





WSIS Action Lines Roadmaps C2, C5, C6

Page 3

INTRODUCTION

ITU WSIS Action Line Roadmaps for C2, C5 and C6 are detailed plans to guide progress towards achieving the WSIS Implementation goals. They provide a broad vision and detailed overview of the activities planned within the mandate of the Union also showing clear linkages with the Sustainable Development Goals (SDGs).

In line with its mandate and the WSIS outcome documents, the ITU continues to play a key role in the WSIS implementation and follow-up process in particular, as the WSIS Action Lines Sole Facilitator for AL C2 (Information and Communication Infrastructure), AL C5 (Building Confidence and Security in the Use of ICTs), and AL C6 (Enabling Environment).

With the aim of strengthening the implementation mechanism, ITU Council 2009 agreed on the framework for roadmaps of ITU's activities in its role as the sole facilitator for the above mentioned WSIS action lines in the implementation of WSIS up to 2015. ITU Council 2016 further highlighted the importance of continuing this exercise also in alignment with the Sustainable Development Goals (SDGs) till 2025. The roadmaps have been updated in accordance to the outcomes of the World Telecommunication Development Conference (WTDC-17).

Roadmaps are detailed plans to guide progress towards achieving the WSIS Implementation goals. They provide a broad vision and detailed overview of the activities planned within the mandate of the Union. Direct links between the activities and the strategic goals and relevant resolutions, programmes and initiatives of the ITU are highlighted that also clearly display the linkages with the SDGs. The roadmaps include timeframes, expected results, as well as list relevant partners. The roadmaps are living documents that will be updated regularly in an ongoing process.

WSIS Action Line C2: Information and Communication Infrastructure

Page 4

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
Geneva Plan of Action and Tunis Agenda for the Information So	ciety			
A: Governments should take action, in the framework of national development policies, in order to support an enabling and competitive environment for the necessary investment in ICT infrastructure and for the development of new services	2016-2019	Goal 1 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 2, 3, 4, 5, 8, 9, 10, 11, 16, 17	Expected Results: -Implementation of the reference framework for harmonization of telecommunication/ICT regulatory policies -Development of competitive telecommunication/ICT markets -Harmonized technical standards to provide increased connectivity of networks and services - Policy and Regulatory Assistance for the establishment of harmonized policies for the ICT market on regional and sub-regional basis <u>ITU Activities</u> : - ITU Assessment Studies - The 16th edition of the Global Symposium for Regulators (GSR) was held in Sharm el- Sheikh, Egypt, from 11 to 14 May 2016. One of the discussion papers precented there has focused on emerging technologies
				held in Sharm el- Sheikh, Egypt, from 11 to 14 May 2016. One of the discussion papers presented there has focused on emerging technologies and infrastructure platforms and their implications for the global regulatory agenda

¹ WSIS outcomes for each action line will be listed in accordance with the Geneva Plan of Action and Tunis Agenda for the Information Society, and the WSIS+10 Outcome Documents (WSIS+10 Statement on the Implementation of WSIS Outcomes and WSIS +10 Vision for WSIS Beyond 2015. These outcomes could be further sub-divided if justified and in accordance with the ITU mandate. ² A proposed time-scale will be shown for each outcome, if possible and feasible, including intermediate stages, if justified.

³ Relevant ITU Strategic Goals and Resolutions should be linked with each outcome. ITU Strategic Goals and Relevant Resolutions: www.itu.int/ITU-D/pdf/op//TU-D-StrategicPlan-2008-2011.pdf.

⁴ This column lists the planned ITU activities and results that are expected by ITU's activities. ITU can only carry out these activities upon the individual request of the concerned administration.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
B: In the context of national e-strategies, devise appropriate universal access policies and strategies, and their means of implementation, in line with the indicative targets, and develop ICT connectivity indicators	2016-2019	Goal 2 Goal 4 Buenos Aires Action Plan Objective 2 Buenos Aires Action Plan Objective 4 Regional Initiatives	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17	 Expected Results: 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 <u>ITU Activities</u>: Direct assistance through programs Implementation of relevant projects (RIs /others) for: Rural Telecoms, ICT Services and Entrepreneurship Development ICT Applications and Satellite Diversity Feasibility study on Digital Broadcasting Roadmap Provision of tools, guidelines and best practice examples on universal service funds and disbursement of the fund Enhancement of the human resource through provision of training Collecting the best practices from Member States management of universal access funds Provision of tools and guidelines on policy development Survey on the availability of national ICT policies in the Member States
C: In the context of national e-strategies, provide and improve ICT connectivity for all schools, universities, health institutions, libraries, post offices, community centres, museums and other institutions accessible to the public, in line with the indicative targets	2016-2019	Goal 1 Goal 2 Buenos Aires Action Plan Objective 2 Buenos Aires Action Plan Objective 4 Regional Initiatives	1, 3, 5, 8, 9, 10, 11, 16, 17	Expected Results: - Improved ICT connectivity of schools and other public spaces <u>ITU Activities</u> : - As follow-up to the Connect Africa Summit the ITU/Craig and Susan McCaw Broadband Wireless Network project for Africa is implementing broadband wireless networks and developing ICT applications to provide free or low cost digital access for schools and hospitals, and for underserved populations in rural and remote areas in selected countries

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
 D: Develop and strengthen national, regional and international broadband network infrastructure, including delivery by satellite and other systems, to help in providing the capacity to match the needs of countries and their citizens and for the delivery of new ICT-based services. Support technical, regulatory and operational studies by the International Telecommunication Union (ITU) and, as appropriate, other relevant international organizations in order to: D1: broaden access to orbital resources, global frequency harmonization and global systems standardization D2: encourage public-private partnership D3: promote the provision of global high-speed satellite services for underserved areas such as remote and sparsely populated areas D4: explore other systems that can provide high-speed connectivity 	2016-2019	Goal 1 Goal 3 Goal 4 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 3, 4, 5, 8, 9, 10, 11, 16, 17	 Expected Results: Development of high-quality and affordable telecommunication/ICT services National telecommunication/ICT master plans to meet the requirements of developing countries Enhanced human capacities in the area of broadband communication networks Ease of access to submarine cables for all countries, and especially landlocked countries Support for the elaboration of spectrum-management plans at the national, regional and global levels, including the transition to digital broadcasting Assistance in using the tools to support the developing countries in improving the international coordination of terrestrial services in border areas 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 ITU Activities: Identification of the broadband infrastructure gaps by every means and tools available to ITU (e.g. ITU Interactive Transmission Maps) Development and implementation of projects in partnership with public and private sector to fill the gaps using the most suitable technology (space and/or terrestrial) Direct assistance on the utilization of spectrum and orbital resources (joint activity of BDT and BR) Bridging the Standardization Gap (BSG) activities under Recommendation 22 Standardization activities: Develop relevant ITU Recommendations to provide worldwide harmonized standards to ensure interworking, interoperability, availability of services and network access; Organize workshops to disseminate information on ITU standardization work on NGN, optical access, audio coding, IPTV etc, to help bridge standardization gap between developing and developed countries.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
E: In the context of national e-strategies, address the special requirements of older people, persons with disabilities, children, especially marginalized children and other disadvantaged and vulnerable groups, including by appropriate educational administrative and legislative measures to ensure their full inclusion in the Information Society	2016-2019	Goal 1 Goal 2 Buenos Aires Action Plan objective 2 Buenos Aires Action Plan Objective 4 Regional Initiatives	1, 2, 3, 4, 5, 8, 10, 11, 16, 17	 Expected Results: 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 ICT connectivity for persons with disabilities, women and girls, youth and children and indigenous people Implementation of Youth Education Scheme and Youth Incentive Scheme programs in collaboration with sponsors <u>ITU Activities:</u> Provision of tools and guidelines for training policy makers, regulators and other stakeholders on e-accessibility and services needed for persons with disabilities, including the joint ITU-G3ICT e-Accessibility Policy Toolkit for Persons with Disabilities (<u>http://www.e-accessibilitytoolkit.org/</u>) Implementation of projects for indigenous and marginalized people ICT portal for indigenous people
F: Encourage the design and production of ICT equipment and services so that everyone, has easy and affordable access to them including older people, persons with disabilities, children, especially marginalized children, and other disadvantaged and vulnerable groups, and promote the development of technologies, applications, and content suited to their needs, guided by the Universal Design Principle and further enhanced by the use of assistive technologies	2016-2019	Goal 1 Goal 2 Buenos Aires Action Plan Objective 2 Buenos Aires Action Plan Objective 4 Regional Initiatives	1, 2, 3, 4, 5, 8, 10, 11, 16, 17	 Expected Results: 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 <u>ITU Activities</u>: Provision of tools and guidelines for training policy makers, regulators and other stakeholders on e-accessibility and services needed for persons with disabilities, including the joint ITU-G3ICT e-Accessibility Policy Toolkit for Persons with Disabilities (<u>http://www.e-accessibilitytoolkit.org/</u>) Standardization initiatives

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
G: In order to alleviate the challenges of illiteracy, develop affordable technologies and non-text based computer interfaces to facilitate people's access to ICT	2016-2019	Goal 1 Goal 2 Goal 3 Buenos Aires Action Plan Objective 2 Buenos Aires Action Plan Objective 4 Regional Initiatives	1, 2, 3, 4, 5, 8, 10, 11, 16, 17	Expected Results: - Eradication of digital illiteracy - Facilitate people's access to ICT <u>ITU Activities</u> : - Development of ICT applications and services - Standardization initiatives
H: Undertake international research and development efforts aimed at making available adequate and affordable ICT equipment for end users	2016-2019	Goal 1 Buenos Aires Action Plan Objective 2 Regional Initiatives	2, 4, 5, 8, 9, 10, 11, 16, 17	Expected Results: -Affordable ICT equipment <u>ITU Activities</u> : -ITU is carrying out a project to foster affordable access to the digital world by providing stakeholders with a platform to identify the appropriate policy, regulatory, technical and commercial measures to achieve affordable access to international bandwidth

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
I: Encourage the use of unused wireless capacity, including satellite, in developed countries and in particular in developing countries, to provide access in remote areas, especially in developing countries and countries with economies in transition, and to improve low-cost connectivity in developing countries. Special concern should be given to the Least Developed Countries in their efforts in establishing telecommunication infrastructure	2016-2019	Goal 1 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 3, 4, 5, 8, 9, 10, 11, 16, 17	 Expected Results: 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. <u>ITU Activities</u>: Workshop on Cross-Border Frequency Coordination Assistance in setting up Basic Spectrum Management System for countries in need Assistance in the construction of satellite networks for broadband Internet access in countries with low population density Providing information on the broadband infrastructure (for every available means) by tools available to ITU (e.g. ITU Interactive Transmission Maps)
J: Optimize connectivity among major information networks by encouraging the creation and development of regional ICT backbones and Internet exchange points, to reduce interconnection costs and broaden network access	2016-2019	Goal 1 Goal 4 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 3, 4, 5, 8, 9, 10, 11, 16, 17	 Expected Results: Promoting the establishment of national and regional Internet exchange points (IXPs) Promoting the development of local content and localized access Promoting IPv4 to IPv6 migration. <u>ITU Activities</u>: Assistance for the establishment of Internet Exchanges Points (IXPs) in regions/countries

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
K: Develop strategies for increasing affordable global connectivity, thereby facilitating improved access. Commercially negotiated Internet transit and interconnection costs should be oriented towards objective, transparent and non-discriminatory parameters, taking into account ongoing work on this subject	2016-2019	Goal 1 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 2, 3, 4, 5, 8, 9, 10, 11, 16, 17	 Expected Results: Studies of policies that enable reduction of the prices paid by users for the different telecommunication services Reduced cost of access to the international fibre-optic network, especially for landlocked developing countries and small island developing states Promotion of cooperation and information sharing 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 Promoting the development, as appropriate, of national, subregional and regional IXPs, subject to national decision 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 ITU Activities: Affordable global connectivity

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
L: Encourage and promote joint use of traditional media and new technologies	2016-2019	Goal 1 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 2, 3, 4, 5, 8, 9, 10, 11, 16, 17	 Expected Results: Formulation of strategic plans and regulatory frameworks for the transition to smart and sustainable development in various relevant spheres Convergence of telecommunications, broadcasting and information technologies and introduction of new media Assistance in the development of frameworks for new and emerging technical issues as well as for utilizing new technologies <u>ITU Activities:</u> Convergence of telecommunications, broadcasting and information technologies and introduction of new media are promoted Development of guidelines on digital broadcasting transition Direct assistance on transition from analog to digital broadcasting including customization of roadmap, deployment of pilot systems and network planning
WSIS+10 Outcome Documents (WSIS+10 Statement on the Ir a. Develop a well-planned, well-maintained, robust, economic, and efficient Broadband infrastructure to ensure the delivery of high quality services including, affordable access to the Internet, information and	nplementation o 2016-2019	<u>f WSIS Outcomes and</u> Goal 1 Goal 3 Goal 4	WSIS +10 Vis 1, 2, 3, 4, 5, 8, 10, 11, 16, 17	Expected Results: - Development or improvement of national broadband plans to guide policies for increasing access to broadband services and promoting
technologies for citizens.		Buenos Aires Action Plan Objective 2 Regional Initiatives		 investment in networks <u>ITU Activities</u>: To show a global perspective of broadband connectivity that allows membership to identify broadband investment opportunities, ITU Interactive Transmission Maps is continuously adding network links from all regions. The maps are a cutting-edge ICT-data mapping platform to take stock of national backbone connectivity (Optical fiber, Microwave links, Satellite Earth Stations, and Internet Exchange Points, IXPs) as well as of other key metrics of the ICT sector. Mobile Coverage (2G, 3G, 4G) datasets are under study for inclusion into the Map. A toolkit for ICT infrastructure place is going to consider key variables for estimating the cost of network placements. The study will cover business plan examples and finance tools options.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
b. Development of affordable network/consumer telecommunications equipment, access and services by economy of scale, development, and conformity and interoperability, by international standards are key elements.	2016-2019	Goal 1 Goal 3 Goal 4 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 3, 4, 5, 8, 9, 10, 11, 16, 17	 Expected Results: Improved infrastructure for broadband access to ICT services of acceptable price and quality, in urban, rural and remote areas <u>ITU Activities</u>: The ITU Conformity and Interoperability (C&I) programme is enhancing the conformity and interoperability of ICT products and reducing the digital divide as well as the Standardization Gap by assisting developing countries with human resource and infrastructure capacity building. More information at <u>https://itu.int/go/CI_Development</u>.
c. Using policy and financing mechanisms such as Universal Service Funds and/or Public-Private Partnership, to connect and cover rural and remote areas with affordable Broadband information and communication infrastructure. To attract private investment, competition and adequate market liberalization policies to develop the infrastructure, financing, and new business models need to be studied and deployed, taking into account national circumstances.	2016-2019	Goal 2 Goal 4 Buenos Aires Action Plan Objective 2 Regional Initiatives	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17	 Expected Results: Development or improvement of national broadband plans to guide policies for increasing access to broadband services and promoting investment in networks Improved access to broadband infrastructure, services and applications in urban and rural areas, especially access for landlocked developing countries Support to non-profit cooperatives that provide services in underserved rural and suburban areas Guidelines on rural connectivity, including policy, appropriate technologies and power supply issues, and best practices ITU Activities: Forums on Universal Access and services aimed at promoting universal service and access and broadband deployment in the regions

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Linkages with the SDGs	Expected Results of ITU Activities ⁴
d. Emergency telecommunication services should be secured. A resilient and robust information and communication infrastructure is an essential step to ensure the continuity of communications in cases of disruptive events such as natural disasters.	2016-2019	Goal 3 Buenos Aires Action Plan Objective 2 Buenos Aires Action Plan Objective 4 Regional Initiatives	1, 3, 5, 11, 13	 Expected Results: 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 Identification of suitable technologies to be used for emergency communications <u>ITU Activities</u>: ITU members have approved Recommendations for disaster management and emergency telecommunication services Emergency telecommunications an integral part of its projects integrating telecommunications/information and communication technology in disaster predication, detection, and alerting The "2nd Global Forum on Emergency Telecommunications (GET- 2016): SAVING LIVES" took place in Kuwait City, Kuwait, at the Regency Hotel, from 26-28 January 2016

Roadmap for WSIS Action Line C5: Building Confidence and Security in Use of ICTs Note: GCA – Global Cybersecurity Agenda

WSIS Outcomes⁵ (WSIS AL C5)	Proposed ⁶ Timing	ITU Strategic Goals and Relevant Resolutions ⁷	Linkages with the SDGs	Expected Results of ITU Activities ⁸
Geneva Plan of Action and Tunis Agenda	for the Informa	ation Society		
Geneva Plan of Action and Tunis Agenda (A1: Promote cooperation among the governments at the United Nations and with all stakeholders at other appropriate fora to enhance user confidence, build trust, and protect both data and network integrity	f <mark>or the Informa</mark> 2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) ITU-T Objective 1 ITU-T Objective 1 <u>GCA</u> 1. Legal Measures 2.Technical and Procedural Measures 3. Organizational Structures 4. Capacity Building 5.International Cooperation <u>Resolutions</u> PP Res. 130, 174, 179 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017) WTSA Res. 50, 52 (Rev.	1.4, 4.1, 4.3, 4.5, 5.b, 7.1, 7.a, 7.b, 9.1, 9.c, 11.3, 11.b, 16.2, 17.8	 Expected Results: Continue to act as a platform that fosters close international cooperation to increase awareness on the security of cyberspace and share experiences and best practices for further action at a global level. ITU Activities: ITU activities under ITU-D and SG 2 Q3 ITU activities under ITU-T SG 13, 17, 20 and other relevant Study Groups ITU activities under Child Online Protection initiative ITU activities under WSIS Forum
		Hammamet, 2016), 58 (Rev. Dubai 2012)		

⁵ WSIS Outcomes for each Action Line will be listed in accordance with the Geneva Plan of Action and Tunis Agenda for the Information Society. These outcomes could be further sub-divided if justified and in accordance with the ITU mandate.

⁶ A proposed time scale will be shown for each outcome, if possible and feasible, including intermediate stages, if justified. 7 Relevant ITU Strategic Goals and Resolutions should be linked with each outcome.

⁸ In this column should be listed the results that are expected by ITU as the sole Facilitator / co-Facilitator (F), Partner (P), or Implementer (I).

A2: Address other information security	2016-2019	ITU Strategic Goal 3 (Target 3.1)	7.1, 7.a,	Expected Results:
and network security issues		ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3, ASP5, CIS3, EUR4)	7.b, 9.1, 9.c, 11.3, 11.b, 17.8	Facilitate an institutional framework for close global cooperation among Member States. This includes helping set up global incidence warning and response systems, protocols and procedures.
		ITU-T Objective 1 <u>GCA</u>		Continue providing a framework for defining security protocols and standards for networks and systems.
		2.Technical and Procedural Measures		
				ITU Activities:
		3. Organizational		ITU-D capacity building activities under the CIRT programme
		Structures		
	5.International Cooperation			
		Resolutions		ITU activities under ITU-T SG 17 and other relevant Study Groups
		PP Res. 130, 174 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
		WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

B1: Governments, in cooperation with the private sector, should prevent, detect	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4, 4.1, 4.3, 4.5,	Expected Results: Member States have access to specified
and respond to cyber-crime and misuse of ICTs by: Developing guidelines that take into		ITU-D Objective 2/Outcome 2.2 (Buenos Aires Action Plan)	5.b, 7.1, 7.a, 7.b, 9.1, 9.c,	toolkits, guidelines and reports for a more coordinated response to cyber-threats.
account ongoing efforts in these areas		Regional Initiatives (AFR3, ARB2, CIS3, EUR4)	11.3, 11.b, 16.2,	ITU Activities:
		ITU-T Objective 1	17.8.	Development of a National Cybersecurity Strategy (NCS) Toolkit facilitated by ITU-D
		GCA		Strategy (NeS) Tookie lacintated by Tro D
		1. Legal Measures 2.Technical and Procedural Measures		Technical Recommendations under ITU-T
		4. Capacity Building		Study Group 17 activities
		5.International Cooperation		Guidelines of the Child Online Protection Initiative
		Resolutions		
		PP Res. 130, 174 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
		WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

B2: Governments, in cooperation with the private sector, should prevent, detect	2016-2019	ITU Strategic Goal 3 (Target 3.1)	7.1, 7.a, 7.b, 9.1,	Expected Results:
and respond to cyber-crime and misuse		ITU-D Objective 2/Output 2.2	9.c, 11.3,	Facilitation of Member States' access to
of ICTs by:		(Buenos Aires Action Plan)	11.b,	resources developed by other relevant international organizations when developing
Considering legislation that allows for effective investigation and prosecution of		Regional Initiatives	16.2, 17.8	national legislation to combat cybercrime.
misuse		(AFR3, ARB2, CIS3, EUR4)	17.0	
				ITU Activities
		GCA		
		1. Legal Measures		Participation of ITU-D Secretariat (Telecommunication Development Bureau)
		5.International Cooperation		in international initiatives such as
				Commonwealth Cybercrime Initiative (CCI) and the World Bank's led effort in
		Resolutions		elaborating a Cybercrime toolkit
				ITU-D activities such as the creation of
		PP Res. 130, 174 (Rev. Busan, 2014)		Cybercrime Legislation resources in
		WTDC Res. 45 (Rev. Dubai, 2014),		collaboration with relevant international organizations who have lead mandates in
		67, 69 (Rev. Buenos Aires, 2017)		this area.
				ITU activities under Child Online Protection
DO Commence in the second time with	2016 2010		1 4 7 1	initiative.
B3: Governments, in cooperation with the private sector, should prevent, detect	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4, 7.1, 7.a, 7.b,	Expected Results:
and respond to cyber-crime and misuse		ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan)	9.1, 9.c,	An institutional framework is being facilitated for governments to cooperate with the private
of ICTs by: Promoting effective mutual assistance			11.3, 11.b,	sector on cyber-risk prevention, detection and
efforts		GCA	16.2,	response.
		1. Legal Measures	17.8	
		3. Organizational		ITU Activities:
		Structures		ITU-D activities under the CIRT Programme and
		4. Capacity Building		ITU-D SG 2 Q 3
				ITU activities under Child Online Protection
		5.International Cooperation		initiative
		<u>Resolutions</u>		
		PP Res. 130, 174, 179 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		

B4: Governments, in cooperation with	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4, 7.1,	Expected Results:
the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by:		ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan)	7.a, 7.b, 9.1, 9.c, 11.3,	Facilitating, promoting and helping expand a global network of incident response teams and regional cybersecurity hubs for the
Strengthening institutional support at the		Regional Initiatives	11.b, 17.8	prevention, detection and recovery from
international level for preventing, detecting and recovering from such		(ARF3, ARB2, ASP5, CIS3, EUR4)	1710	cyber-incidents by Member States.
incidents		GCA		ITU Activities:
		3.Organizational		ITU-D activities under CIRT Programme
		Structures		
		4.Capacity Building		Assisting Members States in the establishment of Computer Incident
		5.International Cooperation		Response Teams (CIRTS)
				Cooperation with relevant international computer incident response associations
		Resolutions		such as FIRST, AP-CERT, Africa CERT, OIC
		PP Res. 130, 174 (Rev. Busan, 2014)		CERT
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
B5: Governments, in cooperation with	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4, 4.1,	Expected Results:
the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by: Encouraging education and raising		ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan)	4.3, 4.5, 5.b, 9.1, 9.c, 16.2, 17.8	Workshops and training programmes organized with/for Member States at a global, regional and national level.
awareness		Regional Initiatives		
		(ARF3, ARB2, ASP5, CIS3, EUR4)		ITU Activities:
		GCA		ITU regional cybersecurity forums and regional and national workshops
		4.Capacity Building		ITU-D training programs and Centres of
		5.International Cooperation		Excellence (CoE)
		Resolutions		ITU activities under Child Online Protection
		PP Res. 130, 174, 179 (Rev. Busan, 2014)		initiative
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		

C. Covernments, and other stakeholders	2016-2019	ITU Stratagic Coal 2 (Target 2.1)	1 1 1 1	Eveneted Decultor
C: Governments, and other stakeholders, should actively promote user education	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4, 4.1, 4.3, 4.5,	Expected Results:
and awareness about online privacy and		ITU-D Objective 2/Output 2.2	5.b, 9.1,	Workshops and training programmes
the means of protecting privacy		(Buenos Aires Action Plan)	9.c, 16.2, 17.8	comprise all relevant aspects of Cybersecurity.
		Regional Initiatives	1710	
		(ARF3, ARB2, EUR4)		ITU Activities:
		GCA		ITU regional cybersecurity forums and regional and national workshops
		4.Capacity Building		ITU-D training programs and CoE.
		5.International Cooperation		
		<u>Resolutions</u>		ITU activities under Child Online Protection initiative
		PP Res. 130, 174, 179 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
D: Take appropriate action on spam at	2016-2019	ITU Strategic Goal 3 (Target 3.1)	9.1,	Expected Results:
national and international levels		ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan)	9.c	Collaboration with relevant entities for further study of spam and its mitigation.
				Development of necessary technical
		Regional Initiatives (AFR3, ARB2, ASP5, CIS3,EUR4)		standards.
		ITU-T Objective 1		
		GCA		ITU Activities:
		2.Technical and Procedural Measures		ITU-T Study Group 17 activities
		3. Organizational Structures		ITU-D collaboration with ISOC on Spam
		5. International Cooperation		
		Resolutions		
		PP Res. 130, 174 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
		WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

E: Encourage the domestic assessment of national law with a view to overcoming any obstacles to the effective use of electronic documents and transactions including electronic means of authentication	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3, CIS3) <u>GCA</u> 1. Legal Measures <u>Resolutions</u> PP Res. 130, 174 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)	1.4, 9.1, 9.c	 <u>Expected Results:</u> Facilitate Member State access to cyber legislation resources developed by relevant institutions and guidelines on different aspects of Cybersecurity. <u>ITU Activities</u> Development of a National Cybersecurity Strategy (NCS) Toolkit facilitated by ITU-D ITU-D maintenance of the Global Cybersecurity Index (GCI) and country profiles for highlighting best national practices including on the legal aspects of Cybersecurity.
F : Further strengthen the trust and security framework with complementary and mutually reinforcing initiatives in the fields of security in the use of ICTs, with initiatives or guidelines with respect to rights to privacy, data and consumer protection.	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3) <u>GCA</u> 1. Legal Measures 2. Technical and Procedural Measures <u>Resolutions</u> PP Res. 130, 174 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017) WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)	9.1, 9.c	Expected Results:Facilitate the provision to Member States of relevant resources developed by relevant institutions on data privacy, data and consumer protection.ITU ActivitiesITU collaboration with relevant international organizations that are working on the aspects of right to privacy, data and consumer protection.Technical Recommendations under ITU-T Study Group 17 activitiesWork under the ITU-T Focus Group on Data Processing and Management to support IoT and Smart Cities & CommunitiesWork under the ITU-T Focus Group on Application of Distributed Ledger Technology (FG DLT)

G: Share good practices in the field of information security and network security and encourage their use by all parties concerned	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3, ARB2, ASP5, CIS3, EUR4)	1.4, 7.1, 7.a, 7.b, 9.1, 9.c, 11.3, 11.b, 17.8	Expected Results: Member States have access to guidelines and good practices in the field of information security and network security. ITU Activities:
		<u>GCA</u> 1. Legal Measures 2.Technical and Procedural Measures 4. Capacity Building 5. International Cooperation <u>Resolutions</u> PP Res. 130, 174 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017) WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		Development of a National Cybersecurity Strategy (NCS) Toolkit facilitated by ITU-D ITU-D maintenance of the Global Cybersecurity Index (GCI) and country profiles for highlighting best national practices on key aspects of Cybersecurity. Technical Recommendations under ITU-T Study Group 17 activities

H: Invite interested countries to set up focal points for real-time incident handling and response, and develop a cooperative network between these focal points for sharing information and technologies on incident response	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output_2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3, ARB2, ASP5, CIS3, EUR4) ITU-T Objective 1 <u>GCA</u> 2.Technical and Procedural Measures 3. Organizational	1.4, 7.1, 7.a, 7.b, 9.1, 9.c, 11.3, 11.b, 17.8	Expected Results: Facilitating, promoting and helping expand a global network of incident response teams and regional cybersecurity centres for the prevention, detection and recovery from cyber-incidents by Member States. ITU Activities: ITU-D activities under CIRT Programme ITU-T Study Group 17 activities
		Structures 5.International Cooperation		
		<u>Resolutions</u> Resolutions PP Res. 130, 174 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017) WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

I: Encourage further development of	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4,	Expected Results:
secure and reliable applications to facilitate online transactions		Regional Initiatives (AFR3, ARB2, ASP5, CIS3, EUR4) ITU-T Objective 1	9.1, 9.c	Continue providing a global platform for Member States, industry, universities etc. to collaborate on the development of relevant security standards.
		<u>GCA</u> 2.Technical and Procedural Measures 5.International Cooperation <u>Resolutions</u> PP Res. 130, 174 (Rev. Busan, 2014) WTSA Res. 50, 52 (Rev. Hammamet,		ITU Activities: ITU-T Study Group 17 activities Work under the ITU-T Focus Group on Application of Distributed Ledger Technology (FG DLT)
		2016), 58 (Rev. Dubai 2012)		
J: Encourage interested countries to contribute actively to the ongoing United Nations activities to build confidence and security in the use of ICTs	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) ITU-T Objective 1	1.4, 4.1, 4.3, 4.5, 5.b, 7.1, 7.a, 7.b, 9.1, 9.c, 11.3, 11.b, 16.2, 17.8	Expected Results: Facilitate a framework for close global cooperation amongst various Member States under existing and future United Nations activities.
		GCA		ITU activities under ITU-D and SG 2 Q3
		5.International Cooperation		ITU activities under ITU-T SG 17 and other relevant Study Groups
		Resolutions		ITU activities under WSIS Forum
		PP Res. 130, 174, 179 (Rev. Busan, 2014)		ITU activities under Child Online Protection initiative
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
		WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

WSIS+10 Outcome Documents (WSIS+1	WSIS+10 Outcome Documents (WSIS+10 Statement on the Implementation of WSIS Outcomes and WSIS +10 Vision for WSIS Beyond 2015						
a. Encourage further strengthening of the trust, and security framework with complementary and mutually reinforcing initiatives in the fields of security in the use of ICTs, with initiatives or guidelines with respect to rights to privacy, data and consumer protection.	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3)	9.1, 9.c	Expected Results: Providing to Member States relevant resources on the rights to privacy, data and consumer protection, as specific aspects of Cybersecurity.			
		ITU-T Objective 1 <u>GCA</u> 1. Legal Measures 2. Technical and Procedural Measures		ITU Activities ITU collaboration with relevant international organizations that are working on the aspects of right to privacy, data and consumer protection Technical Recommendations under ITU-T Study Group 17 activities Work under the ITU-T Focus Group on Data Processing and Management to support IoT and Smart Cities & Communities			
		Resolutions PP Res. 130, 174 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017) WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)					

b. Support greater development, and encourage implementation to international standards for security, in particular open standards. Continue to assist developing and least developed countries to participate in global standards development and related processes.	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives (AFR3, CIS3) ITU-T Objective 1 <u>GCA</u> 2.Technical and Procedural Measures 5.International Cooperation <u>Resolutions</u> PP Res. 130, 174 (Rev. Busan, 2014) WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)	9.1, 9.c	 <u>Expected Results:</u> Continue providing a global forum for Member States, industry, universities etc. to collaborate on the development of relevant security standards. <u>ITU Activities:</u> ITU-T Study Group 17 activities
c. Ensure special emphasis for protection and empowerment of children online. In this regard, governments and other stakeholders should work together to help all enjoy the benefits of ICTs in a safe and secure environment.	2016-2019	ITU Strategic Goal 3 (Target 3.1) ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives: (ARB2, EUR4) <u>GCA</u> 4.Capacity Building 5.International Cooperation <u>Resolutions</u> PP Res. 130, 174, 179 (Rev. Busan, 2014) WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)	4.1, 4.5, 16.2	Expected Results: Providing an international partnership framework for increasing awareness on the risks of the children online and promoting global collaboration for their mitigation. ITU Activities: ITU activities under Child Online Protection initiative

			1	
d. Strengthen support for the establishment		ITU Strategic Goal 3 (Target 3.1)	1.4, 7.1,	Expected Results:
of national Computer Incident Response Teams (CIRTs) including CIRTs responsible for government-to-government cooperation for incident management, where needed, and regional and international coordination among them, for	2016-2019	ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan) Regional Initiatives: (AFR3, ARB2, ASP5, CIS3, EUR4)	7.a, 7.b, 9.1, 9.c, 11.3, 11.b, 17.8	Facilitating, promoting and helping expand a global network of incident response teams and regional cybersecurity centres for the prevention, detection and recovery from cyber-incidents by Member States.
real-time handling and response of incidents, especially for national critical infrastructures, including information		ITU-T Objective 1		ITU Activities:
infrastructure, taking into account national legislations.		<u>GCA</u>		ITU-D activities under CIRT Programme
		2.Technical and Procedural Measures		Assisting Members States in the establishment
		3.Organizational		of Computer Incident Response Teams (CIRTS)
		Structures		Cooperation with relevant international
		4.Capacity Building		computer incident response associations such as FIRST, AP-CERT, Africa CERT, OIC CERT
		5.International Cooperation		ITU-T Study Group 17 activities
		<u>Resolutions</u>		
		PP Res. 130, 174 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
		WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

			1	-
e. Continue to promote the development of	2016 2010	ITU Strategic Goal 3 (Target 3.1)		Expected Results:
assessment frameworks to measure readiness of countries on various aspects of confidence and security in the use of ICTs.	2016-2019	ITU-D Objective 2/Output 2.2 (Buenos Aires Action Plan)	1.4, 7.1, 7.a, 7.b, 9.1, 9.c,	Development and regular update of the Global Cybersecurity Index (GCI) for measuring the cybersecurity national
		<u>GCA</u> 1. Legal Measures	11.3, 11.b, 17.8	commitment of Member States.
		2.Technical and Procedural Measures		ITU Activities:
		3. Organizational		ITU-D maintenance of the Global Cybersecurity
		Structures		Index (GCI) and country profiles for highlighting best national practices key aspects
		4. Capacity Building		of Cybersecurity.
		5. International Cooperation		
		Resolutions PP Res. 130, 174 (Rev. Busan, 2014)		
		WTDC Res. 45 (Rev. Dubai, 2014), 67, 69 (Rev. Buenos Aires, 2017)		
f. Promote research and cooperation	2016-2019	ITU Strategic Goal 3 (Target 3.1)	1.4,	Expected Results:
enabling effective use of data and software in particular electronic documents and transactions including electronic means of		Regional Initiatives (AFR3, ARB2, ASP5, CIS3, EUR4)	9.1, 9.c	Continue providing a global platform for Member States, industry, universities etc. to collaborate on the development of relevant
authentication and improve security methods.		ITU-T Objective 1		security standards.
		GCA		ITH Activities
		2.Technical and Procedural Measures		ITU Activities:
		5.International Cooperation		ITU-T Study Group 17 activities
		<u>Resolutions</u>		
		PP Res. 130, 174 (Rev. Busan, 2014)		
		WTSA Res. 50, 52 (Rev. Hammamet, 2016), 58 (Rev. Dubai 2012)		

Roadmap for WSIS Action Line C6: Enabling Environment

	WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
Gei	neva Plan of Action and	l Tunis Agend	la for the Informat	ion Society	
a.	Governments should foster a supportive, transparent, pro-	2018	Goals 1 & 4 ITU-D Objective 3	2.a: Increase investment, including through enhanced international	ITU organizes the annual Global Symposium for Regulators (GSR) and all the GSR materials and best practice guidelines are posted on the BDT website.
	competitive and predictable policy, legal and regulatory framework, which provides the appropriate incentives			cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and	ITU publishes the flagship Trends in Telecommunication Reform series and the new Global ICT Regulatory Outlook annual series pinpointing major challenges and discussing issues for ICT policy and regulation in the transforming digital economy.
	appropriate incentives to investment and community development in the Information Society	vestment and nunity lopment in the	livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries	Two new series of evidence-based studies and white papers were launched to address the trends and issues related to the new digital ecosystem and to Artificial Intelligence. One of the core focus areas is the work of policy makers and regulators to design and adopt flexible, forward-looking and light-handed regulatory frameworks for digital innovations getting off the ground.	
					The ICT Regulation Toolkit assists regulators in the design of effective and enabling regulatory frameworks by sharing information on key regulatory issues and best practices.
				ITU has launched and facilitated access to the ICT Regulatory Tracker, a tool to monitor and measure the changes taking place in the telecommunication/ ICT regulatory environment. It covers over 180 countries and showcases regulatory progress within the same country, across regions and worldwide.	
				ITU organizes annually several regional economic and financial fora as well as multiple thematic workshops, including for Africa, Latin America and the Caribbean, and Arab States.	
					ITU has been carrying out projects and policy support to foster universal and affordable access to the digital world by providing stakeholders with a platform to identify the

⁹ WSIS Outcomes for each Action Line will be listed in accordance with the Geneva Plan of Action and Tunis Agenda for the Information Society. These outcomes could be further sub-divided if justified and in accordance with the ITU mandate.

Page 31

¹⁰ A proposed time scale will be shown for each outcome, if possible and feasible, including intermediate stages, if justified. 11 Relevant ITU Strategic Goals and Resolutions should be linked with each outcome.

¹² In this column should be listed the results that are expected by ITU as the sole Facilitator / co-Facilitator (F), Partner (P), or Implementer (I).

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
				appropriate policy, regulatory, technical and commercial measures to achieve affordable access to international bandwidth, bringing together fiber-optic and satellite communication stakeholders, as well as policy makers and regulators.
				ITU is undertaking several activities within its mobile roaming imitative Let's roam the world. The main objective of this initiative is to support Members in the definition and adaptation of best practices and guidelines for all stakeholders around the world on international mobile roaming. A new ITU intersectoral web portal on IMR resources has been developed to bring together all ITU IMR resources and activities, as well as activities and initiatives by regulatory associations, regional and international organizations and other stakeholders.
				ITU-D Study Groups provide an opportunity for all Member States and Sector Members to share experiences, present ideas, exchange views, and achieve consensus on appropriate strategies to address ICT priorities. ITU-D Study Groups develop reports, guidelines, and recommendations based on input received from the membership.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
 b. We ask the Secretary General of the United Nations to set up a working group on Internet governance, in an open and inclusive process that ensures a mechanism for the full and active participation of governments, the private sector and civil society from both developed countries, involving relevant intergovernmental and international organizations and forums, to investigate and make proposals for action, as appropriate, on the governance of Internet by 2005. The group should, inter alia: i. develop a working definition of Internet governance; ii. identify the public policy issues that are relevant to Internet governance; 	2018	Goal 4 C09 Res 1305 ITU-D Objective 3	17.16: Enhance the global partnership for sustainable development, complemented by multi- stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	 Activities related to Item b. have been undertaken since 2003. However, some elements mentioned in Item b., specifically items ii and iii, are considered an ongoing activity, due to the dynamic nature of the Internet. It is recommended therefore, to periodically assess the outcomes of the Working Group on Internet Governance (WGIG), to ensure that public policy issues on Internet governance that are currently raised are properly addressed. During the ITU Council Session 2009, Resolution 1305 identified a set of issues that should be discussed and addressed by ITU. It is also recommended to build capacity in ITU Member States, on the current arrangements on Internet governance in order to have a better understanding of the technical and policy requirements the Membership may have. Results of activities in this area include: Extended international cooperation among all Member States and with relevant regional organizations for building capacity on issues pertaining to Internet governance. Increased awareness and capacity of relevant stakeholders (policy-makers, regulators, etc.) with regards to Internet governance issues. Assistance extended to Member States to ensure that they can participate in and contribute to regional and global discussions on topics related to Internet governance, and hold national discussions with the relevant stakeholders on these topics. Extended ways in which developing Member States can better engage in the discussions (organization of training, events, dynamic coalitions, the establishment of regional/sub-regional forums, etc.) Increased capacity in Member States through the development of guidelines, resources and material. Increased involvement by Member States in issues related to Internet through facilitating their participation in regional and global events.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
 iii. develop a common understanding of the respective roles and responsibilities of governments, existing intergovernmenta I and international organizations and other forums as well as the private sector and civil society from both developing and developed countries; 				
iv. [Prepare a report on the results of this activity to be presented for consideration and appropriate action for the second phase of WSIS in Tunis in 2005.]				

WSIS Outcomes (WSIS AL C6)	s ⁹ Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
 c. Governments are invited to: i. facilitate the establishmer national and regional Interes; ii. manage or supervise, as appropriate, respective country code Level Domai name (ccTLD) iii. promote awareness o Internet. 	nt of ernet s their e Top- n));	Goals 1 & 4 ITU-D Objective 3	9.c: Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	 Results of activities in this area include: A more effective use of Internet through: (1) the deployment of facilities such as Internet Exchange Points (IXPs) to make better use of the infrastructures at the regional level, (2) building capacity on ccTLDs and their effective use with the Member States. Increased capacity in Member States through the development of guidelines, resources and material to facilitate the establishment and running of national and regional Internet Exchange Points. Increased capacity in Member States through direct assistance, capacity building activities for managing ccTLDs and other internet resources so that each country can take the necessary decisions regarding their ccTLD. Improved exchange of technical information between Member States and relevant organizations on issues related to ccTLDs and other internet resources through the provision of tools and guidelines for training policymakers, regulators and other stakeholders on the benefits of socio-economic development that the Internet, related applications and services can bring to a country. This includes awareness of the related cybersecurity threats.
d. In cooperation w the relevant stakeholders, pro regional root serv and the use of internationalized domain names in order to overcom barriers to access	omote vers ne	Goals 1 & 4 PP Res 102, 133, C09 Res 1305 ITU-D Objective 3	9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	 Results of activities in this area include: Assistance to Member States in elaborating strategies for the establishment of regional root servers, and International Domain Names (IDNs), especially in relation to the effective use of ccTLDs and regional generic Top Level Domain name (gTLDs). Improved exchange of technical information between Member States and relevant organizations on issues related to internationalized domain names.

	WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
e.	Governments should continue to update their domestic consumer protection laws to respond to the new requirements of the Information Society.	2018	018 Goal 4 ITU-D Objective 3 ITU-D Objective 4	 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all 16.b: Promote and enforce 	In the framework of GSR, tools are created for effective regulation and assistance provided to members to update their domestic consumer protection laws to respond to the new requirements of the Information Society. The GSR Best Practice Guidelines 2014 focused on consumer protection in a digital world. BDT have produced a number of studies and publications, such as on the application of economic modeling, mobile termination rates, competition and price regulation. BDT also developed guidelines, resources and material to increase awareness of the threats to ICT stakeholders and
				non-discriminatory laws and policies for sustainable development	increase understanding of the possible roles of the different stakeholder groups in protecting consumers.
f.	Promote effective participation by developing countries and countries with economies in transition in international ICT forums and create opportunities for exchange of experience.	2018	Goal 4 ITU-D Objective 1 ITU-D Objective 3 ITU-D Objective 4	17.16: Enhance the global partnership for sustainable development, complemented by multi- stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	 ITU organizes the annual GSR and all the various GSR materials and best practice guidelines are posted on the BDT website. ITU aims at improving the exchange of information between Member States and all relevant organizations through the organization of events, workshops, establishment of online forums, etc. ITU-D Study Groups provide an opportunity for all Member States and Sector Members (to share experiences, present ideas, exchange views, and achieve consensus on appropriate strategies to address ICT priorities. ITU-D Study Groups develop reports, guidelines, and recommendations based on input received from the membership.
g.	Governments need to formulate national strategies, which include e-government strategies, to make public administration more transparent, efficient and democratic.	2018	Goal 4 ITU-D Objective 1 ITU-D Objective 3 ITU-D Objective 4	 16.6: Develop effective, accountable and transparent institutions at all levels 16.7: Ensure responsive, inclusive, participatory and representative decisionmaking at all levels 	 Results of activities in this area include: Assistance to Member States in building capacity for the establishment of national ICT strategies, including e-government strategies through the provision of relevant guidelines, toolkits, and training programmes. Assistance to Member States in formulating and implementing national ICT strategies and sectoral e-strategies and master plans.

	WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
h. i.	Develop a framework for the secure storage and archival of documents and other electronic records of information. Governments and stakeholders should actively promote user education and awareness about online privacy and the means of protecting privacy.	2018	Goal 1 & 4 ITU-D Objective 3 ITU-D Objective 4	 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements 16.b: Promote and enforce non-discriminatory laws and policies for sustainable development 	An ITU report has been prepared on the usage of mobile phones for commerce in developing countries in collaboration with the International Trade Center (ITC). A 2016 GSR discussion paper was prepared on maintaining trust in a digital connected society focusing on privacy and data protection rules. The paper discusses the legal frameworks and regulations that apply to the processing of the personal data which lies at the core of the digital connected society.
	j. Invite stakeholders to ensure that practices designed to facilitate electronic commerce also permit consumers to have a choice as to whether or not to use electronic communication.	2018	Goal 1 & 4 ITU-D Objective 3 ITU-D Objective 4	16.b: Promote and enforce non-discriminatory laws and policies for sustainable development	ITU is working with ARCTEL, a regional regulatory association on a multi-phase project to develop the legal and policy framework for e-commerce in developing countries.
k.	Encourage the ongoing work in the area of effective dispute settlement systems, notably alternative dispute resolution (ADR), which can promote settlement of disputes.	2018	Goal 4 ITU-D Objective 3	16.3: Promote the rule of law at the national and international levels and ensure equal access to justice for all	 ITU organizes the annual GSR and all the various GSR materials and best practice guidelines are posted on the BDT website. ITU organizes annually several regional economic and financial fora as well as multiple thematic workshops, including for Africa, Latin America and the Caribbean, and the Arab States. The ICT Regulation Toolkit assists regulators in the design of effective and enabling regulatory frameworks by sharing information on key regulatory issues and best practices.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
I. Governments, in collaboration with stakeholders, are encouraged to formulate conducive ICT policies that foste entrepreneurship, innovation and investment, and with particular reference to the promotion of participation by women.	2018	Goals 1 & 2 ITU-D Objective 3 ITU-D Objective 4	 4.4: By 2030, increase by [x] per cent the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship 5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to 	 Results of activities in this area include: Improved exchange of information between Member States and relevant organizations on best practices for sustainable and forward-looking national ICT strategies fostering entrepreneurship and innovation. ITU is developing a toolkit for ICT innovation policy/governance and ICT innovation ecosystem. The toolkit will contain guidelines and best practices for the ICT Innovation policy and governance, and guidelines on developing a vibrant ICT ecosystem.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
 m. Recognizing the economic potential of ICTs for Small and Medium-Sized Enterprises (SMEs), they should be assisted in increasing their competitiveness by streamlining administrative procedures, facilitating their access to capital and enhancing their capacity to participate in ICT-related projects. 	2018	Goals 1 & 3 ITU-D Objective 4	8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	 Results of activities in this area include: Increased awareness of the relevant ICT related issues amongst SMEs through the development of relevant tools and guidelines. BDT have produced a number of studies and publications, such as on the application of economic modeling, mobile termination rates, and competition and price regulation.
 n. Governments should act as model users and early adopters of e-commerce in accordance with their level of socio- economic development. 	2018	Goals 1 & 2 ITU-D Objective 4	16.6: Develop effective, accountable and transparent institutions at all levels	Results of activities in this area include raised awareness on the potential of e-commerce and provided governments with the necessary tools to promote and further develop e- commerce, in collaboration with relevant stakeholders.
 Governments, in cooperation with other stakeholders, should raise awareness of the importance of international interoperability standards for global e-commerce. 	2018	Goals 1 & 3 ITU-D Objective 4 ITU-T objectives	10.3: Ensure equal opportunity and reduce inequalities of outcome [within and among countries], including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	 Results of activities in this area include: Raised awareness on the importance of standards through the provision of appropriate tools and guidelines. The former Focus Group on Digital Financial Services addresses a series of critical issues currently preventing digital financial services from reaching unbanked or under-banked populations. The Focus Group is developing a standardization roadmap for interoperable mobile money services and best practices to support national policy-makers and regulatory authorities in their efforts to encourage the adoption and use of these services.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
p. Governments, in cooperation with other stakeholders, should promote the development and use of open, interoperable, non- discriminatory and demand-driven standards.	2018	Goal 4 ITU-D Objective 4 ITU-T objectives	11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	 Results of activities in this area include: Assistance to developing countries in undertaking activities to ensure that international standards are followed. Provision of tools and guidelines to countries, and awareness raising on the need to incorporate and ensure that existing standards are adhered to when developing national e-strategies and applications. ITU also provides support, assistance and training to developing countries in bridging the standardization gap on ICT technologies. ITU-T has 13 Regional Groups to stimulate effective participation in ITU-T Study Groups and increase the number of quality Contributions from the various regions. ITU organizes annual Regional ICT Standardization Forums as part of activities under WTSA Resolution 44 on bridging the standardization topical issues in ITU-T study groups and focus groups to engage more developing countries in the standardization work and could also feature capacity building on ITU-T Recommendations.
q. ITU, pursuant to its treaty capacity, coordinates and allocates frequencies with the goal of facilitating ubiquitous and affordable access.	2018	Goal 4 ITU-D Objective 2 ITU-D Objective 3 ITU-R objectives	17.16: Enhance the global partnership for sustainable development, complemented by multi- stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	 Results of activities in this area include: Assistance to developing countries in undertaking activities to ensure rational, efficient and economical use of frequency bands. Provision of tools and guidelines to countries, and awareness to efficiently and effectively manage the radio spectrum and therefore to accelerate the development of wireless technology in these countries.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
r. Additional steps should be taken in ITU and other regional organisations to ensure rational, efficient and economical use of, and equitable access to, the radio- frequency spectrum by all countries, based on relevant international agreements.	2018	Goal 4 ITU-D Objective 3 ITU-R objectives	17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism when agreed upon	 Results of activities in this area include: Assistance to developing countries in undertaking the necessary activities to ensure rational, efficient and economical use of frequency bands. Provision of tools and guidelines to countries, and awareness to efficiently and effectively manage the radio spectrum and therefore to accelerate the development of wireless technology in these countries.
WSIS+10 Outcome Docum 2015	nents (WSIS	+10 Statement on	the Implementation of WS	IS Outcomes and WSIS +10 Vision for WSIS Beyond
a. promote digital inclusion and social and economic empowerment, in particular for youth, women, persons with disabilities and indigenous peoples;	2018	Goals 1 & 2 ITU-D Objective 4	5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women	A series of reports to support decision makers on how to ensure accessible ICT devices and services are widely available in their countries. These publications, available in all 6 official ITU languages and accessible e-book versions, include the Model ICT Accessibility Policy Report and the joint G3ict-ITU reports on Making Mobile Phones and Services accessible for Persons with Disabilities, and Making Television Accessible Report. ITU also implemented a series of Regional Initiatives on ICT accessibility through the ITU regional offices for the Arab states, CIS countries and Europe.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
b. foster broadband development and deployment;	2018	Goals 1 & 4 ITU-D Objective 2 ITU-D Objective 3	 2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all 	 ITU organizes the annual Global Symposium for Regulators (GSR) and all the GSR discussions papers and best practice guidelines are posted on the BDT website. ITU publishes the flagship Trends in Telecommunication Reform series and the new Global ICT Regulatory Outlook series pinpointing major challenges and issues for ICT policy and regulation in the transforming digital economy. Two new series of evidence-based studies and white papers were launched to address the trends and issues related to the new digital ecosystem and to Artificial Intelligence. One of the core focus areas is the work of policy makers and regulators to design and adopt flexible, forward-looking and light-handed regulatory frameworks for digital innovations getting off the ground. The ICT Regulation Toolkit assists regulators in the design of effective and enabling regulatory frameworks by sharing information on key regulatory issues and best practices. ITU has launched and facilitated access to the ICT Regulatory Tracker, a tool to monitor and measure the changes taking place in the telecommunication/ ICT regulatory environment. It covers over 180 countries and showcases regulatory progress within the same country, amongst regions and worldwide. ITU organizes annually several regional economic and financial fora and multiple thematic workshops, including for Africa, Latin America and the Caribbean, and the Arab States. ITU is carrying out projects and policy support to foster universal and affordable access to the digital world by providing stakeholders with a platform to identify the appropriate policy, regulatory, technical and commercial measures to achieve affordable access to international bandwidth, bringing together fiber-optic and satellite communication stakeholders, as well as policy makers and regulators.
c. nurture innovation and entrepreneurship by stimulating investment by ensuring effective and fair	2018	Goal 4 ITU-D Objective 3	8.2: Achieve higher levels of economic productivity through diversification,	ITU is developing a toolkit for ICT innovation policy/governance and ICT innovation ecosystem. The toolkit will contain guidelines and best practices for the ICT

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
competition;			technological upgrading and innovation, including through a focus on high- value-added and labour- intensive sectors	Innovation policy and governance, and guidelines on developing a vibrant ICT ecosystem.

WSIS Outcomes ⁹ (WSIS AL C6)	Proposed ¹⁰ Timing	ITU Strategic Goals and Relevant Resolutions ¹¹	Linkages with the SDGs	Expected Results of ITU Activities ¹²
d. recognize the economic potential of ICTs for Small and Medium- Sized Enterprises (SMEs), contribute to increasing their competitiveness by streamlining administrative procedures, facilitating their access to capital, reducing the cost of doing business and enhancing their capacity to participate in ICT-related projects;	2018	Goals 3 & 4 ITU-D Objective 4	 4.4: By 2030, increase by [x] per cent the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to 	 ITU organizes the annual GSR and all the GSR discussions papers and best practice guidelines are posted on the BDT website. ITU publishes the flagship Trends in Telecommunication Reform series and the new Global ICT Regulatory Outlook series pinpointing major challenges and issues for ICT policy and regulation in the transforming digital economy. The ICT Regulation Toolkit assists regulators in the design of effective and enabling regulatory frameworks by sharing information on key regulatory issues and best practices. ITU also provides support, assistance and training in this area to developing countries.
e. ensure confidence and security in the development and the use of ICTs;	2018	Goal 4 ITU-D Objective 4	9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.	The ICT Regulation Toolkit assists regulators in the design of effective and enabling regulatory frameworks by sharing information on key regulatory issues and best practices. ITU also provides support, assistance and training in this area to developing countries.
f. foster an intellectual property rights framework that balances the interests of creators, implementers and users.	2018	Goal 4 ITU-D Objective 2	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high- value-added and labour- intensive sectors	The ICT Regulation Toolkit assists regulators in the design of effective and enabling regulatory frameworks by sharing information on key regulatory issues and best practices. ITU also provides support, assistance and training in this area to developing countries.

Page 45