









WSIS Action Line Roadmaps



C2

Information and communication infrastructure

C5

Building confidence and security in the use of ICTs **C6**

Enabling environment





WSIS Action Line Roadmaps

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. Roadmaps are detailed plans to guide progress towards achieving the WSIS 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. The roadmaps include timeframes, expected results, impact on ITU's human and financial resources as well as list relevant partners. The roadmaps are living documents that will be updated regularly in an ongoing process, based on clear objectives and measurable targets.

Elaborated framework may serve as a template for the other WSIS Action Line moderators/facilitators to strengthen the implementation mechanism of the WSIS process. It has been widely disseminated amongst the members of the United Nations Group on the Information Society (UNGIS) as well as WSIS stakeholders.

The Roadmaps can be accessed at www.itu.int/itu-wsis

WSIS Action Line C2: Information and Communication Infrastructure

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions ³	Expected Results of ITU Activities ⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
A: Development of national ICT policies.	2010 - 2011	Goal 1 Goal 3 Goal 6 Goal 7	National ICT policies are developed A1*: Direct assistance through programmes (I) A2*: Implementation of relevant projects (Rls /others) (I) Selected examples: 7GL008061 Support for the establishment of harmonized policies for the ICT market in the African, Caribbean and Pacific Group of States 9RAS08026 Policy and Regulatory Assistance in Asia and the Pacific 7RAF08070 Support for the Harmonization of the ICT Policies in Sub-Saharan Africa 7RLA08006 Enhancing Competitiveness in the Caribbean through the Harmonization of ICT Policies 7RAS08025 Capacity Building and ICT Policy	Additional staff is required, including staff skilled and experienced in project implementation, and administrative staff for recruitment of project personnel, procurement of equipment and financial and budgetary control.	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.

^{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. 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/ITU-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.

^{5.} It is intended that this column serves to provide a general indication of planned ITU expenditures for WSIS implementation, which could be of assistance in the formulation of the draft Financial Plan to be approved by PP-10. This could also assist in determining the estimated financial resources required for the next plenipotentiary period to be expended from the regular budget. Variances in estimated amounts would then need to be provided through extra-budgetary sources, such as voluntary contributions.

^{6.} Interested partners should be listed with reference to each outcome.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities ⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
			Regional Initiatives led by ITU have designated "Harmo- nizing and strengthening of ICT policy and regulatory framework" as one of the 5 specific ICT priority areas in at least 2 regions (Africa & Asia-Pacific)		
			A3: Provision of tools and guidelines on policy development		
			Selected examples:		
			-"Connect a School, Connect a Community" toolkit of Best Practices and Policy Advice (www.connectaschool.org)		
			- 7GL007060 Online Toolkit on e-Accessibility for Policy-makers		
			- Relevant to Output 11 – Statistics and information on telecommunication / ICT		
			A4*: Enhancement of the human resource through provision of training		
			Example:		
			- ITU-IDA Executive Training Program on Enabling Frameworks for ICT Development		
			A5: Survey on the availability of national ICT policies in the Member States		
			- Research on this area has been undertaken to enable an upcoming report in 2010		

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities ⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
B: Development and implementation of universal access policies and strategies as well as the ICT connectivity indicators	2010-2011	Goal 2	National universal access policies and strategies are developed A1*: Direct assistance through programs A2*: Implementation of relevant projects (RIs /others) Selected examples: -South Africa: Rural Telecoms, ICT Services and Entrepreneurship Development (RSA-ITU-UPU) - ICT Applications and Satellite Diversity (Pacific Island States, ITU) - Feasibility study on Digital Broadcasting Roadmap in Africa (ITU - Republic of Korea) - Universal service obligation in Thailand (ITU-NTC, Thailand) A3: Provision of tools, guidelines and best practice examples on universal service funds and disbursement of the fund A4*: Enhancement of the human resource through provision of training A5: Collecting the best practices from Member States management of universal access funds	Additional skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
C: ICT connectivity for all public service providers such as universities, schools health institutions, libraries, post offices, community centres, museums and others	2015	Goal 2	80% of institutions providing public services are connected A1: ITU Connecting Villages Initiative A2: ITU Wireless Broadband Partnership A3: Connect a School, Connect a Community A4: Implementation of relevant projects (RIs /others) Selected example: 9RAF08077 Internet for schools in Tanzania	In addition the existing ITU staff a special team of experts is required to deal with these activities Additional funds and human resources needed	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.
D: development and extension of broadband network infrastructure D1: broad access to orbital resources, fre- quency harmonization and global systems standardization D2: encourage public- private partnership	2012	Goal 1 Goal 2 Goal 4 Goal 6	All capitals and major cities are interconnected A1*: Direct assistance on the creation of enabling environment A2: Identification of the broadband infrastructure gaps by every means and tools available to ITU A3: 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) A4*: Direct assistance for the establishment of national internet exchange points A5*: Direct assistance on the utilization of spectrum and orbital resources (joint activity of BDT and BR)	In addition the existing ITU staff a special team of experts is required to deal with these activi- ties	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ^e
D3: promote the provision of global			A6: Bridging the standardization gap (Joint activity of BDT and TSB) through projects, seminars and forums		
high-speed satellite services for unders- erved areas such as	erved areas such as remote and sparsely		A7: Provision of connectivity in remote, underserved and sparsely populated areas through suitable technologies		
remote and sparsely populated areas			Selected examples:		
D4: explore other systems that can			- Broadband wireless network (Initial partnership between ITU and McCAW Foundation, open to other partners)		
provide high-speed connectivity			- Feasibility Study for the Implementation of Broadband Infrastructures in Africa (ITU and Partners)		
			- Regional Initiatives led by ITU have designated "broad- band connectivity" as one of the 5 specific ICT priority areas in at least 4 regions (Africa, Americas, Arab & Asia-Pacific)		
			A8*: Direct assistance on the planning and utilization of mobile wireless broadband including HSPA, LTE, EPC, WiFi, Wimax, etc. by making use of appropriate planning tools		
			A9: Conducting feasibility study on Low-Cost Wireless Broadband Infrastructure		

WSIS Outcomes¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
			Selected examples:		
			Feasability study on low-cost wireless broadband infra- structure (ITU-MIC, Japan)		
			A10: Provision of tools and guidelines on the implementation of Broadband and NGN		
			A11: Provision of tools and guidelines for implementation of advanced spectrum management		
			A12 *: Direct assistance on the implementation of advanced spectrum management procedures, tools and equipments for benefiting from the advantages of the harmonized spectrum use		
			TSB activities: Develop relevant ITU-T 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 Resolutions³	Expected Results of ITU Activities ⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
E: Inclusion of older people, persons with disabilities, children, especially marginalized children and other disadvantaged and vulnerable groups by addressing their special requirements	2010-2011	Goal 4	ICT connectivity for persons with disabilities, women and girls, youth and children and indigenous people A1: 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 http://www.e-accessibilitytoolkit.org/ A2: Implementation of projects for indigenous and marginalized people A3: Creation of ICT portal for indigenous people A4: Implementation of Youth Education Scheme and Youth Incentive Scheme programs in collaboration with sponsors A5: Connect a School, Connect a Community Toolkit of Best Practices and Policy Advice, Repository of Training Materials, and related projects	Additional funds and human resources needed for related activities and projects.	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.
F: Encourage the design and production of affordable ICT equipment and services with technologies that will allow use of assistive technologies to suit to the needs		Goal 1 Goal 4	A1: The joint ITU-G3ICT e-Accessibility Policy Toolkit for Persons with Disabilities http://www.e-accessibilitytoolkit.org/ A2: ITU-T Telecommunications Accessibility Checklist A3: Joint Coordination Activity on Accessibility and Human Factors (JCA-AHF) A4: Facilitation efforts when possible		Private sector, software and hardware developers are expected to contribute to this output.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
G: Develop affordable technologies and nontext based computer interfaces to facilitate people's access to ICT		Goal 1 Goal 4	A1: Facilitation efforts when possible		Private sector, software and hardware developers are expected to contribute to this output.
H: Undertake inter- national research and development efforts aimed at making available adequate and affordable ICT equipment for end users	2015	Goal 1 Goal 4	A1: Provision of used ICT equipment to the countries in need A2: Provision of low-cost end user device to schools, communities, MCT centers A3: Connect a School, Connect a Community Toolkit module on low cost computing devices for schools.	Additional funds and human resources needed	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful
					delivery.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities ⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
I: Encourage the use of unused wireless capacity, in developed and developing countries, to provide access in remote areas and to improve low-cost connectivity in developing countries with special concern be given to the Least Developed Countries in establishing telecommunication infrastructure	2015	Goal 1 Goal 2 Goal 4	Activities indicated for outputs A, B, C and D serve for the purposes of this output	In addition the existing ITU staff a special team of experts is required to deal with these activities Additional funds and human resources needed	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.
J: Optimize con- nectivity among major information networks by encouraging the creation and develop- ment of regional ICT backbones and Internet exchange points	2015	Goal 1 Goal 2 Goal 4	Activities indicated for output D serve for the purposes of this output	In addition the existing ITU staff a special team of experts is required to deal with these activities Additional funds and human resources needed	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/ or participation are expected for the successful delivery.

WSIS Outcomes ¹ (WSIS AL C2)	Proposed ² Timing	ITU Strategic Goals and Relevant Resolutions³	Expected Results of ITU Activities ⁴	Impact on ITU Human and Financial Resources ⁵	Other Partners ⁶
K: Develop strate- gies for increasing affordable global connectivity facilitating improved access and cost oriented Internet transit and intercon- nection tariffs based on objective, transparent and non-discriminatory parameters	2012	Goal 1 Goal 2 Goal 4 Goal 6 Goal 7	Affordable global connectivity A1: Implementing relevant activities under BDT program 1 (i.e. GSR) A2: Implementing relevant activities under the BDT program 4 Regional Initiatives led by ITU have designated "reduction of internet access costs" as one of the 5 specific ICT priority areas in at least 1 region (Americas)	Additional funds and human resources needed	
L: Encourage and promote joint use of traditional media and new technologies	2015	Goal 1 Goal 7	Convergence of telecommunications, broadcasting and information technologies and introduction of new media are promoted A1: Development of guidelines on digital broadcasting transition A2: Development of guidelines on Conversion of analog audio and video archives to digital A3*: Direct assistance on transition from analog to digital broadcasting including customization of roadmap, deployment of pilot systems and network planning A4*: Direct assistance on conversion of analog audio and video archives to digital Selected examples: Regional Initiatives led by ITU in all regions have designated "digital broadcasting" as one of the 5 specific ICT priority areas.	Additional funds and human resources needed	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output. ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery.

Roadmap for WSIS Action Line C5: Building Confidence and Security in Use of ICTs

Note: GCA - Global Cybersecurity Agenda

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
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	Dec. 2012	Goal 1 Goal 2 Goal 3 Goal 6 Goal 7 GCA 1. Legal Measures 2. Technical and Procedural Measures 3. Organizational Structures 5. International Cooperation	Expected Results: Establishment of a global framework for close cooperation amongst Member States on combating cybercrime ITU Activities: ITU activities under the IMPACT initiative ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind in-cash and administrative support from the administrations are the key components for the successful delivery of the output ITU can only be involved at the request of the administrations. Private sector and Donot Community: Financial support and/or participation are expected for the successful delivery

^{7.} 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 ITII manufate

^{8.} A proposed time scale will be shown for each outcome, if possible and feasible, including intermediate stages, if justified.

^{9.} Relevant ITU Strategic Goals and Resolutions should be linked with each outcome.

^{10.} 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).

^{11.} It is intended that this column serves to provide a general indication of planned ITU expenditures for WSIS implementation, which could be of assistance in the formulation of the draft Financial Plan to be approved by PP-10.

This could also assist in determining the estimated financial resources required for the next plenipotentiary period to be expended from the regular budget. Variances in estimated amounts would then need to be provided through extra-budgetary sources, such as voluntary contributions.

^{12.} Interested partners should be listed with reference to each outcome.

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed [®] Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
A2: Address other information security and network security issues	Dec. 2012	Goal 4 Goal 6 GCA 1. Legal Measures 3. Organizational Structures 5.International Cooperation	Expected Results: Establishment of an institutional framework for close global cooperation among Member States. This includes setting up of global incidence warning and response systems, protocols and procedures. Provide a framework for defining security protocols and standards for software and hardware. ITU Activities: ITU activities under the IMPACT initiative ITU-T Study Group 17 activities	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
B1: Governments, in cooperation with the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by: Developing guidelines that take into account ongoing efforts in these areas	May 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA: 5.International Cooperation	Expected Results: Member States have access to specified guidelines for technical response to cyber-crime incidents. ITU Activities: ITU activities under the IMPACT initiative ITU-T Study Group 17 Activities ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

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B2: Governments, in cooperation with the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by: Considering legislation that allows for effective investigation and prosecution of misuse	Dec. 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA 1. Legal Measures 5.International Cooperation	Expected Results: Member States have access to specified guidelines and templates for reviewing/updating cybercrime legislation. ITU Activities BDT Activities such as the creation of Cybercrime Legislation resources ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery
B3: Governments, in cooperation with the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by: Promoting effective mutual assistance efforts	May 2012	Goal 1 Goal 2 Goal 4 Goal 6 Goal 7 GCA 1. Legal Measures 4. Capacity Building 5.International Cooperation	Expected Results: An institutional framework has been created for governments to cooperate with the private sector on cybercrime prevention, detection and response. ITU Activities: ITU activities under the IMPACT initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

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B4: Governments, in cooperation with the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by: Strengthening institutional support at the international level for preventing, detecting and recovering from such incidents	May 2012	Goal 1 Goal 2 Goal 4 Goal 6 Goal 7 GCA 3.Organizational Structures 4.Capacity Building 5.International Cooperation	Expected Results: Establishment of a global framework for close cooperation amongst Member States on combating cybercrime. Establishment of an international cybersecurity hotline; international focal point(s) that is accessible to all Member States. ITU Activities: ITU activities under the IMPACT initiative ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
B5: Governments, in cooperation with the private sector, should prevent, detect and respond to cyber-crime and misuse of ICTs by: Encouraging education and raising awareness	Dec. 2012	Goal 1 Goal 2 Goal 4 Goal 6 Goal 7 GCA 4.Capacity Building 5.International Cooperation	Expected Results: Member States have access to training programs on all aspects of cybersecurity. ITU Activities: ITU training activities under the IMPACT initiative. BDT Training programs ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
C: Governments, and other stakeholders, should actively promote user education and awareness about online privacy and the means of protecting privacy	Dec. 2012	Goal 1 Goal 2 Goal 6 Goal 7 GCA 4.Capacity Building 5.International Cooperation	Expected Results: Member States have access to training programs on all aspects of cybersecurity. ITU Activities: ITU training activities under the IMPACT initiative. BDT Training programs ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
D: Take appropriate action on spam at national and international levels	Dec. 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA 1. Legal Measures 5. International Cooperation	Expected Results: Member States have access to user training and awareness programs on best practices for spam prevention. Provide a global forum for Member States, industry, universities etc to come together to collaborate on Research and Development in designing better spam reduction technologies (spam filters, etc). ITU Activities: ITU-T Study Group 17 Activities	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
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	Dec. 2012	Goal 4 Goal 6 Goal 7 GCA 1. Legal Measures	Expected Results: Member States have access to specified guidelines and templates for reviewing/updating legislation with regards to acceptance of electronic documents and electronic authentication of transactions. ITU Activities: Activities such as the creation of Cybercrime Legislation resources (BDT).	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
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.	Dec. 2012	Goal 4 Goal 6 Goal 7 GCA 1. Legal Measures 2. Technical and Procedural Measures	Expected Results: Member States have access to guidelines on privacy, data and consumer protection. ITU Activities: ITU training activities under the IMPACT initiative. BDT Training programs ITU activities under Child Online Protection initiative	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ⁸ Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
G: Share good practices in the field of information security and network security and encourage their use by all parties concerned	Dec. 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA 2.Technical and Procedural Measures 5 International Cooperation	Expected Results: Member States have access to the guidelines in good practices in the field of information security and network security. ITU Activities: ITU-T Study Group 17 Activities BDT Training programs ITU training activities under the IMPACT initiative.	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

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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	May 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA 3. Organizational Structures 5.International Cooperation	Expected Results: Establishment of an institutional framework for close global cooperation amongst interested Member States. A global incidence warning and response systems has been established under an international framework. Establishment of an international cybersecurity hotline; international focal points that are accessible to all Member States ITU Activities: ITU-T Study Group 17 Activities ITU activities under the IMPACT initiative.	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

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I: Encourage further development of secure and reliable applications to facilitate online transactions	May 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA 2.Technical and Procedural Measures	Expected Results: Provide a global forum for Member States, industry, universities etc to come together to collaborate on Research and Development in designing better spam reduction technologies (spam filters, etc). ITU Activities: ITU-T Study Group 17 Activities	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

WSIS Outcomes ⁷ (WSIS AL C5)	Proposed ^a Timing	ITU Strategic Goals and Relevant Resolutions ⁹	Expected Results of ITU Activities ¹⁰	Impact on ITU Human and Financial Resources ¹¹	Other Partners ¹²
J: Encourage interested countries to contribute actively to the ongoing United Nations activities to build confidence and security in the use of ICTs	May 2012	Goal 1 Goal 4 Goal 6 Goal 7 GCA 5. International Cooperation	Expected Results: Establishment of institutional framework for close global cooperation amongst various Member States under existing and future United Nations activities. ITU Activities: ITU activities under the IMPACT initiative.	Additional funds as well as skilled and experienced staff is required	Administrations: In-kind, in-cash and administrative support from the administrations are the key components for the successful delivery of this output ITU can only be involved at the request of the administrations. Private sector and Donor Community: Financial support and/or participation are expected for the successful delivery

Roadmap for WSIS Action Line C6: Enabling Environment

WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
a. Governments should foster a supportive, transparent, pro-competitive and predictable policy, legal and regulatory framework, which provides the appropriate incentives to investment and community development in the Information Society	On going activities with yearly results	Goal 7 DAP Programme 1	all the GSR discussions papers and best practice guidelines are posted on the BDT website. (Some examples are listed above under Implementation Activities) BDT publishes the Trends in Telecommunication Reform series: (Some examples are listed above under Implementation Activities) The ICT Toolkit assists regulators in the design of effective and enabling regulatory frameworks; the Toolkit has been updated on a regular basis and some modules translated. Discussions are ongoing with infoDev and the World Bank to improve the toolkit and develop new materials. BDT organizes on an annual basis a series of regional regulatory meetings, workshops, training events and direct assistance activities, including the 2008 and 2009 Forum on Telecommunication/ICT Regulation and Partnership in Africa (FTRA), regional seminars on costs and tariffs and regional meeting of the ITU-T Study Group 3 regional group, and expert level training for national regulatory authorities and operators on cost modeling.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
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 developing and 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;	On-going activities with yearly results	Goal 7 C09 Res 1305 DAP Programme 3	 Activities related to Item b. have been undertaken during the period 2003-2005. 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 include: Extended international cooperation among all Member States and with relevant regional organizations for building capacity on issues pertaining to Internet governance. 	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
ii. identify the public policy issues that are relevant to Internet governance; iii. develop a common understanding of the respective roles and responsibilities of governments, existing intergovernmental 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.]	On-going activities with yearly results	Goal 7 C09 Res 1305 DAP Programme 3	 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, 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/subregional 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. (This includes the research and analysis of specific regional issues.) 	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
c. Governments are invited to: i. facilitate the establishment of national and regional Internet Exchange Centres; ii. manage or supervise, as appropriate, their respective country code Top-Level Domain name (ccTLD); iii. promote awareness of the Internet.	2015	Goal 1 Goal 7 DAP Programme 3	 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 events, direct assistance, etc. Increased capacity in Member States through the provision of tools and guidelines for training policy-makers, 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 threats (cybersecurity issues). 	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
d. In cooperation with the relevant stakeholders, promote regional root servers and the use of internationalized domain names in order to overcome barriers to access.	2015	Goal 1 Goal 7 PP Res 102, 133, C09 Res 1305 DAP Programme 3	Assistance to Member States, when necessary, 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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
e. Governments should continue to update their domestic consumer protection laws to respond to the new requirements of the Information Society.	On going activities with yearly results	going Goal 4 In the framework of GSR, tools are created for effective regulation and assistance provided to		Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

	Outcomes ¹³ SIS AL C6)	Proposed⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
ticipation countricularly with ecurion in inforums portunir	te effective par- ion by developing ies and countries conomies in transi- international ICT s and create op- ities for exchange erience.	On-going activities with yearly results	Goal 6 Goal 7 DAP Programme 1 DAP Programme 4 DAP Programme 3	Improved exchange of information between Member States and relevant organizations through the organization of events, workshops, establishment of online forums, etc.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
to form strateg e-gove to make tration	nments need nulate national gies, which include grimment strategies, te public adminis- more transparent, nt and democratic.	2015	Goal 6 DAP Programme 1 DAP Programme 3	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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

^{13.} 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.

^{14.} A proposed time scale will be shown for each outcome, if possible and feasible, including intermediate stages, if justified.

^{15.} Relevant ITU Strategic Goals and Resolutions should be linked with each outcome.

^{16.} 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).

^{17.} It is intended that this column serves to provide a general indication of planned ITU expenditures for WSIS implementation, which could be of assistance in the formulation of the draft Financial Plan to be approved by PP-10. This could also assist in determining the estimated financial resources required for the next plenipotentiary period to be expended from the regular budget. Variances in estimated amounts would then need to be provided through extra-budgetary sources, such as voluntary contributions.

^{18.} Interested partners should be listed with reference to each outcome.

	WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
h.	Develop a framework for the secure storage and archival of documents and other electronic records of information.	2015	DAP Programme 3	Preparation of a BDT report on the usage of mobile phones for commerce in developing countries in collaboration with the International Trade Center (ITC).	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector,
i.	Governments and stake- holders should actively promote user education and awareness about online privacy and the means of protecting privacy.					civil society and donors
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.					

	WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
k.	Encourage the ongoing work in the area of effective dispute settlement systems, notably alternative dispute resolution (ADR), which can promote settlement of disputes.	On-going activities with yearly results	Goal 6 Goal 7 DAP Programme 1	BDT organizes the annual meetings of GSR and all the GSR discussion papers and best practice guidelines are posted in the BDT website. BDT organizes on an annual basis a series of regional regulatory meetings, workshops, training events and direct assistance activities including the FTRA 2008 and 2009, regional seminars on costs and tariffs and regional meetings of the ITU-T SG3 regional group, and expert level training for national regulatory authorities and operators on cost modeling. The ICT Toolkit assists regulators in the design of effective and enabling regulatory frameworks; the Toolkit has been updated on a regular basis and some modules translated. Discussions are ongoing with infoDev and the World Bank to improve the toolkit and develop new materials.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
I.	Governments, in collaboration with stakeholders, are encouraged to formulate conducive ICT policies that foster entrepreneurship, innovation and investment, and with particular reference to the promotion of participation by women.	2015	DAP Programme 3	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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
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.	On-going activities with yearly results	Goal 6 DAP Programme 4	Increased awareness of the relevant ICT related issues amongst SMEs through the development of relevant tools and guidelines. BDT produced a number of studies and publications. For example in 2009, a guide on the application of economic modeling, a study mobile termination rates, and an update of the module on competition and price regulation in the ICT Regulation Toolkit were prepared.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
n. Governments should act as model users and early adopters of e-commerce in accordance with their level of socio-economic development.	2015	DAP Programme 3	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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
o. Governments, in cooperation with other stakeholders, should raise awareness of the importance of international interoperability standards for global ecommerce.	2015	DAP Programme 3 ITU-T objective	Raised awareness on the importance of standards through the provision of appropriate tools and guidelines.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

	WSIS Outcomes ¹³ (WSIS AL C6)	Proposed ¹⁴ Timing	ITU Strategic Goals and Relevant Resolutions ¹⁵	Expected Results of ITU Activities ¹⁶	Impact on ITU Human and Financial Resources ¹⁷	Other Partners ¹⁸
p.	Governments, in cooperation with other stakeholders, should promote the development and use of open, interoperable, non-discriminatory and demand-driven standards.	2015	DAP Programme 3 ITU-T objective	Assistance to developing countries in undertaking the necessary 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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
q.	ITU, pursuant to its treaty capacity, coor- dinates and allocates frequencies with the goal of facilitating ubiquitous and affordable access.	2015	DAP Programme 2 ITU-R objective	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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors
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.	2015	DAP Programme 2 ITU-R objectives	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.	Additional skilled and experienced staff is required	Administrations, regional and international organizations, private sector, civil society and donors

WSIS Action Line Roadmaps

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. Roadmaps are detailed plans to guide progress towards achieving the WSIS 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. The roadmaps include timeframes, expected results, impact on ITU's human and financial resources as well as list relevant partners. The roadmaps are living documents that will be updated regularly in an ongoing process, based on clear objectives and measurable targets.

Elaborated framework may serve as a template for the other WSIS Action Line moderators/ facilitators to strengthen the implementation mechanism of the WSIS process. It has been widely disseminated amongst the members of the United Nations Group on the Information Society (UNGIS) as well as WSIS stakeholders.

The Roadmaps can be accessed at

www.itu.int/itu-wsis



