

6 Telecommunication Development Sector (ITU-D)

6.1 Situational analysis

Telecommunications/information and communication technologies (ICTs) play an increasingly critical role in our economies and society. They have proven to be a powerful driver of innovation, growth and productivity globally. Broad access to telecommunications/ICTs provides significant opportunities for improving government public services, healthcare, education and the environment. Telecommunications/ICTs also open new channels for sharing of global knowledge resources and the free flow of ideas and opinions. However, to harness the potential of telecommunications/ICTs, governments and other stakeholders have to provide an enabling policy environment and supporting infrastructure that are robust and responsive to a shifting set of challenges and opportunities. Over the period of the next ITU-D strategic plan, these challenges and opportunities will include, *inter alia*:

6.1.1 The digital divide

Building the capacity of developing economies and societies to fully leverage the benefits of telecommunications/ICTs will remain high on the international policy agenda. Promoting an enabling environment, infrastructure build-out and deployment of public and commercial applications and services that promote economic growth and social well-being constitute both key challenges and opportunities. Building telecommunication/ICT literacy and specialized skills that enable people to take full advantage of the opportunities that telecommunications/ICTs offer also remains a priority.

Over the last five years, the level of access to telecommunications/ICTs has improved significantly across the world. Mobile cellular has proven to be the most rapidly adopted technology in history, and the total number of broadband subscriptions has grown more than threefold. Yet, there still remains a substantial broadband divide (see below), both within and among countries. Particular efforts will need to be made to support availability of infrastructure and services in underserved and rural areas, in particular in developing countries¹, as well as among people with special needs (marginal and vulnerable populations, including women, children, indigenous peoples, older persons and persons with disabilities).

In 2015, the United Nations General Assembly will assess the outcomes and implementation of both the Millennium Development Goals and the Tunis Agenda for the Information Society of the World Summit on the Information Society (WSIS).

6.1.2 Access to broadband

National broadband infrastructures are becoming the foundation of networked economies and information societies. Following the lead of some countries which have made it part of their universal service obligations, broadband access will be increasingly considered as a basic service that should be made universally available to all citizens. To support this, governments are

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

encouraged to promote both supply- and demand-side policies that create incentives for broadband backbone and access network deployment. Market structures that promote broadband and related services at competitive prices will need to be encouraged. Governments are also encouraged to promote demand-side policies that advance broadband connectivity of schools, libraries and other public institutions.

Promoting broadband access will need to take into consideration the particular starting conditions in developing countries, where fixed-line penetration has been historically low and mobile penetration high. There will be an ongoing need to provide assistance and share best practices on the deployment of appropriate infrastructure technologies (e.g. next-generation networks, whether wireline, wireless and/or mobile-based) and policies that promote investment in infrastructure and service-based competition.

The increasing socio-economic importance of broadband access will also present new regulatory challenges, such as ensuring universal access by balancing and rationalizing access and prices in profitable and non-profitable areas, implementing the broadband backbone infrastructure, defining management models for the broadband infrastructure with a view to avoiding duplication of efforts and investments, establishing new pricing models and methodologies, mitigating natural monopolies and fostering competition, and equalizing the dissemination and adoption of new technologies and services in developed and developing countries alike.

6.1.3 Convergence and the enabling environment

Changes brought about by the advent of high-speed telecommunication/ICT networks, convergence and global and instant access to knowledge are revolutionizing the 21st century. New applications and services are creating new consumer behaviour, business practices and expectations on the part of all stakeholders which, where appropriate, call for innovative and targeted regulation in a digital economy to foster growth at all levels. This technological progress and market transformation has placed an increasing strain on existing policy and regulatory regimes. With convergence, policy-makers and regulators will continue to juggle competing interests, ensure a level playing field, promote transparency and create a stable environment that nurtures the technological and service innovation which lies at the very heart of the telecommunication/ICT sector. Regulators are also facing the challenging task of ensuring affordable access to telecommunications/ICTs while at this same time creating and maintaining investment incentives for all market participants. Striking the right balance requires regulators to be kept informed of current costing issues, as well as financial mechanisms and economic modelling to be able to measure the impact and implications for the national competitive environment.

Meeting the challenges of the digital economy will require cross-sectoral approaches to telecommunication/ICT policy and regulation that go beyond today's sector-specific regulation. A broader approach will need to be taken, encompassing applications and services, electronic content and consumer rights and responsibilities. As these issues are cross-sectoral in nature, clearly defining the responsibility of relevant government agencies will be a critical success factor. A careful balance will be needed between a hands-on and hands-off approach to regulation based on assessment of the broader impact on the whole of the society.

6.1.4 Telecommunication/ICT indicators and the ICT development index

The collection, provision and dissemination of quality indicators and statistics that measure and provide comparative analysis of the use and adoption of telecommunications/ICTs will continue to be a key need to support developing economies. These indicators, as well as the ICT development index, provide governments, regulatory authorities and stakeholders with a mechanism to better understand key drivers of telecommunication/ICT adoption and assist in ongoing national policy formulation.

6.1.5 Transition to digital broadcasting and spectrum management

Countries will continue to implement the transition from analogue to digital broadcasting with different time-scales according to their national priorities as well as, where applicable, the deadlines set by the ITU Regional Radiocommunication Conference (RRC-06) and its Plan and Agreement. During the period of this strategic plan, there will be a continuing need, as a high priority, to assist administrators, regulators, broadcasters and other stakeholders in developing countries in researching and supporting the introduction of digital broadcasting. Continued assistance to developing countries on spectrum management will also be a necessity.

6.1.6 Telecommunication/ICT services and applications for economic and social development, poverty reduction and wealth creation

Telecommunications/ICTs have been widely recognized as a driver of economic and social development, poverty reduction and wealth creation. Telecommunications/ICTs provide an opportunity for developing countries to facilitate trade and economic development in general, as well as business development and job creation, especially for poor and marginalized populations, including women, indigenous peoples and persons with disabilities. ICT applications are also an important demand-side driver that can encourage the adoption of broadband services. A continuing challenge and opportunity is to provide assistance to developing countries in order to facilitate access to ICT-based government services, improved healthcare, access to quality education and environmental management (including the effects of climate change). Providing assistance for the deployment of specific ICT applications that help in integrating new technologies into the broader economy and society value chain will remain a key priority.

6.1.7 Mobile innovation

The coming years are expected to see more rapid advances in the use of mobile technologies as a platform for innovation and new services. These include mobile healthcare solutions (e.g. mobile ultrasound and remote diagnosis); mobile payments including normal banking transactions and payment of government social benefits and taxes; environmental and biomedical sensor technologies integrated into devices; mobile learning; augmented reality and advanced location based services; automatic interpretation; mobile social networking; and new interfaces.

6.1.8 Building confidence in the use of telecommunications/ICTs

With the increasing volume of e-commerce and online financial transactions, the availability of government services, the popularity of collaborative and social networks and the emergence of the "Internet of things", building confidence and maintaining trust in the use of telecommunications/ICTs will continue to be a major policy concern of governments and other stakeholders. As telecommunications/ICTs continue to be further integrated into the economy and our societies, their continuous availability, reliability and security will be increasingly vital to

governments, businesses and individuals. Promoting cybersecurity and international cooperation and coordination in this domain remains a key priority in the coming period.

6.1.9 Capacity building

Policy-makers need to make sure that the digital divide, which remains a key concern for developing countries, does not also become a knowledge divide between those who have access to the information and learning tools of the 21st century and those who do not. Building broad telecommunication/ICT literacy enables citizens to access and contribute information, ideas and knowledge in order to create an inclusive information society. Providing assistance in human and institutional capacity building that improves telecommunication/ICT skills to support the development and use of telecommunication/ICT networks and applications will continue to be a priority.

6.1.10 Emergency telecommunications

Emergency telecommunications play a critical role in both warning of disasters and their immediate aftermath, by ensuring timely flow of information needed by government agencies, humanitarian-oriented organizations and industry involved in rescue and recovery operations and providing medical assistance to the injured. There will be continuing need to support developing countries with early-warning systems, emergency communications and assistance in reconstructing infrastructure destroyed by disasters.

6.1.11 The global financial crisis

While there are indications that economic conditions will improve by the commencement of this strategic plan, the international sponsors and institutions concerned are united in their agreement that the recovery may be weak, slow and/or uneven. Aftershocks witnessed in the telecommunication/ICT sector in developing countries include impacts on capital markets and capital expenditures, consumer lack of buying power, lack of liquidity in the banking sector and a drop in donor funding. As a result, there will need to be flexible and innovative ways of financing development projects, including public-private partnerships and enhanced mobilization of extrabudgetary resources.

6.1.12 Climate change

Climate change challenges our ability to achieve economic and social objectives to support sustainable development. The adverse effects of climate change are likely to fall disproportionately on developing countries given their limited resources.

Telecommunications/ICTs make a valuable contribution to monitoring, mitigating and adapting to climate change. There will continue to be a need to help countries, in particular developing ones, respond to climate change.

6.2 Vision

To be the leading organization for promoting the availability and application of telecommunications/information and communication technologies (ICTs) for socio-economic development.

6.3 Mission

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

6.4 Strategic goal

The strategic goal of ITU-D is threefold, and includes:

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

6.5 Objectives

The objectives of ITU-D are:

6.5.1 Objective 1

To foster international cooperation, among ITU-D members and other stakeholders, on telecommunication/ICT development issues, by providing the pre-eminent forum for discussion, information-sharing and consensus-building on telecommunication/ICT technical and policy issues.

6.5.2 Objective 2

To assist the membership in maximizing the utilization of appropriate new technologies, including broadband, to develop their telecommunication/ICT infrastructures and services, and to design and deploy resilient telecommunication/ICT network infrastructures.

6.5.3 Objective 3

To foster the development of strategies to enhance the deployment, and the safe, secure, and affordable use of ICT applications and services towards mainstreaming telecommunications/ICTs in the broader economy and society.

6.5.4 Objective 4

To assist the membership to create and maintain an enabling policy and regulatory environment, including the establishment and implementation of sustainable national policies, strategies and plans, through sharing best practices and collecting and disseminating statistical information on telecommunication/ICT developments.

6.5.5 Objective 5

To build human and institutional capacity in order to improve skills in the development and use of telecommunication/ICT networks and applications, and to foster digital inclusion for people with special needs, such as persons with disabilities, through awareness raising, training activities, sharing information and know-how and the production and distribution of relevant publications.

6.5.6 Objective 6

To provide concentrated and special assistance to least developed countries (LDCs) and countries in special need, and to assist ITU Member States in responding to climate change and integrating telecommunications/ICTs in disaster management.

Table 6.1 - ITU-D outputs and objectives

ITU-D outputs	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6
World Telecommunication Development Conference 2014 (WTDC-14) <i>(To foster international cooperation...)</i>	X					
WTDC-14 regional preparatory meetings in Asia-Pacific, Africa, Americas, CIS, Europe and Arab States <i>(To foster international cooperation...)</i>	X					
Telecommunication development study groups <i>(To foster international cooperation...)</i>	X					
Telecommunication Development Advisory Group <i>(To foster international cooperation...)</i>	X					
Provision of technical expertise <i>(To assist in maximizing the utilization of appropriate new technologies...)</i>		X				
Project development and implementation <i>(To assist in maximizing the utilization of appropriate new technologies...)</i>		X				
Mobilization of extrabudgetary resources and partnerships <i>(To assist in maximizing the utilization of appropriate new technologies...)</i>		X				
Master plans and best-practice guidelines <i>(To assist in maximizing the utilization of appropriate new technologies...)</i>		X				
Symposia and seminars <i>(To assist in maximizing the utilization of appropriate new technologies...)</i>		X				
International and regional arrangements through global forums – including the regional cybersecurity forums, IMPACT, FIRST, child online protection (COP) and participation in the Internet Governance Forum <i>(To foster the development of strategies to enhance the deployment, security and safe and affordable use of ICT applications and services...)</i>			X			

ITU-D outputs	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6
Mobilization of extrabudgetary resources and partnerships <i>(To foster the development of strategies to enhance the deployment, security and safe and affordable use of ICT applications and services...)</i>			X			
Best-practice guidelines and toolkits <i>(To foster the development of strategies to enhance the deployment, security and safe and affordable use of ICT applications and services...)</i>			X			
International and regional arrangements through global forums related to telecommunications/ICTs for economic and social development <i>(To foster the development of strategies to enhance the deployment, security and safe and affordable use of ICT applications and services...)</i>			X			
Global forums – including the Global Symposium for Regulators (GSR), Global Industry Leaders Forum (GILF), Global Regulators' Exchange and the World Telecommunication/ICT Indicators Meeting (WTIM) <i>(To assist the membership to create and maintain an enabling policy and regulatory environment...)</i>				X		
Surveys, databases (including WTI Database, ICT Eye online portal), statistical and analytical publications (including Measuring the Information Society (MIS) report, World Telecommunication/ICT Development Report (WTDR) and Trends in Telecommunication Reform report) <i>(To assist the membership to create and maintain an enabling policy and regulatory environment...)</i>				X		

ITU-D outputs	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6
Case studies, guidelines and toolkits – including the ICT Regulation Toolkit and statistical manuals and guidelines on cost methodologies, economics and finance <i>(To assist the membership to create and maintain an enabling policy and regulatory environment...)</i>				X		
High-quality training resources, materials and curricula in telecommunications/ICTs <i>(To build human and institutional capacity...)</i>					X	
Enhancement of the ITU Academy portal as a repository for telecommunication/ICT resources and training materials <i>(To build human and institutional capacity...)</i>					X	
Access to ITU training interventions,, through the ITU Academy, centres of excellence and Internet training centres <i>(To build human and institutional capacity...)</i>					X	
Mobilization of extrabudgetary resources and partnerships <i>(To build human and institutional capacity...)</i>					X	
Raising awareness among governmental and private-sector decision-makers on the importance of digital inclusion for people with special needs <i>(To build human and institutional capacity... and to foster digital inclusion...)</i>					X	
Case studies, guidelines and toolkits – including the Connect a School, Connect a Community toolkit of policies and best practices and the e-Accessibility toolkit for policy-makers on persons with disabilities – to promote digital inclusion of people with special needs <i>(To build human and institutional capacity... and to foster digital inclusion...)</i>					X	

ITU-D outputs	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6
Sharing of training materials, applications and other tools on the use of telecommunications/ICTs for social and economic development <i>(To build human and institutional capacity... and to foster digital inclusion...)</i>					X	
Project development and implementation <i>(To build human and institutional capacity... and to foster digital inclusion...)</i>					X	
Global forums <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Provision of technical expertise <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Project development and implementation <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Mobilization of extrabudgetary resources and partnerships <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Surveys, information gathering, reports and market analysis <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Case studies, best-practice guidelines, manuals and toolkits <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Workshops and seminars <i>(To provide concentrated and special assistance to least developed countries...)</i>						X
Assistance in cases of emergency <i>(To assist ITU Member States in responding to climate change...)</i>						X
Development of response strategies in case of emergency <i>(To assist ITU Member States in responding to climate change...)</i>						X

Table 6.2 - Objectives, outputs, expected results and key performance indicators of ITU-D

Objectives	Outputs	Expected results	Key performance indicators
<p>Objective 1</p> <p>To foster international cooperation, among ITU-D members and other stakeholders on telecommunication/ICT development issues by providing the pre-eminent forum for discussion, information-sharing and consensus-building on telecommunication/ICT technical and policy issues</p>	<p>Statutory meetings, including:</p> <ul style="list-style-type: none"> • World Telecommunication Development Conference 2014 (WTDC-14) • WTDC-14 regional preparatory meetings in Asia-Pacific, Africa, Americas, CIS, Europe and Arab States • Telecommunication development study groups • Telecommunication Development Advisory Group 	<ul style="list-style-type: none"> • Enhanced cooperation, including new partnerships, on telecommunication/ICT development issues • High-level discussion of telecommunication/ICT development issues • Decisions made on the creation, termination, work plans and objectives of study groups and the work plan of BDT 	<ul style="list-style-type: none"> • Number of events planned and delivered on time (in accordance with the Constitution and relevant resolutions) • Number, diversity and seniority of participants at events • Feedback from event participants • Number of new partnerships/MoUs signed • Availability of work plans for study groups and BDT.
<p>Objective 2</p> <p>To assist the membership in maximizing the utilization of appropriate new technologies, including broadband, to develop their telecommunication/ICT infrastructures and services, and to design and deploy resilient telecommunication/ICT network infrastructures</p>	<ul style="list-style-type: none"> • Provision of technical expertise • Project development and implementation • Mobilization of extrabudgetary resources, and partnerships • Master plans and best-practice guidelines • Symposia and seminars and awareness-raising 	<ul style="list-style-type: none"> • Reduction in the number of communities, and disadvantaged groups, in developing countries without access to broadband • Agreements signed with partners to assist in infrastructure deployment • Increase in the average telephone density and average broadband density 	<ul style="list-style-type: none"> • Number of communities, and disadvantaged groups, in developing countries provided with access to broadband • Number of new partnerships/MoUs for broadband deployment signed • Feedback from members

Objectives	Outputs	Expected results	Key performance indicators
<p>Objective 3</p> <p>To foster the development of strategies to enhance the deployment, secure, safe, and affordable use of ICT applications and services towards mainstreaming telecommunications/ICT in the broader economy and society</p>	<ul style="list-style-type: none"> • International and regional arrangements through global forums – including the regional cybersecurity forums, IMPACT, FIRST, child on-line protection (COP) and participation in the Internet Governance Forum • Mobilization of extrabudgetary resources and partnerships • Best-practice guidelines and toolkits • International and regional arrangements through global forums – related to telecommunications/ICTs for economic and social development 	<ul style="list-style-type: none"> • Increased confidence in cybersecurity • Improved coordination of international efforts to decrease cyberthreats and protect children online • Enhanced knowledge and skills of national regulators in relation to cyberthreats • Enhanced cooperation through partnerships • Enhance knowledge and skills of national bodies to use telecommunications/ ICTs for social and economic development 	<ul style="list-style-type: none"> • Increased confidence in cybersecurity • Number and impact (e.g. number and seniority of participants) of forums, training programmes, workshops, seminars, toolkits and guidelines • Feedback from members • Number of MoUs in effect • Number of countries having developed or improved programmes relating to the use of telecommunications/ ICTs for social and economic development
<p>Objective 4</p> <p>To assist the membership to create and maintain an enabling policy and regulatory environment, including the establishment and implementation of sustainable national policies, strategies and plans, through sharing best practices and collecting and disseminating statistical information on telecommunication/ICT developments</p>	<ul style="list-style-type: none"> • Global forums, including Global Symposium for Regulators and Global Regulators' Exchange • Surveys, databases (including WTI Database, ICT Eye online portal), statistical and analytical publications, including Measuring the Information Society (MIS) report, World Telecommunication/ICT Development Report (WTDR) and Trends in Telecommunication Reform report • Case studies, guidelines and toolkits, including the ICT Regulation Toolkit and statistical manuals and guidelines on cost methodologies, economics and finance 	<ul style="list-style-type: none"> • Enhanced dialogue between national regulators, policy-makers and other telecommunication/ ICT stakeholders • Enhanced knowledge and skills of policy-makers and national telecommunication/ ICT regulators • Accurate analysis of telecommunication/ ICT development available • WTI Database updated • Enhanced awareness and capacity of countries to produce telecommunication/ ICT statistics • Accurate regulatory and financial information of the telecommunication/ ICT sector available 	<ul style="list-style-type: none"> • Number (e.g. number and seniority of participants) of training programmes, workshops, seminars organized as planned • Number (e.g. number of hits, citations, purchases or attendees) of/at "information" publications, online resources and events • Response rate to annual questionnaires

Objectives	Outputs	Expected results	Key performance indicators
<p>Objective 5</p> <p>To build human and institutional capacity in order to improve skills in the development and use of telecommunication/ ICT networks and applications, and to foster digital inclusion for people with special needs, such as persons with disabilities, through awareness-raising, training activities, sharing information and know-how and the production and distribution of relevant publications</p>	<ul style="list-style-type: none"> • High-quality training resources, materials and curricula in telecommunications/ICTs • Enhancement of the ITU Academy portal as a repository for telecommunication/ICT resources and training materials, as well as access to ITU training interventions • Face-to-face and distance-learning training interventions • Training interventions through the ITU Academy, centres of excellence and Internet training centres • Raising awareness among governmental and private-sector decision-makers on the importance of digital inclusion for people with special needs • Case studies, guidelines and toolkits, including the Connect a School, Connect a Community toolkit of policies and best practices and the e-Accessibility toolkit for policy-makers on persons with disabilities • Sharing of training materials, applications and other tools on the use of telecommunications/ICTs for social and economic development • Project development and implementation • Mobilization of extrabudgetary resources and partnerships 	<ul style="list-style-type: none"> • Increased number of trained telecommunication/ICT professionals in developing countries • Global cooperative network of training institutes • CoE network strengthened and the ITU Academy established • Increased awareness of the need to connect schools to broadband Internet services • Increased human and institutional capacity on accessible telecommunications/ICTs for persons with disabilities • Enhanced human capacity among telecommunications/ ICT stakeholders on the use of telecommunications/ ICTs to promote economic and social development of women and girls, youth and children, indigenous peoples and persons with disabilities • Assistance provided to ITU members in developing and implementing policies and strategies on the use of telecommunications/ICTs to promote economic and social development of women and girls, youth and children, indigenous peoples and persons with disabilities • Case studies, guidelines and toolkits made available to the members • Projects implemented. 	<ul style="list-style-type: none"> • Number of training interventions delivered • Number of individuals trained • Feedback from members and survey satisfaction on training interventions • Number of training resources on ITU Academy platform • Number of CoE nodes established • Number of internet training centres established • Number of members aware of the need to connect schools • Number of case studies, guidelines and toolkits made available to members • Feedback from members • Number of projects developed and implemented • Number of agreements signed (e.g. MoUs) and number of partnerships formed

Objectives	Outputs	Expected results	Key performance indicators
<p>Objective 6</p> <p>To provide concentrated and special assistance to least developed countries (LDCs) and countries in special need, and to assist ITU Member States in responding to climate change and integrating telecommunications/ ICTs in disaster management</p>	<ul style="list-style-type: none"> • Global forums • Provision of technical expertise • Project development and implementation • Mobilization of extrabudgetary resources and partnerships • Surveys, information gathering, reports and market analysis • Case studies, best-practice guidelines, manuals and toolkits • Workshops and seminars • Assistance in cases of emergency • Development of response strategies in case of emergency 	<ul style="list-style-type: none"> • Increased average telephone and broadband density in LDCs and SIDS • Enhanced capacity of regulators in LDCs and SIDS on telecommunications/ICTs • Improved availability of information on telecommunications/ICTs in LDCs and SIDS • Areas vulnerable to natural disasters mapped • Computer-based information systems covering the results of surveys, assessments and observations developed • Policies and measures to minimize the impact of climate change and climate variability developed • Countries better informed on actions to mitigate and adapt to climate change using telecommunications/ICTs • Assistance provided in cases of emergency 	<ul style="list-style-type: none"> • Average telephone and broadband density in LDCs and SIDS • Number and impact (e.g. number and seniority of participants) of forums, training programmes, workshops, seminars, toolkits and guidelines • Feedback from members • Effectiveness and time of response to requests in emergency situations • Number of countries with climate-change and disaster-management strategies and plans

