket reflect the real development of the ICT sector, taking into consideration different levels of development and national circumstances, in application of the WSIS outcomes;

8 to encourage countries to collect statistical indicators and information illustrating national digital divides as well as the efforts made through various programmes to close the gap, showing, as much as possible, the impact on gender issues, persons with disabilities and different social sectors;

9 to strengthen ITU-D's role in the Partnership on Measuring ICT for Development by acting as a member of the steering committee and through active participation in discussions and activities geared to achieving the partnership's main objectives;

10 to provide statistics and regulatory information on the ITU-D website, and to establish appropriate mechanisms and modalities for countries which do not have electronic access to obtain this information;

11 to encourage Member States to bring together different stakeholders in government, academia and civil society in raising national awareness about the importance of the production and dissemination of high-quality data for policy purposes;

12 to provide technical assistance to the Member States for the collection of ICT statistics, in particular by means of national surveys, and for the development of national databases containing statistics and regulatory policy information;

13 to develop training material and conduct specialized training courses on information society statistics for developing countries, favouring collaboration with members of the Partnership on Measuring ICT for Development when necessary, including the statistical department of the United Nations and the Organisation for Economic Co-operation and Development (OECD);

14 to unify all BDT information and statistical databases on the BDT website so as to respond to the objectives stated in §§ 113, 114, 115, 116, 117 and 118 of the Tunis Agenda, and to play a primary role in relation to §§ 119 and 120;

15 to assist countries with indigenous populations in developing indicators to evaluate the impact of ICTs on indigenous peoples that enable the achievement of the objectives set forth in § C8 of the Geneva Plan of Action;

16 to continue to cooperate with the relevant international bodies, in particular the United Nations Statistics Division, and other international and regional organizations, such as OECD, involved in the collection and dissemination of ICT-related information and statistics;

17 to consult regularly with Member States as to the definition of indicators and methodologies for data collection;

18 to encourage and support Member States in the setting up of national centres for statistics on the information society and in the advancement of existing centres;

19 to begin putting this resolution into practice immediately after the conclusion of this conference by holding a meeting of experts within three months, with the purpose of setting the roadmap for the revision process, and to ensure that the results are taken into account as soon as possible, within the existing budget of BDT,

invites Member States and Sector Members

1 to participate actively in this endeavour by providing the statistics and information solicited, and by engaging actively in discussions with BDT on ICT indicators and data-collection methodologies;

2 to establish national systems or strategies for strengthening the consolidation of statistical information related to telecommunications/ICTs;

3 to contribute with experiences of policies that have a positive impact on ICT indicators;

4 to strive to harmonize their domestic statistical data-collection systems with the methods used at the international level,

encourages

donor agencies and relevant United Nations agencies to cooperate in providing relevant support and information on their activities.

RESOLUTION 9 (Rev. Dubai, 2014)

Participation of countries, particularly developing countries, in spectrum management

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that the continuing growth in demand for spectrum, from both existing and new radiocommunication applications, places ever greater requirements on a scarce resource;

b) that, because of the investment in equipment and infrastructures, major changes in the existing use of the spectrum are often difficult to achieve, except in the long term;

c) that the marketplace drives the development of new technologies to find new solutions to address development problems;

d) that national strategies should take into account international commitments under the Radio Regulations;

e) that it is recommended that national strategies should also take into account global changes in telecommunications/information and communication technologies (ICTs) and developments in technology;

f) that increased spectrum access may be facilitated through technical innovation and greater sharing capabilities;

g) that, based on its ongoing work, the ITU Radiocommunication Sector (ITU-R) is well placed to provide worldwide information on radiocommunication technology and spectrum utilization trends;

h) that the ITU Telecommunication Development Sector (ITU-D) is well placed to facilitate the participation of developing countries in ITU-R activities, and, for those developing countries that so request, to distribute to them the results of particular ITU-R activities;

i) that such information would assist spectrum managers in developing countries to develop their own national medium- or long-term strategies;

j) that such information would enable developing countries to benefit from sharing studies and other technical studies in ITU-R, including new spectrum sharing approaches such as dynamic spectrum access (DSA);

k) that, within spectrum management, one of the most pressing concerns of many developing countries, including least developed countries, small island developing states, landlocked developing countries and countries with economies in transition, is the difficulty of elaborating methods for the calculation of fees for use of the radio-frequency spectrum;

l) that regional, bilateral or multilateral agreements could be a basis for fostering cooperation in the field of the radio-frequency spectrum;

m) that spectrum refarming[1] could accommodate the increasing demand for new and existing radiocommunication applications;

n) that spectrum monitoring includes effective use of spectrum monitoring facilities to support the spectrum-management process, the evaluation of spectrum utilization for the purpose of spectrum planning, the provision of technical support for frequency allocation and assignment and the resolution of cases of harmful interference;

o) the need, in studying spectrum-management best practices, to make broadband access more affordable to lower-income populations, especially in developing countries,

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[1] As noted in Recommendation ITU-R SM.1603, redeployment is also referred to as refarming.

recognizing

a) that it is the sovereign right of every State to manage spectrum use within its territories;

b) that there is a strong need for the active participation of developing countries in ITU activities, as expressed in Resolution 5 (Rev. Dubai, 2014) of this conference, Resolution ITU-R 7-2 (Rev. Geneva, 2012) of the Radiocommunication Assembly and Resolution 44 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, which may be represented individually and through regional groups;

c) that it is important to take into consideration the ongoing work in ITU-R and ITU-D, and the need to avoid duplication of effort;

d) the successful cooperation between ITU-R and ITU-D to produce the reports entitled "WTDC-98 Resolution 9: Review of national spectrum management and use of the spectrum – Stage 1: 29.7-960 MHz", "WTDC Resolution 9 (Rev. Istanbul, 2002): Review of national spectrum management and use of the spectrum – Stage 2: 960-3 000 MHz"; "WTDC Resolution 9 (Rev. Doha, 2006): Review of national spectrum management and use of the spectrum – Stage 3: 3 000 MHz – 30 GHz"; and "WTDC Resolution 9 (Rev. Hyderabad, 2010): Participation of countries, particularly developing countries, in spectrum management";

e) the considerable support given by the Telecommunication Development Bureau (BDT) in the compilation of these reports, supporting developing countries;

f) the successful development of the Spectrum Fees Database (SF Database) and the initial compilation of guidelines[2] and case studies to assist administrations in extracting information from the SF Database for use in the preparation of fee-calculation models that suit their national requirements;

g) that, in connection with the ITU-R Handbook on National Spectrum Management and Report ITU-R SM.2012, additional guidelines have been compiled offering various national approaches to spectrum-management fees for spectrum use;

h) that there is significant activity across multiple ITU-R study groups to address spectrum sharing, which may have implications for national spectrum management and which may be of particular interest to developing countries;

i) that ITU-R continues to update Recommendation ITU-R SM.1603, which provides guidelines for spectrum redeployment;

j) that the ITU-R Handbook on Spectrum Monitoring provides guidelines for the installation and operation of spectrum-monitoring infrastructures and the implementation of spectrum monitoring, while Recommendation ITU-R SM.1139 prescribes administrative and procedural requirements for international monitoring systems,

taking into account

a) No. 155 of the ITU Convention, defining the aim of studies conducted within ITU-R;

b) the current scope of ITU-R Study Group 1, as defined by the Radiocommunication Assembly in Resolution ITU-R 4-6,

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[2] Here, "guidelines" refers to a range of options that may be used by ITU Member States in their domestic spectrum-management activities.

resolves

1 to prepare a report within the next study period on national technical, economic and financial approaches to, and challenges of, spectrum management and spectrum monitoring, taking into consideration development trends in spectrum management, case studies on spectrum redeployment, licensing processes and best practices implemented in spectrum monitoring around the world, including consideration of new spectrum-sharing approaches;

2 to continue the development of the SF Database, incorporating national experiences, and provide additional guidelines and case studies, based on contributions from administrations;

3 to update the information available in national frequency allocation tables and make the Resolution 9 and ICT Eye portals complementary;

4 to compile case studies and collect best practices regarding national uses of shared spectrum access, including DSA, and study the economic and social benefits arising from the effective sharing of spectrum resources;

5 to continue to gather the necessary information on activities carried out by ITU-D Study Groups 1 and 2, ITU-R Study Group 1 and relevant BDT programmes,

instructs the Director of the Telecommunication Development Bureau

1 to continue to provide the support described in *recognizing e)* above;

2 to encourage Member States from developing countries, at national and/or regional level, to provide ITU-R and ITU-D with a list of their needs with respect to national spectrum management, to which the Director should endeavour to respond, and an example of which is given in Annex 1 to this resolution;

3 to encourage Member States to continue to provide ITU-R and ITU-D with practical examples of their experiences of using the SF Database, development trends in spectrum management, spectrum redeployment and the installation and operation of spectrum-monitoring systems;

4 to take appropriate measures so that work in accordance with this resolution is carried out in the six official and working languages of the Union,

invites the Director of the Radiocommunication Bureau

to ensure that ITU-R continues the collaboration with ITU-D in the implementation of this resolution.

ANNEX 1 TO RESOLUTION 9 (Rev. Dubai, 2014)

Specific needs in spectrum management

The main types of technical assistance which developing countries expect from ITU are as follows:

1 Assistance in raising the awareness of national policy-makers as to the importance of effective spectrum management for a country's economic and social development

With the restructuring of the telecommunication sector, the emergence of competition, high demand for frequencies from operators, disaster mitigation and relief operations and the need to combat climate change, effective spectrum management has become indispensable for States. ITU should play a key role in raising the awareness of policy-makers by organizing special seminars designed specifically for them. To this end:

- In view of how important the regulators have become, ITU might include them in its regular distribution list for circulars providing information about the different education programmes and modules organized by the Union.
- ITU should include dedicated spectrum-management modules in the programmes of meetings (colloquiums, seminars) bringing together regulators and ministries responsible for spectrum management, with private-sector involvement.
- Within the limits of available resources, ITU should make fellowships available for least developed countries' participation at those meetings.

2 Training and dissemination of available ITU documentation

Spectrum management must be in accordance with the provisions of the Radio Regulations, regional agreements to which administrations are parties, and national regulations. Spectrum managers must be able to provide frequency users with relevant information.

Developing countries would like to have access to ITU-R and ITU-D documentation, which must be available in the six official languages of the Union.

Developing countries would also like to see suitable training provided in the form of specialized ITU seminars, in order to help frequency managers gain a thorough knowledge of ITU-R Recommendations, Reports and Handbooks, which are constantly changing.

Through its regional offices, ITU could set up an effective system to provide frequency managers with real-time information on existing and future publications.

3 Assistance in developing methodologies for establishing national tables of frequency allocations and spectrum redeployment

Tables of frequency allocations form the mainstay of spectrum management; they identify the services provided and their category of use. ITU could encourage administrations to make available national frequency allocation tables to the public and stakeholders and facilitate administrations' access to information available in other countries, in particular by developing links between its website and the websites of administrations which have produced national tables of frequency allocations available to the public, allowing developing countries to obtain information on national allocations in a rapid and timely fashion. ITU-R and ITU-D could also compile guidelines for the development of the above-mentioned tables. Spectrum redeployment is sometimes necessary to allow the introduction of new radiocommunication applications. ITU could provide support in this regard by compiling guidelines for the implementation of spectrum redeployment, on the basis of practical experience of administrations and based on Recommendation ITU-R SM.1603 – Spectrum redeployment as a method of national spectrum management.

In certain circumstances, the Telecommunication Development Bureau (BDT) could make available the assistance of its experts for the development of national tables of frequency allocations and for the planning and implementation of spectrum redeployments, at the request of the countries concerned.

To the extent possible, ITU-D should incorporate appropriate issues into its regional seminars on spectrum management.

4 Assistance in setting up computerized frequency management and monitoring systems

These systems facilitate routine spectrum-management tasks. They must be capable of taking local features into account. The establishment of operational structures also enables the smooth execution of administrative tasks, frequency allocation, spectrum analysis and monitoring. According to the specific features of individual countries, ITU can provide expert help in identifying the technical means, operational procedures and human resources needed for effective spectrum management. The ITU-R Handbook on Computer Aided Techniques for Spectrum Management and the ITU-R Handbook on Spectrum Monitoring may provide technical guidelines for setting up the above-mentioned systems.

ITU should improve the Spectrum Management System for Developing Countries (SMS4DC) software (including its availability in the other official languages), and ensure the necessary assistance and training in the implementation of the software in administrations' daily spectrum-management activities.

ITU should provide expert advice to administrations of developing countries and facilitate participation of developing countries in regional or international spectrum-monitoring activities, as necessary. ITU should also provide encouragement and assistance to administrations in setting up regional spectrum-monitoring systems, if required.

5 Economic and financial aspects of spectrum management

ITU-D and ITU-R could, together, provide examples of:

a) reference frameworks for management accounting;

b) guidelines for the implementation of management accounting, which could be very useful for calculating the administrative costs of spectrum management referred to in *recognizing g)* of this resolution;

c) guidelines of the methods used for spectrum valuation.

ITU could further develop the mechanism set up under *resolves* 2 of this resolution in order to enable developing countries to:

– learn more about practices in other administrations, which could be useful for defining spectrum fee policies tailored to each country's specific situation;

– identify financial resources to be allocated to the operational and investment budgets for spectrum management.

6 Assistance with preparations for world radiocommunication conferences (WRC) and with follow-up on WRC decisions

The submission of joint proposals is a way of guaranteeing that regional needs are taken into account. Alongside regional organizations, ITU could give impetus to the establishment and running of regional and subregional preparatory structures for WRCs.

With support from regional and subregional organizations, the Radiocommunication Bureau could communicate the broad outlines of decisions taken by the conferences, and thereby contribute to establishing a follow-up mechanism for such decisions at national and regional level.

7 Assistance with participation in the work of the relevant ITU-R study groups and their working parties

The study groups play a key role in the drafting of Recommendations which affect the entire radiocommunication community. It is essential that developing countries participate in study group work in order to ensure that their specific features are taken into account. For effective participation of those countries, ITU could – through its regional offices – assist in running a subregional network organized around coordinators responsible for the Questions under study within ITU-R, as well as by providing financial assistance in order for the coordinators to participate in meetings of the relevant ITU-R study groups. The designated coordinators for the different regions should also assist in meeting the desired needs.

8 Transition to digital terrestrial television broadcasting

Most of the developing countries are currently undergoing the transition from analogue to digital terrestrial television broadcasting. There is thus a need for assistance in many topics, including frequency planning, service scenarios and technology selection, which all in turn affect spectral efficiency and the resulting digital dividend.

9 Assistance in identifying the most efficient ways to utilize the digital dividend

Developing countries, upon completing digital switchover, will have some portions of a very valuable spectrum freed, which are known as the digital dividend. Different discussions are being conducted on how to optimally reallocate, and enable more efficient use of, the relevant part of these bands. In order to maximize both economic and social impacts, it will be appropriate to consider including potential use cases and best practices in ITU's library, and to hold regular international and regional workshops on that subject.

10 New spectrum-access approaches

With the ongoing demand for high data rates, there is pressure on the limited spectrum resource. Developing countries need to be aware of innovative schemes for improving spectrum efficiency and spectrum use, through training, seminars and case studies on actual deployments and trials. Areas of particular importance include:

– sharing information and best practice on the use of dynamic spectrum access (DSA) approaches;

– reviews around the possibility of applying DSA approaches to enable better and more cost-effective provision of services.

11 Online spectrum licensing

As part of smart government, public services are increasingly being offered over mobile and online platforms. The process of spectrum licensing can also be automated, and the process of receiving requests for spectrum use and licensing can be made available online and on smart devices. Training and case studies can be offered to the developing countries in order for them to benefit from the experience of countries that have deployed such systems.

RESOLUTION 10 (Rev. Hyderabad, 2010)

Financial support for national spectrum-management programmes

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 10 (Rev. Doha, 2006) of the World Telecommunication Development Conference (WTDC),

considering

a) that we are currently witnessing the accelerated implementation and globalization of different radiocommunication services, and the emergence of new efficient radio applications;

b) that guaranteeing successful development of radiocommunications and implementation of these new applications calls for the availability of appropriate interference-free frequency bands, at the national, regional and international levels, in accordance with the Radio Regulations and Recommendations and resolutions of the ITU Radiocommunication Sector (ITU-R);

c) the outputs from the second phase of the World Summit on the Information Society (WSIS), particularly § 96 of the Tunis Agenda for the Information Society pertaining to the role of ITU in taking steps to ensure the rational, efficient and economic use of, and equitable access to, the radio-frequency spectrum by all countries;

d) that the provision of frequency bands and more efficient use of the spectrum, at the national, regional and international levels, depend on the establishment and implementation of relevant national spectrum-management, including radio-monitoring, programmes to prevent interference;

e) that efficient national spectrum-management programmes are essential to the liberalization of radiocommunications and the privatization of some radiocommunication services and to promoting competition, realizing that such programmes are not available in some developing countries[1];

f) that several countries are switching off their analogue television transmissions and migrating to digital broadcasting technologies, freeing a range of radio frequencies currently used for analogue television;

g) that spectrum can be used for efforts to bridge the digital divide,

recognizing

a) the importance of implementing spectrum-management programmes in ensuring effective development of radiocommunications and the role played by radiocommunications in developing a country's economy, and that such programmes are sometimes not given the necessary priority;

b) that national and international finance organizations frequently accord much more priority to supporting the implementation of telecommunication (including radiocommunication) systems than to the implementation of national spectrum-management programmes;

c) the success achieved in the implementation of Resolution 9 "Participation of countries, particularly developing countries, in spectrum management" since it was first adopted at WTDC (Valletta, 1998),

resolves

1 to continue to invite national and international finance organizations to pay more attention to giving substantial financial support, including through favourable credit arrangements, to national spectrum-management – including radio-monitoring – programmes and training therein for those countries that lack appropriate spectrum-management programmes, as a prerequisite for efficient spectrum utilization, the successful development of radio services and the implementation of new and promising applications, including global ones, at the national, regional and international levels;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

2 to continue to invite the Telecommunication Development Bureau (BDT) to provide, in its budget, for the holding of an annual meeting to study the question of national spectrum management, in full coordination with the Radiocommunication Bureau (BR), within the activities of Programme 1, at the regional and international levels;

3 to invite BDT to follow up development of the national spectrum-management system for developing countries (SMS4DC), in cooperation with BR and ITU-R Study Group 1;

4 to invite BDT to evaluate the possibility of: i) studying optimal ways of phasing out analogue TV in developing countries, and ii) better utilizing the phased-out analogue TV frequencies,

requests the Telecommunication Development Bureau

to bring this resolution to the attention of relevant international and regional financing and development organizations,

invites the Director of the Radiocommunication Bureau

to continue the cooperation with BDT in developing the national spectrum-management system for developing countries (SMS4DC), and training therein,

invites ITU-R Study Groups 5 and 6

to continue the cooperation with ITU-D Study Group 2, providing information on the current and future use of the spectrum with the phased-out analogue TV frequencies and reporting how the developed and developing countries are using or planning to use the digital dividend.

RESOLUTION 11 (Rev. Dubai, 2014)

Telecommunication/information and communication technology services in rural, isolated and poorly served areas and indigenous communities

The World Telecommunication Development Conference (Dubai, 2014),

recalling

Resolution 11 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC),

considering

a) that all WTDCs have reaffirmed the important and urgent need to provide access to basic telecommunication/information and communication technology (ICT) services for everyone, and particularly for developing countries[1], in order to provide coverage in rural and isolated areas which lack this service, and in indigenous communities;

b) the outputs of the first and second phases of the World Summit on the Information Society (WSIS) in relation to the importance of ensuring telecommunication/ICT services in those areas and communities,

noting

a) that a clear correlation between the availability of universal telecommunication/ICT services and economic and social development has been firmly established;

b) the importance of achieving telecommunication/ICT infrastructure development in developing countries, which helps to enhance access to services, particularly in rural, isolated or unserved and underserved areas, and in indigenous communities,

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

recognizing

a) that spectacular progress has been made in many developing countries through universal access to telecommunication/ICT services in rural, isolated and poorly served areas countrywide and in indigenous communities, thereby demonstrating the economic and technical feasibility of projects to provide this type of service;

b) that, in many areas and some developing countries, there is convincing evidence of the overall profitability of telecommunication/ICT services in rural, isolated and poorly served areas, and in indigenous communities,

recognizing further

a) that there are several state-of-the-art technologies which may help to facilitate the provision of telecommunication/ICT services, in particular broadband technologies, to rural, isolated and poorly served areas and indigenous communities;

b) that access to telecommunication/ICT services in rural, isolated and poorly served areas and indigenous communities can only be achieved through judicious choice of appropriate technological options (terrestrial and satellite) allowing access to and maintenance of good quality and economical services;

c) that Study Group 2 of the ITU Telecommunication Development Sector (ITU-D), in the course of its study of Question 10-3/2 in previous study periods, has collected numerous case studies relating to rural projects and projects serving isolated areas and indigenous communities, that these case studies include the preparation, design and implementation of such projects, and that they represent an important reference to be used as lessons for successful projects covering many situations,

resolves

1 to support the principles recommended by Study Group 1, through previous and recent studies of Question 5/1 (former Question 10-3/2) (Telecommunications/ICTs for remote and rural areas), on the best means for providing access to telecommunication/ICT services in rural, isolated and poorly served areas and indigenous communities, in terms of universal access, rural telecommunication programmes, regulatory framework, financial resources and commercial approach, and likewise the substance of its latest recommendation, which includes all previous recommendations and any additions made thereto in the last study period;

2 to instruct ITU-D Study Group 1 to take into account the aims of this resolution when continuing the study of Question 5/1 in the next study period;

3 to instruct the relevant ITU Telecommunication Development Bureau programme to submit written contributions to Study Group 1 on its experience in this area and, in particular, experience gained from the projects it has implemented and the seminars and training programmes it is executing to meet the needs of rural and isolated areas and the needs of indigenous communities,

instructs the Director of the Telecommunication Development Bureau

1 to promote further the use of all appropriate means of telecommunication/ICT to facilitate effective development and implementation of telecommunication/ICT services in rural, isolated and poorly served areas and indigenous communities of the world through the relevant programmes;

2 to continue efforts to promote the optimum use by developing countries of all available new telecommunication/ICT services provided by satellite and terrestrial systems to serve these areas and communities.

RESOLUTION 13 (Rev. Hyderabad, 2010)

Resource mobilization and partnerships for accelerating telecommunication/information and communication technology development

(ABROGATED BY WTDC-14)

RESOLUTION 15 (Rev. Hyderabad, 2010)

Applied research and transfer of technology

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

a) Resolution 15 (Rev. Doha, 2006) of the World Telecommunication Development Conference;

b) the Tunis Commitment, recognizing the principles of universal, non-discriminatory, equitable and affordable access to information and communication technology (ICT) for all nations and all persons everywhere (see §§ 15, 18 and 19);

c) Resolution 64 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on non-discriminatory access to modern telecommunication/ICT facilities and services,

recognizing

a) that many countries would benefit from technology transfer in a wide range of fields;

b) that joint ventures can be effective means of technology transfer;

c) that seminars and training conducted by various countries as well as by international and regional organizations have contributed to the transfer of technology, and hence to the development of ICT networks in the region;

d) that providers of ICT equipment and services are important partners in ensuring the flow of technology to developing countries and that they are ready to enter freely into such arrangements;

e) that applied research is a promising activity for developing countries;

f) that a great number of engineers originally from developing countries contribute to applied research in developed countries;

g) that research institutes in developed countries have substantial human and material resources compared to developing countries;

h) that a relationship of partnership and cooperation between applied research centres and laboratories improves technology transfer,

resolves

1 that, based on agreement among parties concerned, transfer of technology in the area of telecommunications/ICT, which is of benefit to developing countries[1], should be enhanced as much as possible, in respect of conventional technology as well as new technologies and services;

2 that developing and developed countries should continue to cooperate through exchanges of experts, the organization of seminars, specialized workshops and meetings, networking of telecommunication applied research institutions by means of teleconferencing, etc.;

3 that recipient countries should systematically and fully utilize technology transfers in their countries,

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

instructs the Director of the Telecommunication Development Bureau

in cooperation with international, regional and subregional organizations concerned, taking into account the documents adopted by the first and second phases of the World Summit on the Information Society (WSIS):

1 to continue to hold specialized seminars, workshops or training in the field of telecommunications/ICTs in order to raise the technological level in developing countries;

2 to continue to promote the exchange of information among international organizations, donor countries and recipient countries on transfer of technology, by assisting them in setting up cooperative networks between telecommunication research institutes in developing countries and developed countries;

3 to assist in the elaboration of terms of reference guaranteeing technology transfer;

4 to continue to develop handbooks in the area of technology transfer;

5 to ensure that these handbooks are disseminated to developing countries and that users are properly initiated in their use;

6 to encourage the organization of specialized workshops in developing countries by research institutes from developed countries;

7 to give financial support to research institutes in developing countries so as to enable them to attend well-known research meetings and workshops;

8 to establish a model contract for use by research institutes specifying partnership arrangements between them;

9 to encourage the admission of academic institutions, universities and their associated research establishments in the work of the ITU Telecommunication Development Sector as Sector Members or Associates, at a reduced level of financial contribution, particularly academic institutions of developing countries,

invites developing countries

to continue establishing new ICT research projects and to submit them to existing applied research institutes in order to facilitate cooperation with other research institutes in developed countries,

invites telecommunication equipment and service providers

pursuant to the Geneva Declaration of Principles of the first phase of WSIS and the Tunis Commitment of the second phase, to make relevant new technologies and know-how available to their customers in developing countries on a voluntary basis and/or in accordance with sound commercial principles,

appeals to international organizations and donor countries

to assist the developing countries in exploring ways and means of improving technology transfer and developing ICT applied research centres and laboratories, including technical and financial assistance.

RESOLUTION 16 (Rev. Hyderabad, 2010)

Special actions and measures for the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 30 (Rev. Antalya, 2006) of the Plenipotentiary Conference, Resolution 16 (Rev. Doha, 2006) of the World Telecommunication Development Conference (WTDC) and WTDC Resolution 49 (Doha, 2006), on special actions for the least developed countries and small island developing states,

noting

a) the striking imbalance in telecommunication/information and communication technology (ICT) development between these countries (least developed countries, small island developing states, landlocked developing countries and countries with economies in transition) and other countries, the persistence of which exacerbates the digital divide;

b) that these countries and countries in special need are vulnerable to extreme levels of devastation resulting from natural disasters and lack the capacity to respond effectively to these calamities,

appreciating

the special measures taken for the benefit of these countries in the form of concentrated assistance provided under the Doha Action Plan,

still concerned

a) that, despite all the measures taken so far, the telecommunication networks in many of these countries remain in a very poor state of development in urban, semi-urban and rural areas;

b) that multilateral and bilateral flows of technical assistance and investment finance to these countries are constantly declining;

c) that to date there are many countries in this category;

d) with the low level of resources allocated to the special programme for these countries,

aware

that improved telecommunication networks in these countries will constitute a major driver underpinning their social and economic recovery and their development, and an opportunity for them to establish their information societies,

resolves

to endorse the new priority areas for the next four years, the associated programme of action for these countries and its implementation strategy,

instructs the Director of the Telecommunication Development Bureau

1 to implement fully a programme of assistance for these countries as contained in the Hyderabad Action Plan, significantly increasing the financial allocations of Telecommunication Development Bureau (BDT) funds for this activity, including a sufficient number of staff members for these countries;

2 to give priority to these countries in implementing other BDT programmes of assistance to developing countries;

3 to pay special attention to suburban and rural telecommunication/ICT development in these countries, with a view to achieving universal access to telecommunication and information technology services;

4 to strengthen the unit for these countries, within existing resources,

requests the Secretary-General

1 to request the forthcoming Plenipotentiary Conference (Guadalajara, 2010) to increase the allocated budget for these countries with a view to enabling BDT to undertake increased and programmed activities for them;

2 to continue enhancing the assistance provided to these countries through other resources, and in particular through unconditional voluntary contributions and appropriate partnerships, as well as any surplus income from world and regional telecommunication exhibitions and forums;

3 to propose new and innovative measures capable of generating additional funds to be used for telecommunication/ICT development in these countries, in order to benefit from the possibilities afforded by financial mechanisms in facing the challenges of utilizing ICT for development purposes, as stated in the Tunis Agenda for the Information Society,

calls upon governments of least developed countries, small island developing states, landlocked developing countries and countries with economies in transition

1 to continue to accord higher priority to ICT development as well as disaster response and risk reduction planning, and to adopt measures, policies and national strategies that are conducive to bringing about faster development of telecommunications/ICTs in their countries, such as sector liberalization and the introduction of new technologies;

2 in selecting technical cooperation activities financed by bilateral and multilateral sources, to continue to accord high priority to telecommunication/ICT activities and projects;

3 to accord priority to the development of ICTs in national development plans,

calls upon other Member States and Sector Members

to establish partnerships with these countries, either directly or through BDT, in order to bring increased investment into the ICT sector and to stimulate the modernization and expansion of networks in these countries in a bold attempt to reduce the digital divide and to achieve the ultimate goal of universal access in line with the Geneva Plan of Action, the Tunis Commitment and the Tunis Agenda.

RESOLUTION 17 (Rev. Dubai, 2014)

Implementation of regionally approved initiatives at the national, regional, interregional and global levels[1]

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that telecommunications/information and communication technologies (ICTs) continue to be one of the most vital elements for the growth of national economies and protection of the environment;

b) that the existence, at the national, regional, interregional and global levels, of suitable telecommunication networks and services for sustainable development is an essential element for national development and improving the social, economic, financial and cultural situation of Member States;

c) the need to coordinate and harmonize efforts to develop telecommunication infrastructure at the national, regional, interregional and global levels;

d) that the leadership of the ITU Member States is needed to outline a unified national vision of a connected society that is comprehensive of all stakeholders;

e) the commitment of the ITU Member States to promote access to ICTs at affordable prices, paying special attention to the least favoured segments,

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[1] An initiative shall take the form of an all-embracing heading under which a number of projects can be included, leaving it to each region to define these.

taking into account

a) the vital importance of telecommunication development initiatives endorsed by all regional development conferences, and by the preparatory meetings preceding this conference;

b) that there is a lack of funding from the United Nations Development Programme (UNDP) and other international financial institutions, impeding the implementation of such initiatives;

c) that developing countries[2] are increasingly experiencing the need for knowledge of fast-developing technologies and the associated policy and strategic issues;

d) the achievements of the Connect the World initiatives promoted by the ITU Telecommunication Development Sector (ITU-D);

e) the satisfactory and encouraging results achieved by activities of this kind, which have helped cooperation in the creation of telecommunication networks;

f) that, given the resources at the disposal of developing countries, it is an important task to meet the requirements cited in *taking into account c)* above, and that, as the United Nations specialized agency for telecommunications, ITU is in a position to meet these requirements,

noting

a) that the ITU-D centres of excellence training significantly assists the developing countries with knowledge-based requirements;

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[2] These includes the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

b) that the relevant regional organizations play a prominent and important role, especially in support of the developing countries,

resolves

1 that the Telecommunication Development Bureau (BDT) should continue cooperation with the ITU regional offices to identify possible ways and means of implementing the regionally approved initiatives at the national, regional, interregional and global levels, making the utmost use of available BDT resources, its annual budget and surplus income from ITU-TELECOM events, in particular by means of equitable budget allotments for each region;

2 that BDT continue to actively assist the developing countries in elaborating and implementing these initiatives, which are specified in section 3 of the Dubai Action Plan;

3 that Member States should consider contributing in kind and/or in cash to the budget foreseen for implementation of these initiatives and the realization of other projects foreseen within the framework of these initiatives at the national, regional, interregional and global levels;

4 that BDT continue to conclude partnerships with Member States, ITU-D Sector Members, financial institutions and international organizations in order to sponsor implementation activities for these initiatives;

5 that BDT should assist in the implementation of these initiatives at the national, regional, interregional and global levels, integrating as far as possible those initiatives that have the same content or objectives, taking into consideration the Dubai Action Plan;

6 that BDT, through the ITU regional offices, shall compile all the experiences accumulated during the implementation of regional initiatives in each region, and make them available to other regions in order to identify synergies and similarities that will make it possible to make better use of available resources, using the portal for project implementation, in the six official languages of the Union;

7 that BDT make information available on initiatives successfully implemented by each of the regions, so as to capitalize on the experience and leverage the outcomes, which might be replicated in order to save time and resources when setting up and designing projects in the other regions;

8 that BDT also channel the accumulated experience on regional initiatives through the regional offices, and make information available to Member States on implementation, outcomes, stakeholders, financial resources used and so forth,

appeals

to international financial organizations/agencies, equipment suppliers and operators/service providers to contribute, fully or partially, to financing these regionally approved initiatives,

instructs the Director of the Telecommunication Development Bureau

1 to take all necessary measures for promoting and implementing these regionally approved initiatives at the national, regional, interregional and global levels, and in particular the similar initiatives agreed at international level;

2 to ensure that the ITU regional offices have a role in monitoring the implementation of the initiatives approved in their regions, and to submit an annual report to the Telecommunication Development Advisory Group on the implementation of this resolution;

3 that an annual meeting be held for each region in order to discuss the regional initiatives and projects for each region and mechanisms for implementation of the initiatives adopted and to make known the needs of the different regions, and that a regional development forum (RDF) may be held in conjunction with the annual meeting for each region;

4 to take all measures needed to promote consultation with the Member States in each region before implementing and executing approved initiatives in a timely fashion, in order to agree on priorities, suggest strategic partners, means of financing and other issues, thereby promoting a participatory, inclusive process of meeting the goals;

5 in consultation and coordination with the Directors of the Radiocommunication and Telecommunication Standardization Bureaux, to promote the joint work of the three Sectors in order to provide suitable, efficient, agreed assistance for Member States to implement the regional initiatives.

RESOLUTION 18 (Rev. Dubai, 2014)

Special technical assistance to Palestine

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 32 (Kyoto, 1994) of the Plenipotentiary Conference, on technical assistance to Palestine for the development of telecommunications, and Resolution 125 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on assistance and support to Palestine for rebuilding its telecommunication networks;

b) Resolution 99 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the status of Palestine in ITU;

c) the Charter of the United Nations and the Universal Declaration of Human Rights;

d) Resolution 18 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on special technical assistance to Palestine;

e) United Nations General Assembly Resolution 68/235, which recognizes the Palestinian people's right to permanent sovereignty over their natural resources, specifically land, water, energy and other natural resources, in the occupied Palestinian territory, including East Jerusalem;

f) the provisions of § 16 of the Declaration of Principles of the first phase (Geneva, 2003) of the World Summit on the Information Society (WSIS) and the outcomes of the second phase of WSIS, particularly § 96 of the Tunis Agenda for the Information Society, relating to ITU's role in taking steps to ensure rational, efficient and economic use of, and equitable access to, the radio-frequency spectrum by all countries, based on relevant international agreements,

considering

a) that the ITU Constitution and Convention are designed to strengthen peace and security in the world for the development of international cooperation and better understanding among the peoples concerned;

b) ITU's policy of assistance to Palestine for the development of its telecommunication/information and communication technology (ICT) sector, which is efficient but has not yet achieved its goals;

c) Resolution 9 (Rev. Dubai, 2014) of this conference, to the effect that it is the sovereign right of every State to manage spectrum use within its territories, and the provisions in Resolution 99 (Rev. Guadalajara 2010),

considering further

a) that establishment of a reliable and modern telecommunication network is an essential part of economic and social development and is of the utmost importance to the future of the Palestinian people;

b) the importance of the international community in assisting Palestine to develop a modern and reliable telecommunication network,

mindful

of the fundamental principles contained in the Constitution,

having regard to

a) the continuing challenges faced by Palestine and ITU in executing the five projects agreed with the Telecommunication Development Bureau (BDT) under the implementation of Resolution 18 (Rev. Istanbul, 2002), Resolution 18 (Rev. Doha, 2006) and Resolution 18 (Rev. Hyderabad, 2010) of WTDC, which must be a matter of anxiety and concern for the entire international community, especially ITU;

b) the decisions of the Connect Arab summit;

c) the key outcomes of the Regional Preparatory Meeting for the Arab region (RPM-ARB), held in Bahrain in 2013, particularly issues relating to Palestine,

noting

the long-term technical assistance from BDT to Palestine for the development of its telecommunications/ ICTs pursuant to Resolution 32 (Kyoto, 1994) and the urgent need for forms of assistance to be provided in the various fields of information, informatics and communication, and the increasing difficulties that have accompanied the provision of this assistance continuously since that resolution was adopted,

noting with grave concern

the restrictions and difficulties related to the current situation in Palestine that are preventing access to telecommunication/ICT means, services and applications and which constitute a continuing obstacle to telecommunication/ICT development in Palestine,

resolves to continue to instruct the Director of the Telecommunication Development Bureau

1 to continue and enhance the technical assistance provided to Palestine for the development of its telecommunications/ICTs, taking into consideration the need to overcome the increasing and escalating difficulties encountered in the provision of this assistance during the previous cycles since 2002;

2 to take appropriate measures within the mandate of BDT aimed at facilitating the establishment of international access networks, including terrestrial and satellite stations, submarine cables, optical fibre and microwave systems;

3 to instruct BDT, in coordination with the Radiocommunication Bureau, to prepare and implement an urgent plan, to commence immediately, assist Palestine in completing the process of transition and migration to digital terrestrial television broadcasting in the frequency band 470-694 MHz, and identify mechanisms for ensuring that Palestine can exploit the 694-862 MHz frequency band resulting from the digital transition for broadband mobile service uses and applications to be used after the world radiocommunication conference 2015;

4 to provide a periodic report on various experiences in liberalization and privatization of telecommunications/ICTs and to assess their impact on the development of the sector in the Gaza Strip and the West Bank;

5 to implement e-health, e-education, e-government, spectrum planning and management pursuant to the previous agreements in ITU, and human resources development projects and all other forms of assistance;

6 to report to the ITU Council with an annual report on the progress made in implementing this resolution (and similar resolutions) and the mechanisms employed to deal with the increasing difficulties arising,

calls upon ITU members

1 to provide all forms of support and assistance to Palestine bilaterally or through executive actions taken by ITU in this regard;

2 to assist Palestine in rebuilding and restoring the Palestinian telecommunication network;

3 to assist Palestine in recovering its entitlements accruing from incoming and outgoing international traffic;

4 to provide Palestine with assistance in support of the implementation of BDT projects, including human resources capacity building,

requests the Secretary-General

to report to the Plenipotentiary Conference (Busan, 2014) on the progress achieved in implementing this resolution.

RESOLUTION 20 (Rev. Hyderabad, 2010)

Non-discriminatory access to modern telecommunication/information and communication technology facilities, services and related applications

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 20 (Rev. Doha, 2006) of the World Telecommunication Development Conference,

recalling also

a) Resolution 64 (Rev. Antalya, 2006) of the Plenipotentiary Conference, and the importance of telecommunications/information and communication technologies (ICTs) for political, economic, social and cultural progress;

b) the decisions of the two phases of the World Summit on the Information Society (WSIS) concerning non-discriminatory access, in particular §§ 15, 18 and 19 of the Tunis Commitment and §§ 90 and 107 of the Tunis Agenda for the Information Society,

taking into account

a) that ITU plays an important role in the promotion of global telecommunication/ICT standardization and development;

b) that, to this end, the Union coordinates efforts aimed at securing harmonious development of telecommunication/ICT facilities in all its Member States,

taking into account further

that this conference, like its predecessors, is required to formulate a viewpoint and draw up proposals on issues determining a worldwide strategy for the development of telecommunication/ICT facilities, services and applications, and facilitate mobilization of the necessary resources to that end,

noting

a) that modern telecommunication/ICT facilities, services and applications are established, in the main, on the basis of ITU-R and ITU-T Recommendations;

b) that ITU-R and ITU-T Recommendations are the result of the collective efforts of all those taking part in the standardization process within ITU and are adopted by consensus by the members of the Union;

c) that limitations on the access to telecommunication/ICT facilities, services and applications on which national telecommunication/ICT development depends and which are established on the basis of ITU-R and ITU-T Recommendations constitute an obstacle to the harmonious development and compatibility of telecommunications/ICTs worldwide,

recognizing

that full harmonization of telecommunication/ICT networks is impossible unless all countries participating in the work of the Union without exception enjoy non-discriminatory access to new telecommunication/ICT technologies and modern telecommunication/ICT facilities, services and applications, without prejudice to national regulations and international commitments within the competence of other international organizations,

resolves

that there should be non-discriminatory access to telecommunication/ICT, facilities, services and applications established on the basis of ITU-R and ITU-T Recommendations,

encourages the Director of the Telecommunication Development Bureau

to engage in partnerships or strategic cooperation with parties which respect access to telecommunication/ICT facilities, services and applications without discrimination,

requests the Secretary-General

to transmit this resolution to the forthcoming plenipotentiary conference (Guadalajara, 2010) for consideration,

invites the Plenipotentiary Conference

to consider this resolution with a view to taking measures to foster global access to modern telecommunication/ICT, facilities, services and applications,

invites Member States

to help telecommunication/ICT equipment manufacturers and service providers in ensuring that telecommunication/ICT, facilities, services and applications established on the basis of ITU-R and ITU-T Recommendations are made available to the use of the public without any discrimination, in accordance with the decisions of the two phases of WSIS in this regard.

RESOLUTION 21 (Rev. Hyderabad, 2010)

Coordination and collaboration with regional organizations

The World Telecommunication Development Conference (Hyderabad, 2010),

considering

a) Resolution 21 (Rev. Doha, 2006) of the World Telecommunication Development Conference;

b) Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference;

c) Resolutions 17, 44 and 54 (Rev. Johannesburg, 2008) of the World Telecommunication Standardization Assembly;

d) the provisions of §§ 26 and 27 of the Geneva Action Plan;

e) the key principles of the Geneva Declaration of Principles in §§ 60, 61, 62, 63 and 64;

f) the provisions of §§ 23 c), 27 c), 80, 87, 89, 96, 97 and 101 of the Tunis Agenda for the Information Society,

conscious

a) that the role of regional organizations has continued to grow with the changes that have taken place in the last four years;

b) that regional organizations are important bodies, and coordination with them should be carried out in order to support coordination and collaboration on the implementation of regional projects;

c) that it is necessary to adopt ways and means of enhancing the role of ITU in general, and the ITU Telecommunication Development Sector (ITU-D) in particular, in implementing the goals of the World Summit on the Information Society (WSIS) in relation to the development of telecommunication/information and communication technology (ICT) globally, regionally and nationally, in close cooperation with other international and regional organizations and relevant civil-society bodies;

d) that it is necessary to seize every opportunity to give experts from developing countries[1] additional opportunities to gain experience by participating in regional and subregional meetings relating to the work of ITU-D Study Groups 1 and 2,

recognizing

a) that developing countries are at different stages of development;

b) the need, therefore, to exchange opinions on telecommunication development at a regional level;

c) the difficulty for some countries in some regions to participate in ITU-D study group activities;

d) that, pursuant to the aforementioned Resolutions 44 and 54 (Rev. Johannesburg, 2008), regional rapporteur groups might permit wider participation by some countries, at lower cost, to address certain questions;

e) that many of these countries make effective use of regional organizations;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

f) that regional and subregional meetings are a valuable opportunity for exchanging information and generating managerial and technical experience and knowledge;

g) that it is necessary to collaborate with the ITU Telecommunication Standardization Sector (ITU-T) in this respect in implementing Resolutions 44 and 54 (Rev. Johannesburg, 2008),

recalling

a) the possibility of creating regional groups to study questions or difficulties which, because of their specific nature, it is desirable to study within the framework of one or more of ITU's regions;

b) regional initiatives with a view to:

i) implementation of technical cooperation projects and direct assistance to other regions;

ii) cooperation in regional initiatives with regional and international organizations involved with telecommunication/ICT development;

c) the need to create an appropriate mechanism to unify efforts with the bodies referred to in Resolutions 44 and 54 (Rev. Johannesburg, 2008),

resolves

1 to continue to encourage the creation of regional groups to study questions or difficulties that concern a specific region;

2 that ITU-D continue to coordinate, collaborate and organize joint activities in areas of common interest with regional and subregional organizations and training institutions and take into consideration their activities,

instructs the Director of the Telecommunication Development Bureau

1 to take the necessary measures to coordinate with regional and subregional telecommunication organizations, as required;

2 to establish the necessary procedures for liaison between regional rapporteur groups set up under Resolutions 44 and 54 (Rev. Johannesburg, 2008) in ITU-T and the ITU-D study groups, where the subject matter is similar, or to set up similar groups in ITU-D where necessary, on condition that there is no duplication with the regional rapporteur groups set up under Resolutions 44 and 54 (Rev. Johannesburg, 2008).

RESOLUTION 22 (Rev. Dubai, 2014)

Alternative calling procedures on international telecommunication networks, identification of origin and apportionment of revenues in providing international telecommunication services

The World Telecommunication Development Conference (Dubai, 2014),

recalling

Resolution 22 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference,

considering

a) the sovereign right of each State to regulate its telecommunications/information and communication technologies (ICTs), which may include the provision of calling line identification, calling party number delivery and origin identification;

b) the purposes of the Union, which include, *inter alia*:

- to maintain and extend international cooperation among all Member States of the Union for the improvement and rational use of telecommunications/ICTs of all kinds;
- to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness, and making them, as far as possible, generally available to the public;
- to foster collaboration among its Member States and Sector Members with a view to the establishment of rates at levels as low as possible consistent with efficient services and taking into account the necessity for maintaining independent financial administration of telecommunications on a sound basis, pursuant to the purposes of the Union as set forth in Article 1, No. 16, of the ITU Constitution;

- to facilitate peaceful relations, international cooperation among peoples and economic and social development by means of efficient telecommunication services;

c) the necessity of identifying the origin of calls as one of the aims of national security;

d) the need to facilitate the determination of routing and charging;

e) Resolution 21 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on alternative calling procedures on telecommunication networks, which states "that the use of certain alternative calling procedures that are not harmful to networks may contribute to competition in the interests of consumers",

recognizing

a) that alternative calling procedures are not permitted in many countries, while being permitted in others;

b) that the use of alternative calling procedures, including refile, adversely affects the economies of developing countries and may seriously hamper the efforts of these countries for the sound development of their telecommunication networks and services, may prejudice national security aims and may have an economic effect;

c) that some forms of alternative calling procedures may have an impact on traffic management and network planning, and degrade the quality and performance of the public switched telephone network,

recalling

a) Resolution 21 (Rev. Antalya, 2006), which resolves:

"1 to encourage administrations and international telecommunication operators to implement the ITU-T recommendations referred to in *considering d)* in order to limit the negative effects that in some cases alternative calling procedures have on developing countries;

2 to request administrations and international operators which permit the use of alternative calling procedures on their territory in accordance with their national regulations to pay due regard to the decisions of other administrations and international operators whose regulations do not permit such services;

3 to request the appropriate ITU-T study groups, through contributions of Member States and Sector Members, to continue to study alternative calling procedures, such as refile and call-back, and issues related to identification of origin, in order to take into account the importance of these studies as they relate to next-generation networks and network degradation";

b) Resolution 1099 of adopted by the 1996 session of the ITU Council concerning alternative calling procedures on international telecommunication networks, which urged the ITU Telecommunication Standardization Sector (ITU-T) to develop, as soon as possible, the appropriate Recommendations concerning alternative calling procedures;

c) Resolution 29 (Rev. Johannesburg, 2008) of the World Telecommunication Standardization Assembly (WTSA) which notes:

"that in order to minimize the effect of alternative calling procedures:

i) operating agencies authorized by Member States should, within their national law, make every effort to establish the level of collection charges on a cost-oriented basis, taking into account Article 6.1.1 of the International Telecommunication Regulations and Recommendation ITU-T D.5;

ii) administrations and operating agencies authorized by Member States should vigorously pursue the implementation of Recommendation ITU-T D.140 and the principle of cost-oriented accounting-rates and accounting rate shares",

and resolves:

"1 that administrations and operating agencies authorized by Member States should take all reasonable measures, within the constraints of their national law, to suspend the methods and practices of call-back which seriously degrade the quality and the performance of the PSTN, such as constant calling (or bombardment or polling) and answer suppression;

2 that administrations and operating agencies authorized by Member States should take a cooperative and reasonable approach to respecting the national sovereignty of others, and suggested guidelines for this collaboration are attached;

3 to continue developing appropriate recommendations concerning alternative calling procedures and, in particular, the technical aspects of the methods and practices of call-back which seriously degrade the quality and the performance of the PSTN, such as constant calling (or bombardment or polling) and answer suppression;

4 to request Study Group 2 to study other aspects and forms of alternative calling procedures, including refiling and non-identification;

5 to request Study Group 3 to study the economic effects of call-back on the effort of developing countries, including the least developed countries, small island developing states and countries with economies in transition, for sound development of their local telecommunication networks and services, and to evaluate the effectiveness of the suggested guidelines for consultation on call-back",

further recalling

a) Resolution 22 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on the apportionment of revenues in providing international telecommunication services, which resolves to urge ITU-T:

"1 to expedite its work on completing its study on the concept of network externalities for international traffic in relation to both fixed and mobile services;

2 to follow up its work on developing the appropriate costing methodologies for both fixed and mobile services;

3 to agree on transitional arrangements which may allow for some flexibility, taking into account the situation of the developing countries and the rapidly changing international telecommunication environment;

4 to take into consideration the interests of all users of telecommunications/ICTs as a high priority";

b) the need to take into account also the results of the ITU workshop on alternative calling procedures and origin identification held in Geneva on 19-20 March 2012 and § 32 of the Final Acts of the World Conference on International Telecommunications (WCIT-12), on the provision of international calling line identification information, taking into account relevant ITU-T Recommendations,

noting

the decisions of this conference with respect to the programme on Policy and regulatory environment, Questions to be studied by the study groups of the ITU Telecommunication Development Sector (ITU-D), and actions to be taken by the Director of the Telecommunication Development Bureau to support joint activities with ITU-T Study Group 3 for assisting developing countries with accounting-rate reform and with ITU-T Study Group 2 for determining international call origins and limiting misuse of international telecommunication numbering, addressing, naming and call-origin identification systems,

resolves

1 to continue to encourage all administrations and international telecommunication operators to enhance the effectiveness of ITU's role and to give effect to its Recommendations, particularly those of ITU-T Study Groups 2 and 3, in order to promote a new and more effective basis for the accounting regime which would help limit the negative effects of alternative calling procedures and calling party number delivery on developing countries, and limit the negative effects of misappropriation and misuse of international telecommunication numbering resources;

2 to request ITU-D and ITU-T to collaborate so as to avoid overlap and duplication of effort in studying the issue of refile in order to achieve an outcome based on the spirit of Resolution 21 (Rev. Antalya, 2006);

3 to request ITU-D to play an effective role in connection with the implementation of Resolution 22 (Rev. Antalya, 2006) with respect to the apportionment of revenues in favour of developing countries, particularly the least developed among them, in situations where cost-oriented accounting rates reflect asymmetric costs for terminating international traffic, and any amendments thereto by the forthcoming Plenipotentiary Conference (Busan, 2014);

4 to request administrations and international operators which permit the use of alternative calling procedures but do not provide calling party number delivery in their countries in accordance with their national regulations to respect the decisions of other administrations and international operators whose regulations do not permit such services and which request the provision of international calling line identification information, taking into account the relevant ITU-T Recommendations, for security and economic reasons;

5 that cooperation is required with ITU-T, and specifically ITU-T Study Group 2, in implementing Resolution 20 (Rev. Dubai, 2012) of WTSA in relation to telecommunication origin identification and misuse of numbering, addressing and naming resources,

instructs the Director of the Telecommunication Development Bureau

to invite the Director of the Telecommunication Standardization Bureau to collaborate in the implementation of this resolution.

RESOLUTION 23 (Rev. Dubai, 2014)

Internet access and availability for developing countries[1] and charging principles for international Internet connection

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 64 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on non-discriminatory access to modern telecommunication/information and communication technology (ICT) facilities, services and applications, including applied research and transfer of technology, on mutually agreed terms;

b) Resolution 101 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on Internet Protocol (IP)-based networks;

c) Resolution 69 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on non-discriminatory access and use of Internet resources, inviting Member States to refrain from taking any unilateral and/or discriminatory actions that could impede another Member State from accessing public Internet sites and using the resources, within the spirit of Article 1 of the ITU Constitution and the principles of the World Summit on the Information Society;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

d) the provisions of § 50 of the Tunis Agenda for the Information Society, recognizing the particular concerns among developing countries that charges for international Internet connectivity should be better balanced to enhance access, and calling for the development of strategies for increasing affordable global connectivity, thereby facilitating improved and equitable access for all, by the means described in the said paragraph, especially items a), b), c), d), e), f) and g) thereof;

e) the four targets set by the Broadband Commission for Digital Development for making broadband universal and boosting affordability and uptake thereof, namely: making broadband policy universal; making broadband affordable; connecting homes to broadband; and getting people online;

f) Opinion 1 (Geneva, 2013) of the World Telecommunication/ICT Policy Forum (WTPF), which expresses the view that enabling the interconnection of international, national and regional networks through Internet exchange points (IXPs) may be an effective way to improve international Internet connectivity and to reduce the costs of such connectivity, with regulation only when necessary to promote competition, and invites Member States and Sector Members to work in a collaborative manner to do a number of things, including to promote public policies aimed at permitting the local, regional and international Internet network operators to interconnect through IXPs,

noting

a) that Recommendation ITU-T D.50, on international Internet connection, recommends that administrations take appropriate measures nationally to ensure that parties (including operating agencies authorized by Member States) involved in the provision of international Internet connections negotiate and agree to bilateral commercial arrangements, or other arrangements as agreed between administrations, enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission, and the possible application of network externalities, among others;

b) the rapid growth of the Internet and IP-based international services;

c) that international Internet connections remain subject to commercial agreements between the parties concerned, although Internet service provider (ISP) operators from developing countries have expressed concerns that such agreements have not achieved the required balance in regard to charges between developed and developing countries;

d) that the composition of costs for operators, whether regional or local, is, in part, significantly dependent on the type of connection (transit or peering) and the availability and cost of backhaul and long-haul infrastructure;

e) that the cost of transit is an obstacle for development of the Internet in developing countries;

f) that Opinion 1 (Geneva, 2013) considered that the establishment of IXPs is a priority to address connectivity issues, improve quality of service and reduce interconnection costs; and that IXPs and telecommunication traffic exchange points may play a relevant role in the deployment of Internet infrastructure and reaching the overall goals of improving quality, increasing the connectivity and resilience of networks, fostering competition and reducing the costs of interconnection;

g) that access to information and sharing and creation of knowledge contribute significantly to strengthening economic, social and cultural development, thus helping countries to reach the internationally agreed development goals and objectives, a process which can be enhanced by removing barriers to universal, ubiquitous, equitable and affordable access to information;

h) that continuing technical and economic development require ongoing studies in this area by the relevant ITU Sectors, in particular best practices for reducing the cost of international Internet connectivity (transit and peering);

i) that efficient networks and costs enable increased traffic volumes, economies of scale and a shift from transit connections to peering arrangements where appropriate;

j) that a rise in the costs of international connectivity will result in delayed access to and benefit from the Internet;

k) that the disparities in ICT development between countries remain substantial, ICT Development Index (IDI) values being on average twice as high in developed compared to developing countries,

recognizing

a) that commercial initiatives by service providers have the potential to deliver cost savings for Internet access, for example through the development of more local content and the optimization of Internet traffic routing patterns in a manner that provides for a greater proportion of traffic to be routed locally;

b) that the development of an information society requires not only the deployment of appropriate technical infrastructure but also measures to promote availability of local content, applications and services, in a range of languages and at affordable prices, while providing access to remotely available content regardless of location,

taking into account

that, as part of the work of Study Group 3 of the ITU Telecommunication Standardization Sector (ITU-T), on tariff and accounting principles including related telecommunication economic and policy issues, a rapporteur group has been set up for the new study period (2012-2015) for the purpose of drafting a supplement to Recommendation ITU-T D.50 to facilitate the adoption of specific measures to reduce international Internet connection costs, especially for developing countries,

resolves to invite Member States

1 to support the work of ITU-T in monitoring the application of Recommendation ITU-T D.50, bearing in mind the importance of this issue of international Internet connection costs in the developing countries;

2 to make progress in the coordination of regional policies in order to reduce international Internet connection costs, by agreeing on specific measures that will lead to an improvement in conditions for developing countries, including the deployment of regional IXPs;

3 to create policy conditions for effective competition in the international Internet backbone network access market as well as in the domestic Internet access service market, as an important factor for lowering the cost of Internet access for users and service providers;

4 to implement the Tunis Agenda in this respect, particularly § 50 thereof,

reaffirms

its resolution in the quest to continue to ensure that everyone can benefit from the opportunities that information and communication technologies (ICTs) can offer, by recalling that governments, as well as the private sector, civil society and the United Nations and other international organizations, should work together to: improve access to information and communication infrastructure and technologies as well as to information and knowledge; build capacity; increase confidence and security in the use of ICTs; create an enabling environment at all levels; develop and widen ICT applications; foster and respect cultural diversity; recognize the role of the media; address the ethical dimensions of the information society; and encourage international and regional cooperation,

urges regulators

to promote such measures as may be considered appropriate to foster an improvement in conditions for service providers, including small and medium-sized ISPs and incumbent network access service providers, with a focus on reducing connectivity costs as referred to in *noting c), d), f)* and *i)* above,

urges service providers

to negotiate and agree to bilateral commercial arrangements enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as, *inter alia*, traffic flow, number of routes, geographical coverage and the cost of international transmission,

instructs the Director of the Telecommunication Development Bureau

1 to organize and coordinate activities that promote information sharing among regulators on the relationship between charging arrangements for international Internet connection and the affordability of international Internet infrastructure development in developing and least developed countries, through cooperation with ITU-T in this matter, by giving the necessary priority to the relevant study Questions in the work under the programme concerned;

2 to undertake studies on the structure of international Internet connection costs for developing countries, with emphasis on the influence and effects of the connection mode (transit and peering), secure cross-border connectivity and the availability and cost of backhaul and long-haul physical infrastructure;

3 to coordinate actions to provide training and technical assistance in order to encourage and promote the creation and development of regional interconnection infrastructure as a platform for exchanging Internet traffic between developing countries.

RESOLUTION 24 (Rev. Dubai 2014)

Authorization for the Telecommunication Development Advisory Group to act between world telecommunication development conferences

The World Telecommunication Development Conference (Dubai, 2014),

recalling

Resolution 24 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC),

considering

a) that, under the provisions of Article 17A of the ITU Convention, the Telecommunication Development Advisory Group (TDAG) is to continue to provide guidelines for the work of study groups, review progress in the implementation of priorities, programmes and operations and recommend measures to foster coordination and cooperation with other relevant development and financial institutions;

b) that there is a need to evaluate the activities of study groups;

c) that the rapid pace of change in the telecommunication environment and in industry groups dealing with telecommunications/information and communication technologies (ICTs) still demands that the ITU Telecommunication Development Sector (ITU-D) make decisions on issues such as work priorities, study group structure and meeting schedules in shorter periods of time, between WTDCs;

d) that TDAG has demonstrated its capability to make proposals for enhancing the operational efficiency of ITU-D, for improving the quality of ITU-D Recommendations and for methods of coordination and cooperation;

e) that TDAG can help improve coordination of the study processes and provide improved decision-making processes for the important areas of ITU-D activities;

f) that flexible administrative procedures, including those related to budgetary considerations, are needed in order to adapt to rapid changes in the telecommunication/ICT environment;

g) that it is necessary that TDAG continue to act in the four years between WTDCs in order to meet the needs of the members in a timely manner,

recognizing

a) that the duties of WTDC are specified in the Convention;

b) that the current four-year cycle for WTDCs effectively precludes the possibility of addressing unforeseen issues requiring urgent action in the intervening period between two conferences;

c) that TDAG, which meets at least on a yearly basis, is capable of addressing these issues as they arise;

d) that, in accordance with No. 213A of the Convention, a WTDC may assign specific matters within its competence to TDAG, indicating the recommended action on those matters;

e) that TDAG has already demonstrated the capability to act effectively on matters referred to it by the previous WTDC,

noting

that there is still an ongoing need to identify an appropriate mechanism or mechanisms to address new emerging problems for developing countries that ITU-D may not yet have been able to consider,

resolves

1 to continue to assign to TDAG the following specific matters, between two consecutive WTDCs, acting through reports from the Director of the Telecommunication Development Bureau (BDT) and study group chairmen, as appropriate:

i) continue to maintain efficient and flexible working guidelines, and update them as necessary, including to provide opportunities for cross-regional sharing of experiences on the implementation of regional actions, initiatives and projects;

ii) review, on an ongoing basis, the relationship between the ITU-D objectives outlined in the strategic plan for the Union and the budgetary appropriations available for activities, particularly programmes and regional initiatives, with a view to recommending any measures necessary to ensure the efficient and effective delivery of the principal products and services (outputs) of the Sector;

iii) review, on an ongoing basis and in accordance with No. 223A of the Convention, the implementation of the rolling four-year operational plan for ITU-D and provide guidance to BDT on the elaboration of the draft ITU-D operational plan to be approved by the following ITU Council session;

iv) evaluate, and update as necessary, working methods and guidelines to ensure the most efficient and flexible implementation of the key elements of the WTDC Action Plan;

v) evaluate periodically the working methods and functioning of the ITU-D study groups, to identify options for maximizing programme delivery and to approve appropriate changes thereto following an assessment of their work programme, including strengthening of the synergy between Questions, programmes and regional initiatives;

vi) conduct the assessment pursuant to v) above, taking into account the following actions in relation to the current work programme of the study groups, if needed:

- redefinition of the terms of reference of Questions in order to provide focus and eliminate overlap;
- deletion or merging of Questions as appropriate; and
- evaluation of criteria to measure the effectiveness of Questions, both in qualitative and quantitative terms, including a periodical review based on the ITU-D strategic plan with a view to further exploring performance measures in order to more effectively implement actions referred to in v) above;

vii) restructure ITU-D study groups, if required, and, as a result of a restructuring or creation of ITU-D study groups, appoint chairmen and vice-chairmen to act until the next WTDC in response to the needs and concerns of the Member States, within the agreed budgetary limits;

viii) issue advice on study group schedules that meet development priorities;

ix) advise the Director of BDT on relevant financial and other matters;

x) approve the programme of work arising from the review of existing and new Questions and determine the priority, urgency, estimated financial implications and time-scale for the completion of their study;

xi) in order to promote flexibility in responding rapidly to high-priority matters, if required, create, terminate or maintain other groups, appoint their chairmen and vice-chairmen, and establish their terms of reference with a defined duration, in accordance with Nos 209A and 209B of the Convention and taking into account the leading role of the study groups in carrying out the studies on such matters; such other groups shall not adopt Questions or Recommendations;

xii) consult the Director of BDT on the development and implementation of an action plan on electronic working methods and, going forward, procedures and rules for electronic meetings, including legal aspects, taking into account the needs and the means of developing countries and in particular the least developed countries;

2 that, when dealing with restructuring of the study groups and the creation of new study groups, the decisions taken in TDAG meetings shall be unopposed by any Member State present at the meeting;

3 that TDAG, in carrying out its work, collaborate with the advisory groups of the other Sectors with the aim of coordinating efforts and eliminating duplication, consulting where appropriate with the Director of BDT;

4 that TDAG shall promptly consider at its meetings aspects of the decisions of the Plenipotentiary Conference and other conferences and assemblies of the Union that relate to the work of ITU-D,

instructs the Telecommunication Development Advisory Group

to take appropriate action for the implementation of this resolution and report the results to the next WTDC.

RESOLUTION 25 (Rev. Hyderabad, 2010)

Assistance to countries in special need: Afghanistan, Burundi, Democratic Republic of the Congo, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Haiti, Liberia, Rwanda, Sierra Leone, Somalia and Timor Leste

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 34 (Rev. Minneapolis, 1998) of the Plenipotentiary Conference,

recalling further

the purposes of the Union, as enshrined in Article 1 of the ITU Constitution,

recognizing

a) that the ongoing ITU efforts in extending assistance, including through ITU-TELECOM surplus funds, to countries in special need (Burundi, Liberia, Rwanda and Somalia) should be extended to other countries whose circumstances are similar to the aforementioned countries;

b) that a reliable telecommunication network is indispensable for promoting the socio-economic development of countries, in particular those having suffered from natural disasters, domestic conflicts or war;

c) that, under the present conditions and in the foreseeable future, these countries will not be able to bring their telecommunication systems up to an acceptable level without help from the international community, provided bilaterally or through international organizations,

noting

a) the report of the Director of the Telecommunication Development Bureau (BDT) on the implementation, *inter alia*, of Resolution 34 (Rev. Minneapolis, 1998);

b) the efforts deployed by the Secretary-General and the Director of BDT towards the implementation of Resolution 34 (Rev. Minneapolis, 1998),

noting further

that the conditions of order and security sought by United Nations resolutions have been only partially achieved and that, due to non-allocation of resources for the implementation of Resolution 34 (Rev. Minneapolis, 1998), the resolution has been only partially implemented,

resolves

that the special action initiated by the Secretary-General and the Director of BDT, with specialized assistance from the ITU Radiocommunication Sector and the ITU Telecommunication Standardization Sector, should be continued in order to provide appropriate assistance and support to countries that have suffered from natural disasters, domestic conflicts or wars, namely Afghanistan, Burundi, Democratic Republic of the Congo, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Haiti, Liberia, Rwanda, Sierra Leone, Somalia and Timor Leste, in rebuilding their telecommunication networks, as and when the conditions of order and security sought by United Nations resolutions are met,

calls upon Member States

to offer all possible assistance and support to the governments of the countries in special need, either bilaterally or through the special action of the Union referred to above,

invites the Council

to allocate the necessary funds within available resources for the implementation of this resolution,

instructs the Director of the Telecommunication Development Bureau

1 to use the necessary funds, within available resources, to implement activities in favour of the countries listed above;

2 to mobilize extrabudgetary resources to assist these countries,

requests the Secretary-General

1 to ensure that the Union's actions in favour of these countries are as effective as possible and to report on the matter to the Council;

2 to coordinate the activities carried out by the three ITU Sectors in accordance with *resolves* above, to ensure that the Union's action in favour of countries in special need is as effective as possible, and to report on the matter to the Council;

3 to update this list of countries from time to time, as needed and with the approval of the Council.

RESOLUTION 26 (Rev. Doha, 2006)

Assistance to countries in special need: Afghanistan

The World Telecommunication Development Conference (Doha, 2006),

recalling

Resolution 34 (Rev. Minneapolis, 1998) of the Plenipotentiary Conference,

recalling further

the purposes of the Union, as enshrined in Article 1 of the ITU Constitution,

recognizing

a) that no budget was allocated by the Plenipotentiary Conference to accompany Resolution 34 (Rev. Minneapolis, 1998) for the benefit of countries in special need;

b) that the telecommunication infrastructure in Afghanistan has been completely destroyed by the two decades of war and that the existing equipment in use is over forty years old and thus obsolete;

c) that Afghanistan at present does not have a national telecommunication infrastructure, access to international telecommunication networks or access to the Internet;

d) that a telecommunication system is an essential input for the reconstruction, rehabilitation and relief operations in the country;

e) that, under the present conditions and in the foreseeable future, Afghanistan will not be able to rebuild its telecommunication systems without help from the international community, provided bilaterally or through international organizations,

noting

a) that Afghanistan has not benefited from the Union's assistance over a long period due to war in the country;

b) the efforts deployed by the Secretary-General and the Director of the Telecommunication Development Bureau (BDT) towards the provision of assistance to other countries emerging from war situations,

resolves

that the special action initiated by the Secretary-General and the Director of BDT, with specialized assistance from the ITU Radiocommunication Sector and the ITU Telecommunication Standardization Sector, should be continued in order to provide assistance and support to Afghanistan in rebuilding its telecommunication infrastructure, establishing institutions for the sector, developing telecommunication legislation and regulatory framework, including numbering plan, spectrum management, tariff and human resource development and all other forms of assistance,

calls upon Member States

to offer all possible assistance and support to the Government of Afghanistan, either bilaterally or through the special action of the Union referred to above,

invites the Council

to allocate the necessary funds within available resources for the implementation of this resolution,

instructs the Director of BDT

1 to implement fully a programme of assistance for the least developed countries from which Afghanistan can receive focused assistance in various areas determined to be of high priority by the country;

2 to take immediate measures to assist Afghanistan in the period up to the Plenipotentiary Conference (Antalya, 2006),

requests the Secretary-General

to coordinate the activities carried out by the three ITU Sectors in accordance with *resolves* above, to ensure that the Union's action in favour of Afghanistan is as effective as possible, and to report on the matter to the Council.

RESOLUTION 27 (Rev. Hyderabad, 2010)

Admission of entities or organizations to participate as Associates in the work of the ITU Telecommunication Development Sector

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 27 (Rev. Doha, 2006) of the World Telecommunication Development Conference,

considering

a) that the rapid pace of change in the telecommunication environment and in industry groups dealing with telecommunications/information and communication technology/ICT demands the increased participation of interested entities and organizations in the development activities of ITU;

b) that entities or organizations, in particular those with highly focused areas of activity, may be interested only in a small part of the development work of the ITU Telecommunication Development Sector (ITU-D) and, therefore, do not intend to apply for membership in the Sector, but would be willing to join in the activity of a given study group of the Sector if simpler conditions existed;

c) that No. 241A of the ITU Convention enables the Sectors to admit entities or organizations to participate as Associates in the work of a given study group, its working parties or rapporteur groups;

d) that Nos 241A, 248B and 483A of the Convention describe the principles governing the participation of Associates,

resolves

1 that an interested entity or organization may join ITU-D as an Associate and be entitled to take part in the work of a selected single study group and its subordinate groups (such as rapporteur groups or working parties);

2 that Associates are limited to the study group roles described below and excluded from all others:

- Associates may take part in the process of preparing Recommendations within a single study group, including the roles of participating in meetings, submitting contributions and providing comments before the adoption of a Recommendation;
- Associates shall have access to documentation required for their work;

3 that the amount of the financial contribution for Associates be based upon a proportion of the contributory unit for Sector Members as determined by the Council for any particular biennial budgetary period,

requests the Secretary-General

to continue to admit entities or organizations to participate as Associates in the work of a given study group or subgroups or rapporteur group thereof, following the principles set in Nos 241B, 241C, 241D and 241E of the Convention,

requests the Telecommunication Development Advisory Group

to continue to review the conditions governing the participation (including the financial impact on the Sector budget) of Associates based on the experience gained within ITU-D in this area,

instructs the Director of the Telecommunication Development Bureau

to continue to prepare the necessary logistics for the participation of Associates in the work of the ITU-D study groups, including possible impacts of study group reorganization.

RESOLUTION 30 (Rev. Dubai, 2014)

Role of the ITU Telecommunication Development Sector in implementing the outcomes of the World Summit on the Information Society

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 71 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the strategic plan for the Union for 2012-2015;

b) Resolution 130 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on strengthening the role of ITU in building confidence and security in the use of information and communication technologies (ICTs);

c) Resolution 139 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunications/ICTs to bridge the digital divide and build an inclusive information society;

d) Resolution 140 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in implementing the outcomes of the World Summit on the Information Society (WSIS);

e) Resolution 172 (Guadalajara, 2010) of the Plenipotentiary Conference, on overall review of implementation of the WSIS outcomes;

f) the documents adopted by both phases of WSIS, namely:

– the Geneva Declaration of Principles and Geneva Plan of Action;

– the Tunis Commitment and Tunis Agenda for the Information Society;

g) the outcomes of the Ministerial Round Table held at the WSIS Forum 2013, where the ministers "encouraged the WSIS process to continue beyond 2015";

h) the outcomes of the WSIS+10 review process,

recognizing

a) that WSIS stated that the core competencies of ITU are of crucial importance for building the information society, and identified ITU as a moderator/facilitator for implementing Action Lines C2 and C5, and as a partner in Action Lines C1, C3, C4, C6, C7 and C11, as well as Action Line C8 as stated in Resolution 140 (Rev. Guadalajara, 2010);

b) that it was agreed among the parties to follow up the Summit outcomes to appoint ITU as moderator/facilitator for the implementation of Action Line C6, in which it was previously only a partner;

c) that the ITU Telecommunication Development Sector (ITU-D) – in view of its purposes and objectives; the nature of the existing partnership among Member States and ITU-D Sector Members; its experience over many years in dealing with different development needs and implementing a range of projects, including infrastructure projects and specifically telecommunication/ICT infrastructure projects, financed by the United Nations Development Programme (UNDP) and various funds and through possible partnerships; the nature of its five existing objectives, adopted at this conference to meet the needs of the telecommunication/ICT infrastructure, including building confidence and security in the use of telecommunications/ICTs and fostering an enabling environment, and to achieve the WSIS goals; and the presence of its authorized regional offices – is a key partner in the implementation of WSIS outcomes, in respect of Action Lines C2, C5 and C6, which are the cornerstone of the Sector's work pursuant to the ITU Constitution and Convention, and also participates with other stakeholders, as appropriate, in the implementation of Action Lines C1, C3, C4, C7, C8, C9 and C11 and all other relevant action lines and other WSIS outcomes, within the financial limits set by the Plenipotentiary Conference;

d) that the WSIS process will be reviewed in 2015, and that process will consider the post-2015 development vision,

recognizing further

that the Plenipotentiary Conference, in its Resolution 140 (Rev. Guadalajara, 2010), resolved that ITU should complete the report on the implementation of WSIS outcomes concerning ITU in 2014,

taking into account

a) Resolution 75 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, on the ITU Telecommunication Standardization Sector's contribution in implementing the WSIS outcomes;

b) Resolution 61 (Geneva, 2012) of the Radiocommunication Assembly, on the ITU Radiocommunication Sector's contribution in implementing the WSIS outcomes;

c) the programmes, activities and regional initiatives being carried out in accordance with the decisions of this conference for bridging the digital divide;

d) the relevant work already accomplished and/or to be carried out by ITU and reported to the ITU Council through the Council Working Group on WSIS (CWG-WSIS),

noting

a) Council Resolution 1332, on ITU's role in the implementation of the WSIS outcomes up to 2015 and future activities beyond WSIS+10;

b) Council Resolution 1334 (Modified 2013), on ITU's role in the overall review of the implementation of the WSIS outcomes, which resolved to hold the ITU-coordinated WSIS+10 high-level event at which the adoption of the following outcome documents is envisaged:

- draft WSIS+10 Statement on implementation of WSIS outcomes;

- draft WSIS+10 Vision for WSIS beyond 2015, under the mandates of the participating agencies;

c) Council Resolution 1336, on the Council Working Group on international Internet-related public policy issues,

noting further

that the ITU Secretary-General created the ITU WSIS Task Force to formulate strategies and coordinate ITU's policies and activities in relation to WSIS, as noted by Council Resolution 1332,

resolves to invite the ITU Telecommunication Development Sector

1 to continue working in cooperation with the other ITU Sectors and with development partners (governments, specialized agencies of the United Nations, relevant international and regional organizations, etc.), through a clear plan and appropriate mechanisms for coordination among the different partners concerned at the national, regional, interregional and global levels, having particular regard to the needs of the developing countries[1], including in the field of building the telecommunication/ICT infrastructure, building confidence and security in the use of telecommunications/ICTs, and implementation of the other WSIS goals;

2 to continue to encourage the principle of non-exclusion from the information society and to devise appropriate mechanisms to this end (§§ 20-25 of the Tunis Commitment);

3 to continue to facilitate an enabling environment encouraging ITU-D Sector Members to give priority to investing in the development of the telecommunication/ICT infrastructure, encompassing rural, isolated and remote regions, through different technologies;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

4 to assist Member States in finding and/or improving innovative financial mechanisms to develop telecommunication/ICT infrastructure (such as the Digital Solidarity Fund and others mentioned in § 27 of the Tunis Agenda, and partnerships);

5 to continue to assist developing countries in advancing their legal and regulatory frameworks in order to further the goal of building the telecommunication/ICT infrastructure and achieve the other WSIS goals;

6 to promote international cooperation and capacity building in issues related to cyberthreats and building confidence and security in the use of ICTs consistent with Action Line C5, in which ITU is sole facilitator;

7 to pursue its activities in the field of statistical work for telecommunication development, using the indicators required to evaluate progress in this area with a view to bridging the digital divide, *inter alia*, within the framework of the Partnership on Measuring ICT for Development and consistent with §§ 113-118 of the Tunis Agenda, acting on the content of Resolution 8 (Rev. Dubai, 2014) of this conference;

8 to develop and implement the ITU-D strategic plan, taking into account the need to give priority to building the telecommunication/ICT infrastructure, including broadband access, at the national, regional, interregional and global levels, and to achieve the other WSIS goals related to the activities of ITU-D;

9 to continue to propose at the forthcoming plenipotentiary conference appropriate mechanisms for funding the activities flowing from the WSIS outcomes that are relevant to the core competencies of ITU, specifically those to be adopted in relation to:

i) Action Lines C2, C5 and C6, in which ITU is now identified as the sole facilitator;

ii) Action Lines C1, C3, C4, C6, C7, including its eight sub-action lines, and C11, in which ITU is now identified as a co-facilitator, as well as C8 and C9, in which ITU is identified as a partner,

instructs the Director of the Telecommunication Development Bureau

1 to continue to provide CWG-WSIS with a comprehensive summary of ITU-D activities on implementation of the WSIS outcomes;

2 to ensure that concrete objectives and deadlines for WSIS activities are developed and reflected in the operational plans of ITU-D, in accordance with Resolution 140 (Rev. Guadalajara, 2010) and with the objectives that will be set for ITU-D by the Plenipotentiary Conference in 2014 with regard to the implementation by ITU of the WSIS+10 outcomes;

3 to provide the membership with information on emerging trends based on ITU-D activities;

4 to take appropriate action to facilitate the activities to implement this resolution,

further instructs the Director of the Telecommunication Development Bureau

1 to act as a catalyst in the development of partnerships among all parties, with a view to ensuring that initiatives and projects attract investment, and to continue to act as a catalyst in the following functions, among others:

– encouraging the implementation of regional telecommunication/ICT initiatives and projects;

– participating in the organization of training seminars;

– signing agreements with national, regional and international partners involved in development, when required;

– collaborating on initiatives and projects with other relevant international, regional and intergovernmental organizations, where appropriate;

2 to promote human capacity building in developing countries relating to various aspects of the telecommunication/ICT sector, consistent with the mandate of ITU-D;

3 to foster, particularly with the ITU regional offices, the conditions required for a successful knowledge-based enterprise incubator process and other projects for small, medium and micro enterprises (SMMEs) in and among developing countries;

4 to encourage the international financial institutions, Member States and Sector Members, in their respective roles, to address, as a priority issue, the building, reconstruction and upgrading of networks and infrastructure in developing countries;

5 to pursue coordination with international bodies, with a view to mobilizing the financial resources needed in the implementation of projects;

6 to take the necessary initiatives to encourage partnerships which have been given high priority pursuant to:

i) the Geneva Plan of Action;

ii) the Tunis Agenda;

iii) the outcomes of the WSIS review process,

calls upon Member States

1 to continue to give priority to the development of the telecommunication/ICT infrastructure, including in rural, remote and underserved areas, to building confidence and security in the use of telecommunications/ICTs, to fostering an enabling environment and to ICT applications, in order to build the information society;

2 to consider the development of principles towards the adoption of strategies in areas such as telecommunication network security, consistent with WSIS Action Line C5;

3 to submit contributions to relevant ITU-D study groups and to the Telecommunication Development Advisory Group, where appropriate, and contribute to CWG-WSIS on implementing WSIS outcomes within ITU's mandate;

4 to continue to support and collaborate with the Director of BDT in implementing relevant WSIS outcomes in ITU-D;

5 to engage in the WSIS+10 process, in order to reaffirm the need to address remaining challenges of ICT for development to be addressed in the implementation of WSIS beyond 2015,

requests the Secretary-General

to bring this resolution to the attention of the Plenipotentiary Conference (Busan, 2014) for consideration and required action, as appropriate, when reviewing Resolution 140 (Rev. Guadalajara, 2010).

RESOLUTION 31 (Rev. Hyderabad, 2010)

Regional preparations for world telecommunication development conferences

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 31 (Rev. Doha, 2006) of the World Telecommunication Development Conference (WTDC),

considering

a) that the six[1] regions have coordinated their preparations for this conference through preparatory meetings;

b) that many common proposals have been submitted to this conference from administrations which have participated in the preparations, thereby facilitating the work of this conference;

c) that this consolidation of views at regional level, together with the opportunity for interregional discussions prior to the conference, through the consolidated report on the results of the preparatory meetings, has eased the task of reaching a consensus at the last meeting of the Telecommunication Development Advisory Group (TDAG) of the ITU Telecommunication Development Sector (ITU-D) and during the conference;

d) that preparation for future conferences is likely to increase;

e) the firm conviction that the coordination of preparations at regional level for the six regions has been of great benefit to the Member States;

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[1] Africa, Americas, Arab States, Asia-Pacific, Commonwealth of Independent States, Europe.

f) that the continued success of future conferences will depend on greater efficiency of regional coordination and interaction at interregional level prior to such conferences, and in particular at the last TDAG meeting before the conference, as well as during the conference;

g) that there is a continuing need for overall coordination of the interregional consultations,

recognizing

the benefits of regional coordination for the six regions as already experienced in the preparation of all ITU conferences and assemblies,

taking into account

the continued belief in the benefits that a WTDC could gain in terms of efficiency from an increased amount and level of preparation by the six regions for the ITU Member States prior to the conference,

noting

a) that many regional telecommunication organizations have expressed the need for the Union to cooperate more closely with regional telecommunication organizations (see Resolution 21 (Rev. Hyderabad, 2010) of this conference, on coordination and collaboration with regional organizations);

b) that, consequently, the Plenipotentiary Conference (Kyoto, 1994) and the other subsequent plenipotentiary conferences have stressed the need for the Union to develop stronger relations with regional telecommunication organizations,

further noting

that relations between ITU regional offices and regional telecommunication organizations have proved to be of great benefit, and that regional offices should continue to be used to facilitate the preparation of WTDCs,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to organize, within the financial limitations, one regional development conference or preparatory meeting per region for each of the six regions, in a reasonable time-frame, prior to the last meeting of TDAG before the next WTDC, and avoiding overlap with other relevant ITU-D meetings, making full use of the regional offices to facilitate such conferences or meetings;

2 to prepare, in close consultation with the chairmen and vice-chairmen of the regional development conferences or preparatory meetings, a report consolidating the results of such meetings, to be submitted to the TDAG meeting immediately preceding WTDC;

3 to convene the last TDAG meeting not less than three months before WTDC, in order to study, discuss and adopt the consolidated report presenting the outputs of the six regional conferences or preparatory meetings in final form, as a basic document to be included, once approved by TDAG, in the report on the application of this resolution for submission to WTDC, as well as to accomplish whatever else is desirable prior to WTDC (such as the adoption of Questions proposed for study by the study groups), including also a review and revision of all resolutions, recommendations and programmes with the aim of proposing the necessary updates to some or all of them if possible and their submission as proposals from TDAG to WTDC,

requests the Secretary-General, in cooperation with the Director of the Telecommunication Development Bureau

1 to continue to consult with Member States and regional telecommunication organizations in the six regions on the means by which assistance can be provided in support of their preparations for future WTDCs;

2 to continue, on the basis of such consultations, to assist Member States and regional telecommunication organizations in such areas as:

i) organization of informal and formal regional and interregional preparatory meetings;

ii) organization of information sessions;

iii) identification of mutual coordination methods;

iv) identification of major matters to be resolved by the future WTDC;

3 to continue to submit to the next WTDC a report on the application of this resolution,

invites Member States

to participate actively in the implementation of this resolution.

RESOLUTION 32 (Rev. Hyderabad, 2010)

International and regional cooperation on regional initiatives

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

a) Resolution 32 (Rev. Doha, 2006) of the World Telecommunication Development Conference;

b) Resolution 34 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on assistance to countries in special need;

c) the mechanism for cooperation at regional and international level to implement the outputs of the World Summit on the Information Society (WSIS), as set out in §§ 101 a), b) and c), 102 a), b) and c), 103, 107 and 108 of the Tunis Agenda for the Information Society;

d) Resolutions 16 (Rev. Hyderabad, 2010) and 21 (Rev. Hyderabad, 2010) of this conference,

considering

a) that, in the field of development, the future challenges are never-ending and there are always new changes to anticipate;

b) that, in order to achieve the objectives of the developing countries[1], new approaches must be adopted with a view to meeting the challenges of growth, in both qualitative and quantitative terms;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

c) that the ITU Telecommunication Development Sector (ITU-D) is the appropriate framework for the exchange of experiences with a view to formulating the policies most likely to result in harmonious and complementary development which respects the aspirations of all countries to a thriving telecommunication sector in the service of economic development;

d) that the continued lack of funding from the United Nations Development Programme (UNDP) and other international financial institutions further impedes the implementation of international cooperation projects for regional initiatives;

e) that developing countries are increasingly experiencing the need for knowledge of fast-developing technologies and the associated policy and strategic issues;

f) the vital importance of the cooperation among Member States, ITU-D Sector Members and Associates for the implementation of these regional initiatives;

g) the satisfactory and encouraging results achieved by projects which have received international cooperation support under an initiative of the Telecommunication Development Bureau (BDT),

recognizing

a) that developing countries and countries participating in these regional initiatives are at different stages of development;

b) the need, therefore, to exchange experiences on telecommunication development at a regional level in order to support these countries;

c) that ITU and regional organizations share common beliefs that close cooperation can promote regional telecommunications/information and communication technologies (ICTs) in order to support these countries;

d) that there is a continued need for ITU to cooperate more closely with regional organizations, including regional organizations of regulators, in order to support these countries,

noting

a) the existence of regional and subregional organizations of regulators, examples of which are the regional telecommunication regulators networks in some regions;

b) the development of cooperation and technical assistance activities among regional and subregional organizations of regulators,

resolves

1 that ITU-D should strengthen its relations with regional and subregional telecommunication organizations in order to stimulate new initiatives such as, but not limited to, the Agenda for the Connectivity of the Americas, the New Partnership for Africa's Development (NEPAD), the United Nations Institute for Training and Research (UNITAR), the Latin American Institute for Educational Communication (ILCE) and other similar initiatives in various regions, especially the new initiatives established at the two recent summits (for Africa and for the Commonwealth of Independent States), as well as the initiatives adopted under Resolution 17 (Rev. Hyderabad, 2010) of this conference;

2 that BDT should take all necessary steps to encourage exchanges of experience between developing countries, especially in the area of ICTs;

3 that BDT should strengthen its relations with regional and subregional regulatory organizations in different networks, through ongoing cooperation to stimulate the mutual exchange of experience and assistance with the implementation of these regional initiatives,

instructs the Director of the Telecommunication Development Bureau

1 to ensure that ITU-D actively coordinates, collaborates and organizes joint activities in areas of common interest with regional organizations and training institutions, and takes into consideration their activities, as well as providing them with direct technical assistance;

2 to put forward a request at the annual Global Symposium for Regulators meeting, for the meeting to support the implementation of these regional and international initiatives,

requests the Secretary-General

1 to initiate urgently special measures and programmes to develop and promote activities and regional initiatives, in close cooperation with regional and subregional telecommunication organizations, including regulators, and other related institutions;

2 to make every possible effort to encourage the private sector to take actions to facilitate cooperation with member countries in these regional initiatives, including countries with special needs;

3 to continue to work closely with the coordination mechanism established in the United Nations family and with United Nations regional commissions such as, but not limited to, the Economic Commission for Africa (ECA);

4 to submit this resolution to the next plenipotentiary conference with a view to revision and updating of Resolution 58 (Kyoto, 1994) of the Plenipotentiary Conference, in the light of the experience gained in this area.

RESOLUTION 33 (Rev. Dubai, 2014)

Assistance and support to Serbia for rebuilding its destroyed public broadcasting system

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) the noble principles, purpose and objectives embodied in the Charter of the United Nations and in the Universal Declaration of Human Rights;

b) the purpose of the Union, as enshrined in Article 1 of the ITU Constitution,

noting

a) Resolution 33 (Rev. Doha, 2006) of the World Telecommunication Development Conference;

b) Resolution 126 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference,

noting with appreciation

a) the efforts deployed by the Secretary-General of ITU and the Director of the Telecommunication Development Bureau (BDT) towards the implementation of the above-mentioned resolutions;

b) the significant assistance from the European Union (EU), through the pre-accession funds (IPA), for the implementation of the digitization process,

recognizing

a) that a reliable public broadcasting system is indispensable for promoting the socio-economic development of countries, in particular those having suffered from natural disasters, domestic conflicts or war;

b) that the newly established public broadcasting facility in Serbia, "Broadcast Multiplex and Network Operator" (ETV), formerly a part of Radio Television of Serbia, is the public entity responsible for terrestrial broadcasting;

c) that the severe damage to the public broadcasting system (ETV) in Serbia should concern the whole international community, in particular ITU;

d) that, under the present conditions and in the foreseeable future, Serbia will not be able to bring the public broadcasting system in Serbia up to an acceptable level without help from the international community, provided bilaterally or through international organizations,

resolves

1 to continue special action, within the framework and available budgetary resources of the ITU Telecommunication Development Sector, with specialized assistance from the ITU Radiocommunication Sector and the ITU Telecommunication Standardization Sector;

2 to provide appropriate assistance;

3 to support Serbia in rebuilding the public broadcasting system,

calls upon Member States

1 to offer all possible assistance;

2 to support the Government of Serbia, either bilaterally or through, or at any rate in coordination with, the special action of ITU referred to above,

instructs the Director of the Telecommunication Development Bureau

to use the necessary funds within available resources in order to continue the appropriate action,

requests the Secretary-General

1 to coordinate the activities carried out by the ITU Sectors in accordance with the above;

2 to ensure that the ITU action in favour of Serbia is as effective as possible;

3 to report on the matter to the Council;

4 to transmit this resolution to the Plenipotentiary Conference (Busan, 2014).

RESOLUTION 34 (Rev. Dubai, 2014)

The role of telecommunications/information and communication technology in disaster preparedness, early warning, rescue, mitigation, relief and response

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 36 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunications/information and communication technologies (ICTs) in the service of humanitarian assistance;

b) Resolution 136 (Guadalajara, 2010) of the Plenipotentiary Conference, on the use of telecommunications/ICTs for monitoring and management in emergency and disaster situations, and for early warning, prevention, mitigation and relief;

c) Article 5 of the International Telecommunication Regulations, on safety of life and priority of telecommunications;

d) Resolution 182 (Guadalajara, 2010) of the Plenipotentiary Conference, on the role of telecommunications/ICTs in regard to climate change and the protection of the environment,

considering

a) that the Intergovernmental Conference on Emergency Telecommunications (Tampere, 1998) (ICET-98) adopted the Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations (Tampere Convention) and that this convention came into force in January 2005;

b) that the second Tampere Conference on Disaster Communications (Tampere, 2001) (CDC-01) invited ITU to study the use of public mobile networks for early warning and the dissemination of emergency information and the operational aspects of emergency telecommunications such as call prioritization;

c) that the World Radiocommunication Conference (Geneva, 2012), in its Resolution 646 (Rev.WRC-12), encouraged administrations to satisfy temporary needs for frequencies in emergency and disaster-relief situations, to utilize both existing and new technologies and solutions (satellite and terrestrial) for satisfying interoperability requirements and furthering the goals of public protection and disaster relief and to facilitate cross-border circulation of radiocommunication equipment intended for use in emergency and disaster-relief situations through mutual cooperation and consultation without hindering national legislation;

d) that Resolution 646 (Rev.WRC-12) likewise recommends administrations to use regionally harmonized frequency bands for public protection and disaster relief to the maximum extent possible, taking into account the national and regional requirements and having regard to cooperation with other countries concerned;

e) that the World Radiocommunication Conference (Geneva, 2012), in its Resolution 644 (Rev.WRC-12), resolved that the ITU Radiocommunication Sector (ITU-R) continue to study, as a matter of urgency, those aspects of radiocommunications/ICTs that are relevant to early warning, disaster mitigation and relief operations, such as decentralized means of telecommunications/ICTs that are appropriate and generally available, including amateur terrestrial and satellite radio facilities, mobile and portable satellite terminals, as well as the use of passive space-based sensing systems;

f) that the World Radiocommunication Conference (Geneva, 2012), in its Resolution 647 (Rev.WRC-12), instructed the Director of the Radiocommunication Bureau (BR) to continue assisting Member States with their emergency communication preparedness activities by maintaining a database of currently available frequencies for use in emergency situations, reiterating the importance of having spectrum available in the very early stages of humanitarian assistance intervention for disaster relief;

g) that Resolution 647 (Rev.WRC-12) likewise invites the Director of the Telecommunication Standardization Bureau (TSB) and the Director of the Telecommunication Development Bureau (BDT) to collaborate closely with the Director of BR to ensure that a consistent and coherent approach is adopted in the development of strategies in response to emergency and disaster situations;

h) that the World Radiocommunication Conference (Geneva, 2012), in its Resolution 673 (Rev.WRC-12), recognizes the importance of using radiocommunications for Earth observation applications, such as for prediction of disasters and monitoring of the effects of climate change, and for related policy-making;

i) the work of the ITU-R and ITU Telecommunication Standardization Sector (ITU-T) study groups in adopting Recommendations that have helped to provide technical information on satellite and terrestrial radiocommunication systems and wired networks and their role in disaster management, including important Recommendations pertaining to the use of satellite networks in times of disasters;

j) the work of the ITU-T study groups in developing and adopting Recommendations for priority/preferential emergency telecommunications and emergency telecommunication services (ETS), including consideration of use of both terrestrial and wireless telecommunication systems during emergencies;

k) that the Radiocommunication Assembly (Geneva, 2012) updated Resolution ITU-R 53-1 on the use of radiocommunications in disaster response and relief and Resolution ITU-R 55-1 on ITU studies of disaster prediction, detection, mitigation and relief;

l) that the World Conference on International Telecommunications (Dubai, 2012) adopted provisions regarding the absolute priority of safety-of-life telecommunications, such as distress telecommunications, where technically practicable and in accordance with the relevant articles of the ITU Constitution and Convention and taking due account of the relevant ITU-T Recommendations;

m) that modern telecommunications/ICTs are basic tools for disaster mitigation and relief;

n) that mobile and personal communication systems are beneficial for responding to disasters, and should therefore also be used before a disaster to ensure information can be shared with those who need it most;

o) the terrible disasters from which many countries suffer, and the disproportionate impact of disasters and of climate change on developing countries;

p) that least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing states (SIDS) are particularly vulnerable to the impact that disasters can have on their economies and infrastructures and lack the capacity to respond to disasters;

q) that the requirements of persons with specific needs should be taken into account with respect to disaster warning, response planning and recovery efforts;

r) that climate change may be considered to be a major contributing factor to emergencies and disasters affecting humankind;

s) the role of the private sector, governments and international and non-governmental organizations in providing telecommunication/ICT equipment and services, expertise and capacity-building assistance to support disaster relief and recovery activities, particularly through the ITU Framework for International Cooperation in Emergencies (IFCE);

t) that the ITU Global Forum on Effective Use of Telecommunications/ICT for Disaster Management: Saving Lives (2007) outlined ways for ITU and its members to integrate ICTs into disaster-management plans;

u) that a disaster, when it occurs, may extend beyond the borders of a State, and its management may involve the deployment of efforts by more than one country in order to prevent loss of human life and regional economic crisis;

v) that coordination between international, regional and national organizations that specialize in disaster management and administrations increases the probability of saving human life when rescue operations are conducted, and thereby mitigates the consequences of a disaster;

w) that collaborative work and networking among disaster-management experts is essential;

x) that the use of telecommunications/ICTs for sharing of information in the event of a disaster is a powerful decision-making tool for rescue services and operating entities, and for communication with and between citizens,

noting

a) § 51 of the Geneva Declaration of Principles adopted by the World Summit on the Information Society (WSIS), on the use of ICT applications for disaster prevention;

b) § 20 (c) of the Geneva Plan of Action adopted by WSIS, on e-environment, which calls for the establishment of monitoring systems, using ICTs, to forecast and monitor the impact of natural and man-made disasters, particularly in developing countries, LDCs and countries with small economies;

c) § 30 of the Tunis Commitment adopted by WSIS, on disaster mitigation;

d) § 91 of the Tunis Agenda for the Information Society adopted by WSIS, on disaster reduction;

e) that the 2012 United Nations Conference on Sustainable Development developed a framework for follow-up, which invites all relevant agencies of the United Nations system and other relevant international organizations to support developing countries and, in particular, LDCs in capacity building for developing resource-efficient and inclusive economies, including through enhancing knowledge and capacity to integrate disaster risk reduction and resilience into development plans;

f) the continued pursuit by ITU and other relevant organizations of joint activities being undertaken at the international, regional and national levels to establish internationally agreed means to operate systems for public protection and disaster relief on a harmonized and coordinated basis, and the successful role of BDT through its programme activities in this area;

g) that the capability and flexibility of all telecommunication facilities depend upon appropriate planning for the continuity of each phase of network development and implementation;

h) the successful role of BDT, in partnership with the ITU membership, with respect to rapid intervention in enabling and facilitating telecommunications/ICTs for countries which have suffered disasters;

i) that all phases of disaster operations can be greatly facilitated by national emergency communication plans that enable the pre-positioning, rapid deployment and effective utilization of ICT equipment;

j) that including use of telecommunication/ICT tools in infrastructure development planning can avert the risk of disasters and mitigate their effects,

noting further

a) the latest version of the ITU Telecommunication Development Sector (ITU-D) Handbook on Emergency Telecommunications (2014), the Compendium of the ITU's Work on Emergency Telecommunications (2007), the ITU Handbook on Best Practice on Emergency Telecommunications (2008), and the adoption of Recommendation ITU-D 13 (Rev. 2005), on effective utilization of the amateur radio services in disaster mitigation and relief operations;

b) that further guidance for ITU members on disaster-communication management is provided by the successful conclusions and outputs of ITU-D Study Group 2, notably under Question 22-1/2, including the Handbook on Outside Plant for Areas Frequently Exposed to Natural Disasters and an online toolkit which will be updated on a regular basis;

c) that the online toolkit maintained by Question 5/2 (continuation of Question 22-1/2) and BDT serves as a publicly available resource with references and links to all relevant ITU resolutions, Recommendations, reports and handbooks;

d) that the ITU regional offices can be particularly helpful prior to and following emergencies, owing to their proximity to affected countries,

recognizing

a) that frequent tragic events in the world and the experience of BDT and the ITU membership in this area clearly demonstrate the need for enhanced disaster preparedness and for plans that incorporate consideration of high-quality communications equipment and services as well as reliable telecommunication infrastructure, in order to ensure public safety and assist disaster relief agencies in minimizing risk to human life and to provide the necessary general public information and communication needs in such situations;

b) that natural disasters can damage both telecommunication/ICT infrastructures and electricity supplies that power telecommunication/ICT systems and devices, making services inoperable, such that considerations of redundancy and resilience of infrastructure and power supplies become important when planning for disasters;

c) that there is a growing general awareness at the global level of the potentially serious negative consequences of climate change,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to continue to ensure that priority consideration is given to emergency communications as an element of telecommunication/ICT development, including continued close coordination and collaboration with ITU-R and ITU-T and relevant international organizations;

2 to facilitate and encourage the use by members of telecommunications that are appropriate and commonly available for disaster response and mitigation, including those provided by amateur radio services, satellite and terrestrial network services/facilities;

3 to promote, in close collaboration with ITU-R and ITU-T, emergency information broadcasting, for example audio and TV broadcasting, mobile messages, etc., taking into account persons with disabilities and specific needs;

4 to support administrations in their work towards the implementation of this resolution as well as the ratification and implementation of the Tampere Convention;

5 to report to the next world telecommunication development conference on the status of ratification and implementation of the Tampere Convention;

6 to support administrations and regulators in those areas identified in this resolution by taking appropriate measures during the implementation of the ITU-D Action Plan;

7 to continue to support administrations in preparing their national disaster response and relief plans, including consideration of the necessary enabling national regulatory and policy environments to support the development and effective use of telecommunications/ICTs for disaster mitigation, relief and response;

8 to strengthen the role of the ITU regional offices in assisting Member States and Sector Members in developing emergency preparedness plans and early-warning systems, in organizing training workshops on emergency relief and response, in providing equipment training, in fostering collaboration with all parties involved and in helping deploy communication equipment during emergencies;

9 as part of the ITU framework for cooperation in emergencies, to continue providing assistance to administrations, within available resources, and in collaboration with the ITU membership and other partners, through the temporary supply of emergency communications equipment and services, especially during the initial phases of disasters;

10 to expedite the study of aspects of telecommunications/ICTs related to flexibility and continuity in the event of disasters, as part of national disaster plans, including promoting the use of broadband networks for emergency communications through the work of the ITU-D study groups, in collaboration with expert organizations and taking account of the activities of the other ITU Sectors;

11 in implementing Objective 5, to work collaboratively with the ITU-D study Questions, as well as with the other two Sectors, ITU regional offices, the ITU membership and other relevant expert organizations in implementing this resolution, and to report regularly on programme activities and relevant regional initiatives to the study groups;

12 to assist administrations in the use of mobile networks for the timely dissemination of alert messages and warnings in situations of risk or emergency, for those in potentially affected areas;

13 to assist Member States in enhancing and strengthening the use of all available services, including satellite, amateur radio and broadcasting services in emergency situations, when conventional sources of electricity supply or telecommunications are often interrupted;

14 to include in the ITU Academy's training plans programmes on the use of ICTs for disaster management and mitigation,

requests the Secretary-General

to continue to work closely with the office of the United Nations Emergency Relief Coordinator and other relevant external organizations with a view to further increasing the Union's involvement in, and support to, emergency communications, and to report on outcomes of related international conferences, relief activities and meetings so that the Plenipotentiary Conference (Busan, 2014) may take any action that it deems necessary,

invites

1 the United Nations Emergency Relief Coordinator, the Working Group on Emergency Telecommunications and other relevant external organizations or bodies to ensure follow-up and continue collaborating with ITU, specifically BDT, in working towards implementing this resolution and the Tampere Convention, and supporting administrations and international and regional telecommunication organizations in the implementation of that Convention;

2 Member States to continue to deploy all necessary efforts to integrate disaster risk reduction and resilience into telecommunication development plans, as well as to incorporate ICTs into national or regional disaster-management plans and frameworks, taking note of the specific needs of persons with disabilities, children, older persons, displaced persons and the illiterate in disaster preparedness, rescue, relief and recovery planning, and the importance of collaborating with all stakeholders in all disaster phases;

3 regulators to ensure that disaster mitigation and relief operations make provision for the necessary telecommunications/ICTs, through appropriate national regulations and national disaster plans as well as enabling regulatory and policy environments;

4 ITU-D to take account of the particular telecommunication requirements of LDCs, LLDCs, SIDS and low-lying coastal countries in terms of disaster preparedness, rescue, relief and recovery;

5 Member States that have not yet ratified the Tampere Convention to take necessary action to do so as appropriate;

6 BDT to consider how space-based technologies can be used to help ITU Member States collect and disseminate data on the effects of climate change and support early warning, having regard to the link between climate change and natural disasters;

7 ITU-D to take account of the work of ITU-R study groups and dedicated working groups, considering the increased use of mobile and portable communication devices which can be used by first responders to transmit and receive critical information;

8 Member States to facilitate, to the extent practicable, cross-border circulation of radiocommunication equipment intended for use in emergency situations, rescue and relief operations and disaster-relief situations, through mutual cooperation and consultation, without prejudice to national legislation, in accordance with Resolution 646 (Rev.WRC-12);

9 Member States to encourage authorized operating companies to inform all users, including roaming users, in good time and free of charge, of the number to be used for calls to the emergency services;

10 Member States to introduce, in addition to their existing national emergency numbers, a globally harmonized national number for access to emergency services, taking into account the relevant ITU-T Recommendations;

11 Sector Members to make the necessary efforts to enable the operation of telecommunication services in emergency or disaster situations, giving priority, in all cases, to telecommunications concerning safety of life in the affected areas, and providing for such purpose contingency plans;

12 Member States and Sector Members to work together on the study of new digital technologies, standards and related technical issues for improving radio broadcasting systems for sending and receiving information concerning public warning, rescue, disaster mitigation and relief;

13 Member states to consider the appropriate and effective mechanisms to facilitate disaster communications preparedness and response efforts;

14 Member States to coordinate on a regional basis, with the help of ITU bodies and regional and international specialized organizations, in order to draw up regional response plans in the event of a disaster;

15 Member States to develop partnerships, in order to reduce barriers to access to relevant data obtained through the use of telecommunications/ICTs required for the purpose of assisting rescue operations.

RESOLUTION 35 (Rev. Hyderabad, 2010)

Support for development of the African information and communication technology sector

The World Telecommunication Development Conference (Hyderabad, 2010),

considering

the provisions of the ITU Constitution, as contained in Chapter IV thereof on the Telecommunication Development Sector (ITU-D), particularly with regard, *inter alia*, to the functions of the Sector for building awareness of the impact of telecommunications/information and communication technologies (ICTs) on national economic and social development, its catalytic role in promoting the development, expansion and operation of telecommunication services and networks, especially in developing countries, and the need to maintain and enhance cooperation with regional and other telecommunication organizations,

considering further

Resolution 31 (Kyoto, 1994) of the Plenipotentiary Conference on telecommunication infrastructure and socio-economic and cultural development, highlighting:

a) telecommunications/ICTs as a prerequisite for development;

b) their impact on agriculture, health, education, transport, human settlement, etc.;

c) the continuing decline in development resources available to developing countries,

noting

a) that, in its Declaration and resolutions, the World Telecommunication Development Conference (Doha, 2006) reaffirmed a commitment to enhancing expansion and development of telecommunication services in developing countries and harnessing capacity for the application of new and innovative services;

b) the adoption of the Doha Action Plan, incorporating key chapters on global information infrastructure development and the special programme for least developed countries,

aware

that the ITU Council, in its Resolution 1184 on WTDC-02, urged the conference to place special emphasis on the problem of "bridging the digital divide",

taking note of

a) the recognition by the United Nations General Assembly in its Resolution 56/37 of the adoption by the Assembly of Heads of State and Government of the Organization of African Unity at its thirty-seventh ordinary session (Lusaka, July 2001) of the New Partnership for Africa's Development (NEPAD);

b) the actions for NEPAD set out in annex hereto;

c) the declaration by the Economic and Social Council on the role of the United Nations system in supporting the efforts of African countries to achieve sustainable development,

taking cognizance of

a) the operative paragraphs of United Nations Resolution 56/218 on the final review and appraisal of the UN New Agenda for the Development of Africa, relating to consideration of plans and modalities during 2002 for future engagement with NEPAD and calling on the United Nations system and the international community to support the New African Initiative and to ensure effective representation;

b) the conclusions of the Geneva and Tunis phases of the World Summit on the Information Society (WSIS) and the work under way to implement the African Regional Action Plan for the Knowledge Economy (ARAPKE);

c) the call made on 23 November 2004 by the Summit of the NEPAD Heads of State and Government Implementing Committee (HSGIC) for an effective implementation of the NEPAD ICT programme;

d) the request made by the Abuja Declaration of African ministers in charge of telecommunications and ICT on infrastructure development to provide appropriate financial resources to support NEPAD ICT activities;

e) the decisions taken by the Connect Africa summit held in Kigali in October 2007;

f) the request, formulated in the Addis Ababa Declaration adopted by the Heads of State and Government during the 14th Conference of the African Union, that an African digital agenda be set;

g) the appeal made by the conference referred to in *f)* above to development partners, especially financing institutions, to integrate telecommunications/ICTs into their priorities by granting them financing conditions similar to those of other basic public utility infrastructures,

recognizing

that, in spite of the impressive growth and expansion in infocommunication services recorded in the African region since WTDC-98, many areas of major concern still exist and considerable disparities persist in the region, and the digital divide continues to widen,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to mobilize the resources needed to implement this resolution, which complements the resolutions resulting from the 14th Assembly of Heads of State and Government of the African Union, held in Addis Ababa in February 2010, on the theme "Information and communication technologies in Africa: challenges and prospects for development";

2 to pay particular attention to implementation of the provisions of the ITU-D Action Plan relating to the recommendations of the report "Partnership framework for ICT infrastructure development in Africa", earmarking resources so that this can be permanently monitored,

requests the Secretary-General

to bring this resolution to the attention of the Plenipotentiary Conference (Guadalajara, 2010) with a view to its releasing appropriate financial resources for activities to support NEPAD, in particular from the surplus on world telecommunication exhibitions and forums (ITU TELECOM).

ANNEX TO RESOLUTION 35 (Rev. Hyderabad, 2010)

Recommendations of the report "Partnership framework for ICT infrastructure development in Africa"

1 Infrastructure

i) Support to the Ministerial Committee of the African Union for the establishment of the Inter-Agency Coordinating Forum

ii) Preparation of master plans for ICT infrastructure development (PIDA)

iii) Facilitation of the introduction of digital technologies, especially for broadcasting

iv) Support for all projects which promote ICT development and subregional and regional integration, for example, the East African Submarine Cable project (EASSy), the NEPAD e-school initiative, the telecommunication/ICT component of the Programme for Infrastructure Development in Africa (PIDA), RASCOM, e-Post Africa, COMTEL, SRII, INTELCOM II, the ARAPKE projects, etc.

v) Establishment and interconnection of national Internet exchange points

vi) Evaluation of the impact and adoption of measures for strengthening functional capacities and the new missions of subregional maintenance centres

vii) Encourage the establishment of technological alliances in order to promote research and development at a regional level

2 Environment: development and implementation of

i) an Africa-wide vision, strategy and action plan for ICT

ii) a national vision and strategies for the development of ICT with maximum linkage to other national development strategies, notably the Poverty Reduction Strategy Paper (PRSP)

iii) elaboration of a national policy framework and strategy for universal access

iv) provision of support for the harmonization of policy and regulatory frameworks at the subregional level

3 Capacity building, cooperation and partnerships

i) Support for the elaboration of the planning and management of the frequency spectrum at national, subregional and regional levels

ii) Support the strengthening of ICT training institutions and the network of centres of excellence in the region

iii) Establishment of a cooperation mechanism amongst regional institutions that provide development assistance to African countries in the ICT sector

iv) Regional or multi-national approach to provision of support

v) Establishment of an ad hoc regional ICT think tank for Africa

vi) Strengthening of subregional telecommunication regulatory associations

vii) Strengthening of public-private partnership

viii) Establishment of an African ICT database

ix) Strengthening the capacities of regional economic communities for better implementation of the ICT projects and initiatives

RESOLUTION 36 (Rev. Hyderabad, 2010)

Support for the African Telecommunication Union

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 58 (Kyoto, 1994) of the Plenipotentiary Conference, particularly its *resolves*,

recalling further

Resolution 21 (Rev. Doha, 2006) of the World Telecommunication Development Conference,

considering

the urgent need of the African Telecommunication Union (ATU) for assistance and cooperation,

resolves to instruct the Director of the Telecommunication Development Bureau

to take all necessary steps to associate ATU in the implementation of the Hyderabad Action Plan, in respect of support to the African telecommunication/information and communication technology sector in the framework of New Partnership for Africa's Development (NEPAD),

requests the Secretary-General and instructs the Director of the Telecommunication Development Bureau

to take all necessary steps to provide ATU with administrative support and assistance, including logistical and information technology support, in particular by stepping up cooperation between ATU and the ITU Regional Office for Africa, and by making experts available to that organization.

RESOLUTION 37 (Rev. Dubai, 2014)

Bridging the digital divide

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 37 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC);

b) Resolution 139 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference,

recognizing

a) that the telecommunication environment has undergone significant changes since WTDC-10;

b) that there is still a need to show clearly what the digital divide is, where it occurs, and who suffers from it;

c) that development in information and communication technologies (ICTs) has continued to reduce the cost of relevant equipment;

d) that in many ITU Member States regulations have been adopted dealing with regulatory issues such as interconnection, determination of tariffs, universal service, etc., designed to bridge the digital divide at the national level;

e) that the introduction of competition in the provision of telecommunication/ICT services has also continued to reduce telecommunication/ICT costs to users;

f) that national plans and projects for the provision of telecommunication services in developing countries contribute to reducing costs to users and bridging the digital divide;

g) that the introduction of new applications and services has also resulted in bringing down telecommunication/ICT costs;

h) that there is still an ongoing need to create digital opportunities in developing countries, including the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition, taking advantage of the revolution that ICTs have witnessed and are currently witnessing;

i) that various activities are being executed towards bridging the digital divide by many international and regional organizations, such as, in addition to ITU, the Organisation for Economic Co-operation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Development Programme (UNDP), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Economic and Social Council (ECOSOC), the United Nations economic commissions, the World Bank, the Asia-Pacific Telecommunity (APT), the regional economic communities, the regional development banks and many others, and that such activity has increased following the conclusion of the World Summit on the Information Society (WSIS) and the adoption of the Tunis Agenda for the Information Society, particularly in relation to implementation and follow-up;

j) that the BYND2015 World Youth Summit participants, in the Declaration of Costa Rica 2013, called for equitable and universal access to ICTs, particularly for women and girls, as well as other groups marginalized by the digital divide, and called for the United Nations, the international community and all Member States to consider their words and put them into action,

considering

a) that, even with all the developments mentioned above, in many developing countries and especially in rural areas, telecommunications/ICTs, particularly in relation to the Internet, are still not affordable to the majority of the people, as is evident at present;

b) that each region, country and area should tackle its own specific issues regarding the digital divide, while stressing the importance of cooperation in this area at regional and international level in order to benefit from experience gained;

c) that many developing countries do not have the necessary basic infrastructure, long-term plans, laws, appropriate regulations and such like in place for telecommunication/ICT development;

d) that the use of radiocommunication systems, in particular satellite systems, to provide access for local communities located in rural or remote areas without increased connection costs due to distance or other geographical characteristics is an extremely useful tool for bridging the digital divide;

e) that satellite broadband systems support communication solutions offering high connectivity, speed and reliability in both urban areas and rural and remote areas, and thus constitute a fundamental driver of economic and social development for countries and regions;

f) that the development of radiocommunication technologies and deployment of satellite systems enable sustainable and affordable access to information and knowledge, through the provision of communication services with high connectivity (broadband) and wide coverage (regional or global reach), which contribute significantly to bridging the digital divide, efficiently complementing other technologies and enabling countries to be connected directly, quickly and reliably;

g) that Programme 1 of the Telecommunication Development Bureau (BDT) under the Hyderabad Action Plan, on information and communication infrastructure and technology development, has provided assistance to developing countries in the area of spectrum management and in the efficient and cost-effective development of rural, national and international broadband telecommunication networks, including satellite,

further considering

a) that the distribution of the benefits brought about by the ICT revolution is not equitable between developing and developed countries, and between social categories within countries, taking into account the commitments of both phases of WSIS to bridge the digital divide and transform it into a digital opportunity;

b) that equitable access to information and the transition of the countries of the developing world into knowledge economies and into the information age will enhance their economic, social and cultural development, in implementation of the aims of the Geneva Plan of Action and Tunis Agenda and of Goal 2 (To provide assistance to developing countries in bridging the digital divide by achieving broader telecommunication/ICT-enabled socio-economic development) of the strategic plan for the Union for 2012-2015 in Resolution 71 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, which is expected to be maintained in the new plan for 2016-2019, taking into consideration that such access shall be affordable;

c) that, in 2015, the United Nations General Assembly will assess the outcomes and implementation of both the Millennium Development Goals and the WSIS Tunis Agenda,

confirms

the importance of approaches to funding for bridging the digital divide in the Geneva Plan of Action, the Tunis Agenda and the strategic plan for the Union and of their translation into equitable mechanisms for action, particularly in respect of issues related to Internet management, taking into consideration measures for promoting full gender equality, with due regard for people with specific needs, including persons with disabilities and age-related disabilities, youth and indigenous peoples, telecommunications/ICTs for disaster relief and mitigation, and the child online protection initiative,

undertakes

to carry out work from which all countries, especially the developing countries, may benefit, with a view to establishing international methods and specific mechanisms to strengthen international cooperation for bridging the digital divide, through connectivity solutions which support sustainable and affordable access to ICTs, and, in parallel, to continue to shorten the time-frames for implementation of the Digital Solidarity Agenda, beginning with the Geneva Plan of Action, the outcomes of the Connect the World summits, the Tunis Agenda and the strategic plan for the Union,

resolves to request the Director of the Telecommunication Development Bureau

1 to continue to follow up the work pursuant to Resolution 8 (Rev. Dubai, 2014) of this conference in creating social connectivity indicators for the digital divide, standard indicators for each country and a single index, in cooperation with the competent organizations in the relevant United Nations agencies, using available statistics so that charts can be compiled to illustrate the current situation of the digital divide in each country and region;

2 to continue to advocate the advantages of developing low-cost, high-quality ICT-customer computers, that can be directly connected to the networks supporting the Internet and Internet applications, so that economies of scale can be achieved on account of their acceptability at the global level, taking into consideration the possibility of satellite use of this computer;

3 to continue to assist in developing a user-awareness campaign in order to build user trust and confidence in ICT applications;

4 to ensure that special programmes under the centres of excellence continue to address the specific issue of ICT training for poverty alleviation, and to give top priority to these centres;

5 to continue to foster the development of innovative models in order to reduce poverty and bridge the digital divide in the developing countries successfully;

6 to continue to identify key ICT applications in rural areas and to cooperate with specialized organizations with a view to developing a standardized user-friendly content format that overcomes the barrier of literacy and language;

7 to continue to assist in reducing access costs by encouraging manufacturers to develop appropriate technology scalable to broadband applications and having a low operating and maintenance cost, this having been adopted as a key objective of the Union as a whole and ITU Telecommunication Development Sector (ITU-D) in particular;

8 to assist and support developing countries in researching and assessing difficulties and challenges in the operation and maintenance of multipurpose community telecentres in rural and remote areas, with a view to advising developing countries on models of multipurpose community telecentres, including digital inclusion, in rural and remote areas adapted to local circumstances;

9 to encourage members to provide ITU with ICT rural experiences, which can then be put on the ITU-D website;

10 to continue to assist the Member States and Sector Members in developing a pro-competition policy and regulatory framework for ICTs, including online services and electronic commerce, as well as capacity building in connectivity and accessibility, taking into account the specific needs of women and disadvantaged groups;

11 to continue to encourage development of broadcast-mode methods for promoting ICT uses in rural areas;

12 to continue to help in promoting greater participation of women in ICT initiatives, particularly in rural areas;

13 to promote the implementation of studies or projects and activities, in collaboration with the ITU Radiocommunication Sector (ITU-R), with a view, on the one hand, to complementing national radiocommunication systems, including satellite systems, and, on the other, to increasing knowledge and capacities thereof, in order to achieve optimum utilization of the orbit spectrum resource, with the aim of stimulating the development and coverage of satellite broadband for bridging the digital divide;

14 to analyse the adoption of measures for collaboration with ITU-R, in order to support studies, projects or systems and, at the same time, to implement joint activities which seek to build capacities in efficient use of the orbit/spectrum resource for the provision of satellite services, with a view to achieving affordable access to satellite broadband and facilitating network connectivity between different areas, countries and regions, especially in the developing countries,

invites Member States

to consider promoting relevant policies to foster public and private investment in the development and construction of radiocommunication systems, including satellite systems, in their countries and regions, and to consider including the use of such systems in their national and/or regional broadband plans, as an additional tool that will help to bridge the digital divide and meet telecommunication needs, especially in the developing countries.

RESOLUTION 38 (Rev. Hyderabad, 2010)

Development of the Youth Forum in the Telecommunication Development Bureau

(ABROGATED BY WTDC-14)

RESOLUTION 39 (Istanbul, 2002)

Agenda for connectivity in the Americas and Quito Action Plan

The World Telecommunication Development Conference (Istanbul, 2002),

recognizing

that the Summit of Heads of State and Government of the Americas, assembled in Quebec City in April 2001, recognized that an extraordinary technological revolution is taking place, one which will have profound social, cultural, political and economic repercussions, and one which has the potential to create the information society through greater ability to access knowledge and improved use of information, by means of information and communications technologies (ICT),

considering

a) that, in accordance with the mandate handed down by the Heads of State and Government, CITEL has established an "Agenda for Connectivity in the Americas and Quito Action Plan";

b) that the Agenda for Connectivity has been developed in accordance with the following principles:

1) each country should develop a national vision and an agenda for connectivity appropriate to its circumstances, initiated by the highest levels of government, and, where appropriate, under direction from the Head of State;

2) national connectivity agendas must be conceived and executed with the active and ongoing participation of society's fundamental players – government and civil society, including the private sector;

3) national connectivity agendas should be developed around three fundamental components: infrastructure or access, applications for the use of the infrastructure, and high-quality content to be delivered via the infrastructure;

4) recognition of the importance of promoting the development of national and regional content to promote countries' respective cultural identities, to encourage the use of each country's languages, including indigenous languages, without excluding or restricting access to international content;

5) ongoing monitoring and performance measurement of elements of the connectivity agenda, adapted to national realities, to ensure the success and updating of the agenda for connectivity as it develops;

c) that, based on those principles, "connectivity" may be defined as "a society's internal capacity for communication with its global environment through the use of telecommunications, information technologies, and through the products of its content industries. The purpose of connectivity is to enable each country of the hemisphere to evolve towards the information and knowledge-based society. Connectivity is the solution to the digital divide";

d) that ITU has the capacity and the mandate to bring together all regional initiatives to achieve connectivity in a global context,

resolves

to include among the high priorities of ITU support for initiatives under the "Agenda for Connectivity in the Americas", recommending the use of mechanisms to help to achieve the necessary results for each country and region, and promote the exchange of information on the development of connectivity activities globally.

RESOLUTION 40 (Rev. Dubai, 2014)

Group on capacity-building initiatives

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) the principles relating to capacity building in the World Summit on the Information Society (WSIS) Geneva Declaration of Principles, in §§ 29 and 34 thereof;

b) the provisions of § 11 in the WSIS Geneva Plan of Action;

c) the provisions of §§ 14 and 32 of the WSIS Tunis Commitment;

d) the provisions of §§ 22, 23a), 26g), 51 and 90c), d), k) and n) of the WSIS Tunis Agenda for the Information Society;

e) that ITU is one of the moderators/facilitators identified under Action Line C4 in the Annex to the Tunis Agenda, alongside the United Nations Development Programme (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Conference on Trade and Development (UNCTAD),

considering

a) that human resources are still the most vital asset of any organization, and that technical, development and management skills continuously need to be reviewed;

b) that critical to the development of human and institutional capacity is the continuation of ongoing training and exchange of ideas with other experienced technical, regulatory and development professionals and institutions;

c) that the Telecommunication Development Bureau (BDT) continues to play a pivotal role in the development of such skills through its numerous activities, including its capacity-building and digital inclusion programme, and its activities in the field, with the excellent legacy of the Technical Cooperation Department of ITU in this domain prior to the creation of BDT;

d) that the major capacity-building initiatives undertaken by BDT, including the ITU Academy initiative[1], global and regional human capacity development forums, and the centres of excellence and Internet training centres initiatives, have greatly contributed to addressing these issues, and that their aims are in line with the outputs of WSIS, in cooperation with all programmes, and with the two study groups, each according to their respective field of competence;

e) that it is necessary for BDT to systematize its numerous capacity-building activities, treating them in a holistic, coordinated, integrated and transparent manner to meet the overall strategic objectives of ITU-D and make the most efficient use of resources;

f) that it is necessary for BDT to consult regularly with members on their capacity-building priorities and to implement activities accordingly;

g) that it is necessary for BDT to report to the Telecommunication Development Advisory Group (TDAG) on the initiatives and activities undertaken and results achieved, in order to allow members to be fully informed of difficulties encountered and progress made, and to guide BDT in its activities in this field,

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[1] In an effort to streamline and consolidate its numerous capacity-building efforts in the area of ICTs and telecommunications, BDT launched the ITU Academy, which encompasses its related programme activities and partnership initiatives, including the centres of excellence and Internet training centres.

taking into account

a) the success, and demonstrated value in terms of providing practical skills and hands-on learning, of forums such as regional seminars and the World Radiocommunication Seminar (WRS);

b) the large number and diversity of organizations and individuals who participate in and with BDT, whose value as educational resources should be recognized;

c) the capacity-building needs and priorities identified by regions,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to maintain the Group on Capacity-Building Initiatives (GCBI) composed of competent capacity-development experts, familiar with the needs of their regions, to enhance the ability of ITU Member States, Sector Members, experienced and expert professionals, and organizations with relevant expertise to assist ITU-D, and to contribute to the successful implementation of its capacity-building activities in an integrated manner in cooperation with all programmes, and with the two study groups, each according to its respective field of competence;

2 that this group shall include two capacity-building experts representing each of the six regions, that participation shall also be open to all interested Member States and Sector Members, and that the group shall work with BDT staff electronically or, where appropriate, face-to-face, in order to:

i) assist in identifying global trends in the domain of information and communication technologies (ICTs) and capacity building;

ii) assist in identifying regional needs and priorities for capacity-building activities, evaluating the progress of related BDT activities, and make proposals to eliminate any overlap in activities and harmonize ongoing initiatives, etc.;

iii) coordinate, as appropriate, with organizations and professionals that have expertise in building capacity in areas of identified need, leveraging their expertise by either directing members to those experts or facilitating their involvement in ITU capacity-building activities;

iv) assist BDT in designing and implementing an integrated framework for ITU Academy activities, to be implemented during the period 2015-2018;

v) provide advice on the development of formal ICT-curricula design and content for both general ICT literacy and specialized skills;

vi) provide advice on accreditation and certification based on regional and/or international standards;

vii) provide advice on initiatives, academic alliances and partnerships that further the overall strategic objectives of the ITU Academy, including integration with, *inter alia*, centres of excellence, Internet training centres and ITU regional offices;

viii) provide advice on standards for quality assurance and monitoring of courses delivered through the ITU Academy partnerships, including those delivered through the centres of excellence, Internet training centres and/or academic institutions;

ix) submit annually a report to be presented and discussed during the TDAG meeting, including achievements and proposed recommendations on future actions that may need to be taken;

x) act as regional representatives in the related biennial forums organized by BDT;

3 provide the necessary support for the group to carry out its work effectively;

4 take due account of any recommendations of the group.

RESOLUTION 43 (Rev. Dubai, 2014)

Assistance for implementing IMT – International Mobile Telecommunications

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 15 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on applied research and transfer of technology;

b) Resolution 43 (Rev. Hyderabad, 2010) of WTDC;

c) Resolution 59 (Rev. Dubai, 2014) of this conference, on strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest;

d) Resolution ITU-R 17-4 (Rev. Geneva, 2012) of the Radiocommunication Assembly (RA), on integration of International Mobile Telecommunications (IMT-2000 and IMT-Advanced) with existing networks;

e) Resolution ITU-R 23-2 (Rev. Geneva, 2012) of RA, on extension of the international monitoring system to a worldwide scale;

f) Resolution ITU-R 56-1 (Rev. Geneva, 2012) of RA, on naming for IMT;

g) Resolution ITU-R 57-1 (Rev. Geneva, 2012) of RA, on principles for the process of development of IMT-Advanced,

considering

a) the continuous need to promote IMT throughout the world, and in particular in developing countries[1];

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

b) the Guidelines on the smooth transition of existing mobile networks to IMT for the developing countries as adopted by Study Group 2 of the ITU Telecommunication Development Sector (ITU-D), and after amendment by that study group in conclusion of its work in September 2009 based on the opinion of Working Party 5D of the ITU Radiocommunication Sector (ITU-R), complemented by the ITU-R Migration to IMT-2000 Systems – Supplement 1 (Revision 1) of the Handbook on Deployment of IMT-2000 Systems (2011);

c) the tremendous expansion in these networks, especially in the developing countries;

d) the increasing global reliance on the use of IMT technologies to support the achievement of objectives related to key sectors, such as health, agriculture, banking, education, among other objectives, that is transforming the face of service delivery in these sectors across the globe and bringing economic development and improvement to such sectors;

e) the impact of IMT on economic development and improvement of communication, social inclusion and economic activities in sectors such as agriculture, health, education and finance;

f) the very important role of IMT in broadband services,

noting

a) the excellent work of the relevant ITU-R and ITU Telecommunication Standardization Sector (ITU-T) study groups in this regard;

b) the Handbook for deployment of IMT systems prepared jointly by the three Sectors and its newly adopted supplement by ITU-R and ITU-T;

c) the adoption by this conference of Question 2/1,

recognizing

a) that deploying IMT in low frequency bands has benefited operators in providing service in wider areas, as well as enabling investment efficiency and competitive prices for wireless broadband services in developing countries;

b) that developing and developed countries should cooperate though exchanges of experts, the organization of seminars, specialized workshops and meetings relating to the deployment of IMT;

c) that there are many issues to consider in deploying IMT, such as suitable IMT technologies, frequency-band harmonization and strategic planning,

resolves

to include support for implementation aspects of IMT, including suitable IMT technologies, a transition roadmap, frequency-band harmonization and re-planning of certain frequency bands to facilitate deployment of IMT, including those technologies currently used, and support for their implementation as a priority in the action plan adopted by this conference for developing countries,

instructs the Director of the Telecommunication Development Bureau

in close collaboration with the Directors of the Radiocommunication Bureau (BR) and the Telecommunication Standardization Bureau (TSB), as well as the relevant regional telecommunication organizations:

1 to provide assistance to developing countries in their planning and optimization of spectrum usage for the medium to long term for the implementation of IMT, taking into account national and regional specificity and needs;

2 to continue encouraging and assisting developing countries to implement IMT systems using the relevant ITU Recommendations and studies carried out by the study groups, taking into account the protection of existing services, in particular those related to the technologies and the radiocommunication standards recommended by ITU, in order to meet their national requirements for the implementation of IMT in the short, medium and long term with a view to encouraging the use of harmonized spectrum and associated band plans and standards to achieve economies of scale;

3 to disseminate as widely as possible the above-mentioned guidelines and amendments thereto, which are recommended to be used for the evolution of second-generation to IMT-Advanced systems;

4 to provide assistance to administrations on the use and interpretation of ITU Recommendations relating to IMT adopted by both ITU-R and ITU-T;

5 to conduct seminars, workshops or training on strategic planning for the transition from second-generation to IMT, taking into account specific national and regional requirements and characteristics and based on the above guidelines and amendments thereto;

6 to promote the exchange of information among international organizations, donor countries and recipient countries on upgrading to and deploying IMT-Advanced systems in certain frequency bands used by current technologies (particularly those operated below 2 GHz);

7 to provide expert advice on the creation of roadmaps for the evolution of IMT;

8 to encourage administrations to respond to the conclusions contained in Report ITU-R M.2078 (2006), as complemented by Report ITU-R M.2290 (2014), by making available a sufficient quantity of spectrum to enable the proper development of IMT-2000 and IMT-Advanced, with the aim of expanding the provision of mobile-broadband services in an efficient manner;

9 to support projects and training on the use of IMT applications in key sectors, including health, banking, education and public safety, among others, through strategic partnerships;

10 to take into account the results of the work under Question 2/1 in relevant BDT programmes, that are components of the toolkit BDT uses when solicited by Member States and Sector Members in order to support their efforts to build broadband and access to IMT,

invites ITU-D Study Group 1

1 to take into account the contents of this updated resolution when conducting studies under Question 2/1, and to maintain close cooperation in this matter with ITU-R Study Group 5 (specifically, Working Party 5D) and ITU-T Study Group 13;

2 to take into account the decisions of the 2015 World Radiocommunication Conference (WRC-15) when implementing this resolution,

encourages Member States

to provide all support for the implementation of this resolution and for the future work on Question 2/1.

RESOLUTION 45 (Rev. Dubai, 2014)

Mechanisms for enhancing cooperation on cybersecurity, including countering and combating spam

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 130 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the role of ITU in building confidence and security in the use of information and communication technologies (ICTs);

b) Resolution 174 (Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role with regard to international public policy issues relating to the risk of illicit use of ICTs;

c) Resolution 179 (Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in child online protection;

d) Resolution 181 (Guadalajara, 2010) of the Plenipotentiary Conference, on definitions and terminology relating to building confidence and security in the use of ICTs;

e) Resolution 45 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC);

f) Resolution 50 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on cybersecurity;

g) Resolution 52 (Rev. Dubai, 2012) of WTSA, on countering and combating spam;

h) Resolution 58 (Rev. Dubai, 2012) of WTSA, on encouraging the creation of national computer incident response teams (CIRTs), particularly in developing countries;

i) Resolution 69 (Rev. Dubai, 2014) of this conference, on the creation of CIRTs, particularly for developing countries, and cooperation among them;

j) Resolution 67 (Rev. Dubai, 2014) of this conference, on the role of the ITU Telecommunication Development Sector (ITU-D) in child online protection;

k) the noble principles, aims and objectives embodied in the Charter of the United Nations and the Universal Declaration of Human Rights;

l) that ITU is the lead facilitator for Action Line C5 in the Tunis Agenda for the Information Society (Building confidence and security in the use of ICTs);

m) the cybersecurity-related provisions of the Tunis Commitment and the Tunis Agenda;

n) the goal set out in the strategic plan for the Union for 2012-2015, approved by Resolution 71 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, which calls on ITU-D 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;

o) Question 22 of ITU-D Study Group 1, under which in the previous cycle many members collaborated to produce reports, including course materials for use in developing countries, such as a compendium of national experiences, best practices for public-private partnerships, best practices for building a CIRT with accompanying course material, and best practices for a CIRT management framework;

p) the report of the Chairman of the High-Level Group of Experts (HLEG) of the Global Cybersecurity Agenda (GCA), established by the ITU Secretary-General pursuant to the requirements of Action Line C5 on building confidence and security in the use of ICTs and in accordance with Resolution 140 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the role of ITU as sole facilitator for World Summit on the Information Society (WSIS) Action Line C5, and Resolution 58 (Rev. Dubai, 2012), on encouraging the creation of national CIRTs, particularly for developing countries;

q) that ITU and the United Nations Office on Drugs and Crime (UNODC) have signed a memorandum of understanding (MoU) in order to strengthen security in the use of ICTs,

considering

a) the role of telecommunications/ICTs as effective tools to promote peace, economic development, security and stability and to enhance democracy, social cohesion, good governance and the rule of law, and the need to confront the escalating challenges and threats resulting from the abuse of this technology, including for criminal and terrorist purposes, while respecting human rights (see also § 15 of the Tunis Commitment);

b) the need to build confidence and security in the use of telecommunications/ICTs by strengthening the trust framework (§ 39 of the Tunis Agenda), and the need for governments, in cooperation with other stakeholders within their respective roles, to develop necessary legislation for the investigation and prosecution of cybercrime at national levels, and cooperate at regional and international levels having regard to existing frameworks;

c) that United Nations General Assembly (UNGA) Resolution 64/211 invites Member States to use, if and when they deem appropriate, the voluntary self-assessment tool that is annexed to the resolution for national efforts;

d) the need for Member States to develop national cybersecurity programmes centred around a national plan, public-private partnerships, a sound legal foundation, an incident management, watch, warning, response and recovery capability, and a culture of awareness, using as a guide the reports on best practices for a national approach to cybersecurity: building blocks for organizing national cybersecurity efforts, drawn up under the two study periods of Question 22 of ITU-D Study Group 1;

e) that the considerable and increasing losses which users of telecommunication/ICT systems have incurred from the growing problem of cybercrime and deliberate sabotage worldwide alarm all developed and developing nations of the world without exception;

f) the reasons behind the adoption of Resolution 37 (Rev. Dubai, 2014) of this conference, on bridging the digital divide, having regard to the importance of multistakeholder implementation at the international level and to the action lines referenced in § 108 of the Tunis Agenda, including "Building confidence and security in the use of ICTs";

g) the outcomes of several ITU activities related to cybersecurity, especially, but not limited to, the ones coordinated by the Telecommunication Development Bureau, in order to fulfil ITU's mandate as facilitator for the implementation of Action Line C5 (Building confidence and security in the use of ICTs);

h) that various organizations from all sectors of society work in collaboration to enhance cybersecurity of telecommunications/ICTs;

i) that Objective 3 of ITU-D, set under the strategic plan for the Union for 2012-2015, contained in Resolution 71 (Rev. Guadalajara, 2010), was to foster the development of strategies to enhance the deployment, and the safe, secure and affordable use of ICT applications and services towards mainstreaming telecommunications/ICTs in the broader economy and society;

j) that the fact, among others, that critical telecommunication/ICT infrastructures are interconnected at global level means that low infrastructure security in one country could result in greater vulnerability and risks in others;

k) that various information, materials, best practices and financial resources, as appropriate, are available to Member States from national, regional and other relevant international organizations, according to their respective roles;

l) that the results of the cybersecurity awareness survey conducted by BDT and Question 22-1/1 in the previous study period showed that least developed countries require substantial assistance in this area;

m) that the ITU Global Cybersecurity Agenda (GCA) encourages international cooperation aimed at proposing strategies for solutions to enhance confidence and security in the use of telecommunications/ICTs,

recognizing

a) that measures undertaken to ensure the stability and security of telecommunication/ICT networks, to protect against cyberthreats/cybercrime and to counter spam must protect and respect the provisions for privacy and freedom of expression as contained in the relevant parts of the Universal Declaration of Human Rights (see also § 42 of the Tunis Agenda) and the International Covenant on Civil and Political Rights;

b) that UNGA Resolution 68/167, on the right to privacy in the digital age, affirms, *inter alia*, "that the same rights the people have off line must also be protected on line, including the right to privacy";

c) the need to take appropriate actions and preventive measures, as determined by law, against abusive uses of telecommunications/ICTs, as mentioned in connection with "Ethical dimensions of the information society" in the Geneva Declaration of Principles and Plan of Action (§ 43 of the Tunis Agenda), the need to counter terrorism in all its forms and manifestations on telecommunication/ICT networks, while respecting human rights and complying with other obligations under international law, as outlined in operative paragraph 81 of UNGA Resolution 60/1 on the 2005 world summit outcome, the importance of the security, continuity and stability of telecommunication/ICT networks and the need to protect telecommunication/ICT networks from threats and vulnerabilities (§ 45 of the Tunis Agenda), while ensuring respect for privacy and the protection of personal information and data, whether via adoption of legislation, the implementation of collaborative frameworks, best practices and self-regulatory and technological measures by business and users (§ 46 of the Tunis Agenda);

d) the need to effectively confront challenges and threats resulting from the use of telecommunications/ICTs such as for purposes that are inconsistent with objectives of maintaining international stability and security and may adversely affect the integrity of the infrastructure within States to the detriment of their security, and to work cooperatively to prevent the abuse of information resources and technologies for criminal and terrorist purposes, while respecting human rights;

e) the role of telecommunications/ICTs in the protection of children and in enhancing their development, and the need to strengthen action to protect children and youth from abuse and defend their rights in the context of telecommunications/ICTs, emphasizing that the best interests of the child are a key consideration;

f) the desire and commitment of all concerned to build a people-centred, inclusive and secure development-oriented information society, premised on the purposes and principles of the Charter of the United Nations, international law and multilateralism, and respecting fully and upholding the Universal Declaration of Human Rights, so that people everywhere can create, access, utilize and share information and knowledge in complete security, in order to achieve their full potential and to attain the internationally agreed development goals and objectives, including the Millennium Development Goals;

g) the provisions of §§ 4, 5 and 55 of the Geneva Declaration of Principles, and that freedom of expression and the free flow of information, ideas and knowledge are beneficial to development;

h) that the Tunis phase of WSIS represented a unique opportunity to raise awareness of the benefits that telecommunications/ICTs can bring to humanity and the manner in which they can transform people's activities, interaction and lives, and thus increase confidence in the future, conditional upon the secure use of telecommunications/ICTs, as the implementation of the Summit outcomes has demonstrated;

i) the need to deal effectively with the significant problem posed by spam, as called for in § 41 of the Tunis Agenda, as well as, *inter alia*, spam, cybercrime, viruses, worms and denial-of-service attacks;

j) the need for effective coordination between ITU-D programmes and Questions,

noting

a) the continuing work of Study Group 17 (security) of the ITU Telecommunication Standardization Sector (ITU-T) and other standards-development organizations on various aspects of security of telecommunications/ICT;

b) that spam is a significant problem and continues to pose a threat for users, networks and the Internet as a whole, and that the issue of cybersecurity should be addressed at appropriate national, regional and international levels;

c) that cooperation and collaboration among Member States, Sector Members and relevant stakeholders contributes to building and maintaining a culture of cybersecurity,

resolves

1 to continue to recognize cybersecurity as one of ITU's priority activities and to continue to address, within its area of core competence, the issue of securing and building confidence in the use of telecommunications/ICTs, by raising awareness, identifying best practices and developing appropriate training material in order to promote a culture of cybersecurity;

2 to enhance collaboration and cooperation with, and share information among, all relevant international and regional organizations on cybersecurity-related initiatives within ITU's areas of competence, taking into account the need to assist developing countries,

instructs the Director of the Telecommunication Development Bureau

1 to continue to organize, in collaboration with relevant organizations, as appropriate, in conjunction with the programme under Output 3.1 of Objective 3, based on member contributions, and in cooperation with the Director of the Telecommunication Standardization Bureau (TSB), meetings of Member States, Sector Members and other relevant stakeholders to discuss ways and means to enhance cybersecurity;

2 to continue, in collaboration with relevant organizations and stakeholders, to carry out studies on strengthening the cybersecurity of developing countries at regional and international level, based on a clear identification of their needs, particularly those relating to telecommunication/ICT use, including the protection of children and youth;

3 to support Member States' initiatives, especially in developing countries, regarding mechanisms for enhancing cooperation on cybersecurity;

4 to assist the developing countries in enhancing their states of preparedness in order to ensure a high and effective level of security for their critical telecommunication/ICT infrastructures;

5 to assist Member States in the establishment of an appropriate framework between developing countries allowing rapid response to major incidents, and propose an action plan to increase their protection, taking into account mechanisms and partnerships, as appropriate;

6 to implement this resolution in cooperation and collaboration with the Director of TSB;

7 to report the results of the implementation of this resolution to the next WTDC,

invites the Secretary-General, in coordination with the Directors of the Radiocommunication Bureau, the Telecommunication Standardization Bureau and the Telecommunication Development Bureau

1 to report on MoUs between countries, as well as existing forms of cooperation, providing analysis of their status, scope and applications of these cooperative mechanisms to strengthen cybersecurity and combat cyberthreats, with a view to enabling Member States to identify whether additional memoranda or mechanisms are required;

2 to support regional and global cybersecurity projects, such as IMPACT, FIRST, OAS, APCERT, among others, and to invite all countries, particularly developing ones, to take part in these activities,

requests the Secretary-General

1 to bring this Resolution to the attention of the next plenipotentiary conference for consideration and required action, as appropriate;

2 to report the results of these activities to the Council and to the Plenipotentiary Conference in 2018,

invites Member States, Sector Members, Associates and Academia

1 to provide the necessary support for and participate actively in the implementation of this resolution;

2 to recognize cybersecurity and countering and combating spam as high-priority items, and to take appropriate action and contribute to building confidence and security in the use of telecommunications/ICTs at the national, regional and international level;

3 to encourage service providers to protect themselves from the risks identified, endeavour to ensure the continuity of services provided and notify security infringements,

invites Member States

1 to establish an appropriate framework allowing rapid response to major incidents, and propose an action plan to prevent and mitigate such incidents;

2 to establish strategies and capabilities at the national level to ensure protection of national critical infrastructures, including enhancing the resilience of telecommunication/ICT infrastructures.

RESOLUTION 46 (Doha, 2006)

Assistance and promotion for indigenous communities in the world: Information society through information and communication technology

The World Telecommunication Development Conference (Doha, 2006),

recognizing

a) the need to achieve the goal of digital inclusion, enabling universal, sustainable, ubiquitous and affordable access to information and communication technologies (ICTs) for all, including disadvantaged, marginalized and vulnerable groups and indigenous peoples, and to facilitate accessibility of ICTs for all, in the framework of access to information and knowledge;

b) the need to ensure the inclusion of indigenous peoples in the information society, as outlined in the Geneva Declaration of Principles and the Tunis Commitment, and to contribute to the development of their communities using ICTs, based on tradition and self-sustainability,

considering

a) that the World Telecommunication Development Conference (Istanbul, 2002) decided to include relevant provisions in the work programmes of the Istanbul Action Plan, with a view to supporting Member States in addressing the specific needs of indigenous peoples, to create dedicated actions and projects with respect to equitable access, use and knowledge of ICT, based on the preservation of their heritage and cultural legacy;

b) that, as proof of the special attention which ITU in general and the Telecommunication Development Bureau (BDT) in particular give to assistance to indigenous peoples' initiatives, during the second phase of the World Summit on the Information Society (WSIS) in November 2005, ITU signed with the Navajo Nation and the Observatory for Cultural and Audiovisual Communication (OCCAM) a memorandum of understanding (MoU) targeting the development of projects for indigenous peoples worldwide, as well as the provision of ICTs to their communities, while respecting their traditions and cultural patrimony,

taking into account

that the WSIS phase 1 and 2 statements, the Geneva Plan of Action, the Tunis Commitment and the Tunis Agenda for the Information Society have expressly reinforced several activities related to indigenous peoples,

recognizing

that the United Nations Permanent Forum on Indigenous Issues (UNPFII) and the International Indigenous Steering Committee (IISC) delivered a multistakeholder report to the Tunis WSIS plenary in November 2005, highlighting, among other things, that:

– there are more than 370 million indigenous people around the world;

– the development of indigenous-specific needs through ICTs must be affirmed by all stakeholders if the digital divide is to be truly bridged;

– public-private partnerships and multistakeholder cooperation are essential to meet the needs of indigenous groups more effectively toward their integration in the information society;

– that the indigenous issue represents by itself a complex activity of BDT,

invites the World Telecommunication Development Conference and the Director of the Telecommunication Development Bureau

1 to ensure, within the available resources and partnerships to be implemented, that the necessary financial and human resources are allocated within BDT to respond to the existing global initiative for indigenous peoples;

2 to recognize the importance of issues of concern to indigenous peoples worldwide in the determination of priority activities for the ITU Telecommunication Development Sector;

3 to encourage Sector Members to promote the integration of indigenous peoples in the information society worldwide and to promote ICT projects that respond to their specific needs;

4 in line with the above, the ITU mandate, the WSIS outcomes and the Millennium Development Goals, to recognize the global initiative of the assistance to indigenous peoples worldwide as an integral part of the activities of BDT,

requests the Secretary-General

to bring the assistance provided by BDT through its activities to indigenous peoples to the attention of the Plenipotentiary Conference (Antalya, 2006), with a view to providing appropriate financial and human resources for the relevant actions and projects to be implemented in the framework of the telecommunication sector.

RESOLUTION 47 (Rev. Dubai, 2014)

Enhancement of knowledge and effective application of ITU Recommendations in developing countries[1], including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations

The World Telecommunication Development Conference (Dubai, 2014),

recalling

Resolution 47 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on the enhancement of knowledge and effective application of ITU Recommendations in developing countries,

considering

a) that Resolution 123 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference instructed the Secretary-General and the Directors of the three Bureaux to work closely with each other to bridge the standardization gap between developing and developed countries;

b) that Resolution 177 (Guadalajara, 2010) of the Plenipotentiary Conference, on conformance and interoperability (C&I), calls to assist developing countries in establishing regional or subregional conformance and interoperability centres;

c) that the ITU Council, at its 2012 session, when considering the business plan for ITU's long-term implementation of the conformance and interoperability (C&I) programme, agreed on a plan of action in which, in particular, the Telecommunication Development Bureau (BDT) together with the Telecommunication Standardization Bureau (TSB) is to continue to offer training courses on C&I with the active involvement of the ITU regional offices;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

d) that the provisions of ITU Recommendations may be taken into consideration by ITU Member States in the development of national standards, in the developing countries,

recognizing

a) that Resolution 44 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA) resolved to implement the action plan contained in its Annex aimed at bridging the standardization gap between developing and developed countries, which includes four programmes (Strengthening standard-making capabilities; Assisting developing countries with respect to the application of standards; Human resources capacity building; and Fundraising for bridging the standardization gap);

b) that Resolution 76 (Rev. Dubai, 2012) of WTSA calls on the ITU Telecommunication Standardization Sector (ITU-T), in collaboration with the other Sectors, as appropriate, to assist developing countries in identifying human and institutional capacity-building and training opportunities on C&I testing and in establishing regional or subregional C&I centres suitable to perform C&I testing as appropriate encouraging cooperation with governmental and non-governmental, national and regional organizations and international accreditation and certification bodies;

c) that the C&I programme Action Plan was updated by the Council at its 2013 session, and is contained in Document C13/24(Rev.1);

d) that having infrastructure applications in developing countries which are compatible with the Recommendations and standards of ITU-T and/or other international and internationally recognized organizations is desirable, as against those based on proprietary technologies and equipment, so as to maintain a competitive environment, reduce costs, increase the chances of interoperability and ensure satisfactory quality of service and quality of experience,

noting

a) that understanding ITU Recommendations and related international standards in order to apply new technology to the network appropriately and effectively is essential for the implementation of Resolution 76 (Rev. Dubai, 2012), on studies related to C&I testing, assistance to developing countries, and a possible future ITU Mark programme;

b) the increasing availability of implementation guidelines on the application of ITU Recommendations and on how to conduct and appropriately utilize C&I testing, and the lack of guidelines on applying these technical documents,

resolves to invite Member States and Sector Members

1 to continue to engage in activities to enhance knowledge and effective application of ITU-R and ITU-T Recommendations in developing countries;

2 to enhance efforts to introduce best-practice application of ITU-R and ITU-T Recommendations, in, for example, but not limited to, fibre-optic transmission technology, broadband network technology, next-generation networks and building confidence and security in the use of ICTs, by organizing training courses and workshops especially for developing countries, involving academia in the process,

instructs the Director of the Telecommunication Development Bureau, in close collaboration with the Directors of the Telecommunication Standardization Bureau and the Radiocommunication Bureau

1 to continue to encourage the participation of developing countries in training courses and workshops organized by the ITU Telecommunication Development Sector (ITU-D), so as to introduce best practices in the application of ITU-R and ITU-T Recommendations, for example by providing fellowships;

2 to assist developing countries, in collaboration with the Director of TSB, in accordance with Programme 2 under WTSA Resolution 44 (Rev. Dubai, 2012), to take advantage of the guidelines established and developed by ITU-T on how to apply ITU-T Recommendations, in particular on manufactured products and interconnection, with emphasis on Recommendations having regulatory and policy implications;

3 to provide assistance in developing methodological guidance (manuals) on implementing ITU Recommendations;

4 to assist developing countries in building their capacity, in collaboration with the other Bureaux, so as to be able to perform conformance testing and interoperability testing of equipment and systems, relevant to their needs, in accordance with the relevant Recommendations, including the development or recognition of, as appropriate, conformity assessment bodies;

5 to assist the Director of TSB, in collaboration with the Director of the Radiocommunication Bureau (BR) and, as appropriate, with equipment and systems manufacturers and internationally and regionally recognized standards-development organizations, in conducting conformance assessment and interoperability testing events, preferably in the developing countries, to encourage developing countries to attend these events, to collaborate with the Director of TSB to build the capacity of the developing countries to effectively participate and be involved in these events, and to provide the views of developing countries on this issue following a questionnaire addressed by the relevant BDT programme to the ITU members;

6 to coordinate and facilitate participation from developing countries in the work of international or regional test laboratories of organizations or entities specialized in conformance testing and interoperability testing, in order for them to gain on-the-job experience;

7 to collaborate with the Director of TSB in order to implement the recommended actions on Resolution 76 (Rev. Dubai, 2012) from the C&I programme Action Plan as endorsed by the ITU Council at its 2013 session (Document C13/24(Rev.1));

8 to assign to the BDT programme concerned the responsibility for following up implementation of this resolution;

9 to submit a periodic report to the Telecommunication Development Advisory Group on the implementation of this resolution as well as a report to the next WTDC in 2018 on implementation of this resolution, which shall also contain lessons learned with a view to updating the resolution for the phase after 2018;

10 to facilitate, through the ITU regional offices, meetings of experts at the regional and subregional levels, in order to promote awareness in developing countries on the question of the establishment of an appropriate C&I programme in such countries,

invites eligible organizations under Recommendation ITU-T A.5

in collaboration with the Director of BDT and the Director of TSB, in accordance with Resolution 177 (Guadalajara, 2010), to work on building the capacity of developing countries in C&I testing, including training.

RESOLUTION 48 (Rev. Hyderabad, 2010)

Strengthening cooperation among telecommunication regulators

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

a) Resolution 48 (Rev. Doha, 2006) of the World Telecommunication Development Conference;

b) Resolution 138 (Antalya, 2006) of the Plenipotentiary Conference, on the Global Symposium for Regulators,

considering

a) that telecommunication reform has globally been implemented in many developing countries[1];

b) that the reform is characterized by new laws and policies and the establishment of regulatory agencies to implement reform in a new dynamic international environment;

c) that the success of telecommunication reform will mostly depend on the establishment and implementation of an effective regulatory framework;

d) that the regulators are called upon to maintain an effective balance of interest among all stakeholders by promoting fair competition and ensuring an equal-opportunity environment for all players,

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

recognizing

a) that telecommunication regulators have been increasing;

b) the importance of information sharing among regulators, particularly long-standing regulators and newly established ones;

c) the importance and necessity of cooperation among these entities at the regional level,

recalling further

a) the relevant Hyderabad Action Plan programme, especially regulatory symposia, forums, seminars and workshops;

b) the recommendations of past global symposia for regulators (GSR) on the creation of a global exchange programme for regulators;

c) the success of the global exchange programme for regulators,

noting

that the Telecommunication Development Bureau (BDT) has continued the Global Regulatory Exchange,

resolves

1 to continue the specific platform for telecommunication regulators to share and exchange matters concerning regulatory issues electronically (G-REX);

2 that ITU, and in particular the Telecommunication Development Sector (ITU-D), should continue to support regulatory reform by sharing information and experiences;

3 that BDT should continue to coordinate and facilitate joint activities relating to telecommunication policy and regulatory issues with regional and subregional regulatory organizations and associations;

4 that ITU-D should continue to provide further technical cooperation, regulatory exchange, capacity building and expert advice, with the support of its regional offices,

instructs the Director of the Telecommunication Development Bureau

1 to continue to rotate GSR in different regions, to the extent possible;

2 to promote the formal meetings of regulators and regulatory associations at GSR and encourage the participation of all associations;

3 to continue to have a specific platform for regulators and regulatory associations;

4 to organize, coordinate and facilitate activities that promote information sharing among regulators and regulatory associations on key regulatory issues at the international and regional level;

5 to organize seminars, regional workshops and training programmes and other activities to help strengthen newly established regulators,

invites the ITU-D study groups

each within its mandate, to adopt the guidelines and best practices issued annually by GSR and to take them into account in their studies on relevant Questions,

calls upon Member States

to offer to the governments of countries in special need all possible assistance and support for regulatory reform, whether bilaterally, multilaterally or through the special action of the Union,

requests the Secretary-General

to transmit this resolution to the Plenipotentiary Conference (Guadalajara, 2010) in order to ensure that appropriate attention is given to these activities, in particular within the framework of the implementation of the World Summit on the Information Society outcomes, and in regard to the role of regulators in the implementation of the strategic plan for the Union.

RESOLUTION 50 (Rev. Dubai, 2014)

Optimal integration of information and communication technologies

The World Telecommunication Development Conference (Dubai, 2014),

recalling

Resolution 50 (Rev Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC),

considering

a) the role of ITU, in particular the specific functions of the ITU Telecommunication Development Sector (ITU-D);

b) the continuing disparity between those who have and those who do not have access to information and communication technologies (ICT), referred to as the "digital divide";

c) the many stakeholders in the public, private, academic, non-governmental organization and multilateral sectors who are seeking to bridge this divide;

d) the progress accomplished in the implementation of the outcomes of Phases 1 and 2 of the World Summit on the Information Society (WSIS),

bearing in mind

a) that this continuing difference in access to ICTs leads to an extreme escalation of social disparities, with negative impacts on the social and economic environment in the various regions excluded from use of ICTs;

b) the interest shown by WSIS in ICT integration and the role of the three ITU Sectors in this regard;

c) the "Call to Action" of the Broadband Commission for Digital Development, to include ICT networks, services and applications as enablers of sustainable development,

recognizing

a) ITU's role as a catalyst, and in particular that of ITU-D as coordinator and promoter of the rational use of resources in the context of the various projects intended to narrow the digital divide;

b) that numerous studies endorse the conclusion that investments in broadband infrastructure, applications and services contribute to sustainable and inclusive economic growth for peoples;

c) that most ITU Member States have adopted integrated connectivity policies with a view to making affordable ICT services more accessible to citizens, as an indispensable tool in reducing the digital divide;

d) that it is necessary to coordinate the efforts of both the public and private sectors to ensure that opportunities arising from the information society yield benefits, especially for the most disadvantaged;

e) that the integration models supported by the ITU Member States are an element that integrates, facilitates and does not exclude, one which takes into account the individual characteristics of all existing projects, respecting their autonomy and independence;

f) that the integration models propose ways to increase the profitability of existing infrastructure, to lower the cost of developing and implementing ICT projects and platforms, to provide for the sharing of expertise and skills, and to foster intraregional and extraregional technology transfers,

resolves

1 that the Telecommunication Development Bureau (BDT) continue to adopt the necessary measures to implement regional projects derived from the non-exclusive integration models which it has acquired, to link all stakeholders, organizations and institutions of the various sectors in an ongoing relationship of cooperation in which information is disseminated over networks, so as to narrow the digital divide in line with the outputs of Phases 1 and 2 of WSIS;

2 that BDT use the funds at its disposal to attain that objective;

3 that BDT continue to play a central role in this initiative;

4 that BDT collaborate closely, through the ITU regional offices, with ITU Member States in order to implement these regional projects, in addition to maintaining an active communication channel between the strategic stakeholders,

invites Member States

when implementing Resolution 17 (Rev. Dubai, 2014) of this conference, on implementation of regionally approved initiatives at the national, regional, interregional and global levels, to select a project among those proposed for the regions that reflects optimal integration of ICTs with the aim of bridging the digital divide.

RESOLUTION 51 (Rev. Hyderabad, 2010)

Provision of assistance and support to Iraq to rebuild and re-equip its public telecommunication systems

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

a) Resolution 51 (Doha, 2006) of the World Telecommunication Development Conference;

b) Resolution 34 (Rev. Antalya, 2006) of the Plenipotentiary Conference;

c) the noble principles, intentions and goals embodied in the Charter of the United Nations and the Universal Declaration of Human Rights;

d) the purposes of the Union, as enshrined in Article 1 of the ITU Constitution,

conscious

a) that the telecommunication infrastructure in the Republic of Iraq has been destroyed by two and a half decades of war and most of the systems currently in use have become antiquated through long years of use;

b) that the substantial losses the public telecommunication systems in Iraq have suffered should be a matter of concern to the entire international community, especially ITU;

c) that telecommunication systems are fundamental for rebuilding and rehabilitation and for enhancing the social and economic development of nations, particularly those that have suffered the effects of war;

d) that, under present circumstances, Iraq will be unable to rebuild or develop its telecommunication systems to an acceptable level without help from the international community, provided bilaterally or through international organizations;

e) that similar resolutions have been adopted in relation to countries experiencing similar circumstances to those which Iraq is experiencing,

having regard to

the difficulties that were faced in the implementation of Resolution 51 (Doha, 2006),

noting

a) that Iraq has not received appropriate assistance from ITU;

b) the efforts which have been and are being deployed by the Secretary-General and the Director of the Telecommunication Development Bureau to provide assistance to other countries that have recently emerged from the conditions of war they endured,

resolves

1 that special measures need to be taken, within the framework and available budgetary resources of the ITU Telecommunication Development Sector, to provide the appropriate assistance to Iraq;

2 to support Iraq in rebuilding and overhauling its telecommunication infrastructure, establishing institutions, establishing tariffs, developing human resources and setting up training operations outside Iraqi territory if necessary, and to provide other forms of assistance, including technical assistance,

calls upon Member States

to offer all possible assistance in this area, within the framework of the special measures provided by ITU for this purpose,

instructs the Director of the Telecommunication Development Bureau

1 to continue taking immediate measures to assist Iraq to the extent possible within available resources;

2 to take all possible measures to mobilize additional resources to this aim;

3 to submit an annual report to the ITU Council on the progress achieved in implementing this resolution and the mechanisms employed to tackle difficulties as they arise,

requests the Secretary-General

to bring to the attention of the Plenipotentiary Conference (Guadalajara, 2010) the need to allocate a specific budget for Iraq as from the beginning of 2011.

RESOLUTION 52 (Rev. Dubai, 2014)

Strengthening the executing agency role of the ITU Telecommunication Development Sector

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 135 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in the development of telecommunications/information and communication technologies (ICTs), in providing technical assistance and advice to developing countries and in implementing relevant national, regional and interregional projects;

b) Resolution 157 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on strengthening of the project execution function in ITU;

c) Resolution 13 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on resource mobilization and partnerships for accelerating telecommunication/ICT development;

d) Resolution 52 (Rev. Hyderabad, 2010) of WTDC,

considering

a) that, in accordance with No. 118 of the ITU Constitution, one of the functions of the ITU Telecommunication Development Sector (ITU-D) is to discharge, within its specific sphere of competence, 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 development by offering, organizing and coordinating technical cooperation and assistance activities;

b) Resolution 17 (Rev. Dubai, 2014) of this conference, on implementation of regionally approved initiatives at the national, regional, interregional and global levels;

c) that Resolution 140 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in implementing the outcomes of the World Summit on the Information society (WSIS), recognized the key role that ITU can play in executing many of the projects pursuant to the WSIS outcomes;

d) that, through programmes, projects and initiatives of the Telecommunication Development Bureau (BDT) and the regional offices, and some other efforts, including partnerships, there is significant local expertise that has developed over time;

e) that partnerships between the public and private sectors are recognized as an efficient way of implementing sustainable ITU projects,

recognizing

a) that the final outputs of the WSIS process have an impact on the definition of the future activities of ITU in general and ITU-D in particular;

b) that ITU-D undertakes a significant number of projects and activities each year, corresponding to its goals and objectives, including in relation to the various ITU-D programmes, projects and regional initiatives,

noting

a) that BDT has taken several steps to strengthen its project execution role by developing necessary tools and methodologies, including guidelines and templates for project management;

b) that both large-scale and small-scale activities should contribute to the goals and objectives of ITU-D and the broader strategic plan for the Union;

c) that BDT continues to build effective partnerships around specific projects and long-term activities, particularly in relation to the initiatives adopted by the six regions;

d) that, to the greatest extent possible, it is important to develop and maintain the professional project-implementation potential of BDT staff at ITU headquarters and in the regional offices,

taking into account

a) the continued implementation of results-based budgeting (RBB) and results-based management (RBM) in ITU, the main purpose of which is to ensure that activities within this framework are adequately resourced in order to achieve planned results;

b) that the main pillars of RBB and RBM are the process of planning, programming, budgeting, monitoring and evaluation; delegation of authority and accountability; and staff performance and contract management;

c) the potential for improved sharing of information, experiences and lessons learned which would assist in reducing fragmentation and duplication among the wide range of projects undertaken by BDT,

resolves to instruct the Director of the Telecommunication Development Bureau

on the basis of experience acquired in implementing Resolution 52 (Rev. Hyderabad, 2010), the contents of Resolutions 135 and 157 (Rev. Guadalajara, 2010) and other relevant resolutions:

1 to recognize the various benefits of involving locally available expertise, in the region and the country, as the case may be, in executing ITU projects in their region or country, and to stress the involvement of this expertise in the relevant ITU-D projects;

2 to encourage use of the ITU project toolbox for implementing projects and the regional initiatives in the capacity of executing agency;

3 to ensure, as specified in Resolution 157 (Rev. Guadalajara, 2010), that, as far as possible, support costs and expenses borne by ITU-D in respect of project implementation under United Nations Development Programme (UNDP) arrangements or other agreed financing arrangements are recovered;

4 to continue to conclude partnerships with Member States, Sector Members, financial institutions and international and regional organizations in order to finance activities pertaining to implementation of this resolution;

5 to encourage collaboration and information sharing among ITU headquarters, regional offices and area offices, in order to optimize resources and efforts in implementing ITU-D projects;

6 to consider enhancing the projects portfolio on the ITU website, as far as practicable within existing resources, along with project activities and outcomes, where appropriate, in order to learn from past experiences.

NOTE – When implementing this resolution, the updating of relevant resolutions by the next Plenipotentiary Conference (Busan, 2014) may be taken into consideration.

RESOLUTION 53 (Rev. Dubai, 2014)

Strategic and financial framework for the elaboration and implementation of the Dubai Action Plan

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that, in accordance with No. 118 of the ITU Constitution and No. 209 of the ITU Convention, the duties of world telecommunication development conferences (WTDC) shall include: i) establishing work programmes and guidelines for defining telecommunication development questions and priorities, and ii) providing direction and guidance for the work programme of the ITU Telecommunication Development Sector (ITU-D);

b) that Resolution 71 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference contains the strategic plan for ITU-D for the period 2012-2015 and defines the strategic goal and objectives of ITU-D for that period;

c) that Resolution 72 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference determined that there should be a linkage between strategic, financial and operational planning in ITU;

d) that Decision 5 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, in defining the income and expenditure of the Union for the period 2012-2015 and in recognizing the current financial constraints of the Union, has identified in its Annex 2 several measures for reducing expenditure to be taken into account by all three Sectors of the Union,

considering further

a) that, pursuant to Resolution 31 (Rev. Dubai, 2014) of this conference, the identification, analysis and elaboration of regional initiatives and projects at the regional preparatory meetings provides a key input to this conference;

b) that Resolution 1358 of the ITU Council, adopted at its 2013 session, established the Council Working Group for the elaboration of the draft strategic plan and draft financial plan of the Union for 2016-2019 (CWG-SPFP), which was to provide the Telecommunication Development Advisory Group and this conference with the principles, glossary of terms, structure and guidelines for the elaboration of the strategic plan for ITU-D, on the basis of a clear linkage of strategic and operational planning with financial planning and budgeting,

taking into account

a) that Resolution 1359 adopted by the Council at its 2013 session approved the biennial budget of ITU for the period 2014-2015 with a view to achieving financial stability, securing unfunded long-term liabilities, preserving a positive net asset value and avoiding withdrawals from the Reserve Account;

b) the continued implementation of results-based budgeting (RBB) in ITU, the main feature of which is the identification of costs, objectives, expected results, performance indicators and priorities presented within the framework of well-defined outputs (defined as Sector or intersectoral products or services provided by ITU),

taking into account further

a) that the Dubai Action Plan strategic framework is based on:

– Resolutions 71 (Rev. Guadalajara, 2010) and 72 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference;

– the strategic objectives of ITU-D for the period 2016-2019, elaborated by this conference;

– the aim of fulfilling the mandates of ITU-D, in accordance with the Constitution, avoiding duplication of efforts with the other Sectors and implementing the strategic goals set forth in the strategic plans of the Union for 2012-2015 and 2016-2019;

b) that the Dubai Action Plan financial framework is based on:

– Decision 5 (Rev. Guadalajara, 2010), particularly the measures to reduce expenditure identified in Annex 2 thereto;

– the approved biennial budget of the Union for the period 2014-2015 and the forecast of revenues and expenses for the period 2016-2017;

– the aim of achieving long-term financial stability, preserving the net asset value and avoiding withdrawals from the Reserve Account;

c) that the Dubai Action Plan defines programmes, objectives, regional initiatives and expected results that correlate to the principles, terminology and structure of the draft strategic plan for ITU-D for 2016-2019 elaborated by this conference;

d) that the Dubai Action Plan is elaborated in conformity with results-based management/budgeting (RBM/RBB) methodologies, with a view to ensuring that high-priority activities are adequately resourced in order to achieve the planned results,

recognizing

a) the overall review process of the outcomes of the World Summit on the Information Society (WSIS) to take place in 2014/2015;

b) that Resolution 30 (Rev. Dubai, 2014) of this conference has defined ITU-D's role in implementing the WSIS outcomes;

c) that Resolution 140 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference resolved that ITU-D shall assign high priority to the implementation of WSIS Action Line C2, on building information and communication infrastructure;

d) that Resolution 1332 adopted by the Council at its 2011 session instructed the Director of the Telecommunication Development Bureau to take into account ITU's tasks as lead facilitator of WSIS Action Lines C2, C5 and C6 and as co-facilitator of WSIS Action Lines C1, C3, C4, C7, C8, C9, C11 in the preparations for this conference,

resolves to instruct the Director of the Telecommunication Development Bureau

in the implementation of the Dubai Action Plan:

1 to provide the ITU regional and area offices with the assistance necessary for the full implementation of the regional initiatives approved by this conference in Resolution 17 (Rev. Dubai, 2014);

2 to integrate the mandates handed down to ITU-D by the Plenipotentiary Conference and the Council on the implementation of WSIS action lines, taking into account the national development goals established by Member States;

3 to formulate and structure the activities and programmes of the Dubai Action Plan in a manner that facilitates their evaluation, given the critical need to ensure that such activities are assessed on an ongoing basis;

4 to take into account the human and financial resource constraints identified in the biennial budget for 2014-2015 and expected to continue for the next financial planning cycle (2016-2019);

5 to identify and implement multistakeholder partnership arrangements with, *inter alia*, international financial institutions, regional development banks, regional commissions of the Department of Economic and Social Affairs (UNDESA) and other agencies and departments of the United Nations, with international development agencies, regional telecommunication organizations and the private sector, in order to optimize the use of resources and avoid duplication of effort;

6 to continue efforts to identify additional sources of revenue and funding, in order to ensure that the programmes and activities of ITU-D can be fully implemented;

7 to report on the results of implementation of this resolution to the next WTDC.

RESOLUTION 54 (Rev. Dubai, 2014)

Information and communication technology applications

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 54 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC);

b) Resolution 65 (Rev. Hyderabad, 2010) of WTDC;

c) Resolution 74 (Rev. Hyderabad, 2010) of WTDC;

d) Action Line C7 of the Tunis Agenda for the Information Society, covering the following ICT applications:

- e-government
- e-business
- e-learning
- e-health
- e-employment
- e-environment
- e-agriculture
- e-science,

considering

a) the lessons learned from the implementation of Action Line C7 of the Tunis Agenda;

b) that the goal of using and disseminating information and communication technology (ICT) is to bring benefits in all aspects of our daily life, and that ICTs are enormously important in facilitating citizens' access to these applications;

c) that the sharing of infrastructure, when employed to support these applications, will lead to considerable savings in the cost of provision;

d) that the dissemination of these applications must give due regard to local needs in terms of language, culture and sustainable development;

e) that one of the principal advantages of satellite is access to remote, local communities without increased connection costs due to distance or to the geographical features of the areas in which the societies are located;

f) that the security and privacy of these applications require the building of confidence in the use of ICT for this purpose;

g) that as ICT is being continuously integrated into all sectors of society, the applications referred to in Action Line C7 of the World Summit on the Information Society (WSIS) are triggering profound changes in social productivity and hastening a major leap forward in industrial productivity, thus creating a good opportunity for developing countries to raise their level of industrial development and improve social and economic growth;

h) that sharing of experiences and best practices among ITU members will help to facilitate deployment of these applications,

noting

a) that digital literacy is a requirement for closing the digital divide;

b) that developing countries benefit from integrating ICTs into educational systems, by providing a more effective education experience and ensuring that all students obtain the skills necessary to succeed in a knowledge-based economy and society;

c) that the benefits extend beyond the students:

– to their families, who may benefit from access to ICTs;

– to the local community, by leveraging schools transformed into the digital literacy training centres for all citizens; and

– to the broader community, by significantly increasing broadband and ICT penetration;

d) that such a transformation will improve education, assist in connecting all citizens globally, and facilitate the effective use of national resources for the future of children and society;

e) that countries and communities have limited education budgets which have to be apportioned among many different needs, and so studies on the relative benefits of ICTs in educational systems will help countries and communities make informed decisions,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to continue to conduct detailed studies on ICT applications, focusing on the eight areas referred to in Action Line C7 of the WSIS Geneva Action Plan, and ICT applications for industry, as well as studies on the requirements for sustainable management and investment in telecommunications that enable access to these applications and services, relying upon the expertise acquired in the implementation of that action line, and taking into consideration the means available for implementation (whether wireline, wireless, terrestrial, satellite, fixed, mobile, narrowband or broadband);

2 to facilitate discussion and exchange of best practices regarding the challenges and benefits of implementing projects or activities relating to e-applications referred to in WSIS Action Line C7 through strategic partnerships;

3 to take into consideration the importance of the security and confidentiality of the ICT applications highlighted in WSIS Action Line C7 and of protection of privacy, in order to facilitate discussions regarding guidelines, tools, strategies and mechanisms; improve collaboration between government authorities; implement user-friendly government services, potentially including integration and personalization of services; improve the quality of e-government services; and increase awareness of such services;

4 to promote the sharing of Member States' strategies, best practices and technological platforms, increased technical support and training for these various WSIS Action Line C7 applications, and the sharing of guidelines and best practices for these applications with the developing countries, *inter alia* through a regional and/or global collaborative network based on the creation and/or strengthening of ICT applications referred to in WSIS Action Line C7;

5 to work with respective sectors and other partners related to their ICT applications referred to in WSIS Action Line C7, with emphasis on services for remote and rural areas of developing countries, using all available means as indicated in *resolves* 1;

6 to continue to promote the development of telecommunication standards for e-health network solutions and interconnection with medical devices in the developing-country environment of, in conjunction with the ITU Radiocommunication Sector and the ITU Telecommunication Standardization Sector in particular;

7 to continue to make these applications a major strand for the activities of the relevant BDT programme, focusing on its key role for the implementation of study Questions related to ICT applications for the previous and forthcoming study periods;

8 to circulate the outputs of these activities on applications to all Member States on a regular basis;

9 to continue to inform forthcoming WTDCs of the lessons learned and of any amendments the Director may propose with a view to updating this resolution;

10 to ensure that the necessary resources within the budgetary limits are allocated to the above actions,

invites

international financial institutions, donor agencies and private-sector entities to assist and to develop different business models in developing ICT applications referred to in WSIS Action Line C7, including public-private partnership projects and programmes in developing countries,

invites Member States and Sector Members

1 to incorporate, in their e-government strategies and programmes, actions to encourage the use of ICTs to improve collaboration between government authorities, actions to encourage the implementation of user-friendly services, potentially including integration and personalization of services to improve the quality of e-government services, and actions to increase awareness of such services;

2 to provide the Telecommunication Development Bureau with details of work relating to monitoring and evaluation of the status, usage, quality and impact of e-government;

3 to participate actively in regional and global collaborative forums dealing with experiences and best practices in the implementation of e-government strategies and programmes,

encourages Member States and Sector Members

1 to participate in the study of the role of ICTs in educational systems, by contributing their own experiences regarding the implementation of ICTs for achieving universal education worldwide;

2 to support the collection and analysis of data and statistics on e-applications services, such as ICT applications in industry, e-government and e-health and ICT in education, that will contribute to public policy design and implementation as well as enabling cross-country comparisons.

RESOLUTION 55 (Rev. Dubai, 2014)

Mainstreaming a gender perspective[1] for an inclusive and egalitarian information society

The World Telecommunication Development Conference (Dubai, 2014),

noting

a) Resolution 7 (Valetta, 1998) of the World Telecommunication Development Conference (WTDC), on gender issues, transmitted to the Plenipotentiary Conference (Minneapolis, 1998);

b) Resolution 70 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on gender mainstreaming in ITU and promotion of gender equality and the empowerment of women through telecommunications/information and communication technologies (ICTs), which resolves to continue the work being done at ITU, and particularly in BDT, to promote gender equality in telecommunications/ICTs by recommending measures at the international, regional and national levels on policies and programmes that improve socio-economic conditions for women, particularly in developing countries;

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[1] "Gender perspective": Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of design, implementation, monitoring and evaluation so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality. (Source: Report of the United Nations Inter-Agency Committee on Women and Gender Equality, third session, New York, 25-27 February 1998).

c) Resolution 55 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, on mainstreaming a gender perspective in ITU Telecommunication Standardization Sector (ITU-T) activities, which ensures gender mainstreaming in ITU-T activities,

noting further

a) United Nations General Assembly Resolution 64/289, on system-wide coherence, adopted on 2 July 2010, establishing the United Nations Entity for Gender Equality and the Empowerment of Women, which will be known as "UN Women", with the mandate to promote gender equality and the empowerment of women;

b) ECOSOC Resolution 2012/24, on mainstreaming a gender perspective into all policies and programmes in the United Nations system, which welcomed the development of the UN System-Wide Action Plan on Gender Equality and the Empowerment of Women (UNSWAP);

c) that the United Nations Chief Executives Board (CEB), in April 2013, advocated the "Action Plan to measure gender equality and the empowerment of women across the United Nations system", under which ITU will participate in the dissemination, coordination, communication and networking activities forming part of the strategy,

noting also

a) Millennium Development Goal 3 "Promote gender equality and empower women", which promotes a cross-cutting subject area that has implications for the other goals;

b) the outcomes of the World Summit on the Information Society (WSIS), namely the Geneva Declaration of Principles, the Geneva Plan of Action, the Tunis Commitment and Tunis Agenda for the Information Society;

c) Resolution 1187, adopted by the ITU Council at its 2001 session, on a gender perspective in ITU human resources management, policy and practice;

d) Resolution 1327, adopted by the Council at its 2011 session, on ITU's role in telecommunications/ICTs and the empowerment of women and girls;

e) Resolution 1356, adopted by the Council at its 2013 session, on the four-year rolling operational plan for ITU-D for 2014-2017;

f) the decision of the Council at its 2013 session to endorse the ITU Gender Equality and Mainstreaming Policy (GEM), with the aim of becoming a model organization for gender equality, and to leverage the power of telecommunications/ICTs to empower both women and men;

g) the establishment of a Task Force on Gender Issues by the Secretary-General, to prepare a Union-wide action plan to implement the policy,

recognizing

a) that telecommunications/ICTs can help to create a world in which societies are free of gender discrimination, women and men enjoy the same opportunities, and the economic and social potential of women and girls is guaranteed in order to improve their conditions as individuals;

b) that the effect of telecommunications/ICTs as a catalyst will serve the actions and objectives agreed at Rio+20 to ensure that the world takes a more sustainable path to development, incorporating the social, economic and environmental dimensions, favouring social inclusion, equality of women and men, and strengthening protection of the environment on which all forms of life depend,

considering

a) the progress made by the Telecommunication Development Bureau (BDT) in promoting the use of telecommunications/ICTs for the purpose of economic and social empowerment of women and girls;

b) that the Broadband Commission for Digital Development has set a new gender target of getting more women connected to ICTs as a "critical" objective of the post-2015 development agenda;

c) the contributions made by the Task Force on Gender Issues, proposing ways of ensuring that gender mainstreaming and the empowerment of women is underscored in policies and programmes and fully integrated in ITU's work and strategic plan,

resolves

1 that BDT should maintain close links and collaborate, as appropriate, with the Task Force on Gender Issues set up by the Secretary-General, and the Working Group on Broadband and Gender of the Broadband Commission for Digital Development, reciprocally supporting gender mainstreaming in the Union's activities, and that these groups should join forces to eliminate inequalities in access to and use of telecommunications/ICTs, in the interests of building a non-discriminatory and egalitarian information society;

2 that BDT should collaborate with the Working Group on Broadband and Gender of the Broadband Commission for Digital Development, with a view to promoting synergies for establishing the new goal of "gender equality in broadband access by the year 2020";

3 that BDT should continue to work to promote gender equality in the field of telecommunications/ICTs, recommending action on policies and programmes at the international, regional and national level in order to improve the socio-economic condition of women, with greater emphasis on developing countries;

4 that inclusion of the gender perspective should be ensured in the implementation of all relevant outcomes of this conference;

5 that high priority be accorded to the incorporation of gender policies in the management, staffing and operation of ITU-D;

6 that BDT should contribute to the professional employment of women in decision-making posts, encouraging women's leadership in the sphere of telecommunications/ICTs, collaborating to promote a plural, inclusive and integrating information society;

7 to invite the Telecommunication Development (TDAG), Radiocommunication (RAG) and Telecommunication Standardization (TSAG) advisory groups to assist in the identification of subjects and mechanisms to foster the mainstreaming of a gender perspective, as well as matters of mutual interest in that regard;

8 to ensure that the ITU regional offices are informed on progress and results achieved and participate in implementing this resolution,

further resolves

to endorse the following measures:

1 design, implement and support projects and programmes in developing countries and countries with economies in transition that are either specifically targeted to women and girls or gender sensitive, at the international, regional and national levels;

2 support the collection and analysis of sex-disaggregated data and the development of gender-sensitive indicators that will enable cross-country comparisons and reveal trends in the sector;

3 evaluate relevant projects and programmes to assess gender implications, in connection with Resolution 17 (Rev. Dubai, 2014) of this conference;

4 provide gender mainstreaming training and/or capacity building to BDT staff responsible for the design and implementation of development projects and programmes and work with them to develop gender-sensitive projects as appropriate;

5 incorporate a gender perspective into study group Questions, as appropriate;

6 mobilize resources for gender-sensitive projects and projects specifically targeted to promoting policies for women and girls as creators of the potential offered by telecommunications/ICTs and as consumers;

7 develop partnerships with other United Nations agencies to promote the use of telecommunications/ICTs in projects aimed at women and girls, with the aim of encouraging women and girls to connect to the Internet, increasing training for women and monitoring the telecommunication/ICT gender gap,

instructs the Director of the Telecommunication Development Bureau

1 to report to TDAG and the Council on the results and the progress made on the inclusion of a gender perspective in the work of ITU-D, and on the implementation of this resolution;

2 to continue the work of BDT in promoting the use of telecommunications/ICTs for the economic and social empowerment of women and girls,

invites the Director of the Telecommunication Development Bureau

to assist members:

1 to encourage the mainstreaming of a gender perspective through appropriate administrative mechanisms and processes within regulatory agencies and ministries and to promote inter-organizational cooperation on this issue within the telecommunication sector;

2 to provide concrete advice, in the form of guidelines for gender-sensitive project development and evaluation in the telecommunication sector;

3 to increase awareness of gender issues among members through the collection and dissemination of information related to gender issues and telecommunications/ICTs and through best practices on gender-sensitive programming;

4 to establish partnerships with Sector Members in order to develop and/or support specific telecommunications/ICT projects that target women and girls in developing countries and in countries with economies in transition;

5 to encourage Sector Members to promote gender equality in the telecommunication/ICT sector through financial commitments to specific projects involving women and girls;

6 to support active involvement of women experts in ITU-D study groups and other ITU-D activities,

invites the Plenipotentiary Conference

1 to build on and consolidate past accomplishments, by providing the necessary financial and human resources for the effective and sustained integration of a gender perspective in the development activities of ITU-D;

2 to instruct the Secretary-General to bring this resolution to the attention of the United Nations Secretary-General in an effort to promote increased coordination and cooperation for development policies, programmes and projects that link access to and use and appropriation of telecommunications/ICTs and broadband for women and girls;

3 to support the promotion of gender equality, empowerment and the social and economic development of women and girls.

RESOLUTION 57 (Rev. Hyderabad, 2010)

Assistance to Somalia

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 57 (Doha, 2006) of the World Telecommunication Development Conference (WTDC) and Resolutions 34 (Rev. Marrakesh, 2002) and 34 (Rev. Antalya, 2006) of the Plenipotentiary Conference,

recalling further

the purposes of the Union, as enshrined in Article 1 of the ITU Constitution,

recognizing

a) that the telecommunication infrastructure in the Somali Democratic Republic remains completely destroyed by civil conflict, with limited recovery, and that the Somali network requires rehabilitation and reconstruction;

b) that Somalia at present does not have an adequate national telecommunication infrastructure, access to international telecommunication networks or access to the Internet;

c) that a telecommunication system is an essential input for the reconstruction, rehabilitation and relief operations in the country after Somalia was hit by the tsunami;

d) that, under the present conditions and in the foreseeable future, Somalia will not be able to rebuild its telecommunication systems without assistance from the international community, provided bilaterally or through international organizations,

noting

that Somalia has not effectively benefited from the Union's assistance over a long period due to war in the country and the lack of a national government since 1991,

resolves

that special action be initiated by the Secretary-General and the Director of the Telecommunication Development Bureau, with specialized and increased assistance from the ITU Telecommunication Standardization Sector and the ITU Radiocommunication Sector, resulting in the launch of a special initiative with funds allocated, within available budgetary resources, aimed at providing assistance and support to Somalia in rebuilding and modernizing its telecommunication infrastructure and in training activities,

calls upon Member States

to offer all possible assistance and support to the Government of Somalia, either bilaterally or through the special action of the Union,

invites the Council

to allocate the necessary funds within available resources for the implementation of this resolution,

instructs the Director of the Telecommunication Development Bureau

1 to implement fully a programme of assistance for the least developed countries, of which reconstruction and rehabilitation of telecommunication/information and communication technology infrastructure is an integral part, and from which Somalia can receive focused assistance in various areas determined to be of high priority by the country;

2 to take immediate measures, to the extent possible within available resources, to assist in the period up to WTDC-14, focusing on staff training,

requests the Secretary-General

to coordinate the activities carried out by the three ITU Sectors in accordance with *resolves* above, to ensure that the Union's action in favour of Somalia is as effective as possible, and to report on the matter to the ITU Council.

RESOLUTION 58 (Rev. Dubai, 2014)

Telecommunication/information and communication technology accessibility for persons with disabilities, including persons with age-related disabilities

The World Telecommunication Development Conference (Dubai, 2014),

recognizing

a) Resolution 175 (Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunication/information and communication technology (ICT) accessibility for persons with disabilities, including age-related disabilities;

b) Resolution 70 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on telecommunication/ICT accessibility for persons with disabilities;

c) Article 12 of the International Telecommunication Regulations (ITR), adopted by the World Conference on International Telecommunications (Dubai, 2012) (WCIT), which states that Member States should promote access for persons with disabilities to international telecommunication services, taking into account the relevant ITU-T Recommendations;

d) the ITU Telecommunication Development Sector (ITU-D) digital inclusion programme, which promotes telecommunication/ICT accessibility and use for the economic and social development of persons with disabilities, and the progress and results of studies under ITU-D Question 20/1 on access to telecommunication services for persons with disabilities;

e) that the Telecommunication Development Bureau, in partnership with G3ict (Global Initiative for Inclusive Information Communication Technologies)[1], has elaborated an e-Accessibility toolkit for policy-makers, regulators and service providers, which is freely available and accessible online, in order to (i) facilitate development of best policies and strategies for implementation of the Convention on the Rights of Persons with Disabilities; (ii) provide a platform for sharing best practices on ICT disability issues; and (iii) set forth action steps for an effective policy framework;

f) the following actions in the ITU Telecommunication Standardization Sector (ITU-T):

i) studies under Question 4/2 on human factors-related issues for improvement of the quality of life through international telecommunications and Question 26/16 on accessibility to multimedia systems and services, including Recommendation ITU-T F.790 on telecommunication accessibility guidelines for older persons and persons with disabilities;

ii) publication by the Telecommunication Standardization Advisory Group of the guide for ITU study groups entitled "Considering end-user needs in developing Recommendations";

iii) creation of the Joint Coordination Activity on accessibility and human factors for the purposes of awareness-raising, advice, assistance, collaboration, coordination and networking;

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[1] An ITU-D Sector Member and flagship advocacy initiative of UN-GAID, the United Nations Global Alliance for ICT and Development, in collaboration with the secretariat of the Convention on the Rights of Persons with Disabilities.

iv) creation of the ITU-T Focus Group on Audiovisual Media Accessibility (FG-AVA), which is working on broadcasting and Internet television in order to include voice description for the visually impaired and captioning/subtitles for the deaf and hearing impaired, as well as accessible remote Internet participation;

g) the following actions in the ITU Radiocommunication Sector (ITU-R):

i) Recommendation ITU-R M.1076 entitled "Wireless communication systems for persons with impaired hearing";

ii) relevant parts of the ITU-R Handbook entitled "Digital terrestrial television broadcasting in the VHF/UHF bands", providing guidance on techniques to be used for delivering programmes for people with hearing difficulties;

iii) ongoing work in ITU-R to bridge the digital disability divide, including the work in ITU-R Study Group 6 on broadcasting and creation of the new Intersector Rapporteur Group on Audiovisual Media Accessibility (IRG-AVA) between ITU-R and ITU-T, as result of the work of ITU-T FG-AVA;

iv) the work in ITU-R Study Group 4 Working Parties 4A and 4B and Study Group 5 Working Party 5A with regard to improving access to digital hearing aids on a global basis;

h) the formation by the Internet Governance Forum of the Dynamic Coalition on Accessibility and Disability (DCAD), in which ITU-D participates, sponsored by the Director of the Telecommunication Standardization Bureau (TSB), and the partnership between ITU-T and DCAD for the purposes of maximizing the benefits of electronic communications and online information over the Internet for all sectors of the global community;

i) Resolution 57 (Rev. Dubai, 2012) of WTSA, on strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest;

j) Resolution GSC-14/27 (revised), on telecommunication/ICT accessibility for persons with disabilities, agreed upon at the 14th Global Standards Collaboration (GSC) meeting (Geneva, 2009; Halifax, 2011), which advocates greater collaboration between world, regional and national standardization bodies as a basis for establishing and/or strengthening activities and initiatives concerning the use of telecommunications/ICTs for persons with disabilities;

k) Resolution GSC-13/26 (revised), on user needs, considerations and involvement, agreed upon at the 13th Global Standards Collaboration meeting (Boston, 2008; Halifax, 2011);

l) publications and ongoing work of the Special Working Group on Accessibility (ISO/IEC JTC 1 SWG – Accessibility) of the Joint Technical Committee on Information Technology (JTC 1) of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), as well as the Mandate 376 project teams, in identifying user needs and in developing a comprehensive inventory of existing standards as part of the ongoing effort to identify areas where research or new standards work is needed;

m) the activities of the ITU-T study groups in charge of ICT accessibility: ITU-T Study Group 16 (Multimedia coding, systems and applications), which is the lead study group on telecommunication/ICT accessibility for persons with disabilities, and ITU-T Study Group 2 (Operational aspects of service provision and telecommunication management) for the part relating to human factors;

n) activities relating to the development of new standards (e.g. ISO TC 159, JTC 1 SC35, IEC TC100, ETSI TC HF and W3C WAI), and the implementation and maintenance of existing standards (e.g. ISO 9241-171);

o) the formation of G3ict, an ITU-D Sector Member and flagship partnership initiative of the United Nations Global Alliance for ICT and Development (UN-GAID);

p) the joint ITU and G3ict release of the Report "Making TV accessible", on the occasion of the International Day of Persons with Disabilities (3 December 2011), and the report on "Making mobile phones and services accessible to persons with disabilities";

q) various regional and national efforts to develop or revise guidelines and standards for telecommunication/ICT accessibility, compatibility and usability by persons with disabilities,

considering

a) that the World Health Organization estimates that over one billion of the world's inhabitants live with some form of disability, and that there are different types of disabilities (e.g. physical, motor, cognitive, neurological and sensorial disabilities), each requiring special considerations when designing ICT public policy;

b) that a role of the Convention on the Rights of Persons with Disabilities is to provide an opportunity to strengthen the policies related to the implementation of the Millennium Development Goals, thereby contributing to the realization of a "society for all" in the twenty-first century, also affirming that the World Programme of Action Concerning Disabled Persons[2] and the Standard Rules on the Equalization of Opportunities for Persons with Disabilities[3] improve policies related to the implementation of the Millennium Development Goals;

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[2] Resolution 37/351/Add.1 and Corr.1, Annex, Sect. VIII, Recommendation 1 (IV), recalled in Resolution 52/82 of the United Nations General Assembly on implementation of the World Programme of Action Concerning Disabled Persons: towards a society for all in the twenty-first century.

[3] Resolution 48/96, (Annex) approved by the United Nations General Assembly, on the Standard Rules on the Equalization of Opportunities for Persons with Disabilities.

c) that the United Nations Convention on the Rights of Persons with Disabilities, which came into force on 3 May 2008, requires States Parties to take appropriate measures:

1) ensure ICT and emergency service access to persons with disabilities on an equal basis (Article 9, § 1(*b*));

2) promote ICT access for persons with disabilities to new ICT services, including Internet (Article 9, § 2);

3) promote the design, production and distribution of accessible ICT at an early stage (Article 9, § 2(*h*));

4) ensure that persons with disabilities can exercise the right to freedom of expression and opinion (Article 21);

5) provide information in accessible formats and technologies appropriate to different kinds of disabilities in a timely manner and without additional cost (Article 21, § (*a*));

6) urge private entities that render services to the public to provide information and services in accessible and usable formats for persons with disabilities (Article 21, § (*c*));

7) encourage mass media (including information providers through Internet) to make their services accessible to persons with disabilities (Article 21, § (*d*));

d) that the United Nations Convention on the Rights of Persons with Disabilities further states that there is discrimination on the basis of disability if there is denial of reasonable accommodation, considering "reasonable accommodation" to mean necessary and appropriate modification or adjustments not imposing a disproportionate or undue burden, to ensure to persons with disabilities the enjoyment or exercise of all human rights and fundamental freedoms (i.e. freedom of speech, access to information) (Article 2);

e) that States Parties to the Convention on the Rights of Persons with Disabilities undertake to collect adequate information for formulating and implementing policies to give effect to the Convention, and that this information must be disaggregated, and should help identify and address barriers faced by persons with disabilities in exercising their rights (Article 31);

f) that maximizing access to ICT services, products, content and terminals for persons with disabilities will support autonomy of persons with disabilities, access to digital literacy, with particular educational focus on aspects that cannot be offered through everyday education, incorporation in worthy ICT employment and, more generally, access to all the benefits that lead to social inclusion, including healthcare;

g) that United Nations General Assembly (UNGA) Resolution 61/106 adopting the Convention on the Rights of Persons with Disabilities requests the Secretary-General (in § 5) "… to implement progressively standards and guidelines for the accessibility of facilities and services of the United Nations system, taking into account relevant provisions of the Convention, in particular when undertaking renovations";

h) that persons with disabilities, both acting as individuals and through relevant organizations, should be involved in and participate in the process of elaborating legal/regulatory provisions, public policy and standards, pursuant to the rationale of "Nothing about us without us";

i) that Article 14 of UNGA Resolution 65/186 and the High-Level Meeting of the General Assembly on Disability and Development (HLMDD) sent a message concerning the important role telecommunications and ICTs can play to enable a post-2015 disability-inclusive development framework, and HLMDD proposes to work together within the framework of the UN system towards the achievement of the United Nations common goal: "Inclusive development and a society in which persons with disabilities are both agents and beneficiaries";

j) that UNGA Resolution 66/288 endorses the outcome document of the United Nations Conference on Sustainable Development (Rio+20), entitled "The future we want", which states as follows: "... 9. We reaffirm the importance of the Universal Declaration of Human Rights, as well as other international instruments relating to human rights and international law. We emphasize the responsibilities of all States, in conformity with the Charter, to respect, protect and promote human rights and fundamental freedoms for all, without distinction of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, disability age or other status",

recalling

a) that the World Summit on the Information Society acknowledged that special attention should be given to the needs of older persons and persons with disabilities: (i) when elaborating national cyberstrategies, including educational, administrative and legislative measures; (ii) for using ICT in education and human resources development; (iii) in order that equipment and services offer easy and affordable access, under the principles of universal design and assistive technology; (iv) to promote telework and to increase employment opportunities for persons with disabilities; (v) for creation of content that is pertinent to persons with disabilities; and (vii) to create the required abilities for the use of ICT by persons with disabilities[4];

b) the Cairo Declaration (November, 2007) and the Lusaka Declaration (July, 2008) on supporting access to ICT services for persons with disabilities, as well as the Phuket Declaration on tsunami preparedness for persons with disabilities (March, 2007) and the Hyderabad Declaration of the Internet Governance Forum on accessibility for persons with disabilities (December 2008),

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[4] Geneva Declaration of Principles, §§ 13 and 30; Geneva Plan of Action, §§ 9 e) and f), 19 and 23; Tunis Commitment, §§ 18 and 20; Tunis Agenda for the Information Society, § 90 c) and e).

taking into account

a) the principles that should govern ICT services, equipment and software in order to be accessible, namely: universal design, equal access, functional equivalence, affordability and accessibility, which means designing ICTs with parameters and capabilities adapted to the needs, preferences and special abilities of each user;

b) that telecommunication/ICT accessibility for persons with disabilities should be achieved through the formulation of policy options and cooperation between governments, specialized bodies, the private sector, non-governmental organizations and civil society;

c) that mainstreaming disability, accessibility and inclusive planning in the strategic framework for reinforcing the disability perspective in the global development agenda[5] highlights the importance of coordination and exchange of information by and between United Nations bodies concerned;

d) the prevailing difference in ICT accessibility for persons with disabilities in the regions, in countries, and within each country, emphasizing that 80 per cent of persons with disabilities live in developing countries, according to the United Nations Development Programme (UNDP);

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[5] Report 66/128, on strengthening efforts to ensure that persons with disabilities are included in and have access to all aspects of development, in accordance with UNGA Resolution 65/186.

e) that women and girls with disabilities suffer multiple disadvantages, being excluded on account of their gender and their disability,

resolves to invite Member States

1 to ratify the Convention on the Rights of Persons with Disabilities, and to take the relevant measures to ensure that ICT services, equipment and software contribute to the development of telecommunication/ICT accessibility and are effectively accessible to persons with disabilities, with the aim of promoting the inclusion of all members of society, in favour of those who are at risk of marginalization and socially vulnerable;

2 to develop national legal frameworks, including laws, regulations, policies, guidelines or other national and local mechanisms for telecommunication/ICT accessibility for persons with disabilities in accordance with the principles of equal access, functional equivalence, affordability and universal design, taking full advantage of available tools, guidelines and standards;

3 to continue strengthening the collection and analysis of disaggregated data and statistics on disability related to telecommunication/ICT accessibility for persons with disabilities, with the aim of creating e-accessibility statistics and similarly relevant indicators that will contribute to the public policy design, planning and implementation process;

4 to consider introducing telecommunication/ICT relay services[6] for persons with disabilities, to encourage the development of applications for telecommunication terminals and products to increase the accessibility and usability of telecommunications/ICTs for persons with visual, auditory, verbal and other physical and cognitive disabilities, such as telecommunication/relay services for any combinations of hearing, visual, verbal and motor disabilities, accessible websites, public phones with accessibility features (e.g. volume control, information in Braille), public schools, institutions and community centres with a range of accessible equipment including screen readers, Braille printers, hearing aids, among others, and to facilitate access to digital TV content, etc., in order to guarantee the rights of persons with disabilities to information and knowledge;

5 to encourage and enable active participation by persons with disabilities, both as individuals and as organizations, in the policy-making process for ICTs and related areas where ICTs have an impact, by ensuring that the consultation process, meetings and/or surveys are accessible to participation by persons with disabilities;

6 to promote and undertake research and development of ICT-accessible equipment, services and software, with emphasis on free and open-source software and affordable equipment and services;

7 to envisage establishing a programme that considers ICT-accessibility priorities, to be periodically reviewed in order to ensure its relevance to the specific local conditions of a country/region, with a view to progressive implementation;

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[6] Telecommunication relay services enable users of different modes of communication (e.g. text, sign, speech) to interact by providing convergence between the modes of communication, usually through human operators.

8 to mainstream telecommunication/ICT accessibility for persons with disabilities, which involves taking into consideration accessibility principles in a cross-cutting manner;

9 to consider exemption from taxes and customs duties on ICT devices and assistive equipment for persons with disabilities, in accordance with the national regulations on this matter;

10 to establish ongoing and permanent collaboration between developed and developing countries in order to exchange information, technology and best practices related to telecommunication/ICT accessibility for persons with disabilities, including persons with age-related disabilities;

11 to participate actively in accessibility-related studies in ITU-D, ITU-T and ITU-R, and to encourage and promote self-representation by persons with disabilities in the development and standardization process, so as to ensure that their experiences, views and opinions are taken into account in all the work of the study groups;

12 to promote the development of learning opportunities in order to train persons with disabilities to use ICTs for their social and economic development, including through train-the-trainer courses and distance learning,

invites Sector Members

1 to adopt a self-regulation approach for rendering accessibility-related ICT equipment, software and services accessible for persons with disabilities, it being expressly understood that self-regulation does not override legal and regulatory provisions;

2 to adopt a universal design principle from an early stage when designing, producing and creating ICT equipment, services and software, so as to avoid costly retrofitting measures;

3 to promote, if applicable, research and development on ICT-accessible equipment, services and software, having due regard to affordability for persons with disabilities, including persons with age-related disabilities;

4 to take due account of the situations and needs of persons with disabilities, encouraging their active participation so as to receive first-hand information on their requirements for telecommunication/ICT accessibility;

5 to collaborate with Member States in order to make telecommunication/ICT accessibility a reality for persons with disabilities, including persons with age-related disabilities,

instructs the Director of the Telecommunication Development Bureau

1 to ensure that each ITU-D programme, project or activity takes into account telecommunication/ICT accessibility issues and is adapted to the situations and/or needs of all persons with disabilities, including persons with age-related disabilities;

2 to develop and/or update tools and guidelines for use/reference by Member States in mainstreaming telecommunication/ICT accessibility issues in their national/regional policies and regulations, and provide the necessary capacity building;

3 to identify and document examples of best practice for accessibility in the field of telecommunications/ICT for dissemination, publication and sharing of experiences and information among ITU Member States and Sector Members;

4 to consider holding seminars, symposia or forums for policy-makers, telecommunication regulators and Sector Members at which telecommunication/ICT accessibility policies are presented and discussed, and also to promote the elaboration of books, reports or literature that address telecommunication/ICT accessibility for persons with disabilities, including persons with age-related disabilities;

5 to collaborate with the Radiocommunication Bureau and the Telecommunication Standardization Bureau on accessibility-related activities, particularly in creating awareness and mainstreaming telecommunication/ICT accessibility policies, as well as creating programmes that enable countries to introduce services which allow persons with disabilities, including persons with age-related disabilities; to utilize ICT services effectively, reporting the findings to the Council, as appropriate, in both cases;

6 to collaborate and cooperate with relevant United Nations entities and disability organizations in all regions in order to generate awareness of the need for the design and implementation of policies or self-regulatory approaches that will make ICTs accessible for persons with disabilities, including persons with age-related disabilities;

7 to ensure that the needs of the communities of persons with disabilities are taken into account in the provision of telecommunication/ICT accessibility equipment, services and software;

8 to consider the development of an internship programme for persons with disabilities who have expertise in the field of telecommunication/ICTs, so as to build capacity among persons with disabilities in the public policy-making process;

9 to designate a focal point for telecommunication/ICT accessibility for persons with disabilities, including persons with age-related disabilities, and to strengthen the Digital Inclusion programme,

further instructs the Director of the Telecommunication Development Bureau

1 to review, in consultation with the Secretary-General, the accessibility of ITU services and facilities, including meetings and events, to consider taking actions, where appropriate, pursuant to United Nations General Assembly Resolution 61/106, and to inform Member States and Sector Members about the implementation of such actions, as appropriate;

2 to contribute, within the scope of BDT, to uniting efforts for the implementation of the provisions of Resolution 70 (Rev. Dubai, 2012) and Resolution 175 (Guadalajara, 2010);

3 to provide advice to, evaluate and supervise initiatives, projects and programmes, so as to determine their impact in terms of telecommunication/ICT accessibility for persons with disabilities, under Resolution 17 (Rev. Dubai, 2014) of this conference on regional initiatives, where appropriate;

4 to identify, within the study groups, taking into account the financial implications, new accessible software, services and solutions to enable all persons with disabilities, including persons with age-related disabilities, to effectively use telecommunication/ICT services, on the basis of contributions from the Member States and Sector Members, as well as the ITU-T and ITU-R study groups, as appropriate,

invites the Plenipotentiary Conference

1 to build on and consolidate past accomplishments, by providing the necessary financial and human resources for the effective and sustained integration of telecommunication/ICT accessibility for persons with disabilities in the development activities of ITU;

2 to instruct the Secretary-General to bring this resolution to the attention of the Secretary-General of the United Nations in an effort to promote increased coordination and cooperation for development policies, programmes and projects for achieving ICT accessibility for persons with disabilities, in line with the principles of equitable access, functional equivalence, affordability and universal design, and fully harnessing the available tools, guidelines and standards, to eliminate obstacles and discrimination.

RESOLUTION 59 (Rev. Dubai, 2014)

Strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 123 (Rev. Guadalajara 2010) of the Plenipotentiary Conference, on bridging the standardization gap between the developing[1] and developed countries;

b) Resolution 5 (Rev. Dubai, 2014) of this conference, on enhanced participation by developing countries in the work of ITU;

c) Resolution ITU-R 6 (Rev. Geneva, 2007) of the Radiocommunication Assembly, on cooperation with the ITU Telecommunication Standardization Sector (ITU-T) and the ITU Telecommunication Development Sector (ITU-D);

d) Resolutions 17, 26, 44 and 45 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on mutual cooperation and integration of activities between ITU-T and ITU-D;

e) Resolution 57 (Rev. Dubai, 2012) of WTSA, on strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest,

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

considering

a) that a basic principle for cooperation and collaboration among the three ITU Sectors is the need for avoiding duplication of activities of the Sectors, and ensuring that the work is undertaken efficiently and effectively;

b) that the mechanism for cooperation at secretariat level among the three Sectors and the General Secretariat of the Union was established to ensure close cooperation between the secretariats and with the secretariats of external entities and organizations that deal with key priority issues, such as emergency telecommunications and climate change;

c) that consultations have begun between representatives of the three advisory groups to discuss ways and means of enhancing cooperation among the advisory groups;

d) that interaction and coordination in the joint holding of seminars, workshops, forums, symposia and so forth have yielded positive results in terms of financial and human resource savings,

taking into account

a) the expanding sphere of joint studies between the three Sectors and the need for coordination and cooperation among them in this regard;

b) the growing number of issues of mutual interest and concern to the three Sectors including, but not limited to: electromagnetic compatibility, international mobile telecommunications, middleware, audiovisual broadcasting, access to telecommunications/information and communication technologies (ICTs) for persons with disabilities, emergency telecommunications including preparedness, ICT and climate change, cybersecurity, compliance of systems with the Recommendations emanating from the ITU Radiocommunication Sector (ITU-R) and ITU-T study groups and their joint activities, etc.;

c) the need to avoid duplication and overlapping of work among the Sectors and to support efficient and effective integration among them;

d) the ongoing consultation among representatives of the three advisory groups in the discussion of modalities for enhancing cooperation among them,

resolves

1 to invite the Telecommunication Development Advisory Group (TDAG), in collaboration with the Radiocommunication Advisory Group and the Telecommunication Standardization Advisory Group, to assist in identifying subjects common to the three Sectors, or, bilaterally, subjects common to ITU-D and either ITU-R or ITU-T, and in identifying the necessary mechanisms to strengthen cooperation and joint activity among the three Sectors or with each Sector, on issues of joint interest, paying particular attention to the interests of the developing countries, including through the establishment of the inter-sectoral coordination team on issues of mutual interest;

2 to invite the Director of the Telecommunication Development Bureau (BDT), in collaboration with the Secretary-General, the Director of the Telecommunication Standardization Bureau and the Director of the Radiocommunication Bureau, to continue to create cooperation mechanisms at secretariat level on matters of mutual interest to the three Sectors, and also to invite the Director of BDT to create a mechanism for bilateral cooperation with ITU-R and ITU-T, as required;

3 to request the Secretary-General to report annually to the ITU Council on the implementation of this resolution, in particular the joint operational activities undertaken by the three Bureaux, including funding arrangements, including voluntary contributions if any;

4 to invite the ITU-D study groups to continue to develop mechanisms for cooperation with the study groups of the other two Sectors, in order to avoid duplication of study activity and to benefit from the results of the work of the study groups of the two Sectors;

5 to invite the Director of BDT to inform TDAG annually on the implementation of this resolution.

RESOLUTION 60 (Hyderabad, 2010)

Assistance to countries in special situations: Haiti

The World Telecommunication Development Conference (Hyderabad, 2010),

recalling

Resolution 34 (Rev. Antalya, 2006) of the Plenipotentiary Conference,

further recalling

the purposes of the Union, as enshrined in Article 1 of the ITU Constitution,

recognizing

a) that the telecommunication infrastructure in the Republic of Haiti has been significantly affected by the earthquake that struck the country on 12 January 2010;

b) that Haiti at present does not have a sufficient national information and communication infrastructure with adequate international and Internet access;

c) that an adequate telecommunication system is an essential tool in the process of rebuilding the country;

d) that, under the present conditions and in the foreseeable future, Haiti will require the support of the international community in order to build a national information infrastructure that is compatible with its socio-economic development objectives,

noting

a) that Haiti received emergency telecommunication assistance from ITU immediately following the earthquake;

b) the efforts deployed by the ITU Secretary-General and the Director of the Telecommunication Development Bureau (BDT) to assist other countries following armed conflicts or natural disasters,

resolves

that the special action initiated by the Secretary-General and the Director of BDT, with specialized assistance from the ITU Radiocommunication Sector and the ITU Telecommunication Standardization Sector, should be continued in order to provide assistance and support to Haiti in rebuilding its telecommunication/information and communication technology (ICT) infrastructure, establishing appropriate institutions, human capacity building, developing telecommunication legislation and a regulatory framework and harnessing the recognized potential of telecommunications/ICTs for the country's socio-economic and cultural development,

calls upon Member States

to offer all possible assistance and support to the Government of Haiti, either bilaterally or through the special action of the Union referred to above,

invites the Council

to allocate the necessary funds for the implementation of this resolution,

instructs the Director of the Telecommunication Development Bureau

1 to provide focused assistance in the different fields identified by Haiti;

2 to take immediate measures to implement a framework of cooperation allowing the country's systematic adoption of ICTs with a view to its sustainable development,

requests the Secretary-General

1 to bring this resolution to the attention of the Plenipotentiary Conference (Guadalajara, 2010) and seek the allocation of the necessary resources;

2 to coordinate the activities carried out by the three ITU Sectors in accordance with *resolves* above;

3 to ensure that the Union's action in favour of Haiti is as effective as possible, and to report on the matter to the ITU Council.

RESOLUTION 61 (Rev. Dubai, 2014)

Appointment and maximum term of office of chairmen and vice-chairmen of study groups in the ITU Telecommunication Development Sector and of the Telecommunication Development Advisory Group

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that No. 209 of the ITU Convention provides for the establishment of study groups of the ITU Telecommunication Development Sector (ITU-D);

b) that Article 20 of the Convention provides that, in appointing chairmen and vice-chairmen, personal competence and equitable geographical distribution should be especially kept in mind, as well as the need to promote more effective participation by developing countries[1];

c) that No. 214 of the Convention and other related provisions indicate the nature of the work of the study groups;

d) that provisions for the Telecommunication Development Advisory Group (TDAG) have been incorporated in Article 17A of the Convention;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

e) that No. 242 of the Convention requires the World Telecommunication Development Conference (WTDC) to appoint the chairman and one vice-chairman or more for each study group, taking account of competence and equitable geographical distribution, and the need to promote more efficient participation by the developing countries;

f) that section 2 of Resolution 1 (Rev. Dubai, 2014) of this conference contains guidelines regarding the appointment of study group chairmen and vice-chairmen at WTDCs;

g) that procedures and qualifications for the chairman and vice-chairmen of TDAG should generally follow those for the appointment of study group chairmen and vice-chairmen;

h) that experience of ITU in general and of ITU-D in particular would be of particular value for the chairman and vice-chairmen of TDAG;

i) that No. 244 of the Convention describes the procedure for replacing a study group chairman or vice-chairman who is unable to carry out his or her duties at some time in the interval between two WTDCs;

j) that No. 215I of the Convention states that TDAG shall "adopt its own working procedures compatible with those adopted by the world telecommunication development conference";

k) that a specific time-limit on the term of office would permit the introduction of new ideas on a periodic basis, while at the same time give an opportunity for study group chairmen and vice-chairmen and the chairman and vice-chairmen of TDAG to be appointed from different Member States and Sector Members,

noting

a) Article 19 of the Convention, on the participation of entities and organizations in the Union's activities;

b) Resolution 166 (Guadalajara, 2010) of the Plenipotentiary Conference, on the number of vice-chairmen of Sector advisory groups, study groups and other groups;

c) Resolution 58 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on strengthening of relations between ITU, regional telecommunication organizations and all Member States without exception, for the regional preparations for the Plenipotentiary Conference,

taking into account

a) that a maximum time in office of two terms for study group and TDAG chairmen and vice-chairmen provides for a reasonable amount of stability while providing the opportunity for different individuals to serve in these capacities;

b) that § 10.1 of Resolution 1 (Rev. Dubai, 2014) indicates that the study group management team should be composed, at least, of the chairman and the vice-chairmen of the study group, the chairmen and vice-chairmen of working parties and the rapporteurs and vice-rapporteurs;

c) that the TDAG bureau should include at least the chairman and vice-chairmen of TDAG and its working party chairmen and vice-chairmen,

resolves

1 that candidates for the posts of chairmen and vice-chairmen of the ITU-D study groups and candidates for the posts of chairman and vice-chairmen of TDAG should be appointed according to the procedures given in Annex 1, the qualifications given in Annex 2 and the guidelines given in Annex 3 to this resolution;

2 that candidates for the posts of study group chairmen and vice-chairmen and candidates for the posts of chairman and vice-chairmen of TDAG should be identified, taking into account that, for each study group and for TDAG, WTDC will appoint the chairman and up to two vice-chairmen from each of the six regions[2] for the efficient and effective management and functioning of the group in question, applying the guidelines given in Annex 3;

3 that nominations for the posts of study group chairmen and vice-chairmen or for the posts of chairman and vice-chairmen of TDAG should be accompanied by a biographical profile highlighting the qualifications of the individuals proposed, taking into careful consideration continuity in participation in ITU-D study groups or TDAG, and that the Director of the Telecommunication Development Bureau (BDT) will circulate the profiles to the heads of delegation present at WTDC;

4 that the term of office for both chairmen and vice-chairmen should not exceed two terms of office between consecutive WTDCs;

5 that the term of office in one appointment (e.g. as a vice-chairman) does not count towards the term of office for another appointment (e.g. as a chairman) and that steps should be taken to provide some continuity between chairmen and vice-chairmen;

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[2] Africa, Americas, Arab States, Asia-Pacific, Commonwealth of Independent States, Europe.

6 that the interval between WTDCs during which a chairman or vice-chairman is elected under No. 244 of the Convention does not count towards the term of office;

7 that the counting of a term of office is effective from WTDC-10 and is not retroactive,

invites Member States and Sector Members

to support their successful candidates for such posts in ITU-D, and support and facilitate their task during their term of office.

ANNEX 1 TO RESOLUTION 61 (Rev. Dubai, 2014)

Procedure for the appointment of chairmen and vice-chairmen of the ITU-D study groups and of TDAG

1 Typically, the positions of chairmen and vice-chairmen to be filled are known in advance of WTDC.

a) In order to help WTDC appoint chairmen/vice-chairmen, Member States, ITU-D Sector Members and the study group concerned or TDAG should be encouraged to indicate to the Director of BDT suitable candidates preferably three months, but no later than two weeks before the opening of WTDC.

b) In nominating suitable candidates, ITU-D Sector Members should carry out prior consultations with the administration/Member State concerned, in order to avoid any possible disagreement in regard to such nomination.

c) On the basis of proposals received, the Director of BDT will circulate to Member States and Sector Members the list of candidates. The list of candidates should be accompanied by an indication of the qualifications of each candidate as given in Annex 2 to this resolution.

d) On the basis of this document and any relevant comments received, the heads of delegation, at a suitable time during WTDC, should be invited to prepare, in consultation with the Director of BDT, a consolidated list of designated study group and TDAG chairmen and vice-chairmen to be submitted in a document to WTDC for final approval.

e) In drafting the consolidated list, the following should be taken into account: in cases where there are two or more candidates with equal competence for the same chairman position, preference should be given to candidates from Member States and Sector Members having the lowest number of designated study group and TDAG chairmen.

2 Situations which cannot be considered within the above will be dealt with on a case-by-case basis at WTDC.

For example, if WTDC decides to set up a completely new study group, discussions will have to be held at WTDC and appointments made.

3 These procedures should be applied for appointments made by TDAG under delegated authority (see Resolution 24 (Rev. Dubai, 2014) of this conference).

4 Vacant positions of chairmen and vice-chairmen that occur in mid-term between WTDCs are filled in accordance with No. 244 of the Convention.

ANNEX 2 TO RESOLUTION 61 (Rev. Dubai, 2014)

Qualifications of chairmen and vice-chairmen

No. 242 of the Convention states that:

"… In appointing chairmen and vice-chairmen, particular consideration shall be given to the requirements of competence and equitable geographical distribution and to the need to promote more efficient participation by the developing countries."

Whilst giving primary consideration to the qualifications below, there should be an appropriate representation of chairmen and vice-chairmen from developing countries, including the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

As regards competence, the following qualifications, *inter alia*, appear to be of importance when appointing study group chairmen and vice-chairmen:

– knowledge and experience;
– continuity in participation in the relevant study group;
– managerial skills;
– availability[3];
– active in the work of the study group;

and the following qualifications, *inter alia*, appear to be of importance when appointing the chairman and vice-chairmen of TDAG:

– knowledge and experience;
– continuity in the activities of ITU in general and of ITU-D in particular;

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[3] A further factor to be considered when appointing chairmen and vice-chairmen to both study groups and TDAG is candidates' availability for the period up to the next WTDC.

– managerial skills;

– availability[3].

Particular reference to the above qualifications should be included in the biographical profile to be circulated by the Director of BDT.

ANNEX 3 TO RESOLUTION 61 (Rev. Dubai, 2014)

Guidelines for appointment of the optimum numbers of vice-chairmen for ITU-D study groups and for TDAG

1 Pursuant to Resolution 166 (Guadalajara, 2010) and No. 242 of the Convention, the requirements of competence, equitable geographical distribution and the need to promote more effective participation by the developing countries should be taken into account to the extent practicable.

2 To the extent possible, and taking into account the need for demonstrated competence, appointment or selection to the management team should utilize the resources of as broad a range of Member States and Sector Members as possible, at the same time recognizing the need to appoint only the number of vice-chairmen necessary for the efficient and effective management and functioning of the study groups, consistent with the projected structure and work programme.

3 The workload should be a factor in determining the appropriate number of vice-chairmen, up to two vice-chairmen from each region, to ensure that every aspect within the purview of TDAG and the study groups is fully managed.

4 The total number of vice-chairmen proposed by any administration should be fairly reasonable, so as to observe the principle of equitable distribution of posts among the Member States concerned.

5 Regional representation in the advisory group, study groups and other groups of all three Sectors should be taken into account (as indicated in *resolves* 2), such that no single individual may hold more than one vice-chairmanship position in these groups in any one Sector, and only in exceptional cases hold such a position in more than one Sector[4].

6 Where the re-election of vice-chairmen is concerned, the nomination of candidates who have failed to participate in at least half of all meetings during the previous study period should normally be avoided, taking into account prevailing circumstances.

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[4] The criterion mentioned in this paragraph should not prevent a vice-chairman of a given advisory group or a vice-chairman of a given study group from holding positions of chairman or vice-chairman of a given working party or as rapporteur or associate rapporteur for any group under the mandate of that Sector group.

RESOLUTION 62 (Rev. Dubai, 2014)

Measurement concerns related to human exposure to electromagnetic fields

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 72 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, on measurement concerns related to human exposure to electromagnetic fields (EMF), which calls for close cooperation among the Directors of the three Bureaux to implement the resolution in view of its importance to developing countries[1];

b) Resolution 176 (Guadalajara, 2010) of the Plenipotentiary Conference, on human exposure to and measurement of electromagnetic fields,

considering

a) that there is a pressing need for information on the potential effects of human exposure to EMF in order to protect humans from such effects;

b) that there are a number of eminent international bodies involved in establishing measurement methodologies for assessing human exposure to EMF, and these already cooperate with many telecommunication standards bodies, including the ITU Telecommunication Standardization Sector (ITU-T),

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

recognizing

a) that some publications and information about EMF effects on health create doubt among the population, in particular in developing countries, causing these countries to address questions to ITU-T and, currently, to the ITU Telecommunication Development Sector (ITU-D);

b) that without adequate information or appropriate regulation, people, particularly in developing countries, may have concerns about the effect of EMF on their health, and that inadequate, or in some cases incorrect, information may result in increasing opposition to the deployment of radio installations;

c) that the effect on humans of EMF from handheld devices has not received enough public information, and use of a mobile phone may expose the user to a stronger EMF than a base station;

d) that the cost of the equipment used for assessing human exposure to EMF is very high and difficult for many developing countries to afford;

e) that implementing such measurement is essential for many regulatory authorities in developing countries, in order to monitor the limits for human exposure to radio-frequency energy, and that they are called upon to ensure those limits are met in order to license different services;

f) the work of ITU-T Study Group 5 on this issue, including the updating of practical and affordable guidelines to help developing countries deal with this issue effectively,

resolves to instruct the Director of the Telecommunication Development Bureau

in response to the needs of the developing countries and consistent with the substance of Resolution 72 (Rev. Dubai, 2012), and in close cooperation with the Director of the Radiocommunication Bureau and Director of the Telecommunication Standardization Bureau:

1 to give the necessary priority to this subject and, within the available resources, allocate the necessary funds for expediting execution of this resolution;

2 to ensure that Output 2.2 determines the requirements of developing countries and their regulatory authorities (at regional level) in relation to this resolution, contributes to studies on this subject, takes an active part in the work of the relevant ITU Radiocommunication Sector (ITU-R) and ITU-T study groups, and submits written contributions on the results of its work in this regard, plus any proposals it deems necessary, to ITU-D Study Group 2,

instructs Study Group 2

within the framework of its Questions, including Question 7/2, to cooperate with ITU-T Study Group 5 and ITU-R Study Groups 1, 5 and 6, in order to achieve the following goals:

i) to collaborate, with ITU-T Study Group 5 in particular, in the development of a handbook, including implementation guidelines, on the subject of human exposure to EMF issues, as a matter of high priority;

ii) prepare an annual report on the progress of work in this area in respect of their Questions;

iii) contribute to the organization of any seminars on this subject;

iv) contribute to preparation of the Guide on the use of ITU-T publications on achieving electromagnetic compatibility and safety, and publications relating to measurement methodologies, the need for measurements to be performed by a "Qualified Radio Engineer" and the criteria for a "Qualified Radio Engineer", and system specifications,

invites Member States

to conduct a periodic review concerning the performance of the operators and mobile equipment manufacturers in this field to make sure that they are following the national specifications or ITU Recommendations, in order to ensure the safe use of EMF.

RESOLUTION 63 (Rev. Dubai, 2014)

IP address allocation and facilitating the transition to IPv6 in the developing countries[1]

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 101 (Rev. Guadalajara, 2010), Resolution 102 (Rev. Guadalajara, 2010) and Resolution 180 (Guadalajara, 2010) of the Plenipotentiary Conference;

b) Resolution 63 (Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC);

c) Resolution 64 (Rev. Dubai 2012) of the World Telecommunication Standardization Assembly;

d) Opinion 3 (Geneva, 2013) of the fifth World Telecommunication/Information and Communication Technology (ICT) Policy Forum (WTPF), on supporting capacity building for the deployment of IPv6;

e) Opinion 4 (Geneva, 2013) of WTPF, in support of IPv6 adoption and transition from IPv4;

f) the results of the ITU Council Working Group on the subject of the transition from IPv4 to IPv6;

g) the partial progress that has been made towards the adoption of IPv6 over the past few years;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

h) that accelerating the transition from IPv4 to IPv6 has become an important issue today for Member States and Sector Members and stakeholders in the Internet community,

recognizing

a) that Internet Protocol (IP) addresses are fundamental resources that are needed for the development of IP-based telecommunication/ICT networks and for the world economy and prosperity;

b) that many countries believe that there are historical imbalances related to IPv4 allocation;

c) that the fastest possible transition from IPv4 and migration to and deployment of IPv6 addresses available to all countries is necessary in order to respond to global appeals and needs in this regard;

d) that there are a number of developing countries that still need expert technical assistance, as well as a margin of time, for making this transition, despite the partial progress made in some other countries,

taking into account

that many developing countries are experiencing some challenges today in the transition process for technical reasons,

resolves

to promote the exchange of experiences and information relating to the adoption of IPv6, with the aim of unifying joint efforts of all stakeholders and ensuring the contributions that enhance the Union's efforts to support this transition,

instructs the Director of the Telecommunication Development Bureau

1 to continue the close cooperation and coordination with the Director of the Telecommunication Standardization Bureau in this regard, and especially the continuation of ongoing activities to facilitate the process of raising awareness on IPv6 transition and deployment among all members, and to provide the necessary information on training activities;

2 to cooperate with relevant organizations on capacity building for IPv6 in order to respond to the needs of developing countries;

3 to submit an annual report to the ITU Council on the progress made in this regard, and report to the next WTDC;

4 to develop guidelines, to enable adjustment of the organizational frameworks and policies necessary for migration to and deployment of IPv6,

invites Member States

1 to coordinate and inventory, if necessary, the IP addresses in use within their respective territories for the purposes of evaluation, development and monitoring;

2 to continue to stimulate and encourage the transition to IPv6, and particularly to encourage national initiatives and increase interaction with government and private-sector entities, academia and civil-society organizations in order to exchange experiences, expertise and knowledge;

3 to encourage the training of technicians and administrators from governmental agencies and private-sector organizations in IPv6 network, with theory and labs that show how to implement IPv6 on their networks;

4 to raise awareness among providers on the importance of making their services available over IPv6;

5 to encourage manufacturers to supply to the market customer premises equipment (CPEs) that support IPv6 support in addition to IPv4;

6 to foster cooperation among ISPs, service providers and other relevant stakeholders to shorten the transition period.

RESOLUTION 64 (Rev. Dubai, 2014)

Protecting and supporting users/consumers of telecommunication/ information and communication technology services

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) Article 1, No. 9, of the ITU Constitution, which states that the purpose of the Union is to promote, at the international level, the adoption of a broader approach to the issues of telecommunications in the global information economy and society;

b) Article 21, No. 127 of the Constitution, which states that the purpose of the ITU Telecommunication Development Sector is to offer advice and carry out or sponsor studies, as necessary, on technical, economic, financial, managerial, regulatory and policy issues;

c) § 13 e) of the Geneva Plan of Action of the World Summit on the Information Society, which states that governments should continue to update their domestic consumer-protection laws to respond to the new requirements of the information society;

d) §§ 4.4 and 4.5 of Article 4 of the International Telecommunication Regulations, requesting Member States to promote policies to ensure that authorized operating agencies provide free-of-charge, transparent, up-to-date and accurate information to end users on international telecommunication services, including international roaming prices and the associated relevant conditions, in a timely manner, and to encourage measures to ensure that telecommunication services in international roaming of satisfactory quality are provided to visiting users,

taking into account

a) ITU's mandate to serve as coordinator and facilitator for Action Lines C5 and C6 of the Geneva Plan of Action;

b) that the basic principles of consumer and user relations include education and outreach on the appropriate consumption and use of products and services, in order to guarantee freedom of choice and fairness in contracting, together with clear and appropriate information on different products and services, with the correct specification of quantities, characteristics, composition, quality and price;

c) that information is the main input of the digital economy, for which reason it is recognized that the cross-border flow of personal consumer and user data demands the observance of national laws and regulations;

d) that the report entitled "Enforcing national telecommunications laws: Report and best practice guidelines" published in 2010, presented by the Rapporteur for Question 18-1/1, constitutes a first step in suggesting guidelines for enforcing user-protection regulations;

e) that policies on information transparency make it possible to increase the level and quality of the information provided by operators to users and consumers;

f) that the same policies should ensure access to telecommunications/information and communication technologies (ICTs) for persons with disabilities in conditions of use comparable to all other consumers and users;

g) that, for international roaming services, the quantity and quality of information provided to consumers and users would influence inversely the prices paid for those services,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to continue to support work aimed at raising awareness among decision-makers regarding telecommunications/ICTs as well as among regulatory agencies regarding the importance of keeping users and consumers informed about the basic characteristics, quality, security and rates of the different services offered by operators, and at creating other protection mechanisms to facilitate the exercise of consumers' and users' rights;

2 to collaborate with the Member States in order to identify the critical areas for the establishment of policies or regulatory frameworks for the protection of consumers and users;

3 to continue coordination with the ITU Telecommunication Standardization Sector on such topics as service quality, perceived quality and security;

4 to strengthen relations with other international organizations and entities involved in consumer and user protection;

5 to invite relevant regions to create their end-user and consumer associations,

urges Member States

1 to create and promote policies that favour providing end users with information on the characteristics of the telecommunication services offered by different providers, considering especially those that facilitate the provision of free-of-charge, transparent, up-to-date and accurate information to consumers and end users on international telecommunication services, including international roaming prices and the associated relevant conditions, in a timely manner;

2 to foster measures to ensure that telecommunication services in international roaming of satisfactory quality are provided to visiting users;

3 to provide inputs that will disseminate best practices and policies they have implemented to build capacity for the development of related public policies and legal, regulatory and technical measures to address consumer and user protection, including personal data protection, taking into consideration the guidelines and recommendations from ITU and other relevant organizations, as appropriate,

invites Sector Members of the ITU Telecommunication Development Sector

to contribute inputs that will allow the dissemination of best practices and policies they have implemented related to the implementation of consumer- and user-protection policies, taking into consideration ITU guidelines and recommendations.

RESOLUTION 65 (Hyderabad, 2010)

Improving access to healthcare services by using information and communication technologies

(ABROGATED BY WTDC-14)

(Incorporated in Resolution 54)

RESOLUTION 66 (Rev. Dubai, 2014)

Information and communication technology and climate change

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 35 (Kyoto, 1994) of the Plenipotentiary Conference, on telecommunication support for the protection of the environment;

b) Resolution 182 (Guadalajara, 2010) of the Plenipotentiary Conference, on the role of telecommunications/information and communication technologies (ICTs) in regard to climate change and the protection of the environment;

c) Resolution 1353 adopted by the 2012 session of the ITU Council, which recognizes that telecommunications and ICTs are essential components for developed and developing countries[1] in achieving sustainable development, and instructs the Secretary-General, in collaboration with the Directors of the Bureaux, to identify new activities to be undertaken by ITU to support developing countries in achieving sustainable development through telecommunications and ICTs,

d) § 20 of the Geneva Plan of Action of the World Summit on the Information Society, on e-environment, calling for the establishment of monitoring systems using ICTs to forecast and monitor the impact of natural and man-made disasters, particularly in developing countries;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

e) Resolution 34 (Rev. Dubai, 2014) of this conference, on the role of telecommunications/ICT in disaster preparedness, early warning, rescue, mitigation, relief and response;

f) Resolution 673 (Rev.WRC-12) of the World Radiocommunication Conference (Geneva, 2012), on the use of radiocommunications for Earth observation applications, in collaboration with the World Meteorological Organization (WMO);

g) the outcomes of the United Nations Climate Change Conference (Bali, Indonesia, 3-14 December 2007), highlighting the role of ICTs as both a contributor to climate change and an important element in tackling the associated challenges;

h) Resolution 73 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on ICTs, environment and climate change, defining the role of the ITU Telecommunication Standardization Sector (ITU-T) in this area;

i) the results of ITU Telecommunication Development Sector (ITU-D) Study Group 2 Question 24/2 on ICT and climate change, and Question 22-1/2, dealing with the utilization of telecommunications/ICTs for disaster preparedness, mitigation and response, and ITU-D Study Group 1 Question 24/1, on strategies and policies for the proper disposal or reuse of telecommunication/ICT waste material;

j) Resolution 1307 adopted by the 2009 session of the Council, ITU studies having shown that ICT is one of the critical elements, if not the fundamental element, in combating climate change, in terms of monitoring climate change and the role it can play in any international agreement in this area, in addition to mitigating the effects of climate change in many cases;

k) Opinion 3 (Lisbon, 2009) of the World Telecommunication Policy Forum, on ICT and the environment, which highlighted the importance of the work associated with climate change in its many facets, including the global problems of the distribution of food, as well as the need for study on environmentally safe disposal and recycling of discarded ICT equipment;

l) the outcomes of the United Nations Climate Change Conference (Copenhagen, Denmark, 7-16 December 2009);

m) the Nairobi Declaration on the Environmentally Sound Management of Electrical and Electronic Waste, and the adoption by the ninth Conference of the Parties to the Basel Convention of the Work Plan for the Environmentally Sound Management of E-waste, focusing on the needs of developing countries;

n) Resolution 79 (Dubai, 2012) of WTSA, on the role of telecommunications/ICTs in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it;

o) the progress already made in the international symposia on ICTs, environment and climate change, held in various parts of the world[2], by distributing their outcomes as widely as possible;

p) the outcomes of ITU-T Study Group 5 (Environment and climate change), which is responsible for studies on methodologies for evaluating the ICT effects on climate change and also for studying design methodologies to reduce environmental effects, for example recycling of ICT facilities and equipment;

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[2] Kyoto, Japan, 15-16 April 2008; London, United Kingdom, 17-18 June 2008; Quito, Ecuador, 8-10 July 2009; Seoul Virtual Symposium, 23 September 2009; Cairo, Egypt, 2-3 November 2010; Accra, Ghana, 7-8 July 2011; Seoul, Republic of Korea, 19 September 2011; and Montreal, Canada, 29-31 May 2012.

q) the Luxor Call to Action on "Building a Water Resource Efficient Green Economy", adopted at the ITU Workshop on ICT as an Enabler for Smart Water Management, held in Luxor, Egypt on 14-15 April 2013;

r) the work in the Joint Coordination Activity on ICT and climate change under ITU-T Study Group 5,

taking into consideration

a) that the United Nations Intergovernmental Panel on Climate Change (IPCC) estimated that global greenhouse gas (GHG) emissions had risen by more than 70 per cent since 1970, having an effect on global warming, changing weather patterns, rising sea-levels, desertification, shrinking ice cover and other long-term effects;

b) that climate change is acknowledged as a threat to all countries and calls for a global response;

c) the role that ICTs and ITU can play in promoting green ICTs to mitigate climate-change effects;

d) the importance of promoting sustainable development and the ways in which ICTs can enable clean development;

e) that the consequences of developing countries' lack of preparation in the past have recently come to light, and that they will be exposed to incalculable dangers and considerable losses, including the consequences of rising sea levels for many coastal areas in developing countries;

f) that the strategic plan for the Union for 2012-2015 gives clear priority to combating climate change using ICTs;

g) that radio-based remote sensing applications on board satellites are the main global observation tools employed by the Global Climate Observing System (GCOS) for climate monitoring, disaster prediction, detection and mitigation of the negative effects of climate change;

h) that the role of ICTs in tackling the challenge of climate change encompasses a wide array of activities, including, but not limited to: the development of energy-efficient devices, applications and networks; the development of energy-efficient working methods; the implementation of satellite and ground-based remote-sensing platforms for environmental observation, including weather monitoring; and the use of ICTs to warn the public of dangerous weather events and provide communication support for governmental and non-governmental aid providers,

i) Recommendation ITU-T L.1000, on the universal power adapter and charger solution for mobile terminals and other handheld ICT devices, and Recommendation ITU-T L.1100, on the procedure for recycling rare metals in ICT goods,

taking into consideration further

a) the outcome document adopted by Rio+20, entitled "The Future We Want", reflecting the renewal of commitment towards advancing sustainable development and achieving environmental sustainability;

b) that this outcome document recognizes that ICTs are facilitating the flow of information between governments and the public, highlighting the need to continue working towards improved access to ICTs, especially broadband networks and services, and bridging the digital divide, recognizing the contribution of international cooperation in this regard;

c) that the Rio+20 conference has called for further mainstreaming of the three dimensions of sustainable development throughout the United Nations system, inviting UN specialized agencies to consider appropriate measures for integrating the social, economic and environmental dimensions across the UN system's operational activities and to support developing countries, on request, in achieving sustainable development,

aware

a) that ICTs also contribute to GHG emissions, a contribution which, although relatively small, will grow with the increased use of ICTs, and that the necessary priority must be given to reducing GHG emissions from equipment;

b) that ICTs will make a major contribution to mitigating and adapting to the effects of climate change, as well as monitoring changes,

noting

a) current and future work on ICTs and climate change, including the work in relevant ITU study groups such as ITU-T Study Group 5 and ITU-D Study Group 2, which focus on the study of ICT environmental aspects of electromagnetic phenomena and climate change;

b) the use of ICTs as energy-efficient and eco-friendly working methods, as exemplified by the Virtual International Symposium on ICTs and Climate Change (23 September 2009, Seoul, Republic of Korea);

c) that it is important to facilitate an environment in which ITU Member States, Sector Members and other stakeholders may cooperate to obtain and effectively use remote-sensing data for the purposes of research in climate change, disaster management and public administration[3];

d) the positive impact of ICTs in mitigating climate change, insofar as they offer more energy-efficient alternatives to other applications by providing more efficient energy-management systems (buildings/homes) and distribution systems (smart grid);

e) the outcomes of the conferences of the United Nations Framework Convention on Climate Change (UNFCCC);

f) that there are other international forums that are working on climate-change issues with which ITU should cooperate,

resolves

1 to give priority to ITU-D activities in this area and to providing the necessary support, while ensuring appropriate coordination among the three ITU Sectors on a full range of issues, including, for example, studies on the impact of non-ionizing radiation;

2 to continue and further develop ITU-D activities on ICTs and climate change in order to contribute to the wider global efforts to moderate climate change being made by the United Nations;

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[3] This includes areas such as water management, air quality, agriculture, fishing, health, energy, environment, ecosystems and pollution control.

3 to include, as a priority, assistance to developing countries in strengthening their human and institutional capacity in tackling ICTs and climate change, as well as in areas such as climate-change adaptation, as a key element of disaster-management planning;

4 to increase awareness and promote information-sharing on the role of ICTs in enhancing environmental sustainability, in particular by promoting the use of more energy-efficient[4] devices and networks and more efficient working methods, as well as ICTs that can be used to replace or displace higher energy consuming technologies/uses;

5 to promote the development and application of renewable energy systems where appropriate, to support ICT operations and in particular continuity and resilience during disasters;

6 to assist in bridging the standardization gap by providing technical assistance to countries in developing their national green ICT action plans;

7 to set up e-learning programmes on ITU-D Recommendations related to ICT, the environment and climate change,

instructs the Director of the Telecommunication Development Bureau, in collaboration with the Directors of the other Bureaux

1 to formulate a plan of action for the role of ITU-D in this regard, taking into account the role of the other two Sectors;

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[4] With respect to efficiency, promotion of efficient use of materials used in ICT devices and network elements should also be a consideration in ITU-D activity.

2 to ensure that the plan of action is implemented under the relevant objective of the Dubai Action Plan dealing with ICTs and climate change, taking into account the needs of developing countries, and cooperating closely with the study groups of the other two Sectors and with ITU-D Study Group 2 in its implementation of the relevant Questions on ICTs and climate change;

3 to promote liaison with other relevant organizations in order to avoid duplication of work and optimize the use of resources;

4 to organize, in close collaboration with the Directors of the Radiocommunication Bureau (BR) and the Telecommunication Standardization Bureau (TSB) and with other competent bodies, workshops, seminars and training courses in developing countries at the regional level for the purpose of raising awareness and identifying key issues;

5 to report on progress on the implementation of this resolution annually at the meeting of the Telecommunication Development Advisory Group (TDAG);

6 to ensure, in implementing the Dubai Action Plan, that appropriate resources are allocated for initiatives related to ICTs and climate change;

7 to provide input to the ITU-T calendar of events relevant to ICTs, the environment and climate change, based on proposals by TDAG and in close collaboration with the other two Sectors;

8 to develop pilot projects aimed at bridging the standardization gap on environmental sustainability issues, in particular in developing countries, and gauge the needs of the developing countries in the field of ICTs, the environment and climate change, within available resources;

9 to support the development of reports on ICTs, the environment and climate change, taking into consideration relevant studies, in particular the ongoing work under ITU-D Study Group 2 Questions 5/2, 6/2 and 8/2 related to, *inter alia*, ICTs and climate change, and to assist affected countries with utilizing relevant applications for disaster preparedness, mitigation and response, and management of telecommunication/ICT waste;

10 to assist developing countries in undertaking proper assessment of the size of e-waste and in initiating pilot projects to achieve environmentally sound management of e-waste through e-waste collection, dismantling, refurbishment and recycling;

11 to assist developing countries in initiating projects that achieve the sustainable and smart management of water resources through the use of ICTs;

12 to assist developing countries in initiating projects on disaster prediction, detection, monitoring, response and relief,

instructs the Telecommunication Development Advisory Group

to consider possible changes to working methods in order to meet the objectives of this resolution, such as extending the use of electronic means, virtual conferencing, teleworking, etc.,

invites Member States, Sector Members and Associates

1 to continue to contribute actively to the ITU-D work programme on ICTs and climate change;

2 to continue or initiate public and private programmes that include ICTs and climate change, giving due consideration to relevant ITU initiatives;

3 to take necessary measures to reduce the effects of climate change by developing and using more energy-efficient ICT devices, applications and networks;

4 to continue supporting the work of the ITU Radiocommunication Sector (ITU-R) in remote sensing (active and passive) for environmental observation[5] in accordance with relevant resolutions adopted by radiocommunication assemblies and world radiocommunication conferences;

5 to integrate the use of ICTs as an enabling tool to address and combat the effects of climate change into national adaptation and mitigation plans;

6 to incorporate the environmental indicators, conditions and standards in their national ICT plans;

7 to liaise with their relevant national entities responsible for environmental issues in order to support and contribute to the wider United Nations process on climate change, by providing information and developing common proposals related to the role of telecommunications/ICTs in mitigating and adapting to the effects of climate change, so that they can be taken into consideration within UNFCCC.

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[5] Environmental observation can be used to forecast weather and warn the public in the case of natural disasters, and to gather information on dynamic environmental processes and systems.

RESOLUTION 67 (Rev. Dubai, 2014)

The role of the ITU Telecommunication Development Sector in child online protection

The World Telecommunication Development Conference (Dubai, 2014),

recognizing

a) that there is an urgent need and global demand for the protection of children from exploitation and exposure to danger and deception when using the Internet or information and communication technology (ICT);

b) that many of them will participate in the youth programmes of the Telecommunication Development Bureau (BDT) and will become active members in the development of coordination mechanisms with youth forums,

recalling

a) the memorandum of understanding between the secretariat of the Union and Child Helpline International (CHI);

b) Resolution 1306 adopted by the ITU Council at its 2009 session, under which a child online protection working group was set up, with the participation of Member States and Sector Members, and the group's mandate defined by the ITU members in close collaboration with the secretariat of the Union;

c) Resolution 179 (Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in child online protection;

d) the outcomes of the work accomplished by the ITU Council Working Group on Child Online Protection (CWG-COP), most importantly the development of its terms of reference (which were agreed by the 2010 session of the Council) and the description of BDT's activity in this regard, given that it is part of the initiatives of the ITU Telecommunication Development Sector (ITU-D);

e) that the United Nations adopted the Convention on the Rights of the Child (1989), bearing in mind that the need to extend particular care to the child has been stated in the Geneva Declaration of the Rights of the Child of 1924 and in the Declaration of the Rights of the Child adopted by the United Nations General Assembly on 20 November 1959 and recognized in the Universal Declaration of Human Rights, in the International Covenant on Civil and Political Rights (in particular in Articles 23 and 24), in the International Covenant on Economic, Social and Cultural Rights (in particular in Article 10) and in the statutes and relevant instruments of specialized agencies and international organizations concerned with the welfare of children;

f) that, within the framework of the Convention on the Rights of the Child, the States Parties undertook to protect the child from all forms of exploitation and sexual abuse, and for that purpose, in particular, to take all appropriate national, bilateral and multilateral measures to prevent a) the inducement or coercion of a child to engage in any unlawful sexual activity; b) the exploitative use of children in prostitution or other unlawful sexual practices; c) the exploitative use of children in pornographic performances and materials (Article 34);

g) that pursuant to Article 10 of the Optional Protocol to the Convention on the Rights of the Child (New York, 2000) on the sale of children, child prostitution and child pornography, the States Parties shall take all necessary steps to strengthen international cooperation by multilateral, regional and bilateral arrangements for the prevention, detection, investigation, prosecution and punishment of those responsible for acts involving the sale of children, child prostitution, child pornography and child sex tourism; and shall also promote international cooperation and coordination between their authorities, national and international non-governmental organizations and international organizations;

h) that the World Summit on the Information Society (WSIS), in the Tunis Commitment of 2005 (§ 24), recognized the role of ICTs in the protection of children and in enhancing the development of children, urging Member States to strengthen action to protect children from abuse and defend their rights in the context of ICTs, emphasizing that the best interests of the child are a primary consideration; accordingly, the Tunis Agenda for the Information Society (§ 90 q) set forth the commitment to using ICTs as a tool to achieve the internationally agreed development goals and objectives, including the Millennium Development Goals, by, *inter alia*, incorporating regulatory, self-regulatory and other effective policies and frameworks to protect children and young people from abuse and exploitation through ICTs into national plans of action and e-strategies;

i) that, by Resolution 45 (Rev. Dubai, 2014) of this conference, on the establishment of mechanisms for enhancing cooperation on cybersecurity, including countering and combating spam, the World Telecommunication Development Conference (WTDC) recognized the role of ICTs in the protection of children and in enhancing their development and that action to protect children from abuse and defend their rights in the context of ICTs should be strengthened, emphasizing that the best interests of the child are a key consideration;

j) that, during the 2012 WSIS Forum in Geneva, a meeting was organized with partners in the Child Online Protection (COP) initiative, which achieved an important outcome, namely the agreement to work closely with the Family Online Safety Institute (FOSI) and the Internet Watch Foundation (IWF) in order to provide the necessary assistance to Member States;

k) that, in 2012, ITU-D started to develop a national case study to demonstrate best practices, and aims to replicate this exercise in other countries as a way of developing global policies for protecting children online;

l) Resolution 17 (Rev. Dubai, 2014) of this conference, which invites nations to pursue regional initiatives;

m) the work under way in Question 3/2 of Study Group 2, on cybersecurity, which includes child online protection, as well as the current work of the Joint Coordination Activity on Child Online Protection (JCA-COP), established by ITU-T Study Group 17,

taking into account

a) that there are threats that children are exposed to on the Internet, which have diversified and multiplied with the rapid development of information technology and telecommunication devices;

b) the growing development, diversification and spread of access to ICTs worldwide, in particular the Internet, and the increasingly widespread use thereof by children, at times with no control or guidance;

c) the importance of empowering children in the use of telecommunications/ICTs so as to improve their capacity and skills to stay safe and secure online;

d) the need for children to use telecommunication/ICT tools, with emphasis on the importance of protecting them online;

e) the requirement for a multistakeholder approach, as envisaged by WSIS, in order to promote social responsibility in the ICT sector so as to effectively make use of the variety of tools available to build confidence and security in the use of ICTs, reducing the risks identified for children;

f) that, in order to address the issue of cybersecurity for children, it is critical that proactive measures be taken in order to protect children online at an international level;

g) the technical difficulties involved in establishing a single harmonized global child helpline number;

h) that, in 2013, there were almost as many mobile-cellular subscriptions as people in the world, and cellular-mobile penetration rates stood at 128 per cent in the developed countries and 89 per cent in the developing countries[1];

i) that the number of children between the ages of eight and eighteen who possess mobile phones is constantly increasing;

j) the need to continue working at global and regional levels to find available technological solutions to protect children online, as well as innovative applications to make it easier for children to communicate with child online protection helplines;

k) the activities undertaken by ITU in the area of child online protection at the regional and international levels;

l) the activities undertaken by many countries in recent years,

instructs the Director of the Telecommunication Development Bureau

1 to continue with the activities of the COP initiative through the programme under Output 3.1 of Objective 3, encouraging collaboration with relevant study group Questions, with a view to providing guidance to Member States on strategies, best practices and cooperative efforts that can be promoted for the benefit of children;

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[1] Source: "The World in 2013 – ICT facts and figures", ITU, 2013.

2 to collaborate closely with CWG-COP, as well as relevant study group Questions, and encourage coordination among them, with the aim of avoiding duplication of efforts and maximizing outputs relevant to protecting children online;

3 to coordinate with other similar initiatives being undertaken at national, regional and international level, with the objective of establishing partnerships to maximize efforts in this important area;

4 to encourage regional coordination in addressing the issue of child online protection, such as through the development of guiding principles, in cooperation with ITU regional offices and relevant entities;

5 to disseminate these guiding principles, in cooperation with ITU regional offices and relevant entities;

6 to investigate suitable ways of encouraging developing and least developed countries to participate in the work of CWG-COP;

7 to coordinate with the ITU regional offices on the submission of quarterly reports to CWG-COP and on ways of progressing work on child online protection;

8 to support the work of CWG-COP by organizing orientation sessions for experts in connection with meetings of the group;

9 to identify the most appropriate opportunities for ITU to ensure that as much attention as possible is drawn to the issue of child online protection in developing countries;

10 to submit a report on the results of implementation of this resolution to the next WTDC,

invites Member States

1 to join and continue participating actively in CWG-COP and in related ITU activities, for the purposes of comprehensive discussion and exchange of information on legal, technical, organizational and procedural issues as well as capacity building and international cooperation for protecting children online;

2 to develop information, to educate and to create consumer-awareness campaigns targeting parents, teachers, industry and the population in general in order to make children aware of the risks to be found online;

3 to promote the allocation of regional telephone numbers for child online protection;

4 to foster the development of tools that contribute to enhancing child online protection;

5 to support the collection and analysis of data and statistics on child online protection that will contribute to public policy design and implementation, as well as enabling cross-country comparisons;

6 to consider establishing national child online protection frameworks;

7 to work closely with CHI and relevant non-governmental organizations;

8 to develop self-regulatory approaches in cooperation with the private sector, academia and non-governmental organizations,

invites Sector Members

1 to participate actively in all relevant ITU activities, including CWG-COP, Question 3/2 of Study Group 2 and relevant programmes within ITU-D, and in other ITU activities, in particular in ITU-D, with the aim of informing the ITU membership about technological solutions for protecting children online, through various mechanisms such as workshops;

2 to develop innovative solutions and applications to make it easier for children to communicate with child online protection helplines;

3 to formulate guiding principles for informing Member States of modern technological solutions for protecting children online, taking into account best practices for industry and other relevant interested parties.

RESOLUTION 68 (Rev. Dubai, 2014)

Assistance to indigenous peoples within the activities of the Telecommunication Development Bureau in its related programmes

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) Resolution 46 (Doha, 2006) of the World Telecommunication Development Conference, on the role of information and communication technology (ICT) in promoting indigenous peoples in the information society, and the fact that the Telecommunication Development Bureau (BDT) provides assistance to indigenous peoples through all of its programmes in general, and Output 4.3 under Objective 4 in particular;

b) that the Geneva Plan of Action and the Tunis Commitment of the World Summit on the Information Society (WSIS) established that the attainment of their objectives with regard to indigenous peoples and communities is a priority;

c) that Article 16 of the United Nations Declaration on the Rights of Indigenous Peoples states the following: "Indigenous peoples have the right to establish their own media in their own languages and to have access to all forms of non-indigenous media without discrimination",

recalling

that Article 41 of the aforementioned Declaration states that: "The organs and specialized agencies of the United Nations system and other intergovernmental organizations shall contribute to the full realization of the provisions of this Declaration through the mobilization, *inter alia*, of financial cooperation and technical assistance",

recognizing

a) that the public policy recommendations and best practices developed through the "Connect a School, Connect a Community" initiative, in accordance with the principles established by WSIS, indicate that there are minimum conditions in the sphere of technology, capacity building, regulatory framework, self-sustainability and participation, and content development, which must be ensured to achieve ICT development in indigenous regions;

b) that the Declaration of the Second Summit on Indigenous Communication of Abya Yala, held in Mexico in 2013, decided to move ahead on consultation processes with international organizations in the interests of operationalizing the rights of indigenous peoples to communication laid down in the above-mentioned United Nations Declaration on the Rights of Indigenous Peoples;

c) that telecommunication networks operated by indigenous peoples themselves have been developed and that, in order to ensure their development and sustainability, it is necessary to continue fostering the training of indigenous technicians on the basis of their cultural practices and technological innovation solutions, while at the same time ensuring the availability of resources and spectrum for implementing those networks;

d) that it is important to monitor closely the evolving communication experiences of the peoples in question and add to the public policy recommendations and best practices developed by ITU, taking into account the underlying technological innovations and organizational approaches that have stimulated their growth,

resolves

1 to reinforce assistance to indigenous peoples in all BDT programmes;

2 to support digital inclusion of indigenous peoples in general, and in particular their participation in workshops, seminars, forums and training on ICT for social and economic development;

3 to support, through the ITU Academy[1], human-resource training programmes in the design and management of public policies aimed at the development of ICTs in remote and isolated areas, for groups with specific needs and for indigenous peoples, within available BDT funds and human resources;

4 to support, through the ITU Academy, capacity building for indigenous peoples in the maintenance and development of ICTs;

5 to incorporate, in this training, best practices, experience and knowledge that the indigenous peoples have developed on the matter and, where appropriate, include the participation of indigenous experts, in accordance with applicable ITU rules and regulations governing recruitment;

6 to update the research on best practices and public policy recommendations for the development of ICTs in indigenous communities and foster the study of mechanisms that ensure the availability of spectrum for the networks in question;

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[1] The ITU Academy initiative encompasses the centres of excellence and Internet training centres initiatives.

7 to ensure access to training and innovation solutions through pilot projects that enable the implementation of local communication networks administered and operated by indigenous peoples themselves,

instructs the Director of the Telecommunication Development Bureau

to carry out the necessary actions to reinforce the implementation of Output 4.3 of the Dubai Action Plan as it relates to indigenous peoples, establishing collaboration mechanisms with the Member States, other relevant regional and international organizations and cooperation agencies,

invites

1 Member States to provide the necessary facilities and information to allow the participation of members of indigenous peoples and communities in the activities provided for in this resolution;

2 Sector Members to support the implementation of the activities provided for in this resolution.

RESOLUTION 69 (Rev. Dubai, 2014)

Facilitating creation of national computer incident response teams, particularly for developing countries[1], and cooperation between them

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolutions 101, 102, and 130 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, which stress the need for collaboration;

b) Resolution 69 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), and the need to improve coordination and capacity to respond to cybersecurity challenges,

recognizing

a) the highly satisfactory results obtained by the regional approach adopted within the framework of Resolution 69 (Rev. Hyderabad, 2010);

b) the increasing level of computer use and computer dependency in information and communication technologies (ICT) in developing countries;

c) the exposure of developing countries to attacks and threats targeting ICT networks through computers, and that they could be better prepared for such attacks and threats and the increasing level of fraudulent activity by these means;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

d) the results of the work to date on Question 22-1/1 by Study Group 1 of the ITU Telecommunication Development Sector (ITU-D) and its reports and coursework on this subject, which include support for the creation of computer incident response teams (CIRTs) and establishing public/private partnerships;

e) the work to date of BDT Programme 2, to bring together Member States and other stakeholders to assist countries in building national incident management capabilities, such as CIRTs;

f) the importance of having an appropriate level of computer emergency preparedness in all countries, particularly developing countries, by establishing CIRTs on a national basis, and the importance of coordination within and among the regions and of taking advantage of regional and international initiatives in this regard, including the ITU cooperation with regional and global projects and organizations, such as IMPACT, FIRST, the Organization of American States (OAS) and the Asia-Pacific Computer Emergency Response Team (APCERT), among others,

noting

a) that there is an improved, but still low level of computer emergency preparedness within developing countries;

b) that the high level of interconnectivity of telecommunication/ICT networks could be affected by the launch of an attack from networks of the less-prepared nations, which are mostly the developing countries;

c) the importance of having an appropriate level of computer emergency preparedness in all countries;

d) the work of Study Group 17 of the ITU Telecommunication Standardization Sector (ITU-T) in the area of national CIRTs, particularly for developing countries, and cooperation between them, as contained in the outputs of that study group;

e) the need for the establishment of CIRTs on a national basis, including CIRTs responsible for government-to-government cooperation, and the importance of coordination among all relevant organizations;

f) the ITU Global Cybersecurity Agenda,

resolves

1 to invite Member States and Sector Members with experience in this area:

- to establish national CIRTs, including CIRTs responsible for government-to-government cooperation, where needed or currently lacking;

- to collaborate closely with relevant organizations, and ITU-T, in this regard, taking into consideration Resolution 58 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly;

2 to instruct the Director of the Telecommunication Development Bureau to give the necessary priority to this, by:

- promoting national regional and international best practices for establishing CIRTs, as identified by the relevant ITU study groups, such as ITU-D Study Group 1 Question 22-1/1 to date and by other relevant organizations and experts;

- preparing the training programmes necessary for this purpose and continuing to provide support as required to those developing countries that so wish;

- promoting collaboration between and among national CIRTs, including CIRTs responsible for government-to-government cooperation, industry CIRTs and academia CIRTs, in accordance with national legislation, at the regional and global level, by encouraging the participation of developing countries in regional and global projects and in the work of organizations, such as IMPACT, FIRST, OAS and APCERT, among others;

- working to achieve these goals while avoiding duplication of effort with other organizations;

3 to instruct Question 3/2 of ITU-D Study Group 2, within its mandate, to contribute to the implementation of this resolution, also taking into consideration the work carried out by ITU-T on this issue.

RESOLUTION 70 (Hyderabad, 2010)

Regional initiative for Central and Eastern Europe on "E-accessibility (Internet and digital television) for persons with disabilities"

(ABROGATED BY WTDC-14)

RESOLUTION 71 (Rev. Dubai, 2014)

Strengthening cooperation between Member States, Sector Members, Associates and Academia of the ITU Telecommunication Development Sector, including the private sector

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) No. 126 of the ITU Constitution, which encourages participation by industry in telecommunication development in developing countries[1];

b) the ITU Telecommunication Development Sector (ITU-D) provisions of the strategic plan for the Union relating to the promotion of partnership arrangements between the public and private sectors in developed countries;

c) the importance placed, in the outcome documents of the World Summit on the Information Society (WSIS), including the Geneva Plan of Action and the Tunis Agenda for the Information Society, on private-sector participation in meeting the objectives of WSIS, including public-private partnerships;

d) that Sector Members, in addition to their financial contributions to the three Sectors of ITU, also provide professional expertise and support to the Telecommunication Development Bureau (BDT) and, conversely, can benefit from participation in ITU-D activities,

considering also

a) that ITU-D, during the period 2015-2018, should undertake actions in order to be responsive to Sector Members' needs, in particular at the regional level;

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

b) that it is in the interest of ITU to achieve its development objectives, increase the number of Sector Members, Associates and Academia (cf. Resolution 169 (Guadalajara 2010) of the Plenipotentiary Conference) and promote their participation in the activities of ITU-D;

c) that partnerships between and among the public and private sectors, including ITU and other entities such as national, regional, international and intergovernmental organizations, as appropriate, continue to be key to promoting sustainable telecommunication/information and communication technology (ICT) development;

d) that such partnerships prove to be an excellent tool for maximizing resources for, and the benefits of, development projects and initiatives,

recognizing

a) the rapidly changing telecommunication environment;

b) the important contribution that Sector Members make toward the increased provision of telecommunications/ICTs in all countries;

c) the progress achieved, through BDT special initiatives such as partnership meetings and colloquiums, in strengthening cooperation with the private sector and increased support at the regional level;

d) the continued need to ensure increased participation of Sector Members, Associates and Academia,

recognizing further

a) that telecommunications/ICTs are of critical importance to overall economic, social and cultural development;

b) that Sector Members, Associates and Academia may face challenges in the provision of ICT services;

c) the important role played by Sector Members, Associates and Academia in suggesting and implementing ITU-D projects and programmes;

d) that a large number of ITU-D programmes and activities are of interest to Sector Members, Associates and Academia;

e) the importance of the principles of transparency and non-exclusivity for partnership opportunities and projects;

f) the need to promote increased Sector, Associate and Academia membership and their active participation in ITU-D activities;

g) the need to facilitate exchange of views and information between Member States, Sector Members, Associates and Academia at the highest possible level;

h) that these actions should strengthen the participation of Sector Members, Associates and Academia in all ITU-D programmes and activities,

noting

a) that the role of the private sector in a very competitive environment is increasing in all countries;

b) that economic development relies, among others, on the resources and capacity of ITU-D Sector Members;

c) that ITU-D Sector Members are engaged in the work accomplished within ITU-D and can provide ongoing support and expertise to facilitate the work of ITU-D;

d) that ITU-D Associates and Academia are engaged in the work accomplished within ITU-D and can provide scientific and knowledge background to support ITU-D's work;

e) that ITU-D Sector Members, Associates and Academia have a key role in addressing ways by which private-sector issues can be incorporated into ITU-D strategy development, programme design and project delivery, with the overall goal of increasing mutual responsiveness to the requirements of telecommunication/ICT development;

f) that ITU-D Sector Members, Associates and Academia could also advise on ways and means of enhancing partnerships with the private sector and of reaching out to the private sector of developing countries and the many companies that are not knowledgeable of ITU-D activities;

g) the excellent results achieved through the high-level discussions that took place between Member States and Sector Members during the Global Industry Leaders Forum (GILF),

resolves

1 that the ITU-D operational plans should continue to respond to issues relevant to Sector Members, Associates and Academia by strengthening the communication channels between BDT, Member States and ITU-D Sector Members, Associates and Academia at both the global and regional levels;

2 that ITU-D, and the ITU regional offices in particular, should employ the necessary means to encourage the private sector to become Sector Members and to take a more active part through partnerships with telecommunication/ICT entities in developing countries, and especially with those in the least developed countries, in order to help close the gap in universal and information access;

3 that ITU-D should take the interests and requirements of its Sector Members, Associates and Academia into account in its programmes so as to enable them to participate effectively in achieving the objectives of the Dubai Action Plan and the objectives set forth in the Geneva Plan of Action and the Tunis Agenda;

4 that a permanent agenda item dedicated to private-sector issues will be included in the plenary agenda of the Telecommunication Development Advisory Group (TDAG), dealing with relevant inputs concerning the private sector;

5 that the Director of BDT, when implementing the ITU-D operational plan, should consider the following actions:

i) to improve regional cooperation between Member States, Sector Members, Associates and Academia and other relevant entities, through the continuation of regional meetings addressing issues of common interest, in particular for Sector Members, Associates and Academia;

ii) to facilitate the development of public-private sector partnerships for the implementation of global, regional and flagship initiatives;

iii) to promote through its various programmes an enabling environment for investment and ICT development,

resolves further

that appropriate steps should continue to be taken for the creation of an enabling environment at the national, regional, and international levels to encourage development and investment in the ICT sector by Sector Members,

instructs the Director of the Telecommunication Development Bureau

1 to continue working closely with ITU-D Sector Members, Associates and Academia for their participation in successful implementation of the Dubai Action Plan;

2 to address, as appropriate, in the programmes, activities and projects, issues of interest to Sector Members, Associates and Academia;

3 to facilitate communications between Member States, and Sector Members on issues which contribute to an enabling environment for investment, particularly in developing countries;

4 to continue to organize meetings for high-level industry executives, e.g. chief regulatory officers (CRO) meetings, possibly back-to-back with the Global Symposium for Regulators (GSR), in order to foster exchange of information and assist in identifying and coordinating development priorities;

5 to further deploy and strengthen the ITU-D Sector Members, Associates and Academia portal in order to help exchange and disseminate information for all ITU members,

encourages Member States, Sector Members, Associates and Academia of the ITU Telecommunication Development Sector

1 subject to the relevant provisions of the Constitution and the Convention, to participate together and actively in the work of TDAG, to submit contributions, in particular regarding private-sector issues to be discussed, and to provide relevant guidance for the Director of BDT;

2 to participate actively at the appropriate level in all initiatives of ITU-D;

3 to identify means of enhancing cooperation and arrangements between the private and public sectors in all countries, working closely with BDT.

RESOLUTION 72 (Hyderabad, 2010)

More effective utilization of mobile communication services

(ABROGATED BY WTDC-14)

RESOLUTION 73 (Rev. Dubai, 2014)

ITU centres of excellence

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 139 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunications/information and communication technologies (ICTs) to bridge the digital divide and build an inclusive information society;

b) Resolution 123 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on bridging the standardization gap between developing and developed countries;

c) the terms of the Hyderabad Declaration;

d) Resolution 15 (Rev. Hyderabad, 2010), of the World Telecommunication Development Conference (WTDC), on applied research and transfer of technology;

e) Resolution 37 (Rev. Dubai, 2014) of this conference, on bridging the digital divide;

f) Resolution 40 (Rev. Dubai, 2014) of this conference, on the Group on capacity-building initiatives (GCBI);

g) Resolution 47 (Rev. Dubai, 2014) of this conference, on enhancement of knowledge and effective application of ITU Recommendations in developing countries, including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations;

h) Resolution 73 (Hyderabad, 2010) of WTDC, on ITU centres of excellence,

considering

a) that ITU centres of excellence have been operating successfully since 2001 in several languages including English, Arabic, Chinese, Spanish, French, Russian and Portuguese in different regions of the world;

b) that there has been a major strategic review of the ITU Centres of Excellence programme, in accordance with the new results-based management approach and taking into account the changing sector environment, which has made recommendations for the future programme;

c) that GCBI has reviewed the recommendations of the review and advised that the future work shall be focused on the new strategy;

d) that the Centres of Excellence programme will come into operation as from 1 January 2015;

e) that, in every country, specialists in the field of telecommunications/ICTs hold great potential for development of the sector;

f) that there is a need for constant upgrading of the qualifications of telecommunication/ICT specialists;

g) that key ITU Telecommunication Development Sector (ITU-D) projects in regard to the training of telecommunication/ICT staff, including the work of the ITU centres of excellence, make a significant contribution to upgrading the qualifications of telecommunication/ICT specialists;

h) that the centres of excellence should be financially self-sustaining,

recognizing

a) that telecommunication/ICT staff training and capacity building, taking into account gender equality, youth and persons with disabilities, as well as the population as a whole, should be constantly developed and improved;

b) that ITU centres of excellence fulfil an important role in the ITU capacity-building scheme, under the ITU Academy activities;

c) that partnerships and cooperation between ITU centres of excellence and with other education centres contribute to effective training of specialists;

d) the sovereign right of each State to formulate its own policy in regard to the licensing of services for capacity building;

e) the need to attract, first and foremost, qualified experts from academia to the work of the ITU centres of excellence;

f) that activities in the field of human capacity building are being organized and held in parallel in the ITU centres of excellence and in the regional/area offices under the operational plan of ITU-D,

resolves

1 that the activity of ITU centres of excellence should be continued and executed in accordance with the new Centres of Excellence strategy;

2 that the programme's themes be agreed by each WTDC and constitute a high priority for the ITU members and other stakeholders in accordance with a prior assessment of needs conducted at global and regional levels in consultation with regional organizations in the telecommunication/ICT sector and in accordance with the ITU strategic plan;

3 when setting priorities for the work of the ITU centres of excellence, to proceed from the current needs of the region, which are to be identified using the regional organizations or associations in the telecommunication/ICT sector as well as through consultations with ITU members;

4 to consider that human capacity-building efforts should be concentrated in the ITU centres of excellence, whose activities should be included in the operational plans;

5 that the numbers of centres of excellence will be regulated and endorsed by the Telecommunication Development Advisory Group (TDAG);

6 that a regular assessment of the activities of centres of excellence shall be conducted and reported to TDAG,

instructs the Director of the Telecommunication Development Bureau

1 to provide assistance for the work of the ITU centres of excellence according it the necessary priority attention;

2 in drawing up ITU-D operational plans, to incorporate therein activities prepared and carried out by the ITU centres of excellence under the corresponding ITU-D action plans;

3 to make the necessary organizational arrangements for the formulation of standards for ITU human capacity-building activities;

4 to facilitate the work of the ITU centres of excellence, providing them with the necessary support;

5 to make the necessary organizational arrangements for setting up, within the ITU regional/area offices, a database of experts and participants in ITU centres of excellence activities, for exchanges of experts in the field,

calls upon Member States, Sector Members and Academia of the ITU Telecommunication Development Sector

to participate actively in the ITU Centres of Excellence activity, including through the provision of recognized experts, training materials and also financial support.

RESOLUTION 74 (Hyderabad, 2010)

More effective adoption of e-government services

(ABROGATED BY WTDC-14)

(Incorporated in Resolution 54)

RESOLUTION 75 (Dubai, 2014)

Implementation of the Smart Africa Manifesto

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that at its 22nd ordinary session, it was decided that the African Union Assembly "ENDORSES the key outcomes of the Transform Africa Summit hosted by H.E. Paul Kagame, President of the Republic of Rwanda in October 2013 which adopted the SMART Africa Manifesto highlighting the need to place ICT at the centre of national socio-economic development agenda and SMART Africa Alliance as implementation framework";

b) Resolution 30 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on special measures for the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition;

c) the Millennium Declaration and the 2005 World Summit Outcome;

d) the outcome of the Geneva (2003) and Tunis (2005) phases of the World Summit on the Information Society,

recalling

the Connect Africa summit goals adopted by African Heads of State present on 29-30 October 2007, which reflect the challenges and opportunities in the Africa region,

resolves to instruct the Director of the Telecommunication Development Bureau

to provide technical expertise to carry out feasibility studies and project management for the implementation of the Smart Africa Manifesto,

instructs the Secretary-General

1 to engage the different United Nations agencies to support various components of the Smart Africa programmes, in areas within their scope and mandate;

2 to mobilize financial support from the existing networks, including broadcasters, satellite providers, etc.,

invites Member States

1 to cooperate with African countries in promoting regional, subregional, multilateral and bilateral projects and programmes for the implementation of the Smart Africa Manifesto;

2 to transmit this resolution to the Plenipotentiary Conference (Busan, 2014) for consideration.

RESOLUTION 76 (Dubai, 2014)

Promoting information and communication technologies among young women and men for social and economic empowerment

The World Telecommunication Development Conference (Dubai, 2014),

noting

a) Resolution 70 (Guadalajara, 2010) of the Plenipotentiary Conference, which calls for promoting and increasing the interest of, and opportunities for, women and girls in information and communication technology (ICT) careers during elementary, secondary and higher education so as to encourage girls to choose a career in the field of ICT and foster the use of ICTs for the social and economic empowerment of women and girls;

b) the Tunis Commitment of the 2005 phase of the World Summit on the Information Society, reaffirming Member States' commitment to empowering young people as key contributors to building an inclusive information society in order to actively engage youth in innovative ICT-based development programmes and widen opportunities for youth to be involved in e-strategy processes;

c) the Youth Employment and Entrepreneurship Initiative signed by BDT and the Telecentre.org Foundation at Connect Americas 2012;

d) the BYND 2015 Global Youth Summit, held in Costa Rica in September 2013 led by ITU, which brought together some 700 participants and over 3 000 young people around the world who logged in virtually to contribute their ideas to shape the sustainable development agenda in the post-2015 era;

e) that the world's youth have set priorities for the post-2015 development agenda in their "Costa Rica Declaration", as an outcome of the Global Youth Summit, which have been presented for consideration to the United Nations General Assembly at its sixty-eighth session;

f) the fact that the United Nations Secretary-General has put "youth" as a priority in his Agenda and included youth employment, entrepreneurship and education as overall goals through the System-Wide Action Plan on Youth,

recognizing

a) that youth are digital natives, the best promoters of ICTs and the world force for progress;

b) that ICTs are tools through which both young women and men can substantively contribute to, participate in and leverage their social and economic development,

considering

a) the progress made by BDT in promoting gender equality, in the development and implementation of projects that target youth and young women and are gender sensitive, as well as in increasing the awareness of career development for young girls in ICTs and related fields within the Union and among Member States and Sector Members;

b) the results achieved within the framework of Resolution 70 (Rev. Guadalajara, 2010), by promoting the International Girls in ICT Day from 2011 to 2013, through which over 70 000 girls and young women in over 120 countries were made aware of the job opportunities in the ICT sector with the support of BDT;

c) the fact that ICTs play an important role in the promotion of education, career development and work opportunities, as well as for social and economic development of young women and men;

d) the fact that ITU, through the Global Youth Summit, engaged a worldwide community to gather their opinions and ideas on how technology can contribute to a better world and shape the post-2015 development agenda;

e) the fact that BDT plays a substantive role, through its activities, towards youth empowerment and involvement in the decision-making processes related to ICTs for development-related issues,

resolves

1 that ITU-D, taking into account the above considerations, shall continue to support the development of activities, projects and events aimed at promoting ICT applications among young women and men, in particular in the areas of employment, entrepreneurship and education, and thereby contribute to youth educational, social and economic development and empowerment;

2 that the established ITU-D objective on digital inclusion will continue to support the work promoting ICTs to young women and men,

resolves further

1 to establish partnerships with academia concerned with youth development programmes;

2 to add a youth dimension in Questions for study, wherever possible,

instructs the Director of the Telecommunication Development Bureau

1 to seek appropriate means to integrate youth issues into the activities of BDT;

2 to ensure that the necessary resources, within budgetary limits, are allocated to these activities;

3 to promote ICTs among young women and men and their social and economic development and empowerment;

4 to provide guidance on measuring the extent of youth empowerment at national and international level;

5 to provide guidance on digital citizenship among youth, including e-government services,

invites the Director of the Telecommunication Development Bureau

to assist Member States:

1 to promote ICTs for the social and economic development and empowerment of young women and men;

2 to provide concrete advice, in the form of guidelines, to integrate young women and men in the information society;

3 to establish partnerships with Sector Members, in order to develop and/or support specific ICT projects that target young women and men in developing countries and in countries with economies in transition;

4 to include a youth component in the BDT activities aimed at raising awareness of the challenges that youth are facing in the ICT area, and calling for implementation of concrete solutions;

5 to promote ICT-friendly frameworks in education and careers for youth without gender discrimination, and thus encourage young girls and women to be part of the ICT sector,

encourages the Member States

1 to share best practices on national approaches targeting the use of ICTs for the social and economic development of young women and men;

2 to develop national strategies for using ICTs as a tool for the educational, social and economic development of young women and men;

3 to promote ICTs for youth empowerment and involvement in the decision-making processes of the ICT sector;

4 to support ITU-D activities in field of ICTs for the social and economic development of young women and men,

encourages the Member States and Sector Members

1 to coordinate global and regional youth forums, considering available resources;

2 to provide access to telecommunications/ICTs and provide up-to-date training for young people on ICT use;

3 to foster collaboration with civil society and the private sector in order to provide specialized training for young innovators,

requests the Secretary-General

1 to bring this resolution to the attention of the Plenipotentiary Conference (Busan, 2014) with a view to releasing appropriate resources, within the budgetary limits, for the corresponding activities and functions;

2 to bring this resolution to the attention of the United Nations Secretary-General in an effort to promote increased coordination and cooperation for development policies, programmes and projects that link ICTs to the promotion and empowerment of young women and men.

RESOLUTION 77 (Dubai, 2014)

Broadband technology and applications for greater growth and development of telecommunication/information and communication services and broadband connectivity

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 71 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the strategic plan for the Union;

b) Resolution 139 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunications/information and communication technologies (ICTs) to bridge the digital divide and build an inclusive information society;

c) the outcome documents of the 2005 phase of the World Summit on the Information Society (WSIS);

d) Resolution 135 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in the development of telecommunications/ICTs, and the importance of telecommunications/ICTs for economic and social progress;

e) Opinion 2 (Geneva, 2014) of the World Telecommunication/ICT Policy Forum, on fostering an enabling environment for the greater growth and development of broadband connectivity;

f) Resolution 20 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on non-discriminatory access to modern telecommunication/ICT facilities, services and related applications;

g) Resolution 43 (Rev. Dubai, 2014) of this conference, on assistance for implementing international mobile telecommunications (IMT);

h) Resolution 50 (Rev. Dubai, 2014) of this conference, on optimal integration of ICTs,

considering

a) the role of ITU, and the role of the ITU Telecommunication Development Sector (ITU-D) in particular, in the development of telecommunication/ICT facilities and services;

b) the potential benefits of the rapid introduction of new and diverse telecommunication services, including those highlighted in Resolution 66/184 of the United Nations General Assembly, and consistent with § 54 of the Tunis Agenda for Information Society, and the role of broadband connectivity in attaining the UN Millennium Development Goals;

c) the importance of broadband capacity to facilitate the delivery of a broader range of services and applications, promote investment and provide Internet access at affordable prices to both existing and new users in underserved and unserved communities using a technology-neutral approach to bridging the existing digital divide;

d) that new innovative terrestrial wireless systems as well as satellite system technologies can help bridge the digital divide, not only between developing countries and developed countries but also between urban, remote and rural regions where coverage by conventional fixed telecommunication services may not be adequate;

e) that broadband terrestrial and satellite systems are an effective, and in many cases – particularly for rural areas – the most effective, means of performing many practical tasks to open up new prospects to help bridge the digital divide and affording developing countries access to new technologies,

taking into account

a) the report of the fifth WTDC (Hyderabad, 2010), highlighting the importance of telecommunication infrastructure and technology development, particularly in developing countries, and adopting regional initiatives and the Hyderabad Action Plan to assist developing countries in achieving, to a greater degree, universal access to telecommunication services;

b) that many countries are interested in introducing a comprehensive technology-neutral approach for broadband services in activities such as e-health, e-government and e-education;

c) that despite considerable improvements in the availability and affordability of broadband, almost two-thirds of the world population lacks access to affordable broadband;

d) that unequal access to broadband telecommunication services does nothing to eradicate social inequality and has an adverse impact on the social and economic situation in different countries and regions;

e) the importance of competition in promoting investment, as presented in the report of the Broadband Commission for Digital Development[1],

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[1] "Broadband: A Platform for Progress". A report by the Broadband Commission for Digital Development, September 2010. (Available at http://www.broadbandcommission.org/Reports/Report 2.pdf).

recognizing

a) the important role of ITU-D in coordinating the rational use of resources in the context of various projects aimed at securing more widespread deployment of technology-neutral telecommunication services in different countries of the world;

b) that broadband-enabled terrestrial and satellite communications are a factor in eliminating the isolation of certain categories of population who live in parts of a country where coverage by conventional telecommunication networks remains inadequate and lack resources;

c) that studies suggest that broadband penetration is higher in countries with national broadband plans, policies or strategies than in countries without them;

d) that, pursuant to § 22 of the Geneva Declaration of Principles adopted by WSIS, a well-developed information and communication network infrastructure easily accessible and affordable making greater use of broadband can accelerate the social and economic progress of countries and the well-being of all individuals, communities and peoples;

e) the policy recommendations in the report of the Broadband Commission for Digital Development[2] encouraging broadband infrastructure development and the creation of a favourable environment for investment in telecommunications infrastructure by encouraging all Member States to:

i) enable government services that will stimulate demand for and investment in telecommunications, especially in developing countries;

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[2] "The State of Broadband 2012: Achieving Digital Inclusion for All". A report by the Broadband Commission for Digital Development, September 2012. (Available at http://www.broadbandcommission.org/Documents/bb-annual.pdf).

ii) establish a universal service programme to support technology-neutral telecommunication infrastructure investment;

iii) encourage efficient and innovative broadband practices for new market entrants and consumers;

iv) ensure the availability and affordability of broadband-enabled services;

f) that development and implementation of a national broadband plan, policy or strategy is essential to broadband development and economic growth,

resolves

1 to encourage greater coordination by the Telecommunication Development Bureau (BDT), and encourage the private sector to continue playing a significant role in supporting initiatives that foster access to and uptake of broadband connectivity by utilizing the most appropriate technology mix approach, with the aim of providing citizens greater access to ICT applications in support of national broadband strategies;

2 to promote availability, accessibility, reliability and affordability of broadband in developing countries by enabling Member States to develop national broadband policies and implementation strategies based on careful evaluation of supply and demand for broadband;

3 that BDT should support the implementation of regional and national projects for the use of terrestrial and satellite broadband communication systems to provide the population with services, including mobile services and applications such as e-government, e-health and e-education, as well as mobile money transfer and transactions, mobile payment, mobile banking and mobile marketing, on the basis of cooperation with interested Member States, relevant international organizations and the private sector;

4 that BDT, taking into account available experience and the strategy for bridging the digital divide and building the global information society, should formulate and implement a programme to develop proposals and recommendations on the most effective and efficient use of technology, including telecommunication services for broadband connectivity at regional and national level, acting in association with ITU connectivity initiatives as appropriate,

instructs the Director of the Telecommunication Development Bureau

1 to seek partnerships and cooperation with parties directly involved in the provision of services to the population using the most practical telecommunication technology, facilities and networks to ensure effective implementation of the relevant ITU programmes and activities in the development of broadband connectivity, providing reliable broadband access at affordable prices to both existing and new users in underserved and unserved communities;

2 to establish clear links between the broadband study Question(s), programmes, and regional initiatives in order to maximize the use of human and financial resources and, most importantly, better meet the needs of developing countries,

invites Member States

1 to create and promote widespread affordable access to broadband communication infrastructure through enabling legal and regulatory environments, including the availability of spectrum and licensing policies that are fair, transparent, stable, predictable and non-discriminatory;

2 to undertake all efforts to foster an enabling environment for the greater growth and development of technology-neutral broadband connectivity in, in particular, developing countries;

3 to actively contribute to the broadband study Question(s);

4 to implement the results of the work performed on the study Question(s), including legal, regulatory and market reforms that create an enabling environment for broadband by promoting competition, private investment and public-private partnerships;

5 to implement policies and plans to encourage the availability of services, applications, and content that stimulate demand for broadband;

6 to adopt measures that promote human capacity building, including digital literacy programmes and technical education, taking account of the need to promote broadband access for women and girls, persons with disabilities, people living in rural and remote areas and indigenous peoples.

RESOLUTION 78 (Dubai, 2014)

Capacity building for countering misappropriation of Recommendation ITU-T E.164 telephone numbers

The World Telecommunication Development Conference (Dubai, 2014),

considering

the provisions of Chapter IV the ITU Constitution, on the ITU Telecommunication Development Sector (ITU-D), particularly with regard, *inter alia*, to the functions of ITU-D for building awareness of the impact of telecommunications/information and communication technologies (ICTs) on national economic and social development, its catalytic role in promoting the development, expansion and operation of telecommunication services and networks, especially in developing countries, and the need to maintain and enhance cooperation with regional and other telecommunication organizations,

considering further

a) Resolution 22 (Rev. Dubai, 2014) of this conference, on alternative calling procedures on international telecommunication networks, identification of origin and apportionment of revenues in providing international telecommunication services;

b) the resolutions from previous world telecommunication development conferences in regard to countries in special need;

c) the work carried out to date in ITU-D to assist countries in understanding and countering the misappropriation of Recommendation ITU-T E.164 telephone numbers, through ITU-D programmes, activities and projects,

noting

a) that Member States are responsible for managing numbering resources behind country codes assigned to them under Recommendation ITU-T E.164;

b) that many Member States, particularly developing countries, have been significantly and adversely affected by telephone number misappropriation;

c) that many operating agencies have been significantly and adversely affected by telephone number misappropriation;

d) Resolution 61 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, on countering and combating misappropriation and misuse of international telecommunication numbering resources;

e) Recommendation ITU-T E.156, which sets out guidelines for ITU Telecommunication Standardization Sector (ITU-T) action on reported misuse of ITU-T E.164 numbers, and Supplement 1 to Recommendation ITU-T E.156, which provides a best-practice guide on countering misuse of ITU-T E.164 numbering resources,

recognizing

a) Programme 3 of the Hyderabad Action Plan (HAP), on enabling environment, including the following priority areas:

i) assistance to develop national strategies, policies, plans, regulation and economic and financial mechanisms on topics which include telephone numbering;

ii) forums for information discussion and exchange;

iii) development of tools to increase knowledge and know-how;

b) the immediate needs of small island development states (SIDS) and specific regions or subregions, such as the Pacific Islands, in countering telephone number misappropriation,

further recognizing

a) that there is a need to counter and combat misappropriation and misuse of international telecommunication numbering resources assigned in accordance with Recommendation ITU-T E.164;

b) that the allocation of global telephone numbering resources is managed by the Director of the Telecommunication Standardization Bureau in accordance with ITU-T Recommendations;

c) that the management and allocation of national telephone numbering resources is the responsibility of Member States, and that such management is their sovereign right and reflected in national regulatory and legal frameworks;

d) that differences exist between Member States in their approach to managing their national telephone numbering resources;

e) that Member States have the right to impose rules on the parties to whom they allocate telephone numbering resources, for example through national numbering plan authorities;

f) that operating agencies must act in accordance with all applicable national regulatory and legal frameworks of the Member State in which the number is being used,

requests the Director of the Telecommunication Development Bureau

1 to publish, identify, promote and use the documents and research produced thus far as a template for future activity in order to allow consistent identification of the issues and to combat ITU-T E.164 telephone number misappropriation;

2 to utilize notifications of numbering misappropriation submitted to support consistent identification of ITU-T E.164 telephone numbering misappropriation issues, in order to assist, on Member States' request, in developing capability to counter ITU-T E.164 telephone number misappropriation;

3 to continue to work with regions, subregions and countries, in particular developing countries and least developed countries, to develop national legal and regulatory frameworks that are sufficient to ensure best practices in ITU-T E.164 telephone numbering management in order to counter telephone number misappropriation,

requests the Director of Telecommunication Development Bureau in cooperation with the Director of the Telecommunication Standardization Bureau

1 to ensure that national numbering plans are available, either directly from the Member State or via the ITU Operational Bulletin, using the format specified in Recommendation ITU-T E.129, in order to contribute to countering telephone number misappropriation;

2 to be responsive to Member State requests, particularly those from developing countries and SIDS, with a view to developing, supporting and acting on best practices on telephone number misappropriation, resulting in templates, proposals, Recommendations and resolutions to counter and combat ITU-T E.164 telephone number misappropriation;

3 to work cooperatively in order to continue to develop measures based on proven best practices for countering ITU-T E.164 telephone number misappropriation,

invites Member States

1 to collaborate in order to identify, counter and combat activities associated with ITU-T E.164 telephone number misappropriation;

2 to support the development and deployment of ITU-T E.164 telephone numbering management best practices within their jurisdiction;

3 to work collaboratively with other Member States and with operating agencies in order to keep them informed of the rules, guidelines and allocation methods for ITU-T E.164 telephone numbers within their country,

invites Member States and Sector Members

to contribute to the development of best practices for countering misappropriation of ITU-T E.164 telephone numbers and to encourage administrations and international telecommunication operators to ensure that ITU-T E.164 numbering resources are used only by the assignees and only for the purposes for which they were assigned, and that unassigned resources are not used.

RESOLUTION 79 (Dubai, 2014)

The role of telecommunications/information and communication technologies in combating and dealing with counterfeit[1] telecommunication/information and communication devices

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 177 (Guadalajara, 2010) of the Plenipotentiary Conference, on conformance and interoperability, which instructs the Director of the Telecommunication Development Bureau, in close collaboration with the Director of the Telecommunication Standardization Bureau and the Director of the Radiocommunication Bureau, to assist Member States in addressing their concerns with respect to counterfeit equipment;

b) Resolution 64 (Rev. Dubai, 2014) of this conference, on protecting and supporting users/consumers of telecommunication services/information and communication technologies (ICTs);

c) Resolution 76 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme;

d) Resolution 47 (Rev. Dubai, 2014) of this conference, on enhancement of knowledge and effective application of ITU Recommendations in developing countries, including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations, and in particular assistance to developing countries in addressing their fears in relation to counterfeit equipment;

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1 Counterfeit telecommunication/ICT devices include counterfeit and/or copied devices and equipment as well as accessories and components.

e) Resolution 79 (Dubai, 2012) of WTSA, on the role of telecommunications/ICTs in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it,

recognizing

a) that counterfeit telecommunication/ICT products and devices have become a growing problem in the world, adversely affecting to a large extent all stakeholders in the ICT field (vendors, governments, operators and consumers);

b) that several countries have introduced some awareness-raising campaigns, practices and regulations in their markets in order to limit and deter counterfeit products and devices, which have had a positive impact, and that developing countries may benefit from this experience,

taking into account

a) that, with the boom in telecommunications/ICTs, counterfeit telecommunication/ICT devices have increased noticeably in recent times;

b) that these counterfeit devices affect economic growth and intellectual property rights, impede innovation, are hazardous to health and safety and have an impact on the environment and the increasing amount of harmful e-waste;

c) that ITU and relevant stakeholders have a key role to play in fostering coordination between the parties concerned to study the impact of counterfeit devices and the mechanism for limiting them and to identify ways of dealing with them internationally and regionally,

aware

a) that governments play an important role in combating the manufacture of and international trade in counterfeit and copied devices by formulating appropriate strategies, policies and legislation;

b) of the current work and studies in Study Group 11 of the ITU Telecommunication Standardization Sector (ITU-T) and of relevant activities in other relevant forums;

c) of the ongoing work and studies begun in Study Group 1 and being continued in Study Group 2 of the ITU Telecommunication Development Sector (ITU-D) under Question 8/2, on strategies and policies for the proper disposal or reuse of telecommunication/ICT waste material;

d) of the current work and studies in ITU-T Study Group 5, on the health and environmental impact of telecommunication equipment, particularly peripheral, mobile and handheld equipment,

resolves to instruct the Director of the Telecommunication Development Bureau, in close collaboration with the Director of the Telecommunication Standardization Bureau and the Director of the Radiocommunication Bureau

1 to continue to increase and develop ITU activities on combating, and ways of limiting the spread of, counterfeit devices;

2 to assist Member States, particularly developing countries, in addressing their concerns regarding counterfeit devices;

3 to continue to work in collaboration with stakeholders (such as the World Trade Organization (WTO) and World Intellectual Property Organization (WIPO)), including academia and relevant organizations, to coordinate activities relating to combating counterfeit devices through study groups, focus groups and other related groups;

4 to organize seminars and workshops to raise awareness of the health and environmental risks of using counterfeit devices and ways of limiting them, particularly in developing countries, which are the most at risk from the dangers of counterfeit devices;

5 in collaboration with WTO, WIPO and other relevant bodies, to restrict the trading, export and circulation of counterfeit devices internationally;

6 to submit periodic reports on the implementation of this resolution,

instructs ITU-D Study Group 2, in collaboration with the relevant ITU study groups

1 to prepare and document examples of best practices on limiting counterfeit and copied devices, for distribution to ITU Member States and Sector Members;

2 to prepare guidelines, methodologies and publications to assist Member States in identifying counterfeit devices and methods of increasing public awareness to restrict trade in these devices, as well as the best ways of limiting them;

3 to study the impact of counterfeit telecommunication/ICT devices being transported to developing countries;

4 to continue studying safe ways of disposing of the harmful e-waste from the counterfeit devices currently in circulation in the world,

invites Member States

1 to take all necessary measures to combat counterfeit devices;

2 to cooperate and exchange expertise among themselves in this area;

3 to incorporate policies to combat counterfeit devices in their national telecommunication/ICT strategies,

invites telecommunication operators

to cooperate with governments, administrations and telecommunication regulators in combating counterfeit devices, restricting trade in these devices and disposing of them safely,

encourages Member States, Sector Members and Academia

to participate actively in ITU-D studies relating to combating counterfeit devices by submitting contributions and in other appropriate ways.

RESOLUTION 80 (Dubai, 2014)

Establishing and promoting trusted information frameworks in developing countries to facilitate and encourage electronic information exchanges between economic partners

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 135 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role in the development of telecommunications/information and communication technologies (ICTs), in providing technical assistance and advice to developing countries and in implementing relevant national, regional and interregional projects;

b) Resolution 181 (Guadalajara, 2010) of the Plenipotentiary Conference, on definitions and terminology relating to building confidence and security in the use of ICTs;

c) Resolution 71 (Rev. Dubai, 2014) of this conference, on strengthening cooperation between Member States and Sector Members of the ITU Telecommunication Development Sector (ITU-D), including the private sector;

d) Resolution 74 (Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on more effective adoption of e-government services;

e) Resolution 50 (Rev. Dubai, 2014) of this conference, on optimal integration of ICTs;

f) Resolution 48 (Rev. Hyderabad, 2010) of WTDC, on strengthening cooperation among telecommunication regulators;

g) Resolution 54 (Rev. Dubai, 2014) of this conference, on ICT applications;

h) Resolution 45 (Rev. Dubai, 2014) of this conference, on mechanisms for enhancing cooperation on cybersecurity, including countering and combating spam,

considering

a) current difficulties in establishing business partnerships in developing countries;

b) the important role that national telecommunication/ICT policy can play in stimulating innovation and investment in new technologies;

c) the sovereign right of each country to establish its national telecommunication/ICT priorities and policies;

d) the importance of telecommunication networks and ICT infrastructure for economic development;

e) that the amount of electronic information being exchanged by developing countries at national and regional levels is low, but its development potential is undeniable;

f) the potential for broader access to a range of telecommunication/ICT applications and services that are readily available to facilitate economic development;

g) that the World Summit on the Information Society (WSIS) adopted specific action lines in its Plan of Action, including in particular:

– Action Line C1: The role of governments and all stakeholders in the promotion of ICTs for development

– Action Line C2: Information and communication infrastructure: An essential foundation for the information society

– Action Line C5: Building confidence and security in the use of ICTs

– Action Line C6: Enabling environment

– Action Line C7: ICT applications: Benefits in all aspects of life,

noting

a) the adoption and implementation of the Hyderabad Action Plan (WTDC-10), which incorporated provisions on the development of telecommunication/ICT services in developing countries through various programmes, in particular Programme 2 on cybersecurity, ICT applications and IP-based network-related issues and Programme 3 on the enabling environment;

b) that this conference has reaffirmed, in its Declaration and resolutions, a commitment to:

– foster international cooperation on telecommunication/ICT development issues;

– create an enabling environment conducive to telecommunication/ICT development;

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

recognizing

a) that effective deployment and use of ICTs is an important factor in implementing social and economic development programmes, especially in developing countries;

b) the low level of electronic communications and economic information exchanges at the regional level within and between the developing countries;

c) that ICTs have helped to transform business models and organizational structures in countries and are thus a key asset for an enterprise or a country in becoming integrated into the new global economy;

d) that the establishment of trusted information frameworks between economic partners will increase confidence in, and encourage the use of, electronic information exchanges, and will be a key factor in future growth of the digital economy at the global level;

e) the work already being carried out by other international and private-sector organizations in the fields of trusted information frameworks and electronic commerce,

conscious

a) that the modernization of telecommunication networks and the development of services and applications associated with ICTs in these countries will be an important factor in their economic development and will offer them an opportunity to lay the foundations of an inclusive information society;

b) of the potential beneficial impact for developing countries of the establishment of trusted information frameworks to facilitate the exchange of electronic information in the world of business and, in particular, their importance to actors involved in the digital economy;

c) that the removal of existing obstacles to the development of electronic information exchanges in the developing countries depends on establishing trusted information frameworks that encourage the creation of new regional partnerships between administrations, businesses and individuals;

d) of the need to establish trusted information frameworks based on global standards and best practices to facilitate regional and international interoperability of electronic information exchange mechanisms,

resolves

that relevant ITU-D and ITU Telecommunication Standardization Sector (ITU-T) study groups, to the extent possible, take into account the aims of this resolution in studies under Questions pertaining to ICT applications,

instructs the Director of the Telecommunication Development Bureau

1 to act as a catalyst in enhancing international and regional cooperation among Member States, especially regarding the use of ICT applications and services to facilitate electronic information exchanges between economic partners;

2 to invite Study Group 2 to take into account the aims of this resolution when studying the new Question on Creating the smart society: Social and economic development through ICT applications;

3 to assist developing countries to take advantage of resources and services provided by the private sector and relevant organizations at the regional and international levels on global standards and best practices for establishing trusted information frameworks and mechanisms that facilitate electronic information exchanges between economic partners,

invites Member States and Sector Members

1 to encourage the creation of an enabling framework for international and regional partnership in which countries identify their needs in terms of electronic exchanges of economic information, and assess the feasibility of associated operational and technical interoperability frameworks;

2 to organize forums and workshops, at regional and international level, dealing with aspects of the development of trusted information frameworks for electronic exchange of economic information based on global standards and best practices.

RESOLUTION 81 (Dubai, 2014)

Further development of electronic working methods for the work of the ITU Telecommunication Development Sector

The World Telecommunication Development Conference (Dubai, 2014),

recalling

a) Resolution 167 (Guadalajara, 2010) of the Plenipotentiary Conference, on strengthening ITU capabilities for electronic meetings and means to advance the work of the Union;

b) Resolution 66 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on documents and publications of the Union, regarding the electronic availability of documents;

c) Resolution 32 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly, on strengthening electronic working methods (EWM) for the work of the ITU Telecommunication Standardization Sector (ITU-T), and the implementation of EWM capabilities and associated arrangements in the work of ITU-T,

considering

a) the rapid technological change in the field of telecommunications and the associated policy, regulatory and infrastructure adaptations required at national, regional and global levels;

b) the consequent need for the widest possible engagement of the ITU membership from around the world to address these matters in the work of the Union;

c) that developments in technologies and facilities for the holding of electronic meetings and the further development of EWM will enable more open, rapid and easy collaboration between participants in the activities of ITU, which may be paperless;

d) that the implementation of EWM capabilities and associated arrangements will have significant benefits for the membership of the ITU Telecommunication Development Sector (ITU-D), including resource-limited individuals, organizations and States, by allowing them timely and effective access to standards information and the standards-making and approval process;

e) that EWM will be advantageous towards improving communication among members of ITU-D and between other relevant standardization organizations and ITU, towards globally harmonized standards;

f) the key role of the Telecommunication Development Bureau (BDT) in providing support to EWM capabilities,

recognizing

a) the budgetary difficulty of developing countries have in participating actively in face-to-face ITU-D meetings;

b) that numerous ITU-D meetings and ITU meetings as a whole are already available as audio and video webcasts and that use of videoconferencing, audioconference calls, real-time captioning and web-based collaboration tools for electronic participation in certain types of meetings have been advanced in meetings of the Sectors and the General Secretariat,

recognizing further

a) the difficulties that developing countries, in particular least developed countries, could have in implementing electronic working methods;

b) that the time difference between regions complicates remote participation in meetings,

mindful

that some activities and procedures associated with certain ITU-D meetings still require direct face-to-face participation by the Union's membership,

noting

a) that, as an alternative to face-to-face meetings, there are benefits in utilizing electronic meetings to progress discussions;

b) that the existence of electronic meetings, with well-documented rules and procedures, will help ITU-D in widening the involvement of potential stakeholders, particularly from developing countries, who are unable to participate in face-to-face meetings;

c) that electronic meetings may lead to increased efficiency of the activities of ITU-D and reduction of costs for all parties, for example by reducing the need for travel and reducing the need for printed copies of documents, thereby contributing to climate neutrality;

d) that different modes of participation are suitable for different types of meetings;

e) that there is a need for procedures to ensure fair and equitable participation by all;

f) that electronic meetings can contribute to bridging the digital divide;

g) that there needs to be a coordinated and harmonized approach to the EWM technologies used, both in ITU-D and in ITU as a whole,

noting further

a) the desire of members to receive documents in electronic format in a timely manner and the need to reduce the increasing amount of hard-copy documentation generated during meetings and dispatched by mail;

b) that many forms of EWM have already been implemented by ITU-D, such as electronic document submission and the electronic forum service;

c) the preferred use of portable computers by members during meetings;

d) the advantage to the membership of facilitating greater electronic participation in the work of rapporteur groups, study groups and the Telecommunication Development Advisory Group (TDAG), in particular by members unable to participate in meetings in Geneva and elsewhere;

e) the difficulties in bandwidth availability and other constraints, particularly in developing countries;

f) the economies possible from enhancing ITU-D EWM capabilities (e.g. reduced costs for distribution of paper documentation, travel costs, etc.);

g) the experience gained by the other ITU Sectors and other organizations of collaboration using EWM,

resolves

1 to further develop facilities and capabilities for remote participation by electronic means in appropriate meetings of ITU-D;

2 to build upon trials for electronic meetings, such that their subsequent implementation is technologically neutral, to the greatest extent possible, and cost effective, in order to allow broad participation, satisfying the necessary security requirements;

3 that the principal EWM objectives of ITU-D are:

- that collaboration between ITU-D members on the development and dissemination of texts should be also by electronic means, bearing in mind that the procedure for the approval of documents is specified in Resolution 1 (Rev. Dubai, 2014) of this conference;

- that BDT, in close collaboration with the Radiocommunication Bureau (BR) and Telecommunication Standardization Bureau (TSB), should provide facilities and capabilities for EWM at meetings, workshops and trainings, particularly to assist developing countries, least developed countries, small island developing states, landlocked developing countries and countries with economies in transition that have bandwidth limitations and other constraints;

- to encourage electronic participation of developing countries in ITU-D meetings, by providing simplified facilities and guidelines, and by waiving any expenses on those participants, other than the local call or Internet connectivity charges;

- that BDT should provide all members of ITU-D with appropriate and ready access to electronic documentation for their work, including a global, unified and consolidated view of document traceability;

- that BDT should provide appropriate systems and facilities to support the conduct of ITU-D's work by electronic means; and

- that all activities, procedures, studies and reports of ITU-D study groups be posted on the ITU-D website in an easy manner to navigate and find all relevant information,

instructs the Director of the Telecommunication Development Bureau

1 to take action, in consultation with TDAG, in order to provide appropriate electronic participation or observation facilities in ITU-D meetings for delegates unable to attend face-to-face meetings;

2 to elaborate, together with the General Secretariat and Bureaux of the other Sectors, a coordinated and harmonized approach to the EWM technology used in ITU;

3 to involve TDAG in the evaluation of the use of electronic meetings and to develop further procedures and rules associated with electronic meetings, including the legal aspects;

4 to develop and maintain an EWM action plan to address the practical and physical aspects of increasing the EWM capability of ITU-D, including the use of tools such as videoconferencing;

5 to ensure that the objectives referred to in *resolves* 2 above are systematically addressed in the EWM Action Plan, including individual action items identified by the ITU-D membership or BDT, and to establish their priority and management in consultation with TDAG;

6 to identify and review costs and benefits of the action items on a regular basis;

7 to report to each meeting of TDAG on the status of the EWM Action Plan, including the results of the cost and benefit reviews described above;

8 to assign the executive authority, budget within BDT and resources to execute the EWM Action Plan as swiftly as possible;

9 to develop and disseminate guidelines for the use of ITU-D EWM facilities and capabilities;

10 to take action in order to provide appropriate electronic participation or observation facilities (e.g. webcast, audioconference, webconference/document sharing, videoconference, etc.) in ITU-D meetings, workshops and training courses for delegates unable to attend events in person, and to coordinate with BDT to assist in the provision of such facilities;

11 to continue promoting electronic working methods so as to encourage and facilitate the participation of all developing countries in the work of ITU-D;

12 to provide an ITU-D website that is easy to navigate to find all relevant information, with use of the Union's six official languages on an equal footing;

13 to report to the ITU Council on an ongoing basis on the developments made with regard to electronic meetings, in order to assess progress in their use within ITU,

instructs the Telecommunication Development Advisory Group

1 to participate in the development of an action plan on EWM and on further procedures and rules associated with electronic meetings, including the legal aspects;

2 to review the status of the EWM Action Plan on a regular basis,

invites Sector Members of the ITU Telecommunication Development Sector

to assist BDT in implementing the EWM Action Plan.

RESOLUTION 82 (Dubai, 2014)

Preserving and promoting multilingualism on the Internet for an inclusive information society

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) the provisions of Resolutions 101 and 102 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on ITU's role with regard to international public policy issues pertaining to the Internet and the management of Internet resources, including domain names and addresses;

b) Resolution 133 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the role of administrations of Member States in the management of internationalized (multilingual) domain names;

c) Resolution 154 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the use of the six official languages of the Union on an equal footing;

d) Resolution 69 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on non-discriminatory access and use of Internet resources;

e) that the mission of the ITU Telecommunication Development Sector (ITU-D) falls within the more general framework of ITU's purposes, laid down in Article 1 of the ITU Constitution, and is formulated as follows: "The mission of the ITU Telecommunication Development Sector (ITU-D) shall be 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",

recalling

Resolution 20 (Rev. Hyderabad, 2010) of the World Telecommunication Development Conference (WTDC), on non-discriminatory access to modern telecommunication/ICT facilities, services and related applications,

recognizing

a) Articles 19 and 27 of the Universal Declaration of Human Rights of 1948, to the effect that: "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers", and "Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits…";

b) Article 27 of the International Covenant on Civil and Political Rights of 1966, and the International Covenant on Economic, Social and Cultural Rights of 1966, designed to impose specific obligations in regard to protection against sexual, religious, racial or other forms of discrimination, which stipulates that: "In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language";

c) United Nations General Assembly (UNGA) Resolution 47/135 of 18 December 1992, adopting the Declaration on the rights of persons belonging to national or ethnic, religious and linguistic minorities, which states that: "States shall protect the existence and the national or ethnic, cultural, religious and linguistic identity of minorities within their respective territories and shall encourage conditions for the promotion of that identity";

d) the United Nations Administrative Committee on Coordination (ACC) Statement of 1997 on universal access to basic communication and information services, which asserts that: "... the information and technology gap and related inequities between industrialized and developing nations are widening: a new type of poverty – information poverty – looms";

e) § 25 of the Millennium Declaration approved by UNGA, which refers to measures aimed at increasing the effectiveness of the United Nations in human rights and public information efforts;

f) UNGA Resolution 35/201, approved at the 97th plenary session on 16 December 1980, transmitting the recommendation on promotion and use of multilingualism and universal access to cyberspace;

g) the report drawn up by the Organisation for Economic Co-operation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Internet Society in 2012, entitled "The relationship between local content, Internet development and access prices", which informs us that there is a strong correlation between the development of local network infrastructure and the growth of local content, that local content is growing in volume as a result of investment worldwide, and that its composition is changing and local content is no longer dominated by developed countries, but is more representative of the diversity of multiple cultures, languages and communities existing in the world[1],

emphasizing

a) the role played by ITU in the successful organization of the two phases of the World Summit on the Information Society (WSIS), and that the Geneva Declaration of Principles and the Geneva Plan of Action, adopted in 2003, and the Tunis Commitment and the Tunis Agenda for the Information Society, adopted in 2005, have been endorsed by UNGA;

b) the WSIS 2003 Declaration of Principles and its commitment to "build a people-centred, inclusive and development-oriented information society, where everyone can create, access, utilize and share information and knowledge";

c) that the Internet is a subject of valid international interest and must flow from full multistakeholder cooperation, with a duty to guarantee equitable distribution of resources, facilitate access for all and guarantee stable and secure functioning of the Internet, having due regard to multilingualism, on the basis of the outcomes of the two phases of WSIS;

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[1] Report available at http://www.internetsociety.org/localcontent/.

d) that the Geneva Declaration of Principles aimed at "building the information society: a global challenge in the new millennium" establishes, as one of its fundamental principles, under § B8 (Cultural diversity and identity, linguistic diversity and local content), that "the creation, dissemination and preservation of content in diverse languages and formats must be accorded high priority in building an inclusive information society, paying particular attention to the diversity of supply of creative work and due recognition of the rights of authors and artists. It is essential to promote the production of and accessibility to all content – educational, scientific, cultural or recreational – in diverse languages and formats. The development of local content suited to domestic or regional needs will encourage social and economic development and will stimulate participation of all stakeholders, including people living in rural, remote and marginal areas";

e) that the aforementioned Declaration of Principles also asserts that "the preservation of cultural heritage is a crucial component of identity and self-understanding of individuals that links a community to its past. The information society should harness and preserve cultural heritage for the future by all appropriate methods, including digitization";

f) that, similarly, at the WSIS meeting in Geneva, UNESCO introduced its concept of knowledge societies, emphasizing plurality, diversity and inclusion, and highlighting that the use of ICTs has to take into account universally recognized human rights, focusing on four principles: freedom of expression, universal access to information and knowledge, cultural and linguistic diversity and quality education for all;

g) that the UNESCO Convention of 2005 on the Protection and Promotion of the Diversity of Cultural Expression stipulates that: "Equitable access to a rich and diversified range of cultural expressions from all over the world and access of cultures to the means of expressions and dissemination constitute important elements for enhancing cultural diversity and encouraging mutual understanding";

h) that UNESCO has provided assistance to Member States in the implementation of the policy guidelines assembled in the recommendations for decision-makers, and carried out various training activities in respect of universal access to information and the promotion and use of multilingualism, in conjunction with the Organization of American States (OAS);

i) that the Paris Declaration on Open Educational Resources of 2012 recommends that States, within their capacities and authority, *inter alia*, promote the understanding and use of open educational resources, facilitate enabling environments for use of ICTs, reinforce the development of strategies and policies on open educational resources and encourage the development and adaptation of open educational resources in a variety of languages and cultural contexts,

taking into account

a) that International Mother Language Day, proclaimed by the UNESCO General Conference in November 1999, has been observed yearly since 2000 to promote linguistic and cultural diversity and multilingualism, and that the 2011 edition focused on the theme "Information and communication technologies for the safeguarding and promotion of languages and linguistic diversity";

b) that, in the changing telecommunication/ICT environment, a continuing challenge facing the Union is to remain a pre-eminent intergovernmental organization where Member States, Sector Members and Associates work together to enable the growth and sustained development of telecommunications and information networks and applications, and to facilitate universal access so that people everywhere can participate in, and benefit from, the emerging information society;

c) that ITU is deploying maximum efforts, in collaboration and coordination with competent organizations in the field of Internet governance, to bring the greatest possible benefits to the world community;

d) that, at the operational level, ITU has been carrying out the tasks assigned under the WSIS outcomes, in its capacity as: lead facilitator (along with UNESCO and the United Nations Development Programme (UNDP)) for coordinating the multistakeholder implementation of the Geneva Action Plan; facilitator for Action Lines C2 (Information and communication infrastructure) and C5 (Building confidence and security in the use of ICTs) and, at UNDP's request, having accepted to play the role of facilitator for Action Line C6 (Enabling environment); co-facilitator for Action Lines C1 (Role of governments and all stakeholders in the promotion of ICTs for development), C3 (Access to information and knowledge), C4 (Capacity building), C7 (ICT applications: Benefits in all aspects of life) and C11 (International and regional cooperation); and partner in Action Lines C8 (Cultural diversity and identity, linguistic diversity and local content) and C9 (Media);

e) the 2012 report by the Broadband Commission for Digital Development, which makes it clear that content and broadband-enabled services in local languages as well as the capacities of local communities to create and share content are important drivers of the use of broadband infrastructure by local population;

f) the 2013 report of the Broadband Commission for Digital Development, which presents a series of strategies that governments worldwide, in particular the developing countries and other entities interested in education, should adopt in order to derive maximum benefit from the advantages offered by ICTs, including promoting mobility of education and open educational resources, supporting the development of content adapted to local contexts and languages, etc., pointing to the need to create ecosystems of online educational applications and services with local and homegrown content,

resolves to instruct the Director of the Telecommunication Development Bureau, in collaboration with the Director of Telecommunication Standardization Bureau

to include in the work programmes of relevant ITU-D study groups necessary actions to preserve and promote multilingualism on the Internet and the provision of a huge range of social services, from health to education, with focus on the development of digital content from popular cultures and minority groups using a range of non-mainstream languages which are currently not covered in the Internet, in order to contribute from ITU-D's vantage point, with the Member States, to guaranteeing digital inclusion, building an inclusive and plural information society, and prompting calls for action within the framework of ITU so as to ensure that the importance of preserving linguistic and cultural diversity is recognized, within the framework and available budgetary resources of ITU-D,

further instructs the Director of the Telecommunication Development Bureau

1 to ensure that, in all ITU-D programmes, projects and activities, due account is taken of the need to resolve the issues that hamper the preservation and promotion of multilingualism in the digital ecosystem of the Internet and associated services;

2 to consider holding seminars, symposia or forums for policy-makers, telecommunication/ICT regulators, Sector Members and interested stakeholders, at which public policies for protecting linguistic and cultural diversity of communities, peoples and minority groups and persons with specific needs are presented and discussed, so that their voices are heard and their identities, lifestyles, etc., are taken into account;

3 to collaborate with the Radiocommunication Bureau and the Telecommunication Standardization Bureau in regard to their activities to promote awareness and mainstream policies, and in the creation of programmes and projects that help developing countries foster linguistic diversity and multilingualism on the Internet;

4 to provide advice to, evaluate and supervise projects, initiatives and programmes, so as to determine their impact in terms of preserving and promoting linguistic diversity and multilingualism, under Resolution 17 (Rev. Dubai, 2014) of this conference on regional initiatives, where appropriate;

5 to report to the ITU Council on the implementation of this resolution,

invites Member States and Sector Members, Academia and Associates, as appropriate

1 to participate actively in all international discussions and initiatives for guaranteeing the preservation and promotion of multiculturalism and multilingualism in the digital ecosystem of the Internet and associated services, with a view to ensuring universal access and bringing multilingual societies to life, and strengthening dialogue between cultures, openness and mutual understanding, tolerance towards others, etc.;

2 to submit contributions within ITU-D in order to facilitate effective implementation of this resolution;

3 to promote the creation of capacity building to develop local digital content, in rural contexts and within vulnerable groups of the population, in order to preserve multiculturalism and promote their regional, national and local integration;

4 to contribute, with UNESCO, which is the facilitator for implementation of WSIS Action Line C8, focusing on concerns and requests for assistance, in particular from developing countries, to facilitating and fostering affordability of international Internet connectivity, and thereby overcome language barriers and increase use of the Internet;

5 to contribute to the establishment of regional, national and local strategic plans to promote sites which ensure and foster linguistic diversity and multilingualism in the digital ecosystem of the Internet;

6 to contribute to studying appropriate mechanisms for converting digital archives in non-mainstream languages, with a view to fostering socio-economic development and information and knowledge sharing between communities and groups with specific needs, and so that more and new voices can benefit from the potential offered by telecommunications/ICTs;

7 to recommend measures within their competencies for cooperation with academia, civil society and other interested and involved stakeholders, under a multistakeholder approach, with a view to reducing disparity, exclusion and discrimination in terms of opportunities, by exploiting the potential that protecting and safeguarding languages not present in the digital ecosystem of the Internet offers;

8 to promote awareness among equipment manufacturers and designers regarding the advantages of introducing in the regions already identified by UNESCO alternative alphabets for languages not present in the digital ecosystem of the Internet, to be used by people with different native languages, and thus contribute to moving forward towards digital inclusion, respecting their cultural identity,

invites the Secretary-General

1 to bring this resolution to the attention of the next plenipotentiary conference, for its consideration, taking into account past accomplishments, by allocating the necessary human resources to make effective contributions to ITU-D's activities for institutionalizing the issue of multilingualism within ITU;

2 to bring this resolution to the attention of the Secretary-General of the United Nations in an effort to promote increased cooperation and coordination for development policies, programmes and projects in order to make progress in linguistic diversity and the Internet, in line with the principles of equitable access, functional equivalence, affordability and universal design, fully harnessing the available tools, guidelines and standards, for the elimination of all forms of discrimination and digital exclusion.

RECOMMENDATION ITU-D 15

Models and methods to determine the cost of national telecommunication services

(January, 2002)

Question 12/1: *Tariff policies, tariff models and methods of determining the cost of national telecommunication services*

The ITU Telecommunication Development Bureau (ITU-D),

recognizing

a) that the level and structure of telecommunication tariffs have an important role to play in creating the internally generated funds needed by telecommunication operators, which in most cases serve to finance telecommunication entities' development programmes and are also used in meeting their recurrent expenditure requirements;

b) that the establishment of a balanced and attractive telecommunication tariff structure can promote efficient use of the network and services, enhance universal service provision and have a positive effect on the development of other sectors of the economy,

noting

a) that many developing countries lack adequate experience and skills in formulating cost-orientated tariffs to enable them to benefit fully from telecommunication tariff policies, strategies and practices;

b) that these countries need assistance in obtaining tools for determining and calculating costs in the context of the implementation of cost-orientated tariff structures and levels,

recommends

1 that, in establishing of their legal and regulatory frameworks, public authorities and administrations should:

a) focus on methods for determining and calculating cost-orientated tariffs for telecommunication services, including interconnection charges;

b) take the necessary measures to ensure that they are provided with the appropriate tools for determining the costs of telecommunication services;

c) provide for appropriate training of staff responsible for the tariff structure on the various models and approaches existing worldwide, including in particular the regional tariff models relating to national costs,

2 that the following general principles identified by ITU-T Study Group 3 be implemented in determining and calculating costs:

a) transparency,

b) practicability,

c) objectivity,

d) cost causality,

e) cost recovery,

3 that ITU-D, and the Director of BDT in particular, pursuant to WTDC-98 Resolution 12, give support to administrations in the implementation of cost-orientated tariff structures.

RECOMMENDATION ITU-D 16

Tariff rebalancing and cost-oriented tariffs

(January, 2002)

Question 12/1: *Tariff policies, tariff models and methods of determining the cost of national telecommunication services*

The ITU Telecommunication Development Bureau (ITU-D),

recognizing

a) that the level and structure of telecommunication tariffs play an important role for telecommunication operators in the financing of their development programmes and meeting their recurrent expenditure requirements;

b) that the establishment of a balanced and attractive telecommunication tariff structure can promote use of the network and the operation of services, enhance universal service provision and have a positive effect on the development of other sectors of the economy,

noting

a) that many developing countries lack adequate experience and skills in formulating cost-orientated tariffs to enable them to benefit fully from telecommunication tariff policies, strategies and practices;

b) that these countries need assistance in obtaining tools for determining and calculating costs in the context of the implementation of cost-orientated tariff structures and levels,

recommends

1 that, in establishing their legal and regulatory frameworks, public authorities and administrations should take into consideration, where necessary, the impact of high inflation,

2 that public authorities:

a) gradually rebalance tariffs so as to move to cost-orientated tariffs;

b) adopt time-limited safeguards to ensure that losses of income due to the lowering of tariffs for certain services and/or in certain areas are not offset by price increases for other services and/or in other areas (peripheral, rural, …);

c) move towards rebalancing of traffic and judges its consequences on the affordability of telecom services, which need to be linked to appropriate measures that regulators and policy makers may derive,

3 that public authorities ensure:

a) that tariffs for access to and use of the fixed public telephone network are independent of the type of application which the operators and users implement, except to the extent that they require different services or facilities;

b) that the tariffs for facilities additional to the provision of connection to the fixed public telephone network and fixed public telephone services are sufficiently unbundled so that the user is not required to pay for facilities which are not necessary for the service requested;

c) that, in cases where different tariffs exist, in particular to take account of high traffic load during peak hours and low traffic load at quiet times, the differences are commercially justified,

4 that ITU-D, and the Director of BDT in particular, pursuant to WTDC-98 Resolution 12, should give support to administrations in the implementation of cost-orientated tariff structures, *inter alia* by conducting case studies, making the questionnaire an annual one and updating the database.

RECOMMENDATION ITU-D 17

Sharing of facilities in rural and remote areas

(January, 2002)

Question 10/2: *Communications for rural and remote areas*

The ITU Telecommunication Development Bureau (ITU-D),

considering

a) the work of Focus Group 7[1], Focus Group 7's Report[2], and the updated Report on Communications for rural and remote areas;

b) the need for provision of and the fundamental goal of providing access to basic and advanced telecommunication services;

c) the significance of obtaining physical access to and use of public or community communications centres (e.g. public call offices, multi-purpose community telecentres, and other community access centres; and

d) the benefit brought to underserved communities by these facilities,

bearing in mind

a) that the success of a community access focal point also depends upon access, availability, cost, community participation, reliability, sustainability, and services offered;

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[1] Focus Group 7 was established at WTDC-98 to study various mechanisms by which to promote the development of new telecommunication technologies for rural applications. Focus Group 7 completed its work at the end of 2000.

[2] The Report of Focus Group 7 entitled New technologies for rural applications was published in February 2001. Also see http://www7.itu.int/itudfg7/.

b) that the success of the community access focal point also depends on analysis and assessment of the needs of the community and the appropriate technology, a community action and business plan, and the development of know-how, expertise and human resources,

noting

that there is no single model that meets the needs of an individual community, but that certain elements may be applicable in other community models,

recommends

1 that community stakeholders, policy makers, the private sector, and regulators facilitate the most inclusive framework for sharing community access facilities from practical and partnership perspectives, and collaborate to document successful and sustainable examples of community centres/access facilities, and

2 that stakeholders take advantage of a wealth of knowledge gained by development organizations, non-governmental organizations, ITU members and ITU experts on lessons learned in creating sustainable community access centres.

RECOMMENDATION ITU-D 19

Telecommunications for rural and remote areas

The World Telecommunication Development Conference (Dubai, 2014),

recognizing

a) that the following Recommendation resulting from the ITU-D study period 1998-2002 has provided guidance on a number of issues concerning telecommunications/information and communication technologies (ICTs) in rural and remote areas:

– RECOMMENDATION ITU-D 17, Sharing of facilities in rural and remote areas (January 2002);

b) that Focus Group 7, on rural telecommunications, addressed technological options, service potential and financing mechanisms for the provision of telecommunications/ICTs in rural and remote areas;

c) that the Telecommunication Development Bureau (BDT), through the "Connect a School, Connect a Community" initiative, has developed public policy recommendations and best practices for the development of ICTs in indigenous communities, and that therein, based on relevant cases of countries worldwide, it notes the importance of creating conditions for the provision of telecommunication services in those areas, through projects that are organized around achieving economies of scale and run by the communities themselves,

noting

a) that Focus Group 7 paid particular attention to the role of micro-finance institutions (MFI) in promoting access to ICT services and application by supporting small entrepreneurs;

b) the excellent results of the study period 2006-2010, which consolidate experiences worldwide on the successful provision of telecommunications/ICTs to rural and remote areas, based, *inter alia*, on information submitted to the case library and on e-discussions on the issues identified by the Rapporteur Group[1];

c) that experiences all over the world with emerging technologies deployed in rural and remote areas providing broadband, wired transmission media and wireless transmission media indicate rapid decrease of costs and increase of range and capacity, and that all these developments make connecting rural areas a feasible option;

d) that backhaul wireless solutions play a key role in extending broadband service delivery and coverage for rural and remote areas;

e) that the deployment of IP-based platforms serving wide areas can make a range of developmental services and applications such as education, health, agriculture, etc. available to the rural population;

f) that, in remote and rural areas, spectrum use might be improved by the use of new spectrum-access approaches;

g) that these developments make it possible for telecommunication/ICT services and applications to be provided by small and medium enterprises, local governments and non-governmental organizations in rural and remote areas with appropriate business models;

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[1] The case library for Question 10-2/2 can be consulted at http://www.itu.int/ITU-D/study_groups/SGP_2006-2010/events/Case_Library/index.asp.
The address of the e-discussion web page is: http://www.itu.int/ituweblogs/ITU-D-SG2-Q10/.

h) that technical expertise and adoption capacity are important factors to plan, implement and operate such facilities;

i) that in rural and remote areas of developing countries, low incomes and lack of literacy and computer literacy limit the number of people who can have Internet access in their homes: These communities need public ICT facilities which can be used for communication, delivery of services and various capacity building activities, and there is a role for small entrepreneurs, local governments, schools and post offices in this process;

j) that the provision of ICT services and applications by small entrepreneurs in rural and remote areas has the potential to create employment, and these ventures can be supported by financial institutions and receive support from various government schemes;

k) that a well planned maintenance and operation programme in order to keep the infrastructure and associated equipment, including terminal equipment, in good working condition is an essential aspect of the support structures in rural areas;

l) the excellent collaboration between BDT and the Universal Postal Union in promoting the use of post offices as vehicles for the provision of access to telecommunication/ICT services and applications in rural and remote areas;

m) that energy supply is a basic bottleneck for the spread of telecommunications/ICTs in rural and remote areas, and that innovative uses of solar power, mini-hydro power and windmill power sources, sometimes in combination, are being successfully employed in many countries to provide reliable energy sources for mobile base stations,

considering

a) that the provision of telecommunications, ICT services and applications can make significant contribution to the quality of life of the population living rural and remote areas;

b) that stimulation of demand for telecommunications/ICTs through proactive government policies is a key to realizing their benefits;

c) that the accumulation of experiences worldwide on community access institutions (telekiosks, multipurpose community telecentres, multimedia centres) points to the need for proactive and supportive government policies to simulate demand of the services available;

d) that the availability of information should be reinforced by the upgrading of skills and provision of capital in order that information is properly utilized;

e) that access to telecommunications/ICTs for all will maximize social welfare, increase productivity, conserve resources and contribute to safeguarding human rights,

recommends

1 that developing countries should include the provision of telecommunications/ICTs in rural and remote areas in their national development plans;

2 that, in planning infrastructure development in rural and remote areas, it is important to assess all available technologies in the market, taking into consideration the regulatory environment, geographical conditions, climate, costs (capital expenditure and operational expenditure), maintainability, operability, sustainability, etc., based on the results of the site survey and community needs;

3 that community access to ICT facilities and services is particularly important in rural and remote areas: business models which can achieve financial and operational sustainability can be operated by local entrepreneurs supported by a variety of initiatives, and these facilities, where necessary, should also be supported by universal service funds as an essential component of rural communications;

4 that it is important to encourage the use of post offices to provide telecommunication/ICT services, owing to their communicative presence in the lives of the population in rural areas;

5 that local institutions should be involved in planning and implementing ICT facilities;

6 that enhancing local technical expertise and adoption are important for successful implementation of ICT services and applications in rural and remote areas, and attention should thus be paid to training, exchange of information and sharing of maintenance facilities in order to achieve sustainability and viability;

7 that adoption of broadband technology should be encouraged;

8 that keeping equipment in good working condition through effective preventive maintenance programmes is an essential part of making telecommunications in rural areas viable and should be encouraged, while guarding against making developing countries a dumping ground for obsolete technologies;

9 that it is important to take steps to ensure continued reliability of equipment in rural environments, such as developing an appropriate maintenance and operation strategy and encouraging training for technical staff;

10 that it is important to consider small and non-profit community operators, through appropriate regulatory measures that allow them to access basic infrastructure on fair terms, in order to provide broadband connectivity to users in rural and remote areas, taking advantage of technological advances;

11 that it is also important that administrations, in their radio-spectrum planning and licensing activities, consider mechanisms to facilitate the deployment of broadband services in rural and remote areas by small and non-profit community operators;

12 that, given that lack of energy supply is a major bottleneck in the provision of telecommunications/ICTs in rural and remote areas, and taking into consideration environmental issues, renewable energy sources should be used whenever feasible;

13 that, since the high cost of backhaul investment is another bottleneck in the provision of telecommunications/ICTs in rural and remote areas, new regulatory frameworks on shared infrastructure and accelerated licensing processes could help in developing these networks;

14 that collaboration among governments, industry, local agencies and international organizations is desirable in the development of low-cost ICT infrastructure, including renewable energy sources and terminals for the provision of telecommunications/ICTs in rural and remote areas, and should be pursued;

15 that Member States shall promote the best alternatives for the deployment of cost-effective backhaul solutions for broadband access networks in rural and remote areas.

RECOMMENDATION ITU-D 20

Policy and regulatory initiatives for developing telecommunications/ICTs/broadband in rural and remote areas

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that the significant role of telecommunications/ICTs/broadband in providing services, particularly e-applications, in rural and remote areas of developed countries, countries with economies in transition, developing and least developed countries (LDCs) for the empowerment of their people, promotion of culture, improvement of the quality of life of the rural community, development of the economy, etc.;

b) that ITU-D Study Groups 1 and 2 have continued their study activities to address the challenges faced by the rural and remote areas of the world in general, and LDCs and developing countries in particular, on various issues including, but not limited to, the range of techniques and solutions to provide services and e-applications, based on the inputs by the membership;

c) that Recommendation ITU-D 19 (Hyderabad, 2010) compiled the past Recommendations and consolidated them into a Recommendation based on the results of the studies on techniques and solutions for the development of telecommunications/ICTs/broadband for rural and remote areas since the establishment of the dedicated study Question during WTDC-94 (Buenos Aires),

recognizing

a) that the Telecommunication Development Bureau (BDT), under the activities of ITU-D Study Group 2 Question 10-3/2, conducted a survey to gather detailed information on policy and regulatory measures that have been taken by the governments around the world and economic and business models for telecommunication/ICT/broadband growth in rural and remote areas;

b) that the survey also sought to collect information on the possible impact and analysis of such interventions and initiatives;

c) that the inputs received through the survey were useful for the study of ITU-D Study Group 1 and 2 Questions for the 2010-2014 study period to assist countries in strengthening the capacity to address challenges for the development of telecommunications/ICTs/broadband in rural and remote areas,

taking into account

a) the results of analysis of the survey submitted by BDT to ITU-D Study Group 2;

b) the analysis of case studies submitted to ITU-D Study Group 2 during the 2010-2014 study period;

c) the final report of ITU-D Study Group 2 Question 10-3/2, on telecommunications/ICTs for rural and remote areas (2014);

d) the report of Broadband Commission for Digital development (2012) submitted to ITU-D Study Group 2;

e) the ITU Report on measuring the information society (2012);

f) the fact that, in contrast to the large percentage of the global population that subscribe to basic mobile phone services, Internet connectivity in developing countries and LDCs is still limited, in particular in their rural and remote areas;

g) that many governments have initiated the development of a specific national broadband network plan that would also cater for the needs of their rural and remote areas;

h) that active and passive infrastructure sharing, along with the sharing of spectrum resources, are already included by some countries in their national telecommunication/ICT policy;

i) that new licensees, with the support of the universal service fund and the sharing of active and passive network elements based on reference offers, as well as spectrum resources, can service rural and remote areas with incremental addition of their own network infrastructure elements, billing systems and customer services and independent tariff plans,

noting

a) that the following major interventions/initiatives are observed in the analysis of survey input:

i) the definition of "rural and remote areas" is based on sparse population and harsh geographical conditions, and some countries have licence obligations to cover a certain percentage of the population in such areas;

ii) the majority of the countries that responded to the survey have specific government policies in place for the development of telecommunications/ICTs/broadband in rural and remote areas, including the corresponding instruments, such as universal service provisions, universal access funds, licence obligations and targets for broadband coverage, penetration rate and data speed, defined in their telecommunication law and regulation;

iii) funds are collected by the government ministry or telecommunication regulator of the country as a percentage of annual gross revenue or other scheme in proportion with income/annual net revenue/turnover and also managed and disbursed by the relevant ministry or regulator;

iv) the development and adoption of an appropriate economic model and business model is critical for the development and sustainability of telecommunication/ICT/broadband networks and service provisioning in rural and remote areas, and it has been found that various kinds of economic and business models have been adopted by Member States based on specific country situations and requirements;

v) sharing of backbone network infrastructure in rural and remote areas among operators, rather than building network infrastructure using a specific government budget and through a universal service obligation (USO) fund, is one possible option;

vi) special policy, legal and/or regulatory frameworks for infrastructure sharing in rural and remote areas, for example by using optical fibre cables and base transceiver stations (BTS)/microwave towers and related support infrastructures, is an option worth considering in developing countries and LDCs,

convinced

a) that the development of telecommunication/ICT/broadband services is essential for overall socio-economic and cultural development as well as for the promotion of other sectors;

b) that the development of ICT infrastructure is an important measure to prevent the migration of population to urban areas;

c) that telecommunication/ICT infrastructure is an important tool for measuring factors related to the protection of the environment,

recommends

1 that governments and regulators around the world in general and in the developing countries and LDCs in particular should take regulatory and policy measures to accelerate the development of telecommunications/ICTs/broadband in their rural and remote areas through specific policy and regulatory interventions/initiatives, and include them in their national development plans;

2 that operators and service providers should implement universal telecommunication/ICT service in rural and remote areas;

3 that Sector Members, Associates and Academia should take actions to increase studies on economic, energy-efficient and clean equipment suitable for ICT infrastructure development in rural and remote areas;

4 that the state-of-the-art cost-effective techniques and technologies for broadband infrastructure development most suited for the geographical and economic conditions of rural and remote areas be put in place to enable these areas to access various e-applications, especially those which integrate them into national streams like e-governance, e-health, e-education, e-agriculture, etc. for vitalizing rural community through policy and regulatory interventions/initiatives;

5 that country/area-specific poverty indices published by the United Nations/World Bank may be taken into due consideration in the implementation of universal telecommunication/ICT service in rural and remote areas,

invites the Director of BDT

to continue organizing symposiums, seminars, workshops and related activities on the subject.

RECOMMENDATION ITU-D 21

ICT and climate change

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that climate change is now an undeniable reality, and global action to reduce greenhouse gas (GHG) emissions is urgent in order to avoid devastating impacts on our societies;

b) that the World Telecommunication Development Conference (Hyderabad, 2010) (WTDC-10) stated that telecommunications/ICTs can make a substantial contribution to monitoring, mitigating and adapting to the adverse effects of climate change;

c) that the World Radiocommunication Conference (Geneva, 2012) (WRC-12) revised Resolution 673 (Rev. Geneva, 2012), on the importance of earth observation radiocommunication applications;

d) that the Plenipotentiary Conference (Guadalajara, 2010) adopted Resolution 182 (Guadalajara, 2010), on the role of telecommunications/information and communication technologies (ICTs) in regard to climate change and the protection of the environment;

e) that WTDC Resolution 66 (Rev. Dubai, 2014), on information and communication technology and climate change, states that radio-based remote sensing applications on board satellites are the main global observation tools employed by the Global Climate Observing System for climate monitoring, disaster prediction, detection and mitigation of the negative effects of climate change;

f) that the economic costs imposed by extreme climates and disasters on humans, societies and ecosystems are growing;

g) that climate modelling indicates that, in future, continued increases in GHG concentrations may drive more extreme weather events;

h) that, according to Resolution 30 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, countries, particularly small island developing states, least developed countries (LDCs), landlocked developing countries (LLDCs) and low-lying coastal countries, are vulnerable to global climate change and rising sea levels;

i) that the process established by the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the ongoing negotiations of its Intergovernmental Negotiating Committee are important international actions aimed at addressing the threat of climate change, mitigating its adverse impacts and assisting all ITU Member States, especially LDCs, in adapting to its adverse consequences,

noting

a) that ICTs can facilitate faster development of various social and economic sectors in any country and that they lead to especially perceptible equal opportunities for all mankind;

b) the need for improvement for the most vulnerable parts of society in rural and remote areas, contributing to their inclusive growth of society;

c) that providing assistance to developing countries in formulating national and regional strategies and measures on the use of ICTs can to help mitigate and respond to the devastating effects of climate change;

d) that it is necessary to have an updated map of the potential upheavals that may occur in the long term due to the consequences of the warming of the climate;

e) that mapping areas vulnerable to natural disasters and developing computer-based information systems covering the results of surveys, assessments and observations, as part of the development of adequate response strategies, adaptation policies and measures, can minimize the impact of climate change and climate variability;

f) that assisting developing countries in the use of data from active and passive satellite-based remote sensing systems for climate monitoring, disaster prediction, detection and mitigation of the negative effects of climate change is a key issue for understanding the long-term evolution of the climate;

g) that facilitating Member States' participation in bilateral, regional and global research, assessments, monitoring and mapping of climate impacts can help in the development of response strategies;

h) that we can benefit from the experience of some countries, suffering from extreme weather events, which have already integrated in their strategy against climate change a list of concrete principles and actions;

i) that the World Summit on the Information Society (WSIS) decided to launch projects to promote ICTs in the fields of environment, natural resources, green ICT sector and natural disasters,

recognizing

a) that emissions of global warming gases continue to rise as the world burns ever more coal, oil and gas for energy;

b) that the year 2012 was the tenth warmest year since records began in 1880, with an annually averaged temperature across global land and ocean surfaces 0.57°C above the 1950s average, and around 0.8°C above the 1880 estimated average;

c) that there are changes in rainfall patterns, and wetter regions of the world (mid to high latitudes in the northern hemisphere and tropical regions) are generally getting increasing rainfall, and drier regions less rainfall;

d) that significant temperature increases have been observed over the last 50 years in the Atlantic, Pacific and Indian Ocean basins and that these increases cannot be attributed to changes in solar activity, volcanic eruptions or other natural variations;

e) that, with the operation of ground instruments since 1880 and the operation of remote sensing satellites, the constant increase in the mean sea level is a scientific fact that cannot be challenged;

f) that the increase in the mean sea level is threatening small islands and coastal cities,

recognizing further

a) that telecommunications/ICTs are of critical importance to overall economic, social and cultural development;

b) that countries believe it is essential to develop Internet access and to encourage training in ICTs as part of adaptation to climate change, as insufficient data is gathered at local level and sent for analysis;

c) that some countries want to learn more about the reduction of energy consumption and GHG emissions, and also to learn about ICTs that could operate at lower energy consumption and would require less maintenance, together with the corresponding quantified benefit for climatic change;

d) that some countries would like to learn more about the negative effects or impact of not using "green" ICTs and how can these contribute to helping reduce global warming,

recommends

1 that countries elaborate guidelines and best practices and implement national policies and related measures to facilitate the use of ICT to combat climate-change challenges;

2 that support be provided to help countries invest more in meteorology monitoring services, in order to prevent extreme events that could be devastating, as better prediction would cost relatively little and helps reduce the carnage caused by floods, droughts and tropical cyclones;

3 that, in order to help countries invest in the technologies, they need to know more about climate change in general, and have better access to and understanding of meteorological data (satellite and terrestrial) that are supplied;

4 that countries elaborate training programmes with a view to ensuring better usage of all the monitoring data;

5 that a program be developed, based on real figures, showing the effect of reduced energy consumption and the benefit of ICT;

6 that it is necessary to adopt innovative ICT-enabled strategies to tackle climate-change adaptation and mitigation on the long term;

7 that, as ICTs may need to operate in difficult meteorological conditions (hot weather, high humidity, etc.), it becomes urgent to help countries develop more affordable, as well as more robust and reliable, green ICTs;

8 that better cooperation between countries be established in areas related to the monitoring of meteorological data and for mitigating climate change using ICTs,

recommends further

1 that appropriate steps be taken for the creation of an enabling environment at the national, regional and international levels to encourage development and investment in the ICT sector, in meteorology and in prediction of extreme events by ITU members;

2 that work on further developing the field of ICTs and climate change be continued and treated by countries as a priority and urgent task,

invites the Director of the Telecommunication Development Bureau

1 to continue to contribute actively to enhancing activities related to climate-change mitigation and adaptation;

2 to continue jointly organizing events with other ITU Sectors in order to reduce duplication and enhance sharing of information across the Sectors and Member States.

RECOMMENDATION ITU-D 22

Bridging the standardization gap in association with regional groups of the study groups

The World Telecommunication Development Conference (Dubai, 2014),

considering

a) that Resolution 123 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on bridging the standardization gap between developing and developed countries, instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other, in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries, on follow-up and implementation of the operative paragraphs of that resolution supporting coordination in this respect at the regional level through regional offices and organizations;

b) that Resolution 44 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA), on bridging the standardization gap, instructs the Director of the Telecommunication Standardization Bureau (TSB), in collaboration with the Directors of Telecommunication Development Bureau (BDT) and the Radiocommunication Bureau (BR), within available resources, to provide the support needed for regional mobilization for standardization as well as to conduct workshops and seminars, as appropriate, to disseminate information and increase understanding of new Recommendations, in particular for developing countries;

c) that Resolution 54 (Rev. Dubai, 2012) of WTSA, on creation of, and assistance to, regional groups, instructs the Director of TSB, in collaboration with the Director of BDT, within the allocated or contributed resources that are available, to provide all necessary support for creating and ensuring the smooth functioning of the regional groups,

taking into account

the *further resolves* of Resolution 44 (Rev. Dubai, 2012), which states that ITU regional offices are to:

i) be engaged in the activities of TSB in order to promote and coordinate standardization activities in their regions to support the implementation of the relevant parts of that resolution and to carry out the objectives of the action plan, and launch campaigns to attract new Sector Members, Associates and Academia from developing countries to join ITU-T;

ii) assist the vice-chairmen, within the offices' budgets, in mobilizing members within their respective regions for increased standardization participation;

iii) organize and coordinate the activities of the regional groups of ITU-T study groups;

iv) provide the necessary assistance to the regional groups of ITU-T study groups;

v) provide assistance to the regional telecommunication organizations for the setting-up and management of regional standardization bodies,

recommends

1 that a functional structure for regional offices be implemented to support the activities of the regional groups;

2 that there be a budget allocation to regional offices to support the activities of the regional groups and their leaderships;

3 that the result of the activities of regional groups be sent for use, as appropriate, in the ITU Telecommunication Development Sector,

requests the Director of the Telecommunication Development Bureau

1 to implement a functional structure for the regional offices to support the activities of the regional groups;

2 to facilitate and support chairmen and vice-chairmen of ITU-T study groups from developing countries in promoting standardization activities and mobilizing members in subregional groups through workshops, seminars and forums.

Dubai Action Plan

Section 5 – Study Group Questions

STUDY GROUP 1

QUESTION 1/1

Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, over-the-top (OTT) services and the implementation of IPv6

1 Statement of the situation or problem

Increased access to broadband is widely credited with improving development outcomes, fostering economic growth and increasing competitiveness. Broadband is a key input to achieving a people-centred, inclusive and development-oriented information society.

Despite impressive gains in access to telecommunication/ICT infrastructure, services and applications, many developing countries, particularly least developed countries (LDCs), still lack sufficient access to broadband connectivity. ITU data from 2012 estimate that 31 per cent of the population and 28 per cent of households in developing countries have access to the Internet, and in the world's 49 LDCs, less than 10 per cent have Internet access. The gender gap is also more pronounced, as 16 per cent fewer women than men use the Internet. Of the more than 1 billion people who have a disability that affects their access to modern communications, 80 per cent are in the developing world. Penetration rates for mobile-broadband subscriptions in developing countries stood at 20 per cent in 2013, with fixed-broadband penetration at 6.1 per cent. Further**,** the cost of access to broadband service remains prohibitively high in many developing countries owing to a variety of factors, including a lack of infrastructure investment and the need to develop, implement and enforce enabling policies and regulations, in particular those that would promote effective competition.

ITU-D, with active participation from Member States and Sector Members, should endeavour to increase the availability of affordable broadband services during the 2014-2018 study period by carefully analysing the policy and technical issues related to broadband deployment, adoption and use. In particular, ITU members and BDT must identify, elevate and address the stated needs of the LDCs and others in improving broadband deployment and use. Members will benefit from analysing the technical issues involved in deploying broadband access technologies, including integration of access network solutions with existing or future network infrastructure.

Broadband access policies, implementation and applications should be studied together, so that developing countries can better evaluate their best options for sustainable broadband deployment. Combining these topics will eliminate fragmentation of these related issues and more accurately provide a clear roadmap of options for developing countries to close the existing gap in broadband service.

The proposed study Question and expected outputs reflect elements from study Questions from the previous study period 2010-2014, notably Question 19-2/1, on implementation of IP telecommunication services in developing countries, and Question 26/2, on migration from existing networks to next-generation networks for developing countries: technical, regulatory, and policy aspects.

During the 2010-2014 study period, under Question 19-2/1, the rapporteur group within Study Group 1 studied the implementation of IP telecommunication services in developing countries. A study report was drafted containing relevant information and data that will be of use to Member States, and particularly the developing countries.

Global implementation of IPv6 remains a challenge for all countries, and will be achieved in stages. Studies are therefore proposed on transitioning from IPv4 to IPv6 and its impacts.

The Internet Engineering Task Force (IETF) develops Internet Protocols, including IPv4 and IPv6.

Many countries and international organizations are interested in this Question. The World telecommunication Standardization Assembly (WTSA) (Johannesburg, 2008) adopted Resolution 64 (Johannesburg, 2008), on IP address allocation and facilitating the transition to and deployment of IPv6, which was revised by WTSA-12. The ITU Council at its 2012 session, in Decision 572, decided that the 2013 World Telecommunication/ICT Policy Forum (WTPF-13) would address the issue of IP-based networks. The forum was held from 14 to 16 May 2013 in Geneva (the previous WTPF had been held from 21 to 24 April 2009 in Portugal, and had discussed convergence, Internet and the ITRs). WTPF is organized by ITU and aims to encourage discussion and seek consensus among the different stakeholders in the form of "opinions" reflecting a common vision which serves to guide policy in the ICT sector as well as regulatory and standardization activities throughout the world. WTPF-13 issued six opinions (Document WTPF-13/16), as follows:

– Opinion 1 (Geneva, 2013): Promoting Internet exchange points (IXPs) as a long-term solution to advance connectivity

– Opinion 2 (Geneva, 2013): Fostering an enabling environment for the greater growth and development of broadband connectivity

– Opinion 3 (Geneva, 2013): Supporting capacity building for the deployment of IPv6

– Opinion 4 (Geneva, 2013): In support of IPv6 adoption and transition from IPv4

– Opinion 5 (Geneva, 2013): Supporting multistakeholderism in Internet governance

– Opinion 6 (Geneva, 2013): On supporting operationalizing the enhanced cooperation process.

Many countries are also now discussing at the highest policy level the adoption of laws and regulations on "net neutrality". This subject involves all the stakeholders, including political leaders, regulators, operators and providers. Given the complexity of the matter and the different market conditions in each country, there is no "one size fits all" approach to this issue.

In 2005, the Federal Communications Commission (FCC) published an Internet Policy Statement in which it made clear its support to preserve and promote the open and interconnected nature of the public Internet and has recognized the role of appropriate network management. In Europe, the EU, citing Article 1, paragraph 8(g), of Directive 2009/140/EC, published a Communication on the open Internet and net neutrality in Europe (COM(2011)0222). The Body of European Regulators for Electronic Communications (BEREC/ORECE) in December 2011 published its Guidelines on transparency in the scope of net neutrality and a framework for work on quality of service. In France, the *Conseil National du Numérique* in its report of 12 March 2013 calls for recognition of the principle of net neutrality as a fundamental principle of a constitutional character.

On 18 April 2013, ITU published a report on regulation, *Trends in Telecommunication Reform 2013: Transnational aspects of regulation in a networked society.* Chapter 2 of this report is devoted to the issue of net neutrality. As the report shows, the debate on net neutrality continues to be obscured by the lack of a generally agreed definition of the term among regulators themselves.

IP-based services are often offered by providers to users over an Internet connection, independent of the telecommunication network operator providing the Internet connection. These services are often referred to as "over-the-top (OTT)" services. Consumer demand for such services is rapidly growing as consumers want more of, and perceive large benefits from, these services. Consumers expect to be able to access legal content, applications and services and want information about their subscriptions. Such services create demand for broadband access and services but also are requiring network operators to seek new business models and arrangements, particularly in developing countries.

Also, the Question should focus on new issues that have arisen from the cross-sectoral nature of the telecommunication/ICT market in developing countries, where new applications, services and players bring a host of emerging regulatory matters. The study group should provide analysis of regulatory models and frameworks for cooperation among the various entities involved in the development, deployment and management of these new applications and services.

2 Question or issue for study

2.1 Policy and regulation

a) Policies and regulations that promote affordable broadband networks, services and applications, including ways to optimize spectrum use.

b) Effective and efficient ways to fund increased broadband access for the unserved and underserved.

c) The regulatory and market conditions necessary to promote deployment of broadband networks and services, including organizational options for national regulatory authorities resulting from convergence, as well as coordination with related ministries and regulators due to the cross-cutting nature of the services such as mobile money transfer, m-banking, m-commerce and e-commerce.

d) Success stories and lessons learned.

e) Ways to remove practical barriers to broadband infrastructure deployment, and best practices for improving cross-border connectivity and small island developing states' connectivity challenges.

f) Considering the fact that meeting demand for content requires improved access to broadband services, study the following:

– pattern and trends in broadband services in regard to, *inter alia*, broadband deployment, international traffic and applications, etc.;

– access-supporting applications primarily used for development, i.e. e-government, e-education, e-health, etc., in an affordable manner, taking into consideration previous guidelines on the subject.

g) Commercial impact of new investments required to meet the growing demand for access to the Internet generally, and bandwidth and infrastructure requirements for delivering affordable broadband services to meet development needs.

h) Impacts of the provisioning of IP-based applications and services offered by content providers to users over a broadband Internet connection, independent of the telecommunication network operator providing the internet connection, often referred to as "over-the-top (OTT)" services, including impacts on regulation, competition, network infrastructure and business models.

2.2 Transition and implementation

a) Methods to implement broadband service, including the transition from narrowband networks and interconnection and interoperability features.

b) Operational and technical issues associated with deploying broadband networks, services and applications, including the transition from narrowband to broadband networks.

c) Ways to remove practical barriers to broadband infrastructure deployment.

d) Success stories and lessons learned.

e) Continued study of issues relating to facilitating access to IP networks, thereby enabling access to IP services and associated applications, as identified in § 2 of the wording of Question 19-2/1 for the 2010-2014 study period.

f) Study of the policy and technological aspects of a) the transition from IPv4 to IPv6 and, separately, b) ways to manage access to networks, balancing network performance, competition and consumer benefits.

3 Expected output

Reports, best-practice guidelines, case studies and recommendations, as appropriate, that take into account the issues for study and the following expected outputs:

a) Broadband policy and regulation

i) Policies promoting incentives for broadband deployment through effective competition, public and private investment, inter-platform competition, and private-public partnerships towards accomplishing universal access to broadband services.

ii) Examination of, and best practices for encouraging, regional policies and practices that promote and address cross-border connectivity and small island developing state connectivity.

iii) Best practices to develop technology-neutral and service-neutral policies.

iv) Methods to open markets to effective competition through transparent regulatory and taxation reforms.

v) Policies to encourage efficient and innovative mobile-broadband practices for new market entrants and consumers, including by allocating and assigning spectrum.

vi) Best practices for infrastructure sharing and access to networks to promote market entry, where appropriate.

vii) Capacity building in rural and/or underprivileged communities.

viii) Studies to examine new and innovative pricing methodologies for broadband services, trends in broadband services in regard to, *inter alia*, broadband deployment, international traffic and applications, and assessment of the current demand for broadband at global and regional level.

ix) Best practices and guidelines for stimulating investment in broadband that allows the delivery of services for development in an affordable manner.

x) Identification of policy tools to facilitate the availability to consumers at local and national levels of competitive IP-based services and applications, so called "over-the-top" (OTT) services.

xi) Identification of the range of alternative successful business arrangements that have been used to meet growing demand and other changes in the market.

xii) Identification of the best practices and policies that create incentives for investment in IP-based services and applications.

xiii) Evaluation of challenges and an overview of best practices and guidelines regarding legal frameworks and cooperation mechanisms among appropriate government entities seeking to facilitate, and avoid barriers to, the development and deployment of new services and applications, such as mobile money transfer, m-banking, m-commerce and e-commerce.

b) Broadband transition and implementation

i) Best practices to finance broadband access to underserved and unserved communities, including universal service funds, coverage requirements and alternative means of financing broadband access.

ii) Guidelines for making the transition from narrowband to broadband networks, taking into account in particular the potential challenges, benefits and opportunities that developing countries may encounter when implementing broadband networks, services and associated applications.

c) Transition from IPv4 to IPv6

i) Compilation of the questions raised by, and requirements of, developing countries in their transition to IPv6.

ii) Consolidation and coordination of efforts to ensure the transition to IPv6.

iii) Survey of procedures, methods and time-frames for the effective transition to IPv6, having regard to the experience of ITU Member States.

The final report may also contain best practices on transition to IPv6, which may address the following issues:

1) Transition to IPv6 for telecommunication operators:

1.1) stages in the transition, including best practices for top-level domain operators and application service providers in migration efforts;

1.2) transition for network backbones;

1.3) transition for access networks;

1.4) collecting best practices for routing;

1.5) network service;

1.6) quality-of-service issues;

1.7) issues of network security throughout the transition process.

2) Combined use of IPv6 and IPv4.

3) Participation required of the regulator.

4 Timing

Annual progress reports. This study is expected to last four years.

Within two years, a draft report on the subjects should be submitted to Study Group 1.

A final report and guidelines or Recommendation(s) are to be submitted to Study Group 1 within four years.

The rapporteur's group will work in collaboration with BDT to implement the lessons learned from study of the Question through training seminars.

The activities of the rapporteur's group will end within four years.

5 Proposers/sponsors

Arab States; African Telecommunications Union; Asia-Pacific Telecommunity; Brazil; Regional Commonwealth in the field of Communications; India; United States.

6 Sources of input

The major source of input will be the experiences of those Member States and Sector Members that have deployed broadband networks and that have begun implementation of IPv6. Contributions from Member States and Sector Members will be essential to the successful study of the issue.

Interviews, existing reports and surveys should also be used to gather data and information for the finalization of a comprehensive set of best-practice guidelines.

Material from regional telecommunication organizations, telecommunication research centres, manufacturers and working groups should also be used, in order to avoid duplication of work.

Close cooperation with ITU-T study groups, in particular Study Group 13 and the Global Standards Initiative (GSI-NGN), other standards groups involved in the activities discussed in the study Question and other activities within ITU-D will also be essential.

Contributions are expected from Member States, Sector Members and Associates, and from relevant ITU-R, ITU-T and ITU-D study groups, and other stakeholders.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
Consumers/end users	Yes	Yes
Standards-development organizations, including consortia	Yes	Yes

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

a) Target audience

All national telecom policy-makers, regulators, service providers and operators, especially those in developing countries, as well as manufacturers of broadband technologies.

b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D interim and final reports. This will provide a means for the audience to have periodic updates of the work carried out and to provide input and/or seek clarification/more information from ITU-D Study Group 1 should they need it.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity (indicate which programmes, activities, projects, etc., will be involved in the work of the Study Question):

– Programmes ☑

– Projects ☑

– Expert consultants ☑

– Regional offices ☑

3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.) ☐

b) Why?

The Question will be addressed within a study group over a four-year study period (with submission of interim results), and will be managed by a rapporteur and vice-rapporteurs. This will enable Member States and Sector Members to contribute their experiences and lessons learned with respect to policy, regulatory and technical aspects of the migration from existing networks to broadband networks.

9 Coordination and collaboration

The ITU-D study group dealing with this Question will need to coordinate with:

– Relevant ITU-T study groups, particularly Study Group 13

– Relevant focal points in BDT and ITU regional offices

– Coordinators of relevant project activities in BDT

– Standards-development organizations (SDOs)

– Experts and experienced organizations in this field.

10 BDT programme link

WTDC Resolution 77 (Dubai, 2014).

Links to BDT programmes aimed at fostering the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap.

11 Other relevant information

As may become apparent within the life of the Question.

QUESTION 2/1

Broadband access technologies, including International Mobile Telecommunications (IMT), for developing countries

1 Statement of the situation or problem

ITU-D Study Group 1 will provide developing countries with an understanding of the different technologies available for broadband access using both wired and wireless technologies for terrestrial and satellite telecommunications, including International Mobile Telecommunications (IMT). Study Group 1 will continue to cover the technical issues involved in deploying broadband access technologies, including the integration of such access network solutions in existing and future network infrastructures, provide guidelines for broadband access development, taking into account the fact that the standardization of broadband access technologies is a priority in the ITU strategic plan, and respond to the initiatives of all developing countries (as proposed by the six regional preparatory meetings (RPMs) for the World Telecommunication Development Conference.

2 Question or issue for study

a) Identify the factors influencing the effective deployment of wireline and wireless, including satellite, broadband access technologies and their applications.

b) Examine broadband access technologies and their future trends.

c) Identify methodologies for migration planning and implementation of broadband technologies, taking into account existing networks, as appropriate.

d) Consider trends in the various broadband access technologies, deployments, services offered and regulatory considerations.

e) Continue to identify ways and means of implementing IMT, using terrestrial and satellite links.

f) Identify key elements to be studied in order to facilitate the possible deployment of systems integrating the satellite and terrestrial components of IMT.

g) Provide information on the specific impact of the deployment of all broadband access technologies on underserved populations, including persons with disabilities.

h) Provide information on IMT-Advanced systems, based on the advice of Working Party 5D of ITU-R Study Group 5 and working parties of ITU-R Study Group 4.

3 Expected output

a) Yearly progress report on the above study items.

b) A final report for the Question that includes:

1) analysis of the factors influencing the effective deployment of all broadband access technologies; and

2) guidelines for broadband access deployment that could be delivered, *inter alia*, through training seminars in accordance with the relevant BDT programme.

c) A handbook on IMT deployment in developing countries to replace the Handbook on Deployment of IMT-2000 systems (2003). This handbook will be the result of study group collaboration between ITU-R Study Groups 4 and 5, ITU-T Study Group 13 and the Rapporteur's Group dealing with this Question as part of ITU-D Study Group 1.

d) Draft Recommendation(s), as appropriate and if justified.

4 Timing

The interim report on this Question is expected by 2016. The final report is expected in 2017 at the end of the ITU-D study period.

5 Proposers

Arab States; Member States of CITEL.

6 Sources of input

1) Results of related technical progress in relevant ITU-R and ITU-T study groups, in particular, in ITU-R, Working Parties 5D (Question 77) and 5A of Study Group 5 and Working Parties 4A, 4B and 4C of Study Group 4 and, in ITU-T, Study Group 15 (Question 1) and Study Group 13 (Question 15).

2) ITU publications, reports and recommendations on broadband access technologies.

3) Relevant reports of national and/or regional organizations in developing and developed countries.

4) Contributions on experiences with the implementation of relevant networks in developed and developing countries.

5) Contributions of Sector Members on the development of wired and wireless broadband access technologies, including access through satellite systems.

6) Relevant inputs from service providers and manufacturers.

7) Relevant inputs and information from BDT programmes related to broadband and the different broadband access technologies.

8) Relevant output and information from study Questions related to ICT applications.

7 Target audience

a) Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

b) Proposed methods for implementation of the results

The work of the rapporteur's group will be conducted and publicized through the ITU-D website as well as through documents and appropriate liaison statements. The results of the work will also be used by relevant BDT programmes that are components of the toolkit that BDT uses when solicited by Member States and Sector Members to support their efforts to build out broadband access networks.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods for handling the Question

The Question will be handled by a rapporteur's group of ITU-D Study Group 2.

9 Coordination

In order to coordinate effectively and avoid duplication of activities, the study should take into consideration:

– outputs from the relevant ITU-T and ITU-R study groups;

– the relevant outputs from ITU-D Questions;

– inputs from the relevant BDT programme(s);

– inputs from those involved in the study of IMT systems, and other broadband access technologies, including satellite.

10 Relevant programme

The programme of Objective 2, Output 2.2 will be the relevant programme.

11 Other relevant information

Resolution 43 (Rev. Dubai, 2014) of WTDC should be taken into consideration.

QUESTION 3/1

Access to cloud computing: Challenges and opportunities for developing countries

1 Statement of the situation or problem

Cloud computing is a concept in the world of multimedia, and one towards which the world is now gradually moving, in view of the many powerful advantages it offers. This concept can be summarized as a model enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g. networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service-provider interaction.

For many countries, cloud computing represents a possible solution to the lack of adequate computing resources and it has achieved remarkable growth in many of the most developed countries, particularly after the adoption of this trend by mobile-telephone operators and manufacturers. Cloud computing is considered by key industry leaders to be the next technological revolution of the twenty-first century.

The main key characteristics of cloud computing are economies of scale (infrastructure sharing) and flexibility of use.

2 Question or issue for study

a) Discuss infrastructure needs for supporting and enabling access to cloud services, and highlight best practices for developing such infrastructure.

b) Examine definitions and characteristics of cloud computing and its future trends.

c) What are the features of networks that support effective access to cloud-computing services?

d) Building and developing a sufficient group of existing frameworks to support investment in infrastructure for cloud computing, taking into consideration relevant standards recognized or under study in the other two ITU Sectors.

e) Costs associated with the adoption of cloud computing.

f) Develop case studies of successful cloud-computing platforms used in developing countries.

3 Expected output

a) Yearly progress report on the above study items.

b) A progress report midway through the study cycle.

c) A final report for the Question that includes:

- Analysis of the factors influencing effective access to support cloud computing.
- A set of guidelines, such as policy or technical approaches, among others, for facilitating infrastructure deployment, which could be delivered, *inter alia*, through training seminars in accordance with the ITU-D programme on Capacity building.
- A handbook on infrastructure supporting cloud computing in developing countries. This handbook will be the result of study group collaboration between ITU-T Study Group 13 and the rapporteur group dealing with this Question as part of ITU-D Study Group 1.
- Draft Recommendation(s), as appropriate and if justified.

4 Timing

The interim report on this Question is expected by 2016. The final report is expected in 2017 at the end of the ITU-D study period.

5 Proposers/sponsors

Arab States; African States.

6 Sources of input

1) Results of related technical progress in relevant ITU-T study groups, in particular Study Group 13.

2) ITU publications on cloud-computing services.

3) Relevant reports of national and/or regional organizations in developing and developed countries.

4) Contributions on experiences with providing access to cloud-computing services in developed and developing countries.

5) Relevant inputs from service providers and manufacturers.

6) Relevant inputs from BDT programmes related to cloud computing.

7 Target audience

a) Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

b) Proposed methods for implementation of the results

The work of the rapporteur group will be conducted and publicized through the ITU-D website as well as through documents and appropriate liaison statements. The results of the work will also be used by relevant BDT programmes as components of the toolkit BDT uses when solicited by Member States and Sector Members to support their efforts to migrate to cloud-computing services.

8 Proposed methods for handling the Question

The Question will be handled by a rapporteur group of ITU-D Study Group 1.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

9 Coordination and collaboration

In order to coordinate effectively and avoid duplication of activities, the study should take into consideration:

– outputs from the relevant ITU-T study groups, in particular those made available by ITU-T Study Group 13;

– the relevant outputs from ITU-D Questions;

– inputs from the relevant BDT programmes.

10 Relevant programme

The relevant programmes will be the programmes on Policy and regulatory environment, Capacity building, Cybersecurity, ICT applications and Telecommunication/ICT networks.

11 Other relevant information

As may become apparent within the life of the Question.

QUESTION 4/1

Economic policies and methods of determining the costs of services related to national telecommunication/ ICT networks, including next-generation networks

1 Statement of the situation or problem

In recognition of the progress made during the previous study period on Question 12-3/1, the revised Question 4/1 will take into account the fact that under next-generation networks (NGN), operators and service providers will have access to telecommunication/ICT networks, including broadband infrastructure networks and services in a converged manner, in order to enable delivery and use of multimedia services and electronic applications (e-government, e-education, e-health, e-banking, e-commerce).

The work programme set out below to guide the activities related to Question 4/1 covers:

– identification of active collaborators;

– expected outputs of the Question;

– working methods; and

– work programme.

2 Question or issue for study

An important contribution for the work to be made on Question 4/1 is expected to come from a group of international experts (rapporteur's group). Thus, all interested parties are invited to join the rapporteur's group so that the work can satisfactorily progress and comprehensively cover the scope of the Question.

Specifically, the Question will examine the following main topics:

1) New charging methods (or models, if applicable) for services provided over NGN networks:

   1.1) Methods (or models, if applicable) for determining the costs of access to telecommunications in an NGN environment (wholesale level).

2) Different models for infrastructure sharing, including through commercially negotiated terms:

   2.1) Infrastructure sharing and access to networks/infrastructure for new entrants, including national roaming aspects

   2.2) Incentives for network development

   2.3) The impact of infrastructure sharing on investment cost, provision of telecommunication/ICT services, competition and prices to consumers: case studies with quantitative analysis.

3) Consumer price evolution and impact on ICT service usage, innovation, investment and operator revenues:

   3.1) New and innovative business models for services deployed in an NGN environment, including methods encouraging the adoption and use of ICT services

   3.2) Trends in prices of telecommunication/ICT services, including international mobile roaming

   3.3) Impact of price reduction on the adoption and use of ICT services, consumption, innovation, investment and operator and service provider revenues.

4) Methods of determining the cost of licences for the operation of networks and/or the provision of telecommunication services delivered to operators or service providers, including the costs of resources (e.g. frequencies and telephone numbering) made available to them in the country in a convergent environment:

4.1) Methods of determining licence fees: case studies and country experiences

4.2) Evolution of licence fees according to the market, including other fees (e.g. frequencies and telephone numbering)

4.3) Best practices for determining licence fees: operators are now implementing NGN, and this may require a change in regulatory accounting tools, including separation, to continue enhancing the competition process and long-term benefit to end users. As access and core networks move to NGN, new accounting tools to deal with these network structures may be required in the future. Due to the fact that there is only one platform for all services, the identification and distribution of joint costs will be more challenging. The work related to this Question will identify:

- Key design issues
- Implementation details
- What kind of auditing is required for the model
- Possible unintended consequences.

NOTE – The frequency licence fee study will be done in cooperation with Resolution 9 (Rev. Dubai, 2014) to avoid study duplication.

3 Expected output

Development of best practices for each of the following areas:

a) Promoting appropriate infrastructure sharing

b) Encouraging price/tariff reduction to consumers through competition

c) Stimulating access to and use of these services.

4 Timing

An interim report will be presented to Study Group 1 in 2015. It is proposed that this study should be completed in 2017, when a final report will be submitted.

5 Proposers/sponsors

ITU-D Study Group 1 proposed the continuation of this Question as modified herein.

6 Sources of input

The major source of input will be the experiences of Member States and Sector Members on costing and pricing issues. Contributions from Member States and Sector Members will be essential to the successful study of the issue.

Interviews, existing reports and surveys should also be used to gather data and information for the finalization of a comprehensive set of best-practice guidelines.

Material from regional telecommunication organizations, telecommunication research centres, manufacturers and working groups should also be used, in order to avoid duplication of work.

Contributions are expected from Member States, Sector Members and Associates, and from relevant ITU-R, ITU-T and ITU-D study groups, and other stakeholders.

7 Target audience

All the target audiences mentioned below, with particular attention to the needs of developing countries.

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
ITU-D programme	Yes	Yes

a) Target audience – Who specifically will use the output

All national telecom policy-makers, regulators, service providers and operators, especially those in developing countries, as well as regional and international organizations.

b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D interim and final reports. This will provide a means for the audience to have periodic updates of the work carried out and to provide input and/or seek clarification/more information from ITU-D Study Group 1 should they need it.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

Electronic distribution of the report and guidelines to all Member States, Sector Members and their respective national regulatory agencies (NRAs), and ITU regional offices.

Distribution of the report and guidelines at the Global Regulators' Symposium and relevant BDT, BR and TSB seminars.

How?

1) Within a study group: ☑

   – Question (over a multi-year study period) ☑

2) Within regular BDT activity:

   – Objective 2 ☑

   – Projects: regional initiatives ☐

   – Expert consultants ☑

9 Coordination and collaboration

The ITU-D study group dealing with this Question will need to coordinate with:

– Relevant ITU-D study group questions, particularly Question 1/1

– Relevant ITU-T study groups, particularly Study Group 3

– Relevant focal points in BDT and ITU regional offices

– Experts and experienced organizations in this field.

10 BDT programme link

ITU-D Objective 2.

11 Other relevant information

Question4/1 will liaise closely with ITU-T Study Group 3 and its regional groups for Africa (SG3RG-AFR), Asia and Oceania (SG3RG-AO), Arab States (SG3RG-ARB) and Latin America and the Caribbean (SG3RG-LAC), ITU-D Study Groups 1 and 2 and other international and regional organizations concerned with issues relating to costs and tariffs for telecommunication services, and ITU-D enabling environment programme.

As may become apparent within the lifetime of this Question.

QUESTION 5/1

Telecommunications/ICTs for rural and remote areas

1 Statement of the situation or problem

In order to meet the objectives set by the Geneva Plan of Action of the World Summit on the Information Society (WSIS), including those in the Millennium Development Goals for improving connectivity and access in the use of ICTs, to be achieved by 2015 for all on this planet, it is necessary to address the challenge of infrastructure development in the rural and remote areas of developing countries[1], where more than half of the world population live, as an essential foundation for providing valuable ICT applications identified in Action Line C7 of the Tunis Agenda for the Information Society for improving the quality of life of residents in marginalized areas, harsh climates and difficult geographical terrains.

The rapid migration of the populations of developing countries to urban areas may have an adverse effect on poverty alleviation, unless measures are taken to improve the environment and life in rural and remote areas, possibly by deploying telecommunications/ICTs for these areas.

The installation of cost-effective and sustainable basic telecommunication infrastructure in rural and remote areas is an important aspect calling for further studies, and specific outcomes need to be available for the vendor community to develop a suitable solution to meet the challenges in the rural and remote areas.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

Most of the time, existing network systems are primarily designed for urban areas, where the necessary support infrastructure (adequate power, building/shelter, accessibility, skilled manpower to operate, etc.) for setting up a telecommunication network is assumed to exist. Hence, current systems need to be more adequately adapted to specific rural requirements in order to be widely deployed.

Some of the known challenges that developing countries planning to extend ICTs to rural and isolated areas must be tackle are the following:

1) Shortage of power
2) Expense of maintaining power backup – usually diesel – and environmental hazards thereof
3) Difficult terrain
4) Difficult access and transportation
5) Lack of skilled manpower
6) Installation and maintenance of networks is quite challenging and difficult
7) Very high operating cost
8) Low potential ARPU
9) Sparsely populated areas and scattered population clusters.

More detailed studies addressing the challenges of deploying cost-effective and sustainable ICT infrastructure in rural and remote areas are expected to be undertaken within the ITU-D study groups, taking into account the global perspective.

Therefore, the WSIS target "Connect villages with telecommunications/ICT and establish community access points" should be promoted more intensively by employing emerging broadband technologies for various e-application services to vitalize the social and economic activities of rural and remote areas. Multipurpose community telecasters (MET), public call offices (PCO), community access centres (CAC) and e-posts are still valid in terms of cost effectiveness for sharing infrastructure and facilities by community residents, leading to the goal of provision of individual telecommunication access.

Therefore, it is proposed to deal with the challenges and system requirements of fixed and mobile networks for rural deployments in developing nations.

Decisions that may drive first the examination and then the choice of particular techniques and solutions for the provision of multimedia telecommunications/ICT services may be influenced by, *inter alia*, the following:

a) Increasing availability of telecommunications/ICTs that provide enhanced broadband connectivity at progressively lower costs, lower energy consumption and lower greenhouse gas emissions.

b) Experience gained since the previous ITU-D study cycles in many parts of the world in developing, implementing and refining major rural telecommunication programmes, as more countries respond to particular situations, and in-country demand using "best practices" as outlined in the work of ITU-D.

c) The influence of cultural, social and other factors in producing differing and often creative responses to meeting the demand for multimedia services from residents of rural and remote areas of developing and least developed countries.

d) Progress being steadily made on human resources development/management issues which are fundamental to establishing sustainable telecommunication infrastructure.

2 Question or issue for study

There are a variety of several (new and old) issues that members will be interested in addressing within the four coming years of this Question. It is proposed that the main issue for study continue to be the range and scope of techniques and solutions that are expected to play a significant role in the provision of e-application services for rural and remote areas, with particular attention to the provision of broadband access through sustainable networks including interoperable International Mobile Telecommunications (IMT) in suitable frequency bands, such as 450-470 MHz and other frequency bands identified for IMT. It is further proposed that the study should progress in stages, to cover a four-year cycle in the following manner:

– Step 1: Continue identification of the full range of potential techniques and sustainable solutions that can significantly impact on the provision of telecommunication/ICT applications in rural and remote areas, with emphasis on those that employ the latest broadband technologies designed to lower infrastructure capital and operating costs, assisting convergence between services and applications, taking into considerations reducing greenhouse gas emissions.

– Step 2: Continue to investigate and report on how the techniques identified above can be used to best deliver the range of services and applications required by rural and remote communities and adapted to the needs of their users.

– Step 3: Identify, assess and consolidate the challenges faced by developing countries in setting up or upgrading telecommunication infrastructure in rural areas, including those aimed at providing enhanced broadband connectivity through networks based on suitable interoperable IMT frequency bands, such as 450-470 MHz and other frequency bands identified for IMT.

– Step 4: Report on the public policies and regulatory measures carried out by developing countries to overcome or mitigate the above-mentioned challenges.

– Step 5: Describe the evolution of system requirements for rural network systems specifically addressing such identified challenges of rural deployment.

– Step 6: Continue consideration of the quality of the services provided, and the cost effectiveness, degree of suitability in different geographies and sustainability of the techniques and solutions identified in the above-mentioned steps.

– Step 7: Augment the report on the set of case studies that clearly demonstrate how a range of techniques, based on new technology aimed at providing reduced capital and operating cost solutions, reducing GHG emissions and enhancing community participation, can maximize the benefits of broadband telecommunication/ICT infrastructure in rural and remote areas.

– Step 8: Identify business models for sustainable deployment of networks and services in rural and remote areas, taking into consideration priorities based on economic and social indicators.

During the study carried out in each of the steps, the following matters should also be studied and reflected in the outputs of the Question:

– environmental sustainability in deploying the infrastructure and necessary robustness of telecom infrastructure;

– maintenance and operational aspects to provide a quality and continuous service;

– demand-side factors and practices to generate and increase the usage of ICT devices and services;

– efforts to build ICT skill sets for the deployment of broadband services;

– relevant localization of content;

– affordability of services/devices for rural users to adopt so as to fulfil their development needs.

In dealing with the above studies, the work under way in response to other Questions being dealt with in ITU-D, and close coordination with relevant activities under those Questions, in particular Questions 1/1, 2/1, 4/1 and Questions 2/2, 4/2 and 5/2, are highly relevant. In the same way, the studies shall take into account cases related to indigenous communities, isolated and poorly served areas, least developed countries (LDCs), small island developing states (SIDS) and landlocked developing countries (LLDCs), and highlight their particular needs and other particular situations which need to be considered in developing telecommunication/ICT facilities for these areas.

3 Expected output

The output will be a report on the results of the work conducted for each step above, together with one or more recommendations at appropriate times, either during the course of or at the conclusion of the cycle.

4 Timing

The output will be generated on a yearly basis. The output from the first year will be analysed and assessed in order to update the work plan for the next year, and so on.

5 Proposers/sponsors

The Question was originally approved by WTDC-94, and subsequently revised by WTDC-98, WTDC-02, WTDC-06, WTDC-10 and WTDC-14. Brazil, India and Japan.

6 Sources of input

Contributions are expected from Member States, Sector Members and Associates, as well as inputs from relevant BDT programmes, particularly those that have successfully implemented telecommunication/ICT projects in rural and remote areas. These contributions will enable those responsible for work on this Question to develop the most appropriate conclusions, recommendations and outputs. The intensive use of correspondence and online exchange of information and experiences is encouraged for additional sources of inputs.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Relevant policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Rural authorities	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers, including software developers	Yes	Yes
Vendors	Yes	Yes

a) Target audience

Depending on the nature of the output, upper- to middle-level managers in operators and regulators in developing countries, including relevant rural authorities, are the predominant users of the output. The study outcomes will ensure adequate attention of vendors to focus on their development efforts to meet the needs of developing countries.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

b) Proposed methods for implementation of the results

To be decided during the study period.

8 Proposed methods of handling the Question

Within Study Group 1.

9 Coordination

The ITU-D study group dealing with this Question will need to coordinate with:

– Focal points of the relevant Questions in BDT
– Coordinators of relevant project and programme activities in BDT
– Regional and scientific organizations with mandates covering the subject matter of the Question
– Other relevant stakeholders (see Recommendation ITU-D 20).

As may become apparent within the life of this Question.

10 BDT programme link

WTDC Resolution 11 (Rev. Dubai, 2014), Resolution 68 (Rev. Dubai, 2014) and Recommendation ITU-D 19.

Links to BDT programmes aimed at fostering the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap.

11 Other relevant information

As may become apparent within the life of this Question.

QUESTION 6/1

Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks

1 Statement of the situation or problem

At the World Telecommunication Development Conference (Dubai, 2014), account was taken of the wish of Member States and Sector Members to study the protection of telecommunication/ICT consumers, and that study was included under convergence. Faced with the rapid evolution of technologies and the appearance on the market of ever more sophisticated equipment, consumers who are not telecommunication/ICT experts can find themselves at a loss. Consequently, consumer information and consumer rights have become a priority and the topic should be made the subject of a separate study.

In the majority of meetings organized by the leading telecommunication and ICT players, the issue of consumer protection has become a constant concern, yet neither regulators, operators or service providers nor equipment manufacturers have defined or provided a specific legal basis for the legal consumer-protection instruments that need to be implemented in order to guarantee universal access to quality telecommunication/ICT services at low cost.

Given the pace of change and the time it takes to introduce and implement new legislation and regulations, bodies responsible for consumer protection (regulators, public and private agencies) should regularly amend their regulatory frameworks on the basis of the right balance between the interests of operators/service providers and those of users in areas such as subscription agreements, protection of intellectual property rights and management of digital rights, without detriment to innovative models of e-commerce (for example, e-commerce and commerce using mobile phones which open up wide prospects for transborder commerce by enabling hitherto underserved communities to have access to certain goods and services).

One of the key challenges for regulators is to establish a culture of security that promotes trust in telecommunication/ICT applications and services, one in which there is effective enforcement of privacy and consumer protection.

All consumers must have all the information which they need in order to make informed choices and benefit from adequate protection and compensation mechanisms when problems arise.

For most developing countries, the functioning of consumer-protection associations in general – and in the telecommunication/ICT sector specifically, especially in terms of experience and professionalism – presents difficulties when it comes to the management of consumer protection with state agencies, regulators or service providers/operators.

Education and awareness-raising for consumers, including persons with disabilities, women and children, should be a matter for all the parties involved in consumer protection (regulators, consumer-protection bodies and policy-makers).

The development of intersectoral competition with the emergence of services resulting from convergence (bundled services, services via mobile, etc.) makes it even more essential to enhance transborder cooperation, and for regulators and policy-makers to improve their competences and the tools intended to protect consumers. Furthermore, the question of after-sales service, which is one criterion for consumer choice, will need to be studied.

The study carried out over the last study cycle built on and encompassed the findings previously made on basic issues of consumer protection, in particular in the convergent environment, and enforcement, including appropriate national legislation, practices, procedures and sanctions.

The study addressed challenges of enforcement of law, policies and regulations in the area of consumer protection, specifically describing enforcement practices in selected countries, covering also protection in the context of convergence.

The study proposed a number of guidelines that are applicable in diverse circumstances and will assist Member States and Sector Members in their efforts to enforce their national laws in the area of protection for consumers of telecommunication/ICT services.

These studies on consumer protection in the context of convergence should nevertheless be completed and focus on the new challenges.

Member States and Sector Members would benefit from a report setting out the various resources, strategies and tools available to improve enforcement of their national and regional laws, rules and regulations governing consumer information, protection and rights, from the perspective of laws, regulations, economic bases and consumer-protection networks/organizations.

2 Question or issue for study

a) Organizational methods and strategies developed by public consumer-protection agencies with regard to legislation/regulations and regulatory activities.

b) Mechanisms/means put in place by regulators, operators/service providers and consumer-protection agencies to inform consumers, in particular the different subject areas covered.

c) The role of international, regional and national organizations for the protection of telecommunication/ICT consumers' rights.

d) Any economic and financial measures adopted by national authorities in the interests of consumers of telecommunication/ICT services, in particular specific categories of users (persons with disabilities, women and children).

e) Challenges in relation to the provision of new convergent services (transparency of service offers, fluidity of markets, quality and availability of services, value-added services, after-sales services, procedures for dealing with consumers' complaints or concerns, and so on) relating to consumer protection, as well as the policies, regulations and rules established by national regulatory agencies (NRAs) to protect consumers against possible abuses by operators/providers of these convergent services.

3 Expected output

a) A report to Member States and Sector Members, consumer-protection organizations, operators and service providers, setting out guidelines and best practices that will need to be produced to help these actors to find the tools needed for a better culture of consumer protection as regards information, awareness-raising, inclusion of consumers' fundamental rights in laws and national, regional or international regulatory texts, and consumer protection in the provision of all telecommunication/ICT services.

b) Organization of regional seminars on consumer protection: consumer information, protection and rights, laws, economic and financial bases, consumer networks.

4 Timing

An interim report will be presented to Study Group 1 in 2015. It is proposed that this study should be completed in 2017, when a final report will be submitted.

5 Proposers/sponsors

ITU-D Study Group 1 proposed the continuation of this Question as modified herein.

6 Sources of input

a) Contributions from Member States, Sector Members and interested regional and international organizations, such as the United Nations and its specialized agencies, OECD and recognized consumer associations

b) Surveys/interviews

c) Regulatory information available through BDT

d) Websites of national telecommunication/ICT regulatory authorities for worldwide, regional and national governmental bodies responsible for consumer protection, and recognized consumer associations

e) Relevant work currently being undertaken in ITU-T and ITU-R

f) Other relevant sources.

7 Target audience

All the target audiences identified below, with particular attention to the needs of developing countries.

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Telecommunication/ICT consumer-protection organizations	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
ITU-D programme	Yes	Yes

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

a) Target audience – Who specifically will use the output

National telecom policy-makers, regulators, service providers and operators, as well as recognized international, regional and national bodies for the protection of telecommunication/ICT consumers.

b) Proposed methods for implementation of the results

– Electronic distribution of the report and guidelines to all Member States, Sector Members and their respective NRAs, and ITU regional offices

– Distribution of the report and guidelines at the Global Regulators' Symposium and relevant BDT, BR and TSB seminars.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group: ☑

   – Question (over a multi-year study period) ☐

2) Within regular BDT activity:

   – Objective 2 ☑

   – Projects: Regional initiatives ☐

   – Expert consultants ☐

3) In other ways – describe (e.g. regional, within other organizations, jointly with other organizations, etc.) ☐

Together with recognized international, regional and national bodies for the protection of telecommunication/ICT consumers.

b) Why within a study group?

A study group provides the best vehicle for the widest participation by developing countries both in the work of the Question and in shaping the outcome documents (i.e. best-practice guidelines).

9 Coordination and collaboration

This Question should be coordinated with ITU-D Objective 2 and with Questions relating to persons with disabilities, persons with specific needs and telecommunication/ICT services proposed for study during the 2014-2018 study period in the study groups.

10 BDT programme link

ITU-D Objective 2.

11 Other relevant information

As may become apparent within the lifetime of this Question.

QUESTION 7/1

Access to telecommunication/ICT services by persons with disabilities and with specific needs

1 Statement of the situation or problem

The World Health Organization (WHO) estimates that one billion persons in the world live with some type of disability. According to WHO, about 80 per cent of persons with disabilities live in low-income countries. Disability appears in different forms and degrees, regarding physical, sensitive or mental aspects. Also, increasing life expectancy results in elder persons having reduced capabilities. Thus, it is likely that the number of persons with disabilities will continue to rise.

The inclusion in society of persons with disabilities is a policy of Member States. The objective of such policy is to bring about the necessary conditions for persons with disabilities to enjoy the same opportunities in life as the rest of the population. The disabilities policy has evolved, and is not limited to basic healthcare, education of children with disabilities and rehabilitation of persons who have suffered disability during adulthood. The implementation of the disabilities policy has made urban infrastructure accessible, and has improved health and rehabilitation services for this group. Moreover, the principles of equal opportunity and non-discrimination are common policies of Member States.

With respect to telecommunications, at the World Telecommunication Development Conference (Istanbul, 2002) Member States resolved, by Resolution 20 (Rev. Istanbul, 2002), that access to technologies, facilities and telecommunication services must be provided on a non-discriminatory basis.

Telecommunications/ICTs have been acknowledged as essential for social, cultural, economic, political and democratic development as well as exercising several fundamental rights. Within the World Summit on the Information Society (WSIS), both the Declaration of Principles and the Tunis Commitment emphasized the immense impact that telecommunications/ICTs have in almost every aspect of life and that they are considered an instrument for productivity, economic growth, employment generation, good government and dialogue between persons and nations.

WSIS acknowledged that special attention should be given to the needs of elder persons and persons with disabilities.

In recognition of the accessibility to telecommunications/ICT by persons with disabilities, the ITU Council approved the theme "Connecting people with disabilities: Telecommunications/ICT opportunities for all" for the World Telecommunication and Information Society Day (17May) in 2008.

On 13 December 2006, the United Nations General Assembly approved the Convention on the Rights of Persons with Disabilities (CRPD).

The CRPD was opened for signature on 30 March 2007 and, as of 16 February 2009, 137 countries had signed it, while 81 had signed the Optional Protocol. Of these, 48 had ratified the Convention and 28 the Optional Protocol. The CRPD establishes basic principles, and also a State's obligations to ensure equal access to telecommunications/ICTs, including Internet, by persons with disabilities.

There is a lack of specific legal provisions governing telecommunication/ICT accessibility. Certain countries have anti-discriminatory laws or telecommunication laws. Some have legal provisions from a medical standpoint which considers disability as a "defect" rather than addressing disability with emphasis on ability and integration. Legal provisions should be available to turn good accessibility provisions into reality.

It is also pertinent to mention that broadband access and usage are highly dependent on literacy and ICT literacy as well. The United Nations Educational, Scientific and Cultural Organization (UNESCO) estimates that 774 million people (around 11 per cent of world population) aged 15 and above worldwide are illiterate, i.e. they cannot read or write; and two-thirds of them, i.e. 493 million, are women. Among them, 52 per cent live in South and West Asia and 22 per cent in sub-Saharan Africa.

Several issues encountered by both disability groups and illiterate groups of people have common solutions.

1.1 Accessibility standards

Accessibility standards are essential in order to make it possible for equipment and services to be usable by the broadest range of persons, interoperable and provide the required quality services. ITU-T has prepared several Recommendations and documents that provide information on a wide range of accessibility standards.

It is also important to consider stakeholder participation where persons with disabilities should be involved in the process of elaborating legal/regulatory provisions, public policy and standards.

It would also be important to consider assistive technologies to be used by persons with various types of disabilities. These assistive technologies should aim to overcome or reduce the gap between standard telecommunications/ICTs generally available and those which address the needs of persons with disabilities.

1.2 Information and statistics

It is also important to gather information and data addressing many important issues relating to accessibility to telecommunications/ICT by persons with disabilities. Therefore, a methodology should be developed to assist the information-gathering process.

2 Question or issue for study

Analyse policies and strategies to promote, develop and implement the most advanced technological solutions to enable equal access to telecommunications/ICTs by persons with disabilities to that enjoyed by the rest of the population.

3 Expected output

It is proposed that the Question for study should result in a report that will enable Member States, especially developing and least developed countries (LDCs), to design policies and execute strategies for promoting and implementing services and solutions which provide access to telecommunications/ICTs by persons with disabilities and with specific needs, and for people with difficulties mastering reading and writing. Furthermore, the report will help Member States and Sector Members identify commercial best practices relating to telecommunications/ICT that should apply in relation to persons with disabilities.

The report should contain the regulatory policies necessary for ensuring accessibility to telecommunications/ICT for persons with disabilities, including, but not limited to:

a) the principles to be applied by service providers and equipment manufacturers (i.e. equal access, accessibility/compatible devices);

b) a recommendation on the desirable access to telecommunications/ICT;

c) suggested schemes for the implementation of policies and strategies;

d) an economic cost evaluation and a comparison of the available technological solutions;

e) a recommendation on commercial best practices applied by service providers for overcoming the difficulties faced by persons with disabilities in accessing telecommunications/ICT.

4 Timing

These activities should be included in the programme of activities of ITU-D Study Group 1 for the period 2014-2018, as a new Question.

4.1 Mid-term report is expected by 2016.

4.2 Final report is expected by 2017.

5 Proposers/sponsors

Mexico/CITEL

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India, Center for Development of Telematics (CDOT)
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6 Sources of input

The following stakeholders are encouraged to supply information for the Question: Member States, Sector Members, relevant international and regional organizations, public and private institutions and civil-society organizations involved in the design of policies and advocacy for the development of technological solutions to alleviate the difficulties faced by persons with disabilities in accessing telecommunications/ICT.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Interested	Very interested
Telecom regulators	Interested	Very interested
Service providers/operators	Interested	Very interested
Manufacturers	Interested	Interested

a) Target audience

The result of the study will serve Member States, and particularly administrations of developing countries and LDCs, to design policies and to execute strategies and actions for implementing technological solutions that improve accessibility to telecommunications/ICT by persons with disabilities. Moreover, it will enable Sector Members and service providers located in those countries to design and apply proven and successful commercial practices to meet the needs of persons with disabilities and facilitate their access to telecommunications/ICT.

b) Proposed methods for implementation of the results

Authorities from Member States could consider designing policies and strategies to implement the most suitable technological solutions in the light of the characteristics of their populations and countries. In this respect, there could be short-term, medium-term and long-term action plans so as to permit implementation in phases.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

The report should also be useful for administrations of Member States, Sector Members and service providers to encourage the adoption of commercial practices applicable to meet the needs of persons with disabilities and with specific needs.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity (indicate which programmes, activities, projects, etc., will be involved in the work of the study Question)

– Programme: digital inclusion ☑

– Projects ☐

– Expert consultants ☐

– Regional offices ☐

3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.) To be defined in the work plan. ☐

b) Why?

The Question will be addressed within ITU-D Study Group 1, in close cooperation with ITU-T Study Group 16 (Question 26/16).

9 Coordination and collaboration

Coordination is recommended with relevant international organizations, and with service providers that have adopted best practices to meet the needs of persons with disabilities and facilitate their access to telecommunications/ICT.

10 BDT programme link

To be defined in the work plan.

11 Other relevant information

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QUESTION 8/1

Examination of strategies and methods of migration from analogue to digital terrestrial broadcasting and implementation of new services

1 Statement of the situation or problem

1.1 Evidence suggests that the migration from analogue to digital sound and television broadcasting technologies will be universal and unstoppable over time in countries or regions at varying pace. While digital satellite sound and television broadcasting services have been introduced worldwide, digital terrestrial television and sound broadcasting are becoming a priority for every country of ITU regions.

1.2 ITU-D can continue playing a role in helping Member States evaluate the technical and economic issues involved in migrating from terrestrial analogue to digital sound and television broadcasting. ITU-D has been collaborating closely with both ITU-R and ITU-T on broadcasting matters, including through discussions being held in ITU-R Joint Task Group 4-5-6-7, thus avoiding duplication.

1.3 The use of the "digital dividend" is an important issue, and continues to be widely debated by broadcasters and operators of telecommunication and other services operating in the same frequency bands. The role of the regulatory authorities in this regard is crucial to balancing the interests of users with the demands of growth in all branches of the industry.

1.4 Following the preparation by the three ITU Sectors of numerous studies on implementing digital television broadcasting systems, and pursuant to the resolutions of the World Radiocommunication Conference (Geneva, 2012) (WRC-12) on exploiting the digital dividend in the future, there is a need to study the impact of the digital dividend on all parties and to review best practice in this regard, as these are essential steps for reaping maximum benefit from the frequencies concerned. The digital dividend spectrum can be used for new, innovative services, from interactive television to mobile communications and wireless broadband Internet services.

2 Question or issue for study

Studies under the Question will focus on the following issues:

2.1 Impact on developing countries of the coexistence of terrestrial television broadcasting with other terrestrial telecommunication services, taking into consideration relevant activities carried out in the other two ITU Sectors, including new uses for the digital dividend.

2.2 Analysis of gradual transition to digital terrestrial television broadcasting, focusing mainly on the activities necessary for the analogue switch-off, including:

a) analysis of ongoing progress in the quantity/availability of receiving terminals for reception by users of both sound and TV digital terrestrial broadcasts;

b) analysis of various analogue switch-off strategies, including economic/financial benefits granted to lower-income people for the acquisition of the necessary means for terrestrial reception of digital broadcasting signals;

c) analysis of spectrum re-planning strategies, such as the reallocation of existing broadcasting channels, to allow the coexistence of broadcasting and other services, considering new uses for the digital dividend; and

d) analysis of effective marketing strategies to accelerate the process of public awareness about digital broadcasting.

2.3 Spectrum planning for bands allocated to broadcasting services in preparation for the analogue switch-off, the digital dividend, and possible band plans, the planning of different services including allotment plans, and specific bands to be allocated to broadcasters after the analogue switch-off, within the purview of ITU-R.

2.4 The use of the digital dividend frequency bands resulting from the transition to terrestrial digital broadcasting, including technical, regulatory and economic aspects, such as:

a) status of the use of the digital dividend frequency bands;

b) standards/recommendations adopted or currently being studied by the other two ITU Sectors related to the topic;

c) sharing of the digital dividend frequency band;

d) harmonization and cooperation at regional level;

e) the role of the digital dividend in saving financing, cost savings on the transition to digital, and best experience and practice in this regard.

3 Expected output

a) A report reflecting studies outlined in §§ 2.1, 2.2, 2.3 and 2.4 above.

b) Collection and periodic dissemination of relevant data emanating from the organizations and groups listed in § 8 below. Periodic updates on studies taking place in the other ITU Sectors.

c) Comprehensive guidelines on transition from analogue to digital broadcasting, focusing especially on strategies to speed up the migration and analogue switch-off.

d) Best practices report on fostering public awareness regarding the transition from analogue to digital broadcasting.

e) Compendium of public policies on the digital terrestrial television transition, bringing together the regulatory experiences of countries concerning strategies for spectrum re-planning and planning and executing the analogue switch-off.

4 Timing

A yearly progress report is expected at each study group meeting.

5 Proposers/sponsors

Brazil; Arab States.

6 Sources of input

1) Collection of related contributions and data from Member States and ITU-D Sector Members, and those organizations and groups listed in § 9 below.

2) Updates and outputs of ITU-R and ITU-T study groups; relevant recommendations and reports related to digital terrestrial sound and television broadcasting below 1 GHz.

3) Examination of the impact on developing countries of transition to digital sound and television broadcasting, re-planning, convergence and interactivity.

4) Outputs of WTDC Resolution 9 (Rev. Dubai, 2014), including relevant recommendations, guidelines and reports.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Broadcasting operators	Yes	Yes
ITU-D programme	Yes	Yes

a) Target audience – Who specifically will use the output

Beneficiaries of the output are expected to be middle and higher-level managers in broadcasters, telecommunication/ICT operators and regulators worldwide.

b) Proposed methods for implementation of the results

Activities include conducting technical studies, observing best practices, and developing comprehensive reports serving the target audience's interests.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity (indicate which programmes, activities, projects, etc., will be involved in the work of the study Question):

– Programmes ☑

– Projects ☑

– Expert consultants ☐

– Regional offices ☑

3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.) ☐

b) Why?

To be defined in the workplan.

9 Coordination and collaboration

The ITU-D study group dealing with this Question should coordinate closely with:

– Other ITU-R and ITU-T study groups dealing with similar issues, and in particular other relevant ITU-D groups, for example the ITU-D Working Group on Gender Issues

– ITU-R Joint Task Group 4-5-6-7 and Study Group 1 Working Party 1B

– The Technical Committee of the Inter-Regional Broadcasting Union

– UNESCO and relevant international and regional broadcasting organizations, as appropriate

– The Director of the Telecommunication Development Bureau (BDT) shall, through the appropriate BDT staff (e.g. regional directors, focal points) provide information to rapporteurs on all relevant ITU projects in different regions. This information should be provided to the meetings of the rapporteurs when the work of the programmes and regional offices is in the planning stages and when it is completed.

10 BDT programme link

Outputs 1.2, 2.2 and 4.1

WTDC Resolutions 10 (Rev. Hyderabad, 2010) and 9, 17 and 33 (Rev. Dubai, 2014)

Links to BDT programmes aimed at fostering the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap.

11 Other relevant information

As may become apparent within the life of the Question.

STUDY GROUP 2

QUESTION 1/2

Creating the smart society: Social and economic development through ICT applications

1 Statement of the situation or problem

All areas of society – culture, education, health, transport and trade – will depend for their development on the advances made through ICT systems and services in their activities. ICTs can play a key role in the protection of property and persons; smart management of motor vehicle traffic; saving electrical energy; measuring the effects of environmental pollution; improving agricultural yield; management of healthcare and education; management and control of drinking water supplies; and solving the problems facing cities and rural areas. This is the smart society.

Delivering the promise of the smart society relies on three technological pillars – connectivity, smart devices and software – and on sustainable development principles.

Connectivity encompasses and includes existing and traditional networks (mobile, broadband, and cable) as well as new technologies most often reliant on radio spectrum. Connectivity is a key enabler and component of machine-to-machine (M2M) and resulting applications and services such as e-government, traffic management and road safety.

Smart devices are the things that are connected that create smart societies. Cars, traffic lights and cameras, water pumps, electricity grids, home appliances, street lights and health monitors are all examples of things that need to become smart, connected devices so that they can deliver significant advancements in sustainability and economic and social developments. This is especially important in developing countries.

Software development connects and enables the first two pillars that, all working together, support new services that would never have been possible before. These new services are transforming everything from energy efficiency to environmental improvements, road safety, food and water safety, manufacturing and basic government services.

2 Question or issue for study

1) Discussion of and assistance in raising awareness of methods of improving connectivity to support the smart society, including connectivity to support smart grids, smart cities and e-environment and e-health applications.

2) Examination of best practices for fostering and enabling deployment and use of smart devices, including mobile devices, the importance of the application of such devices having been highlighted by BDT's m-Powering Development initiative, launched at ITU TELECOM World 2012 in Dubai, with an emphasis on successful examples from rural areas in developing countries.

3) Survey of methods and examples of how software, both open-source and/or proprietary, enables connectivity of smart devices, thereby supporting smart services and smart societies.

4) Definition of a measurement and performance benchmark for quality-of-life indicators in smart cities, and possible regulation and communication mechanisms that can be followed for good urban governance.

5) The experiences of developed countries that have built smart cities.

6) Creation of a national ecosystem that will include all stakeholders involved in defining national road-safety policy.

7) Definition of a regional cooperation and coordination framework in the area of intelligent transport on cross-border networks.

3 Expected output

The output expected from this Question will include:

a) Case studies on how to enable use of telecommunications and other means of connectivity, including M2M communications, and access to ICT applications to support sustainable development and foster smart societies in developing countries.

b) Increasing awareness among relevant participants regarding the adoption of open-source strategies for enabling access to telecommunications, and studying the drivers for increasing the degree of preparedness to use and develop open-source software to support telecommunications in developing countries, as well as creating opportunities for cooperation between ITU members by reviewing successful partnerships.

c) Analysis of factors affecting the efficient roll-out of connectivity to support ICT applications that enable e-government applications in smart cities and rural areas.

d) Sharing of best practices in the use of ICT networks to enable road safety.

e) Annual progress reports and detailed final report containing analysis, information and best practices, as well as any practical experience acquired in the areas of use of telecommunications and other means of enabling ICT applications and connecting devices for development of the smart society.

4 Timing

A preliminary report should be submitted to the study group in 2016. The studies should be concluded in 2017, by which time a final report will be submitted.

5 Proposers/sponsors

The Question was approved by WTDC-14, on the basis of Question 17-3/2 and proposals from the Asia-Pacific Telecommunity, Arab States, Member States of the African Telecommunications Union, the United States, Algérie Télécom Spa, Intervale (Russian Federation) and the A.S. Popov Odessa National Academy of Telecommunications (Ukraine).

6 Sources of input

a) Progress on study of the Questions relevant to this issue in ITU-T and ITU-R study groups.

b) Contributions from Member States, Sector Members, Associates other United Nations agencies, regional groups, and BDT coordinators.

c) Progress of BDT initiatives with other United Nations organizations and the private sector on using ICT applications for development of the smart society.

d) Progress on any other relevant activity carried out by the ITU General Secretariat or BDT.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers (telecommunication/ICT equipment manufacturers, automobile industry, etc.)	Yes	Yes
BDT programmes	Yes	Yes

a) Target audience – Who specifically will use the output

Relevant policy-makers, regulators and participants in the telecommunication/ICT and multimedia sectors.

b) Proposed methods for the implementation of the results

In guidelines for implementing BDT regional initiatives.

8 Proposed methods of handling the Question or issue

Within Study Group 2.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition

9 Coordination and collaboration

– The relevant BDT unit dealing with these issues

– Relevant work in progress in the other two ITU Sectors.

10 BDT programme link

All BDT programmes are concerned by the Question as regards, in particular, aspects relating to information and communication infrastructure and technology development, ICT applications, enabling environment, digital inclusion and emergency telecommunications.

11 Other relevant information

To be identified later during the life of this new Question.

QUESTION 2/2

Information and telecommunications for e-health

1 Statement of the situation or problem

E-health is an integrated system of healthcare delivery that employs telecommunications/ICTs as a substitute for face-to-face contact between medical staff and patient. It includes many applications, such as telemedicine, electronic medical records, medical consultation at a distance, medical consultation between rural medical centres and urban hospitals, etc. E-health provides for transmission, storage and retrieval of medical information in digital form between doctors, nurses, other medical staff and patients for clinical, educational and administrative purposes, both at the local site (your workplace) and at a distance (remote workplaces). In some developing countries[1], the number of mobile phones has overtaken the number of fixed phones, and the mobile telecommunication network could be considered a more attractive platform for the introduction of e-health services.

E-health is playing a very important role in healthcare delivery in developing countries, where the acute shortage of doctors, nurses and paramedics is directly proportional to the enormous unsatisfied demand for health services. Some developing countries have already successfully implemented small pilot telemedicine projects, and they are looking forward to proceeding further by considering the development of e-health master plans, as recommended by the World Health Organization in its Resolution WHA58.28 in May 2005, which aims, in particular, at reducing disparities with regard to medical services between urban and rural areas and pays special attention to the least developed countries (LDCs).

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

2 Question or issue for study

The Question shall:

a) Take further steps to assist in raising the awareness of decision-makers, regulators, telecommunication operators, donors and customers about the role of ICTs in improving healthcare delivery in developing countries.

b) Encourage collaboration and commitment between the telecommunication sector and the health sector in developing countries, in order to maximize the utilization of limited resources on both sides for implementing e-health services.

c) Continue to disseminate experiences and best practices with the use of ICTs in e-health in developing countries.

d) Encourage cooperation among developing and developed countries in the field of mobile e-health solutions and services.

e) Promote the development of technical standards for e-health applications in conjunction with ITU-T. In particular, develop guidelines for developing countries on how to use such standards.

f) Introduce and disseminate ITU technical standards related to e-health for developing countries.

3 Expected output

The outputs expected from this Question will include:

a) Guidelines on how to draft the telecommunication/ICT part of an e-health master plan.

b) Guidelines with regard to the use of mobile telecommunications for e-health solutions in developing countries.

c) Collection and summary of the requirements and effectiveness of telecommunication infrastructure for the successful implementation of e-health applications, taking into account the environment of developing countries.

d) Dissemination of the technical standard related to the introduction of e-health services in developing countries.

e) Collaboration with ITU-T Study Group 16 in order to accelerate the elaboration of technical standards for e-health applications.

f) Collaboration with the relevant BDT programme, if so requested, to support implementation of the telecommunication/ICT component of e-health projects in developing countries, including advice on best practices on how to train developing countries in the use of the telecommunication/ICT component of e-health projects.

g) Sharing and dissemination of best practices on e-health applications in developing countries using the ITU/BDT website, in close collaboration with the relevant BDT programme.

4 Timing

The work undertaken by the study group can be phased over the next study period. The participation of experts from the group for the provision of assistance in the development of e-health projects in developing countries will be encouraged.

5 Proposers/sponsors

The Question was originally approved by WTDC-98, and subsequently revised by WTDC-02, WTDC-06, WTDC-10 and WTDC-14.

6 Sources of input

Inputs will be expected from Member States and Sector Members, experts in e-health applications, etc. Contributors and contacts have already been established during the 2002-2006, 2006-2010 and 2010-2014 study periods, and new contacts will be invited, too. This Question supported the mobile e-health initiative for developing countries launched in 2009.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
ITU-D programme		
Ministries of health	Yes	Yes
Medical organizations	Yes	Yes
NGOs in the field of health	Yes	Yes

This Question aims at stimulating collaboration between the telecommunication/ICT and health communities, between developed and developing countries, and among developing countries. The experience gained from telecommunications/ICT for e-health applications in developing countries will also be expected to benefit equipment suppliers and service providers in developed countries.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

a) Target audience – Who specifically will use the output

Telecommunication/ICT and health communities, between developed and developing countries and among developing countries, as well as telecom regulators manufacturers, medical organizations, NGOs and service providers.

b) Proposed methods for implementation of the results

Within Study Group 2. The outputs of this Question will be made available via the ITU-D website.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity (indicate which Programmes, activities, projects, etc., will be involved in the work of the Study Question):

– Programmes: ICT applications and services ☑

– Projects ☐

– Expert consultants ☐

– Regional offices ☑

3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.) ☐

b) Why?

To take into account the ongoing/planned programmes/regional initiatives and optimize resources.

9 Coordination and collaboration

Coordination between the telecommunication/ICT and health communities, between developed and developing countries and among developing countries, as well as telecom regulators manufacturers, medical organizations, NGOs and service providers.

10 BDT programme link

Programme: ICT applications and services (Output 3.2)

11 Other relevant information

The activity for the next study cycle can be based on the final report, and on other initiatives which resulted from Question 14-3/2 of the last study period, namely mobile telecommunications for mobile e-health.

QUESTION 3/2

Securing information and communication networks: Best practices for developing a culture of cybersecurity

1 Statement of the situation or problem

Securing information and communication networks and developing a culture of cybersecurity have become key in today's world for a number of reasons, including:

a) the explosive growth in the deployment and use of information and communication technology (ICT);

b) cybersecurity remains a concern of all and there is thus a need to assist countries, in particular developing countries, to protect their telecommunication/ICT networks against cyberattacks and threats;

c) the need to endeavour to ensure the security of these globally interconnected infrastructures if the potential of the information society is to be achieved;

d) the growing recognition at the national, regional and international levels of the need to develop and promote best practices, standards, technical guidelines and procedures to reduce vulnerabilities of and threats to ICT networks;

e) the need for national action and regional and international cooperation to build a global culture of cybersecurity that includes national coordination, appropriate national legal infrastructures, and watch, warning and recovery capabilities, government/industry partnerships, and outreach to civil society and consumers;

f) the requirement for a multistakeholder approach to effectively make use of the variety of tools available to build confidence in the use of ICT networks;

g) United Nations General Assembly (UNGA) Resolution 57/239, on creation of a global culture of cybersecurity, invites Member States "to develop throughout their societies a culture of cybersecurity in the application and use of information technology";

h) UNGA Resolution 68/167, on the right to privacy in the digital age, affirms, *inter alia*, "that the same rights that people have offline must also be protected online, including the right to privacy";

i) best practices in cybersecurity must protect and respect the rights of privacy and freedom of expression as set forth in the relevant parts of the Universal Declaration of Human Rights, the Geneva Declaration of Principles adopted by the World Summit on the Information Society (WSIS) and other relevant international human rights instruments;

j) the Geneva Declaration of Principles indicates that "A global culture of cybersecurity needs to be promoted, developed and implemented in cooperation with all stakeholders and international expert bodies", the Geneva Plan of Action encourages sharing best practices and taking appropriate action on spam at national and international levels, and the Tunis Agenda for the Information Society reaffirms the necessity for a global culture of cybersecurity, particularly under Action Line C5 (Building confidence and security in the use of ICTs);

k) ITU was requested by WSIS (Tunis, 2005), in its agenda for the implementation and follow-up, to be the lead facilitator/moderator for Action Line C5 (Building confidence and security in the use of ICTs), and ITU-T, ITU-R, ITU-D and the General Secretariat, based on such responsibility and in response to relevant resolutions adopted by the World Telecommunication Development Conference (WTDC) (Doha, 2006 and Hyderabad, 2010), by the Plenipotentiary Conference (Antalya, 2006 and Guadalajara, 2010), as well as by the World Telecommunication Standardization Assembly (Johannesburg, 2008 and Dubai, 2012), have carried out many studies in order to improve cybersecurity;

l) WSIS outputs (both phases: Geneva, 2003 and Tunis, 2005) called for building confidence and security in the use of ICTs;

m) WTDC Resolution 45 (Rev. Dubai, 2014) supported the enhancement of cybersecurity among interested Member States;

n) consistent with its mandate, ITU-D should play a role in bringing together Member States, Sector Members and other experts to share experiences and expertise for securing ICT networks;

o) the results of Question 22-1/1 in the past study period, which include numerous reports, and contributions from across the globe;

p) there have been various efforts to facilitate the improvement of network security, including the work of Member States and Sector Members in standards-setting activities in ITU-T and in the development of best-practice reports in ITU-D; by the ITU secretariat in the Global Cybersecurity Agenda (GCA); and by ITU-D in its capacity-building activities in the relevant programme; and, in certain cases, by experts across the globe;

q) governments, service providers and end-users, particularly in least developed countries (LDCs), face unique challenges in developing security policies and approaches appropriate to their circumstances;

r) Member States and infrastructure operators would benefit from additional reports detailing the various resources, strategies and tools available to build confidence in the use of ICT networks and the role of international cooperation in this regard;

s) spam continues to be a serious concern;

t) evolving methodologies on common testing criteria for telecommunication networks;

u) the need for simplified test procedures at basic level for security testing of telecommunication networks to promote a security culture.

2 Question or issues for study

a) Discuss approaches and best practices for evaluating the impact of spam within a network, and provide the necessary measures, including mitigation techniques, that developing countries can use, taking into account existing standards and available tools.

b) Provide information on current cybersecurity challenges that service providers, regulatory agencies and other relevant parties are facing.

c) Continue to gather national experiences from Member States relating to cybersecurity, and to identify and examine common themes within those experiences.

d) Continue to analyse results of the cybersecurity awareness survey carried out in the last study period, and issue an updated survey so as to measure progress over time.

e) Provide a compendium of relevant, ongoing cybersecurity activities being conducted by Member States, organizations, the private sector and civil society at the national, regional and international levels, in which developing countries and all sectors may participate, including information gathered under c) above.

f) Examine specific needs of persons with disabilities, in coordination with other relevant Questions.

g) Examine ways and means to assist developing countries, with the focus on LDCs, in regard to cybersecurity-related challenges.

h) Continue to gather national experiences and national requirements in the area of child online protection, in coordination with other relevant activities.

i) Hold ad hoc sessions, seminars and workshops to share knowledge, information and best practices concerning effective, efficient and useful measures and activities to enhance cybersecurity, using outcomes of the study, to be collocated as far as possible with meetings of Study Group 1 or of the rapporteur group for the Question.

j) Gather national experience and requirements on common criteria and security testing that would facilitate the development of a framework and guidelines that could speed up the security testing of telecommunication equipment, in collaboration with the relevant ITU-T study groups and other standards-developing organizations (SDOs), as appropriate, and taking into account available information and material in these entities.

3 Expected output

1 Reports to the membership on the issues identified in § 2 a) to j) above. The reports in question will reflect that secure information and communication networks are integral to building of the information society and to the economic and social development of all nations. Cybersecurity challenges include potential unauthorized access to, destruction of and modification of information transmitted on ICT networks, as well as countering and combating spam. However, the consequences of such challenges can be mitigated by increasing awareness of cybersecurity issues, establishing effective public-private partnerships and sharing successful best practices employed by policy-makers and businesses, and through collaborating with other stakeholders. In addition, a culture of cybersecurity can promote trust and confidence in these networks, stimulate secure usage, ensure protection of data and privacy while enhancing access and trade, and enable nations to better achieve the economic and social development benefits of the information society.

2 Educational materials for use in workshops, seminars, etc.

3 Accumulation of knowledge, information and best practices on effective, efficient and useful measures and activities to enhance cybersecurity in developing countries resulting from ad hoc sessions, seminars and workshops.

4 Timing

This study is proposed to last four years, with preliminary status reports to be delivered on progress made after 12, 24 and 36 months.

5 Proposers/sponsors

ITU-D Study Group 1; Arab States; Inter-American proposal; Japan; Islamic Republic of Iran.

6 Sources of input

a) Member States and Sector Members

b) Relevant ITU-T and ITU-R study group work

c) Relevant outputs of international and regional organizations

d) Relevant non-governmental organizations concerned with the promotion of cybersecurity and a culture of security

e) Surveys, online resources

f) Experts in the field of cybersecurity

g) Other sources, as appropriate.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

a) Target audience

National policy-makers and Sector Members, and other stakeholders involved in or responsible for cybersecurity activities, especially those from developing counties.

b) Proposed methods for implementation of the results

The study programme focuses on gathering information and best practices. It is intended to be informative in nature and can be used to raise awareness for Member States and Sector Members of the issues of cybersecurity and to draw attention to the information, tools and best practices available, the results of which may be used in conjunction with BDT-organized ad hoc sessions, seminars and workshops.

8 Proposed methods of handling the Question or issue

The Question will be addressed within a study group over a four-year study period (with submission of interim results), and will be managed by a rapporteur and vice-rapporteurs. This will enable Member States and Sector Members to contribute their experiences and lessons learned with respect to cybersecurity.

9 Coordination

Coordination with ITU-T, in particular Study Group 17 or its successor, ITU-D Question 7/1 on persons with disabilities, as well as other relevant organizations, including FIRST, IMPACT, APCERT, OAS CICTE, OECD, RIRs, NOGs, M3AAWG and others. Given the existing level of technical expertise on the issue in these groups, all documents (questionnaires, interim reports, draft final reports, etc.) should be sent to them for comment and input prior to being submitted to the full ITU-D study group for comment and approval.

10 BDT programme link

The BDT programme under Output 3.1 of Objective 3 shall facilitate exchange of information and make use of the output, as appropriate, to satisfy programme goals and the needs of Member States.

11 Other relevant information

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QUESTION 4/2

Assistance to developing countries for implementing conformance and interoperability programmes

1 Statement of the situation or problem

Inclusion of an ITU-D study group Question on this matter provides an effective way to further the aims of Resolution 47 (Rev. Dubai, 2014) of the World telecommunication Development Conference (WTDC), Resolution 76 (Rev. Dubai, 2012) of the World telecommunication Standardization Assembly (WTSA) and Resolution 177 (Guadalajara, 2010) of the Plenipotentiary Conference.

Member States and ITU-D Sector Members can assist and guide each other by conducting studies, building tools to bridge the standardization gap, and navigating issues related to matters raised in the above-mentioned resolutions. ITU-D can harness the energy of its membership to examine these important issues.

In a global economy characterized by rapid technological change, a variety of ICT solutions and the convergence of telecommunication networks and services, ICT users – public entities, businesses and consumers – understandably have certain expectations regarding interoperability, quality and also environmental sustainability of products and services.

In this regard, to facilitate safe usage of products and services anywhere in the world, regardless of who is the manufacturer or service provider, it is crucial that products and services be developed in accordance with relevant international standards, regulations and other specifications, and that their compliance be tested.

The Question will ultimately contribute to international community's effort in adopting eco-friendly set of harmonized standards, since the countries can, through conformance and interoperability (C&I) regime instruments, better control and authenticate products.

Conformity assessment increases the probability of interoperability, i.e. equipment built by different manufacturers being capable of communicating successfully. In addition, it helps to ensure that products and services are delivered according to expectations. Conformity assessment builds consumer trust and confidence in tested products and consequently strengthens the business environment and, thanks to interoperability, the economy benefits from business stability, scalability and cost reduction of systems, equipment and tariffs.

While economically C&I increases market opportunities, encourages trade and technology transfer and contributes to the removal of technical barriers, socially it helps to extend ICT service availability and affordability to all people at a good level of quality.

To increase the benefits of C&I, many countries have adopted harmonized C&I regimes at both national and bi-/multilateral level. However, some developing countries have not yet done so because of a number of major challenges, such as the lack of appropriate/adequate infrastructure and technology development to be in a position to test or to recognize tested ICT equipment (e.g. accredited laboratories).

Availability of high-quality, high-performing products will accelerate widespread deployment of the infrastructure, technologies and associated services, allowing people to access the information society regardless of their location or chosen device, and contributing to implementing the outcomes of the World Summit on the Information Society (WSIS).

In this respect, other outcomes of the Plenipotentiary Conference, ITU-D, ITU-T and ITU-R resolutions and Recommendations, and in particular Resolution 177 (Guadalajara, 2010), Resolution 47 (Rev. Dubai, 2014), Resolution 76 (Rev. Dubai, 2012), and Resolution ITU-R 62 (Geneva, 2012) of the Radiocommunication Assembly, should serve as a basis for the study of this Question, and as the framework for ITU's business plan developed upon request of ITU's Member States, which establishes the following four pillars:

- Pillar 1: Conformance assessment
- Pillar 2: Interoperability
- Pillar 3: Capacity building
- Pillar 4: Establishment of C&I regimes, including building laboratories.

The report presented by the Secretary-General to the 2013 session of the ITU Council ("Conformance and Interoperability Programme Status Report and Action Plan" – Document C13/24(Rev.1)) was positively commented on by the councillors, who unanimously referred to the importance of activities relating to conformance and interoperability, supported the work accomplished by ITU in that area, and urged the Union to continue that work.

2 Question or issue for study

The Question is established in ITU-D Study Group 2,to examine these issues and undertake the following, taking into account the economic impact of previously mentioned programmes, including on Member States and Sector Members:

2.1 In close collaboration with the relevant BDT programme(s), identify and assess what the challenges, priorities and problems are for countries, subregions or regions with respect to the application of ITU-T Recommendations, approaches to meeting the confidence needs associated with equipment conformance to ITU-T Recommendations and other related issues, identifying critical issues/priority issues in countries, subregions or regions, and identifying related best practices.

2.2 Examine how information transfer, know-how, training and institutional and human capacity development can strengthen the ability of developing countries to reduce risks associated with low-quality equipment, and equipment interoperability issues. Examine effective information-sharing systems and best practices to assist in this work.

2.3 Examine global trends related to these matters.

2.4 Elaborate a methodology for the implementation of this Question, in particular gathering evidence and information regarding current best practices being adopted to create C&I programmes, taking into consideration progress achieved by the all ITU Sectors in this regard.

2.5 Techniques designed to promote harmonization of C&I regimes, to improve regional integration and to contribute to bridging the standardization gap, consequently reducing the digital divide.

2.6 Information regarding the establishment of mutual recognition agreements (MRA) between countries. Guidance on concepts and procedures to establish and manage MRAs.

2.7 Techniques on market surveillance and maintenance of C&I regimes in order to guarantee the credibility and sustainability of the conformance assessment scheme put in place.

3 Expected output

In the next ITU-D study period 2014-2018, studies of various issues related to conformance and interoperability are to be reported, including a description of the technical, legislative and regulatory framework that would be needed to implement appropriate C&I programmes by developing countries.

Specifically, the following outputs are envisaged:

a) Harmonized guidelines on technical, legal and regulatory aspects of a C&I regime

b) Feasibility studies regarding the establishment of laboratories in different C&I domains

c) Guidance on the framework and procedures to establish MRAs

d) Case studies on C&I regimes established at national, regional or global levels

e) Development of a methodology for assessing the status of C&I regimes in place in the regions (or subregions)

f) Experience-sharing and case study reports on C&I implementation of programmes.

4 Timing

4.1 Annual progress reports will be submitted to ITU-D Study Group 2.

4.2 A final report will be submitted to ITU-D Study Group 2.

5 Proposers/sponsors

United States; Algérie Télécom; Arab States.

6 Sources of input

1) Member States, Sector Members and relevant experts.

2) Examination of regulations, policies and practices in countries that have created systems to manage these matters.

3) Other relevant international organizations.

4) Interviews, existing reports and surveys should also be used to gather data and information for the finalization of a comprehensive set of best-practice guidelines for administering C&I information. Material from regional telecommunication organizations, telecommunication research centres, manufacturers and working groups should also be utilized in order to avoid duplication of work. Close cooperation with ITU-T study groups, in particular Study Group 11 and the Joint Coordination Activity on C&I testing (JCA-CIT), and with other organizations (e.g. ILAC, IAF, ISO, IEC) involved in conformance and interoperability activities and other actions within ITU-D is required and extremely important.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
Consumers/end-users	Yes	Yes
Standards-development organizations, including consortia	Yes	Yes
Testing laboratories	Yes	Yes
Certification bodies	Yes	Yes

a) Target audience

Depending on the nature of the output, policy- and decision-makers, middle- to upper-level managers in operators, laboratories, SDOs, certification bodies, market-research agencies, regulators and ministries in developed, developing and least developed countries will be the predominant users of the output. Compliance managers at equipment manufacturers and system integrators could also use the output for information.

b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D interim and final reports. This will provide a means for the audience to have periodic updates of the work carried out and a means for the audience to provide input and/or seek clarification/more information from ITU-D Study Group 2 should they need it.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

The Question will be addressed within a study group over a four-year study period (with submission of interim results), and will be managed by a rapporteur and vice-rapporteurs. This will enable Member States and Sector Members to contribute their experiences and lessons learned with respect to conformity assessment, type-approval and interoperability.

9 Coordination

9.1 The ITU-D study group dealing with this Question will need to coordinate with:

– Relevant ITU-T study groups, particularly Study Group 11

– Relevant focal points in BDT and ITU regional offices

– Coordinators of relevant project activities in BDT

– Standards-development organizations (SDOs)

– Conformity-assessment bodies (including testing organizations and laboratories, accreditation organizations, etc.) and industry consortia

– Consumers/end users

– Experts in this field.

10 BDT programme link

a) WTDC Resolution 47 (Rev. Dubai, 2014)

b) WTSA Resolution 76 (Rev. Dubai, 2012)

c) WTSA Resolution 44 (Rev. Dubai, 2012)

d) C&I Action Plan Pillars 3 and 4 (Council Document C13/24(Rev.1))

Links to BDT programmes aimed at human-capacity development and assistance to operators in developing and least developed countries, programmes that deal with technical assistance and programmes concerning conformance and interoperability.

11 Other relevant information

As may become apparent within the life of this Question.

QUESTION 5/2

Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response

1 Statement of the situation or problem

1.1 Context

a) Recent natural and man-made disasters, which remain of critical concern to Member States

b) The longstanding role of ITU in supporting the use of telecommunications/ICTs for the purpose of disaster preparedness, mitigation, response and recovery

c) The value of collaborating and sharing experiences, both regionally and globally, in order to support national and regional preparedness

d) The excellent results of the work of Question 22-1/2 in the past study period, including the compilation of numerous case studies and development of an online toolkit and Handbook on Emergency Telecommunications.

1.2 Background texts

a) WTDC Resolution 34 (Rev. Dubai, 2014), on the role of telecommunications/ICT in early warning and mitigation of disasters, as well as to support humanitarian assistance

b) the Tunis Agenda for the Information Society, § 91 b) and c), which recognizes and identifies many important elements that need to be addressed in the application of telecommunications in the area of disaster prediction, detection and mitigation

c) Resolution 646 (Rev. WRC-12) of the World Radiocommunication Conference (WRC), on the radiocommunication aspects of public protection and disaster relief

d) Resolution 36 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunications/ICTs in the service of humanitarian assistance

e) Resolution 136 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on the use of telecommunications/ICTs for monitoring and management in emergency and disaster situations, and for early warning, prevention, mitigation and relief

f) WRC Resolution 644 (Rev. WRC-12), on radiocommunication resources for early warning, disaster mitigation and relief operations

g) WRC Resolution 647 (Rev. WRC-12), on spectrum-management guidelines for emergency and disaster relief radiocommunications

h) WRC Resolution 673 (Rev. WRC-12), on radiocommunications for Earth observation applications, such as for prediction of disasters and monitoring of the effects of climate change.

1.3 Further provisions

a) Resolution ITU-R 53-1 (Rev. Geneva, 2012) of the Radiocommunication Assembly (RA), which relates to a database of frequencies for use in emergency situations maintained by the Radiocommunication Bureau

b) RA Resolution ITU-R 55-1 (Geneva, 2012), which relates to guidelines for management of radiocommunications in disaster prediction, detection, mitigation and relief, collaboratively and cooperatively, within ITU and with organizations external to the Union

c) Recommendation ITU-D 13-2, which recommends that administrations include the amateur services in their national disaster plans, reduce barriers to effective use of the amateur services for disaster communications, and develop memoranda of understanding (MoU) with amateur and disaster relief organizations

d) Recommendation ITU-R M.1637, which offers guidance to facilitate the global circulation of radiocommunication equipment in emergency and disaster relief situations

e) Report ITU-R M.2033, which contains information on some bands or parts thereof which have been designated for disaster relief operations

f) Recommendations ITU-T E.106 (International Emergency Preference Scheme for Disaster Relief Operations) and ITU-T E.107 (Emergency Telecommunications Service (ETS) and Interconnect Framework for National Implementations of ETS Numbering), which relate to use of public telecommunications by national authorities in emergency and disaster relief operations.

1.4 Aspects to be considered

a) The complementary work being undertaken by BDT programme(s) and regional offices to provide assistance on disaster communications/emergency telecommunications assistance to ITU Member States

b) The activities of the Intersectoral Emergency Telecommunications Team, an internal ITU secretariat mechanism to ensure coordination across all the secretariat's activities for emergency telecommunications

c) The role of ITU Sector Members and relevant international, regional and non-governmental organizations in providing telecommunication/ICT equipment and services, expertise and capacity-building assistance to support disaster relief and recovery activities throughout the world, particularly through the ITU Framework for International Cooperation in Emergencies (ICE)

d) The ongoing work of the United Nations Working Group on Emergency Telecommunications (WGET), in which ITU participates, to facilitate the use of telecommunications/ICTs in the service of humanitarian assistance

e) The ongoing work of the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO) and ITU related to search and rescue and distress alerting that may be applicable to disaster communications management frameworks

f) Publications, workshops and forums facilitated by ITU's work on emergency communications provide information to enhance the preparedness, mitigation, and relief capacities of ITU Member States

g) Developing countries continue to require support in development of disaster communications management expertise

h) ITU-D Objective 5, in coordination with the regional offices and ITU-D Study Group 2, can continue to assist and guide developing countries in building comprehensive disaster-management plans, setting up early-warning centres, addressing climate-change adaptation, and promoting regional and international cooperation in the time of disasters through coordinated efforts

i) Moreover, ongoing or planned telecommunication/ICT development projects can often be leveraged to address emergency communications requirements and to support relief and recovery operations

j) Furthermore, there is a need for additional information on the effective use of telecommunications/ICTs for disaster preparedness, response and recovery, including consideration of how existing systems and infrastructures can be integrated into disaster-management frameworks, how to facilitate rapid deployment of systems and services following a disaster, and how to help ensure redundancies and resiliency of networks and infrastructures from the effects of natural disasters.

2 Question or issue for study

2.1 Continue examination of terrestrial, space-based and integrated telecommunications/ICTs to assist affected countries in utilizing relevant applications for disaster prediction, detection, monitoring, response and relief, including consideration of best practices/guidelines for implementation, and in ensuring a favourable regulatory environment to enable rapid deployment and implementation of relevant technologies.

2.2 Continue gathering national experiences and case studies in disaster preparedness, mitigation and response, and in the development of national disaster communications plans, and examine common themes between them.

2.3 Examine the role that administrations and Sector Members and other expert organizations and stakeholders share in collaboratively addressing disaster management and the effective use of telecommunications/ICTs.

2.4 Develop best practices for the elaboration of national and regional disaster-management plans or frameworks for the use of telecommunications/ICTs in natural and man-made disaster and/or emergency situations, working in coordination with the relevant BDT programmes, regional offices and other partners.

2.5 Continue updating the online toolkit with relevant information and materials collected during the study period.

3 Expected output

The expected output will be a report or reports on the results of the work conducted for each step above, together with one or more Recommendations, as appropriate. Outputs may also include regular updates to the online toolkit, and the development of any additional tools or guidelines to support the implementation of telecommunications/ICTs for disaster management.

4 Timing

4.1 Annual progress reports should be submitted to ITU-D Study Group 2.

4.2 Draft final reports and any proposed draft Recommendations/guidelines should be submitted to ITU-D Study Group 2 within four years.

4.3 The rapporteur's group will work in close collaboration with relevant BDT programme(s), regional offices, regional initiatives and relevant ITU-D Questions, and ensure proper liaison with ITU-R and ITU-T.

4.4 The activities of the rapporteur's group will come to an end within four years.

5 Proposers/sponsors

The new text for this revised Question stems from an Inter-American proposal.

6 Sources of input

Contributions are expected from Member States, Sector Members and Associates, as well as inputs from relevant BDT programme(s) and relevant ITU-R and ITU-T study groups, and any relevant ITU-D Question. International and regional organizations responsible for disaster and emergency telecommunications are encouraged to provide contributions related to experiences and best practices. The intensive use of correspondence and online exchange of information is encouraged for additional sources of inputs.

7 Target audience

a) Target audience

Depending on the nature of the output, middle to upper-level managers in operators and regulators in developed and developing countries will be the predominant users of the outputs.

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D reports, or as agreed during the study period in order to address the Question for study.

8 Proposed methods of handling the Question

The Question will be addressed within a study group over a four-year study period (with submission of interim results), and will be managed by a rapporteur and vice-rapporteurs. This will enable Member States and Sector Members to contribute their experiences and lessons learned with respect to emergency communications.

9 Coordination

The ITU-D study group dealing with this Question will need to coordinate with:

– Relevant ITU-D Question(s)
– Relevant BDT programme(s)
– Regional offices
– Relevant ITU-R and ITU-T study groups
– Working Group on Emergency Telecommunications (WGET)

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

– Relevant international, regional and scientific organizations with mandates relevant to this Question.

10 Other relevant information

As may become apparent within the life of this Question.

QUESTION 6/2

ICT and climate change

1 Statement of the situation or problem

The issue of climate change has emerged as a global concern and requires global collaboration by all concerned, in particular the developing countries (which are the most vulnerable group of countries with respect to climate change). International initiatives in this domain are seeking to achieve sustainable development and identify ways and means in which lCTs can monitor such climate change and reduce overall global greenhouse gas (GHG) emissions.

ITU-T Study Group 5 is the lead study group for study of ICT environmental aspects of electromagnetic phenomena and climate change, including design methodologies to reduce environmental effects, such as recycling related to ICT facilities, equipment, and that ITU-R Study Group 7 (Science services) is the lead study group for studies related to the use of radio technologies, systems and applications, including satellite systems, for environment and climate-change monitoring and climate-change prediction.

In this respect, the outcomes of ITU-T and ITU-R resolutions and Recommendations, and in particular Resolution 73 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA) and Resolution 673 (Rev. WRC-12) of the World Radiocommunication Conference should serve as a basis for the study of this Question.

2 Question or issue for study

There are a variety of issues that members will address within the four coming years of this Question. It is expected that the following steps for the study will play a major role in the future in order to meet the objective of this Question:

a) In close collaboration with the relevant BDT programme(s), identify the regional needs for such applications for developing countries.

b) Elaborate a methodology for the implementation of this Question, in particular gathering evidence and information regarding current best practices on how ICTs can help reduce overall GHG emissions, taking into consideration progress achieved by ITU-T and ITU-R in this regard.

c) Consider the role of Earth observation in climate change, as determined by the implementation of Resolution 673 (Rev. WRC-12), on radiocommunication use for Earth observation applications, in order to enhance the knowledge and understanding of developing countries in respect of the utilization and benefits of relevant applications in connection with climate change.

d) Develop best-practice guidelines for the implementation of relevant Recommendations adopted by ITU-T as a result of the implementation of Resolution 73 (Rev. Dubai, 2012), both for monitoring climate changes and reducing the impact of climate change using the action plan of WTSA Resolution 44 (Rev. Dubai, 2012), in particular programmes 1, 2, 3 and 4 of that resolution.

3 Expected output

The output will be a report on the results of the work concluded for each step identified above, taking into account the specific needs of developing countries. Other outputs could be the organization of workshops and seminars for the developing countries, in relation with the relevant ITU-D programme and in consultation with the relevant ITU-T and ITU-R study groups.

4 Timing

The output will be generated on a yearly basis. The output for the first year will be analysed and assessed in order to update the work for the next year, and so on. An interim report will be produced by 2016. The final report is due by the end of 2017.

5 Proposers/sponsors

The Question was approved by WTDC-14.

6 Sources of input

Contributions are expected from:

Member States, Sector Members and Associates, as well as inputs from:

a) Relevant BDT programmes, and particularly ICT initiatives successfully implemented for climate change

b) Regional needs as identified by relevant questionnaires and/or workshops on the subject

c) Regional and/or national action plans and/or results in combating climate change

d) Progress achieved by ITU-T and ITU-R study groups in this domain, in particular the results of the Joint Coordination Activity on ICTs and climate change (JCA-ICTCC)

e) Progress achieved by the United Nations Intergovernmental Panel on Climatic Change (IPCC) and other similar initiative(s).

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

a) Target audience – Who specifically will use the output

The output of this Question will be used by both developed and developing countries, and in particular the least developed countries (LDCs), small island developing states (SIDS), landlocked countries (LLDCs) and countries with economies in transition.

b) Proposed methods for implementation of the results

Within Study Group 2.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

Close coordination is essential with ITU-D programmes, and with other relevant ITU-D study Questions, ITU-R study groups dealing with ICT for climate change and ITU-T Study Group 5.

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity:

– Programmes ☑

– Projects ☑

– Expert consultants ☑

3) In other ways – describe (e.g. regional, within other organizations, jointly with other organizations, etc.) ☑

b) Why?

To ensure that the work and output of this study Question is not duplicated and that there is better collaboration among BDT, the other ITU Sectors, Sector Members and other United Nations agencies.

9 Coordination and collaboration

– Regular ITU-D activities

– Other study group Questions or issues

– Regional organizations, as appropriate

– Work in progress in the other ITU Sectors.

10 BDT programme link

Objective 5, Output 5.1.

11 Other relevant information

To be determined during the implementation of this Question.

QUESTION 7/2

Strategies and policies concerning human exposure to electromagnetic fields

1 Statement of the situation or problem

The deployment of different sources of electromagnetic fields to cater for the telecommunication and ICT needs of urban and rural communities has developed very rapidly over the past ten years. This has been due to strong competition, ongoing traffic growth, quality-of-service requirements, network coverage extension and the introduction of new technologies.

It has prompted concern on the possible effects of prolonged exposure to emissions on people's health.

This concern on the part of populations is growing, aggravated by the feeling that they are not being kept informed in regard to the process for deploying these installations; hence many complaints received by operators and government bodies responsible for radiocommunications/ICTs.

Thus, since the continued development of radiocommunications requires trust on the part of populations, the work carried out in ITU-R Study Group 1 Working Party 1C and in ITU-T Study Group 5 under Resolution 72 of the World Telecommunication Standardization Assembly, on measurement concerns related to human exposure to electromagnetic fields, should be complemented by studies on the different regulatory and communication mechanisms developed by countries to increase the awareness of and information to populations and facilitate the deployment and operation of radiocommunication systems.

2 Question or issue for study

The following subjects should be studied:

a) Compilation and analysis of the regulatory policies concerning human exposure to electromagnetic fields that are being considered or implemented for authorizing the installation of radiocommunication sites and powerline telecommunication systems.

b) Description of the strategies or methods for raising the awareness of populations and increasing information to populations regarding the effects of electromagnetic fields due to radiocommunication systems.

c) Proposed guidelines and best practices on this matter.

3 Expected outcome

a) A report to the membership presenting guidelines to assist Member States in resolving similar problems faced by regulatory bodies.

b) The report will provide regulatory authorities with guidelines on methods for raising the awareness of populations along with best practices based on countries' experience in the matter.

4 Timing

A provisional report is to be presented to the study group in 2015. It is proposed that the study be completed in 2017, at which date a final report containing guidelines will be submitted.

5 Proposers/sponsors

Member States.

6 Sources of input

– Member States, Sector Members
– Regional organizations
– ITU Sectors
– World Health Organization
– International Commission on Non-Ionizing Radiation Protection (ICNIRP)
– Institute of Electrical and Electronics Engineers (IEEE)
– BDT focal points.

7 Target audience

a) Target audience – Who specifically will use the input?

Target audience	Developed countries	Developing countries[1]
Telecom/ICT decision-makers, local authorities	Yes	Yes
Telecom/ICT regulators	Yes	Yes
Service providers/operators	Yes	Yes
Constructors/equipment provider	Yes	Yes

b) Proposed methods for implementation of the results

The results of the Question are to be distributed through ITU-D reports, or as agreed during the study period in order to address the Question for study.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

Close coordination is essential with ITU-D programmes, as well as with other relevant ITU-D study Questions and ITU-R study groups dealing with ICT for climate change, and ITU-T Study Groups 5 and 7.

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity:

– Programmes ☑

– Projects ☑

– Expert consultants ☑

3) In other ways – describe (e.g. regional, within other organizations, jointly with other organizations, etc.) ☐

b) Why?

To ensure that the work and output of this study Question is not duplicated and that there is better collaboration among BDT, the other ITU Sectors, Sector Members and other United Nations agencies.

9 Coordination and collaboration

The ITU-D study group dealing with this Question will need to coordinate with:

– Relevant ITU-D Question(s)

– Relevant BDT programme(s)

– Regional offices

– Relevant ITU-R and ITU-T study groups

– Working Group on Emergency Telecommunications (WGET)

– Relevant international, regional and scientific organizations with mandates relevant to this Question.

10 BDT programme link

Objective 5, Output 5.1

11 Other relevant information

To be defined in the work plan.

QUESTION 8/2

Strategies and policies for the proper disposal or reuse of telecommunication/ICT waste material

1 Statement of the situation or problem

The growth of telecommunications/ICTs, especially in developing countries, has been exponential in recent years. For instance, between 2002 and 2007, mobile-phone penetration in the Americas region grew from 19 to 70 terminals per 100 inhabitants. Globally, the share of mobile-phone subscriptions in developing countries increased by 20 percentage points, from 44 per cent to 64 per cent over the same period of time.

The growth of electrical and electronic equipment and their peripherals, as well as the continuous updating of technology, has generated a significant growth in telecommunication/ICT waste. It is estimated that between 20 and 50 million tonnes of telecommunication/ICT waste are generated every year worldwide. However, recycling and responsible disposal of telecommunication/ICT waste remain at low levels, making it difficult to even find figures on this issue at regional level.

The consequences of not carrying out proper recycling or disposal are environmental problems of large magnitude, especially for developing countries.

The exponential growth of telecommunication/ICT terminals, the associated high turnover of terminals and advances in technology make it imperative to put forward actions in the immediate future to prevent the environmental catastrophe that would result in developing countries if we fail to produce an adequate regulatory framework and work towards policies that address this problem.

2 Question or issue for study

Strategies to develop a responsible approach to, and comprehensive treatment of, telecommunication/ICT waste: policy and regulatory actions required in developing countries, in close collaboration with ITU-T Study Group 5.

3 Expected output

The final expected output is a report with recommendations and actions to be taken by developing countries to implement a comprehensive system of telecommunication/ICT waste management.

This final report should contain the technical classification of e-waste related to telecommunication/ICT policy recommendations, together with regulatory proposals, economic models and methods of financing for developing countries.

4 Timing

Four years with an interim report by 2016, and a final report by 2018.

5 Proposers/sponsors

Participants in the ad hoc Group of WTDC-14 Committee 3 on Objective 5.

6 Sources of input

– Member States
– Sector Members
– Associates.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

a) Target audience – Who specifically will use the output

Telecom regulators, telecom policy-makers, service providers/operators and manufacturers, principally of developing countries and least developed countries (LDCs).

b) Proposed methods for the implementation of the results

A set of guidelines and recommendations about the strategies for a responsible and comprehensive approach to the treatment of waste related to telecommunications/ICTs: policy and regulatory actions required in developing countries and LDCs.

[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

This guide could be implemented by the developing countries and LDCs, as well as operators and manufacturers, in the establishment of actions for a responsible and integral treatment of waste related to telecommunications/ICTs.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group:

It is proposed to perform the following tasks within Study Group 1:

i) Technical classification of telecommunication/ICT waste, according to the components and hazardous substances.

ii) Identify and assess the problems countries and/or regions face in the implementation of a comprehensive telecommunication/ICT waste management system.

iii) Experiences of various developed and developing countries, as well as manufacturers and operators, in the comprehensive management of telecommunication/ICT waste, including policy, regulatory and economic studies, methods of financing, among others.

iv) Examine how the transfer of information and knowledge, training and skills development in people and institutions can strengthen the ability of countries to manage the handling of telecommunication/ICT waste. Browse effective systems for sharing information that assists in these tasks.

2) Within regular BDT activity:

– Programmes ☐

– Projects ☐

– Expert consultants ☐

3) In other ways – describe (e.g. regional, within other organizations, jointly with other organizations, etc.) ☐

b) Why?

To elaborate the set of guidelines, it would be necessary to have the experience of the different countries, operators and manufacturers, as well as different organizations related with the topic who could provide information.

The study group must develop questionnaires and the set of guidelines.

9 Coordination and collaboration

– Regular ITU-D activities

– Other study group Questions or issues

– Regional organizations, as appropriate

– Work in progress in the other ITU Sectors.

10 Other relevant information

–

QUESTION 9/2

Identification of study topics in the ITU-T and ITU-R study groups which are of particular interest to developing countries

1 Statement of the situation or problem

The ITU-T and ITU-R study groups undertake many studies on topics with diverse purposes, outputs and focus. Many of these studies on topics are, or could be, of particular concern to developing countries[1]. Developing countries frequently lack the resources to follow the work of even a limited number of study groups in the other two Sectors, and are not aware of the Questions agreed for study, their purpose and the status of their implementation. There is no doubt that some developing countries are now in a position to take part in the work of some of the study group Questions and nearly all are likely to benefit from the output of these studies.

2 Question or issue for study

Identification on a continuing basis of those study group topics in ITU-T and ITU-R which are of particular interest to developing countries, based on an agreed set of guidelines, including the preparation of some technical reports. This Question activity is for the benefit of both ITU-D study groups.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

3 Expected output

The output expected from this Question will include:

a) Agreed guidelines for the identification process of such topics.

b) Annual progress reports indicating the status of the selected topics and, where completed, an indication of how the outputs can be obtained.

c) Technical reports on particular topics (called technical arrays in the past).

4 Timing

Annual progress reports.

5 Proposers/sponsors

The Question was originally approved by WTDC-94, and subsequently revised by WTDC-98, WTDC-02, WTDC-06, WTDC-10 and WTDC-14.

6 Sources of input

a) Examination of all the ITU-T and ITU-R study group Questions and Recommendations with a view to selecting those topics of interest to developing countries.

b) Request for updating information from ITU-T and ITU-R on the selected topics.

c) Inputs by the relevant ITU-D study group rapporteurs, in accordance with their follow-up on the activities of ITU-T and ITU-R with relevance to their Questions.

d) Contributions by members regarding the technical reports.

7 Target audience

Target audience	Developed countries	Developing countries[1]
Telecom policy-makers	*	Yes
Telecom regulators	*	Yes
Service providers/operators	*	Yes

* The Question outputs are specifically targeted to developing countries, although it is in the interest of telecommunication policy-makers in the developed countries to be aware of the interests of developing countries.

a) Target audience – Who specifically will use the output

Depending on the nature of the output, upper- to middle-level managers in operators and regulators in developing countries are the predominant users of the output.

b) Proposed methods for the implementation of the results

The yearly output of this Question will be made available via the ITU-D website. Hard copies could be provided on request.

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[1] These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

8 Proposed methods of handling the Question or issue

Within Study Group 2.

a) How?

1) Within a study group:

– Question (over a multi-year study period) ☑

2) Within regular BDT activity (indicate which programmes, activities, projects, etc., will be involved in the work of the study Question):

– Programmes: ☐

– Projects ☐

– Expert consultants ☐

– Regional offices ☑

3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.) ☐

b) Why?

Falls within the mandate of the study group, and collaboration with regional offices for practical cases.

9 Coordination and collaboration

The ITU-D study group dealing with this Question will need to coordinate with:

– Relevant focal points in BDT

– Coordinators of relevant project activities in BDT

– Regional and scientific organizations with mandates covering the subject matter of the Question.

10 BDT programme link

11 Other relevant information

As may become apparent within the lifetime of the Question.

PART D

Annexes

Annex A – Opening address: His Excellency Mohammed Ahmed al-Qamzi, Chairman of the Telecommunication Regulatory Authority United Arab Emirates

Dr Hamadoun Touré, ITU Secretary-General,
Mr Houlin Zhao, ITU Deputy Secretary-General,
Directors of the ITU Bureaux,
Excellencies, ministers,
Heads of delegation,
Ladies and gentlemen,
Distinguished gathering,

May the peace and blessings of God be upon you.

I welcome you all to the United Arab Emirates, and hope that your esteemed conference – the World Telecommunication Development Conference 2014 – will achieve its lofty goals and noble aims of promoting sustainable development through the optimum use of information and communication technologies (ICTs). I am fully confident that this gathering of experts and specialists, representing various regional and international groups, States, the private sector, international organizations and academia, will be successful in establishing firm foundations on which to build the programmes and plans to support development in regions that are in dire need of your support, to enable them to employ their resources in order to serve their peoples and build their future.

Permit me at the outset to extend profound gratitude and thanks to the leadership and officials of the International Telecommunication Union (ITU) and all Member States of the Union for the great confidence they have placed in UAE by making it the venue for this session of your major global conference. Furthermore, I extend gratitude to the fraternal nation of the Arab Republic of Egypt, where the conference was supposed to have convened. We call to God Almighty from the bottom of our hearts to preserve its regional and international position and help its noble people to move forward toward the bright and shining future to which they aspire.

We in UAE feel enormously grateful for all the support we received to host this major event, and consider it a testament of appreciation of which we are supremely proud. We look upon it as crowning the close cooperation with ITU and the members of the Union, and consider that our successful hosting of three major ITU events in 2012 – the World Telecommunication Exhibition, the World Telecommunication Standardization Assembly and the World Conference on International Telecommunications – is evidence of our belief in the mission of ITU as the pre-eminent organization that leads the world in the ICT field and has a significant and prominent role to play.

The successes of previous WTDCs, the last of which was held in India in 2010, as well as the numerous events and meetings held under the auspices of ITU, represent a sound basis for the discussions and deliberations you will have over the coming days. Accordingly, we hope that you will decide and adopt action plans, general principles, programmes, strategic goals and development strategies for the different regions within a "Dubai Action Plan" which it is assumed will be tantamount to a roadmap for the future.

Your Excellencies,
Distinguished gathering,

You are undoubtedly aware of the scale of the challenges which your conference will have to confront. In this regard, I am reminded of the words of the great Arab poet, Abu at-Tayyib al-Mutanabbi: "Resolutions are measured according to those who take them". Many communities labouring under a whole range of problems gaze upon your resolve and look to your resolutions and your initiatives.

God created the atmosphere as the property of all and made the different frequencies a resource for people across the world to make use of in sustaining the Earth and supporting development programmes. However, although the use of this scarce resource is a basic human right, it is nevertheless a cause of regret that destabilizing social unrest and problems continue to prevent many communities from benefiting from such a fundamental natural resource.

Furthermore, the lack of equal opportunities to access and use modern digital technologies is an issue that must not be ignored or glossed over. The huge discrepancy between countries in this area has created what has come to be called "the digital divide", which represents an impediment, indeed an impenetrable barrier, to the development programmes which developing societies desire.

Add to that the problems of poverty, unemployment, social marginalization, illiteracy and natural disasters, and we find ourselves faced with challenges that are not inconsiderable and require of us a high degree of cooperation and solidarity, as well as innovative solutions that are practical and realistic.

With regard to the scale of the challenges, it is fortunate that in today's world we have a number of strengths to help us achieve many of our human aspirations. Perhaps a brief glance at the ICT sector today might help to spread a generous measure of optimism about the possibility of achieving the success to which we aspire. Thus, by the end of 2013, the number of mobile telephone users had exceeded 6.8 billion subscribers, representing 96 per cent of the entire population of the Earth. The number of Internet users was over 2.7 billion, which is 40 per cent of the Earth's population. Turning to broadband use, which was the key topic of your pre-conference discussions this year, we find that it is steadily growing, with 2 billion users by the end of 2013.

Together, these developments represent a positive feature of the world today. They provide us with the means of making it possible to help communities caught up in social unrest and other problems. And extending the hand of assistance to these communities is a humanitarian duty, given concrete form through the successive sessions of your conference. What is hoped for at this session is not less than what has been achieved in the past and, indeed, much more. The list is long. In the sphere of health, for example, the possibility exists of using advanced telecommunication systems to provide solutions remotely and across borders, ensuring the continuous improvement of health systems and practice. The same applies in education, social integration, bridging the digital divide, interaction and information exchange programmes, upgrading systems, disaster management and relief operations.

Ladies and gentlemen,

The lofty mission of ITU, based upon fostering links between people through ICTs, is one that strikes a chord with the Emirati people, whose own particular identity has made their country a refuge for all human cultures and a meeting point for the peoples of the world. They smell in its air the sweet scent of serenity, security and safety; they feel on its soil a profound sense of human brotherhood; and they sense in its every part the essence of human contact, interaction and diligent labour to achieve development at every level and in all spheres.

As a Member State and prominent player, UAE will continue to work effectively with ITU in many of the Union's councils and bodies. We shall spare no effort to benefit from the experience of others in the interests of our society and country; and to place our own successful national expertise at the disposal of others as a concrete expression of the global human dimension on which the mission of ITU is founded.

We understand the importance of this conference, and are aware of the exceptional value of the discussions to be held and the decisions that will emerge. I can only say that I wish you every success. I would like to thank once again Dr Hamadoun Touré, ITU Secretary-General, and the members of his team. I wish all participating States a successful and pleasant stay in "your" country, the United Arab Emirates.

May the peace and blessings of God be upon you.

Annex B – Opening address: Dr Hamadoun Touré, Secretary-General, ITU

Excellencies,

Distinguished delegates,

Ladies and gentlemen,

It is a great pleasure to be with you here in Dubai today. Let me offer my sincere thanks and appreciation to the United Arab Emirates for all its efforts in the excellent organization and facilities for this conference. I would like to express my thanks to the local authorities of Dubai for their very kind hospitality.

Ladies and gentlemen,

I think we are all well aware of the importance of this sixth WTDC, and I am encouraged to see such a high level of participation.

What we decide and define here over the next two weeks will shape not just the future of ICT development over the next four years, but the future shape of the very world we live in.

In today's fast-moving ICT sector, four years is a very long time. To see how long that really is, let's look back to 2010, when we last held the WTDC, in Hyderabad, India.

Since then the ICT landscape has changed in extraordinary and unexpected ways.

We have seen the number of fixed-line subscriptions continue to fall, and there are now around 82 million fewer fixed-line subscriptions than there were at the beginning of 2010.

This fall in fixed lines has been massively more than compensated for by mobile growth over the same period – with net additions of almost 2.2 billion mobile cellular subscriptions since the beginning of 2010.

And the great news for this conference is that almost all of this growth has been in the developing world, which accounted for 90 per cent of the net additions – very close to 2 billion new mobile-cellular subscriptions have been added in the past four years.

The same pattern is true of the growth in Internet users, where 817 million of the 1 billion new Internet users over the past four years have come from the developing world.

We have also seen social media continue to skyrocket. When we met in Hyderabad, four years ago, there were around 30 million users of Twitter, and 400 million users of Facebook. Today hundreds of millions of tweets are sent every day, and Facebook has over 1.2 billion users.

Does that mean our job is finished?

Of course not!

And that's why we're all here.

While over three-quarters of people in the developed world now have access to the Internet, more than two-thirds of people in the developing world still do not.

In the developed world, fixed and mobile broadband penetration rates at the beginning of 2014 stood at 27.2 per cent and 74.8 per cent, respectively. In the developing world, they stood at 6.1 per cent and 19.8 per cent.

Distinguished delegates,

These are powerful numbers, but they also demonstrate the extraordinary opportunities that lie ahead.

ICTs – and in particular broadband networks – offer perhaps the greatest opportunity we have ever had to make rapid and profound advances in global social and economic development.

This is of tremendous and timely importance, as we approach the cusp between the MDGs next year, and the beginning of the post-2015 development process.

And this of course is why 'Broadband for Sustainable Development' has been chosen as the theme for WTDC this year.

Like you, I am convinced that by extending access to broadband, countries will quickly accelerate sustainable social and economic progress.

By delivering efficiencies across so many areas – from education and healthcare to transportation, water and energy – broadband networks can quickly pay for themselves, creating a virtuous circle of investment, productivity and human development.

To help world leaders see the ways that broadband can accelerate the achievement of the MDGs, ITU and UNESCO launched the Broadband Commission for Digital Development in 2010, just a few weeks before we last met, in Hyderabad.

In this context, and in the context of this conference, it is especially gratifying to see broadband access growing so rapidly in the developing world – with penetration in the developing world in terms of mobile broadband growing an incredible 50 per cent between the beginning of 2013 and the beginning of 2014.

Ladies and gentlemen,

I am an optimist, and I have tremendous faith that the public and private sectors will work together to invest in, and roll out, the necessary infrastructure.

They did this so well in the creation of mobile-cellular networks in the developing world, and I expect to see the pattern continued for broadband.

I am convinced, moreover, that in partnership they will also help create the necessary services that people need, and that we will quickly see enriched content developed and created that will start off a virtuous circle in stimulating demand.

As this happens, we will rapidly see broadband reach the remotest corners of our planet.

We must make sure that we do not just bring broadband to the people, but that we do so responsibly. That we preserve cyberpeace and deliver cybersecurity in a world that is always connected, and always online.

Distinguished delegates,

The output from this conference will be fed into the ITU strategic plan which will be endorsed by the ITU Plenipotentiary Conference in the Republic of Korea in October.

And I hope that many of you will be there to help shape our future as an organization – and to make sure we adopt a sound strategic and financial plan for the next four years.

So over the next two weeks, let’s dream big!

Let’s think about how technological advances might shape the future!

Let's think about what can be done with massive increases in computational power and ever-cheaper memory!

Let's think about what can we do with the cloud, to make the world a better place!

And let's think about how can we put ever smarter, ever more affordable smartphones to use across the developing world!

Let's be bold!

Let's work together to develop the programmes and projects that will ensure ICTs really ***do deliver*** a better quality of life – for ***all*** the world's people!

Thank you.

Annex C – Opening address: Mr Brahima Sanou, Director, Telecommunication Development Bureau, ITU

Your Excellency Mr Mohammed Al-Qamzi, President of the United Arab Emirates Telecommunications Regulatory Authority,

Your Excellency, Dr Mohamed Al Ghanim, Director-General of the United Arab Emirates Telecommunications Regulatory Authority,

Your Excellencies, ladies and gentlemen, ministers,

Your Excellencies, ambassadors and representatives of the diplomatic corps,

Ladies and gentlemen, heads of delegations representing Member States and ITU-D Sector Members,

Dr Hamadoun Touré, Secretary-General of ITU,

Mr Houlin Zhao, Deputy Secretary-General,

Mr Malcom Johnson, Director of TSB,

Mr François Rancy, Director of BR,

Distinguished delegates, ladies and gentlemen,

Good day to you all, and may peace be with you!

It is an honour and a great pleasure for me to welcome you to the sixth World Telecommunication Development Conference.

To begin with, I would like to express my profound gratitude to the authorities of the United Arab Emirates for their exemplary hospitality, their warm welcome and the very good working conditions they have created for us.

Your Excellencies, ladies and gentlemen,

Since our last World Telecommunication Development Conference, held in Hyderabad in 2010, we have witnessed rapid growth and expansion of telecommunication and ICT networks and services.

As I am sure we all agree, our sector is one of the most resilient and innovative, and has been among the fastest growing economic sectors over the past decade.

So I congratulate all of you – our members – for providing conducive and appropriate policy, legal and regulatory frameworks that have opened the doors to more private-sector investment in the ICT sector.

The past decade has been one of enormous changes.

We experienced the global financial crisis which shook our confidence and undermined traditional points of reference. We are now, fortunately, seeing tangible signs of economic recovery.

We have also witnessed a surge in social media in recent years.

ICTs have accelerated and expanded our access to information and enhanced our ability to create and exchange information.

ICTs have helped to improve service provision by governments and the private sector, and made services more effective and efficient, more accessible and, above all, increasingly affordable.

ICTs have changed our lives forever.

Being connected has become a necessity for all, and using ICTs an essential skill: before long, at least 95 per cent of decent jobs will require ICT skills.

Distinguished delegates, ladies and gentlemen,

The Hyderabad Action Plan adopted in 2010 has helped us to achieve great things. Thanks to your commitment, your passion, and your partnerships, we now have many "success stories" to tell.

Over the four years of implementing the Hyderabad Action Plan, we have continued to gather together all the world's regulators and share best practices in support of convergence in the areas of ICT terminals, infrastructure, services and service providers.

Between 2002 and 2011, we recorded an average of 394 natural disasters a year, or more than one a day. We have therefore continued to provide assistance in the field of disaster risk reduction. We have sent telecommunication equipment to disaster-affected countries in order to help with organizing rescue operations and humanitarian relief.

In 2011, we launched a digital literacy campaign for women in collaboration with the Telecentre.org Foundation.

I am pleased to report that we have been able to train over 1 million women at the bottom of the development pyramid.

We have launched key partnerships, in particular with the World Health Organization (WHO) and the private sector, to promote the use of ICTs in health services, and we will continue to do likewise in other areas such as education.

We have continued to make available to our embers reliable and up-to-date statistical data to help them in making policy, regulatory and investment decisions.

We have, for the first time ever, quantified the real size of the digital gender gap, and estimated that 30 per cent of the world's youth can be considered "digital natives".

Global economic losses due to cybercrime were estimated at between USD 300 billion and 3 000 billion in 2013. It is estimated that more than 1 million photos and other images of child victims of sexual abuse and exploitation are currently available on line.

Building confidence and security in the use of ICTs therefore remains one of our top priorities.

I am happy to tell you that on this front, we have continued to play our full part as a catalyst through initiatives and programmes which we are implementing to improve cybersecurity in every country and facilitate international cooperation.

We have provided assistance to more than 30 countries to help with the transition from analogue to digital broadcasting, and assisted more than 43 countries with spectrum management.

Between 2008 and 2012, the cost of fixed broadband fell by 82 per cent. We have continued to assist countries in developing and implementing strategies and master plans for the deployment of broadband infrastructure and services.

Since the last WTDC in 2010, we have trained more than 20 000 people from more than 120 countries.

I have personally launched three major initiatives, and I will have more to say about these when I present the Hyderabad Action Plan implementation report. But I can already tell you that together, we have made real changes in people's lives. This is an honourable mission, and we should all be proud of our accomplishments.

Nevertheless, despite this progress, significant challenges remain. Some 92 per cent of those who are still not connected to the Internet live in developing countries.

They have no idea what the Internet is, nor do they know that ICTs can change their lives fundamentally and in a positive way.

Our mission is therefore far from accomplished. That is why we are here today.

Here we are.

Here in Dubai, one of the most beautiful cities in the world, we must make the bold decision to continue working together to promote digital inclusion and empowerment of all people, including young people, the elderly, persons with disabilities, and other vulnerable or disadvantaged groups in society.

Here in Dubai, home of the Burj Khalifa – the world's tallest building – we must commit ourselves to reinforcing public-private partnership and exploring innovative possibilities for development in order to overcome the challenges ahead.

To me, challenges are nothing but opportunities. So let us seize the opportunities that lie ahead of us to make the world a better place!

As the late Nelson Mandela – "Madiba" – said in 2009, "information and communication technologies are the single most powerful tool we have for human progress".

Let us therefore work together to put this powerful tool in the hands of ordinary people.

Annex D – Statements by the delegation of the United States of America

1 Ninth Plenary Meeting

Consideration of Resolution 18 (Rev. Dubai, 2014), on special technical assistance to Palestine (Revision 1 to Addendum 21 to Document 43, proposal ARB/43/21)

The delegate of the United States submitted to the secretariat the statement reproduced below:

Original: English

Statement by the delegation of the United States of America

Mr Chairman,

The United States supports the development of telecommunications in Palestine and the adoption of this Resolution.

The United States recognizes that Palestine needs the support of partners from around the world and this institution. Guided by Resolution 18, the ITU has provided valuable assistance to Palestine in the past. The need for that assistance remains, both to continue addressing existing challenges and to help Palestine take advantage of new and evolving opportunities for telecommunications development.

The United States hopes for progress in the work of the Joint Technical Committee, the principal mechanism for the resolution of telecommunications issues between Palestine and Israel. It is our understanding that the Israeli-Palestinian Interim Agreement on the West Bank and Gaza, in particular Annex 3 Article 36, is the presiding bilateral arrangement between the parties with respect to telecommunications and that this Resolution does not contradict that Interim Agreement. This Resolution cannot and does not contravene or alter the bilateral Interim Agreement or substitute for the Joint technical Committee it established.

The United States would like to thank the delegations from Palestine and the Arab group for meeting with us and working constructively to achieve a resolution we can all support.

Thank you very much, Mr Chairman. The United States requests our statement be entered into the record.

2 Thirteenth Plenary Meeting

The delegate of the United States submitted to the secretariat the statement reproduced below:

Original: English

Statement by the delegation of the United States of America

Mr Chairman,

Now that we have approved document 111, I would like to make the following statement for the record of this meeting:

Internet governance refers not only to the decisions that affect the Internet's growth and development, but the manner in which those decisions are made. The United States Government is a staunch supporter of the multistakeholder model of Internet governance, which ensures the participation of governments, industry, civil society, and the technical community in shaping Internet policy.

Therefore, the United States believes that all Internet governance activity and related discussions must occur in a multistakeholder fashion because it is the process that brings the most knowledge to bear on any given question. In order for the capacity building activity described in Objective Four to be successful, the ITU and multistakeholder Internet institutions need to collaborate to develop a training program to increase ITU members' knowledge of, and participation in, these institutions and related forums. Each organization, including the ITU, must work within the boundaries of its mandates and expertise. It is our understanding that the intent of this text is that this crucial collaboration will take place between the ITU and the multistakeholder Internet institutions such as the Internet Society, the Internet Engineering Task Force, ICANN, the Regional Internet Registries, and the World Wide Web Consortium. We believe that text explicitly stating this would be helpful to avoid misunderstandings in the future.

Annex E – List of resolutions abrogated by WTDC-14

Number	Title
Resolution 13 (Rev. Hyderabad, 2010)	Resource mobilization and partnerships for accelerating telecommunication/information and communication technology development
Resolution 38 (Rev. Hyderabad, 2010)	Development of the Youth Forum in the Telecommunication Development Bureau
Resolution 65 (Hyderabad, 2010)	Improving access to healthcare services by using information and communication technologies
Resolution 70 (Hyderabad, 2010)	Regional initiative for Central and Eastern Europe on "E-accessibility (Internet and digital television) for persons with disabilities"
Resolution 72 (Hyderabad, 2010)	More effective utilization of mobile communication services
Resolution 74 (Hyderabad, 2010)	More effective adoption of e-government services

Annex F – New numbering and allocation of Study Group Questions

Study Group 1

New number	Title	Origin
Q1/1	Policy, regulatory and technical aspects of the migration from existing networks to broadband networks in developing countries, including next-generation networks, m-services, OTT services and the implementation of IPv6	Merger of former Questions 7-3/1, 10-3/1, 19-2/1 and 26/2
Q2/1	Broadband access technologies, including IMT, for developing countries	Continuation of Question 25/2
Q3/1	Access to cloud computing: Challenges and opportunities for developing countries	New Question
Q4/1	Economic policies and methods of determining the costs of services related to national telecommunication/ICT networks, including next-generation networks	Continuation of Question 12-3/1
Q5/1	Telecommunications/ICTs for rural and remote areas	Continuation of Question 10-3/2
Q6/1	Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks	Continuation of Question 18-2/1
Q7/1	Access to telecommunication/ICT services by persons with disabilities and with specific needs	Continuation of Question 20-1/1
Q8/1	Examination of strategies and methods of migration from analogue to digital terrestrial broadcasting and implementation of new services	Continuation of Question 11-3/2
Resolution 9	Participation of countries, particularly developing countries, in spectrum management	Revised Resolution 9

Study Group 2

New number	Title	Origin
Questions related to ICT applications and cybersecurity		
Q1/2	Creating the smart society: Social and economic development through ICT applications	New Question integrating former Question 17-3/2 and with additional content
Q2/2	Information and telecommunications/ICTs for e-health	Continuation of Question 14-3/2
Q3/2	Securing information and communication networks: Best practices for developing a culture of cybersecurity	Continuation of Question 22-1/1
Q4/2	Assistance to developing countries for implementing conformance and interoperability programmes	New Question
Questions related to climate change, environment and emergency telecommunications		
Q5/2	Utilization of telecommunications/ICTs for disaster preparedness, mitigation and response	Continuation of Question 22-1/2
Q6/2	ICT and climate change	Continuation of Question 24/2
Q7/2	Strategies and policies concerning human exposure to electromagnetic fields	Continuation of Question 23/1
Q8/2	Strategies and policies for the proper disposal or reuse of telecommunication/ICT waste material	Continuation of Question 24/1 with additional content
Question on other topics		
Q9/2	Identification of study topics in the ITU-T and ITU-R study groups which are of particular interest to developing countries	Continuation of Question 9-3/2

Annex G – Status of Resolutions, Recommendations and Decisions

Resolutions

Res.	Title	First Approved	History	Status
1	Special Programme of Assistance for the Least Developed Countries (LDCs)	Buenos Aires, 1994	-	Obsolete
1	Adoption of AF-RTDC-96 resolutions and recommendations	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
1	**Rules of procedure of the ITU Telecommunication Development Sector**	**Doha, 2006**	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
2	Establishment of study groups	Buenos Aires, 1994	Replaced by Res. 3 (Valletta, 1998)	Abrogated
2	Mechanisms for monitoring, evaluation and progress review of conference resolutions	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
2	**Establishment of study groups**	**Doha, 2006**	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
3	Procedures to be applied by study groups	Buenos Aires, 1994	Replaced by Res. 4 (Valletta, 1998)	Abrogated
3	Establishment of study groups	Valletta, 1998	Rev. Istanbul, 2002; Replaced by Res. 2 (Doha, 2006)	Abrogated
4	Telecommunication Policies and Strategies	Buenos Aires, 1994	-	Obsolete
4	Procedures to be applied by study groups	Valletta, 1998	Rev. Istanbul, 2002; Replaced by Res. 1 (Doha, 2006)	Abrogated

Res.	Title	First Approved	History	Status
5	"Buenos Aires Initiative" – Non-Discriminatory Access to Modern Telecommunication Facilities and Services	Buenos Aires, 1994	-	Obsolete
5	**Enhanced participation by developing countries in the activities of the Union**	**Valletta, 1998**	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
6	Cooperation between the ITU/BDT and regional organizations	Buenos Aires, 1994	Replaced by Res. 21 (Valletta, 1998)	Abrogated
6	Telecommunication Development Advisory Group working group on private-sector issues	Valletta, 1998	Rev. Istanbul, 2002; Rev. Doha, 2006; Abr. Hyderabad, 2010	Abrogated
7	Disaster communications	Buenos Aires, 1994	Replaced by Res. 19 (Valletta, 1998)	Abrogated
7	Gender and telecommunication policy in developing countries	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
8	Telecommunication support for the protection of the environment	Buenos Aires, 1994	-	Obsolete
8	**Collection and dissemination of information and statistics**	**Valletta, 1998**	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**

Res.	Title	First Approved	History	Status
9	Membership, Rules of Procedure and Working Methods of the Telecommunication Development Advisory Board	Buenos Aires, 1994	-	Obsolete
9	**Participation of countries, particularly developing countries, in spectrum management**	**Valletta, 1998**	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
10	Coordination of the advisory bodies	Buenos Aires, 1994	-	Obsolete
10	**Financial support for national spectrum-management programmes**	**Valletta, 1998**	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
11	Venue of the Regional Development Conferences	Buenos Aires, 1994	-	Obsolete
11	**Telecommunication/information and communication technology services in rural, isolated and poorly served areas and indigenous communities**	**Valletta, 1998**	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
12	Telecommunication financing and trade	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
13	Resource mobilization and partnerships for accelerating telecommunication/ information and communication technology development	Valletta, 1998	Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Abr. Dubai, 2014	Abrogated

Res.	Title	First Approved	History	Status
14	Telecom Africa	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
15	**Applied research and transfer of technology**	Valletta, 1998	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
16	**Special actions and measures for the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition**	Valletta, 1998	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
17	**Implementation of regionally approved initiatives at the national, regional, interregional and global levels**	Valletta, 1998	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
18	**Special technical assistance to Palestine**	Valletta, 1998	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
19	Telecommunication resources for disaster mitigation and relief operations	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
20	**Non-discriminatory access to modern telecommunication/information and communication technology facilities, services and related applications facilities, services and related applications**	Valletta, 1998	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**

Res.	Title	First Approved	History	Status
21	**Coordination and collaboration with regional organizations**	Valletta, 1998	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
22	**Alternative calling procedures on international telecommunication networks, identification of origin and apportionment of revenues in providing international telecommunication services**	Valletta, 1998	**Rev. Istanbul, 2002; Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
23	**Internet access and availability for developing countries and charging principles for international Internet connection**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
24	**Authorization for the Telecommunication Development Advisory Group to act between world telecommunication development conferences**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
25	**Assistance to countries in special need: Afghanistan, Burundi, Democratic Republic of the Congo, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Haiti, Liberia, Rwanda, Sierra Leone, Somalia and Timor Leste**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**

Res.	Title	First Approved	History	Status
26	**Assistance to countries in special need: Afghanistan**	Istanbul, 2002	**Rev. Doha, 2006**	**In force**
27	**Admission of entities or organizations to participate as Associates in the work of the ITU Telecommunication Development Sector**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
28	Strengthening the use of electronic document handling for the work of ITU-D study groups	Istanbul, 2002	Abr. Doha, 2006	Abrogated
29	ITU Telecommunication Development Sector initiatives on Sector Member issues	Istanbul, 2002	Rev. Doha, 2006; Abr. Hyderabad, 2010	Abrogated
30	**Role of the ITU Telecommunication Development Sector in implementing the outcomes of the World Summit on the Information Society**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
31	**Regional preparations for world telecommunication development conferences**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
32	**International and regional cooperation on regional initiatives**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
33	**Assistance and support to Serbia for rebuilding its destroyed public broadcasting system**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Dubai, 2014**	**In force**

Res.	Title	First Approved	History	Status
34	**The role of telecommunications/information and communication technology in disaster preparedness, early warning, rescue, mitigation, relief and response**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
35	**Support for development of the African information and communication technology sector**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
36	**Support for the African Telecommunication Union**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010**	**In force**
37	**Bridging the digital divide**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
38	Development of the Youth Forum in the Telecommunication Development Bureau	Istanbul, 2002	Rev. Doha, 2006; Rev. Hyderabad, 2010; Abr. Dubai, 2014	Abrogated
39	**Agenda for connectivity in the Americas and Quito Action Plan**	Istanbul, 2002	-	**In force**

Res.	Title	First Approved	History	Status
40	**Group on capacity-building initiatives**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
41	E-health (including telehealth/telemedicine)	Istanbul, 2002	Abr. Doha, 2006	Abrogated
42	Implementation of tele-education programmes	Istanbul, 2002	Abr. Doha, 2006	Abrogated
43	**Assistance for implementing IMT – International Mobile Telecommunications**	Istanbul, 2002	**Rev. Doha, 2006; Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
44	Mainstreaming gender in ITU-D programmes	Istanbul, 2002	Abr. Doha, 2006	Abrogated
45	**Mechanisms for enhancing cooperation on cybersecurity, including countering and combating spam**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
46	**Assistance and promotion for indigenous communities in the world: Information society through information and communication technology**	Doha, 2006	-	**In force**
47	**Enhancement of knowledge and effective application of ITU Recommendations in developing countries, including conformance and interoperability testing of systems manufactured on the basis of ITU Recommendations**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
48	**Strengthening cooperation among telecommunication regulators**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**

Res.	Title	First Approved	History	Status
49	Special actions for the least developed countries and small island developing states	Doha, 2006	Abr. Hyderabad, 2010	Abrogated
50	**Optimal integration of information and communication technologies**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
51	**Provision of assistance and support to Iraqto rebuild and re-equip its public telecommunication systems**	Doha, 2006	**Rev. Hyderabad, 2010**	**In force**
52	**Strengthening the executing agency role of the ITU Telecommunication Development Sector**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
53	**Strategic and financial framework for the elaboration and implementation of the Dubai Action Plan**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
54	**Information and communication technology applications**	Doha, 2006	**Rev. Hyderabad, 2010; Rev. Dubai, 2014**	**In force**
55	**Mainstreaming a gender perspective for an inclusive and egalitarian information society**	Doha, 2006	**Rev. Dubai, 2014**	**In force**
56	Creation of a new Question in Study Group 1 regarding access to telecommunication services for persons with disabilities	Doha, 2006	Abr. Hyderabad, 2010	Abrogated

Res.	Title	First Approved	History	Status
57	**Assistance to Somalia**	Doha, 2006	**Rev. Hyderabad, 2010**	**In force**
58	**Telecommunication/information and communication technology accessibility for persons with disabilities, including persons with age-related disabilities**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
59	**Strengthening coordination and cooperation among the three ITU Sectors on matters of mutual interest**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
60	**Assistance to countries in special situations: Haiti**	Hyderabad, 2010	-	**In force**
61	**Appointment and maximum term of office of chairmen and vice-chairmen of study groups in the ITU Telecommunication Development Sector and of the Telecommunication Development Advisory Group**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
62	**Measurement concerns related to human exposure to electromagnetic fields**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
63	**IP address allocation and facilitating the transition to IPv6 in the developing countries**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**

Res.	Title	First Approved	History	Status
64	**Protecting and supporting users/consumers of telecommunication/ information and communication technology services**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
65	Improving access to healthcare services by using information and communication technologies	Hyderabad, 2010	Abr. Dubai, 2014	Abrogated
66	**Information and communication technology and climate change**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
67	**The role of the ITU Telecommunication Development Sector in child online protection**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
68	**Assistance to indigenous peoples within the activities of the Telecommunication Development Bureau in its related programmes**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
69	**Facilitating creation of national computer incident response teams, particularly for developing countries, and cooperation between them**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**

Res.	Title	First Approved	History	Status
70	Regional initiative for Central and Eastern Europe on "E-accessibility (Internet and digital television) for persons with disabilities"	Hyderabad, 2010	Abr. Dubai, 2014	Abrogated
71	**Strengthening cooperation between Member States, Sector Members, Associates and Academia of the ITU Telecommunication Development Sector, including the private sector**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
72	More effective utilization of mobile communication services	Hyderabad, 2010	Abr. Dubai, 2014	Abrogated
73	**ITU centres of excellence**	Hyderabad, 2010	**Rev. Dubai, 2014**	**In force**
74	More effective adoption of e-government services	Hyderabad, 2010	Abr. Dubai, 2014	Abrogated
75	**Implementation of the Smart Africa Manifesto**	**Dubai, 2014**	**-**	**In force**
76	**Promoting information and communication technologies among young women and men for social and economic empowerment**	**Dubai, 2014**	**-**	**In force**
77	**Broadband technology and applications for greater growth and development of telecommunication/information and communication services and broadband connectivity**	**Dubai, 2014**	**-**	**In force**

Res.	Title	First Approved	History	Status
78	Capacity building for countering misappropriation of Recommendation ITU-T E.164 telephone numbers	Dubai, 2014	-	In force
79	The role of telecommunications/information and communication technologies in combating and dealing with counterfeit telecommunication/ information and communication devices	Dubai, 2014	-	In force
80	Establishing and promoting trusted information frameworks in developing countries to facilitate and encourage electronic information exchanges between economic partners	Dubai, 2014	-	In force
81	Further development of electronic working methods for the work of the ITU Telecommunication Development Sector	Dubai, 2014	-	In force
82	Preserving and promoting multilingualism on the Internetfor an inclusive information society	Dubai, 2014	-	In force

Recommendations

Rec.	Title	First approved	History	Status
1	Application of telecommunications to health and other social services	Buenos Aires, 1994	-	Obsolete
1	Role of World Telecommunication Development Conferences	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
2	Development partnership with international education agencies	Buenos Aires, 1994	-	Obsolete
2	Future membership and functions of the Telecommunication Development Advisory Board	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
3	Application of information and communication technologies for development	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
4	Liberalization and competitive business environment	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
5	Role of telecommunications in economic, social and cultural development of indigenous peoples	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
6	Information Infrastructure	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
7	Role of telecommunication and information technologies in the protection of the environment	Valletta, 1998	Rev. Istanbul, 2002; Abr. Doha, 2006	Abrogated
8	Timely implementation of Global Mobile Personal Communications by Satellite (GMPCS)	Valletta, 1998	Rev. Istanbul, 2002; Abr. Hyderabad, 2010	Abrogated

Rec.	Title	First approved	History	Status
9	Telemedicine	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
10	The importance of partnerships in support of human resources initiatives: The example of the TEMIC declaration	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
11	Operational planning in the International Telecommunication Union	Valletta, 1998	Abr. Istanbul, 2002	Abrogated
12	Consideration of disaster telecommunication needs in telecommunication development activities	Istanbul, 2002	Abr. Doha, 2006	Abrogated
13	Requests for technical assistance for developing Countries	Istanbul, 2002	Rev. Doha, 2006; Abr. Hyderabad, 2010	Abrogated
14	Pilot integration project for information and communications technologies	Istanbul, 2002	Abr. Doha, 2006	Abrogated
15	**Models and methods to determine the cost of national telecommunication services**	**January 2002**	**-**	**In force**
16	**Tariff rebalancing and cost-oriented tariffs**	**January 2002**	**-**	**In force**
17	**Sharing of facilities in rural and remote areas**	**January 2002**	**-**	**In force**
18	Potential benefits for rural telecommunications	Doha, 2006	Abr. Hyderabad, 2010	Abrogated

Rec.	Title	First approved	History	Status
19	Telecommunications for rural and remote areas	March 2010	Rev. Dubai, 2014	In force
20	Policy and regulatory initiatives for developing telecommunications/ICTs/broadband in rural and remote areas	Dubai, 2014	-	In force
21	ICT and climate change	Dubai, 2014	-	In force
22	Bridging the standardization gap in association with regional groups of the study groups	Dubai, 2014	-	In force

Decisions

Dec.	Title	First approved	History	Status
1	Minimum budget for ITU-D study groups in 2006	Doha, 2006	Abr. Hyderabad, 2010	Abrogated

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