Innovative E-Governance for Sustainable Development

ITU Regional Office for Asia and the Pacific
Agenda

1) ITU Overview and Activities

2) Issues and Challenges in e-Government

3) e-Government Trends

4) Framework for ICT for Development in the Asia-Pacific Region (ICTD-ASP)
1) ITU Overview & Activities
A specialized agency of the UN with focus on Telecommunication / ICTs

Founded in 1865
ITU: A brief overview

**193** Member States

**567** Sector Members

**159** Associates

**60** Academia

**ITU-R:** ITU’s Radio-communication Sector globally manages radio-frequency spectrum and satellite orbits that ensure safety of life on land, at sea and in the skies.

**ITU-T:** ITU’s Telecommunication Standardization Sector enables global communications by ensuring that countries’ ICT networks and devices are speaking the same language.

**ITU-D:** ITU’s Development Sector fosters 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.

Headquartered in Geneva,

**4** Regional Offices

**7** Area Offices.
ITU: Reaching out to the World

ITU Headquarter: Geneva, Switzerland

Europe Regional Office
Geneva, Switzerland

Americas
Regional Office
Brasilia, Brazil

Area Offices
Tegucigalpa, Honduras.
Santiago, Chile.
Bridgetown, Barbados

Africa
Regional Office
Addis Ababa, Ethiopia

Area Offices
Yaoundé, Cameroon
Harare, Zimbabwe
Dakar, Senegal

Arab
Regional Office
Cairo, Egypt

Asia-Pacific
Regional Office
Bangkok, Thailand

Acting Regional Director
Mr. Sameer Sharma

Area Office
Jakarta, Indonesia
Head: Ms. Aurora Rubio

CIS Area Office
Moscow, Russia
Foster international cooperation on telecommunication/ICT development issues

Foster an enabling environment conducive to ICT development and foster the deployment of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap.

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

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

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

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<th>Initiative #1</th>
<th>Special Consideration For LDCs*, SIDS**, Including Pacific Island Countries, And Landlocked Developing Countries</th>
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<td>Initiative #2</td>
<td>Emergency Telecommunications</td>
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<td>Harnessing The Benefits of New Technologies</td>
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<td>Initiative #4</td>
<td>Development Of Broadband Access And Adoption Of Broadband</td>
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<td>Initiative #5</td>
<td>Policy And Regulation</td>
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</table>

* LDC: Least Developed Countries  
** SIDS: Small Island Developing States
ITU Plenipotentiary Conference 2014
20 October – 7 November 2014
Busan, Republic of Korea

ITU: Newly Elected Officials

Mr. Houlin Zhao
ITU Secretary-General

Mr. Malcolm Johnson
ITU Deputy Secretary-General

Mr. Chaesub Lee
Director,
Telecom Standardization Bureau (ITU-T)

Mr. Francois Rancy
Director,
Radiocommunications Bureau (ITU-R)

Mr. Brahim Sanou
Director,
Telecommunications Development Bureau (ITU-D)
## ITU Asia-Pacific Events 2015

<table>
<thead>
<tr>
<th>Event Title</th>
<th>Dates</th>
<th>Venue</th>
<th>Partners</th>
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<tr>
<td>ITU-D Regional Economic and Financial Forum of Telecommunications/ICTs for Asia and Pacific Region</td>
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<td>Kuala Lumpur, Malaysia</td>
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<tr>
<td>Regional Development Forum: Facilitating Investment in ICT Sector</td>
<td></td>
<td>Bangkok, Thailand</td>
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<td>ITU Asia-Pacific Region Regulators Roundtable and International Training Programme</td>
<td></td>
<td>Kuala Lumpur, Malaysia</td>
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<td>ITU-IDA Executive Training Programme</td>
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<td>Singapore, Singapore</td>
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<tr>
<td>Asia-Pacific Regional Forum on USO and Broadband</td>
<td>March 2015</td>
<td>Bangkok, Thailand</td>
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<tr>
<td>Training on Spectrum Monitoring</td>
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<td>China</td>
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<tr>
<td>Regional Workshop on Accelerating Broadband Access</td>
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<td>Indonesia</td>
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<tr>
<td>Asia-Pacific Regional Workshop on Satellite Coordination</td>
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<td>Manila, Philippines</td>
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<td>International Satellite Symposium 2015</td>
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<td>Hanoi, Viet Nam</td>
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<td>Asia-Pacific Regional Forum on Digital Broadcasting</td>
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<td>Bangkok, Thailand</td>
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## ITU Asia-Pacific Events 2015 (cont’d)

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<tr>
<th>Event Title</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Internet Infrastructure Security Roundtable</td>
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<td>Singapore, Singapore</td>
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<tr>
<td>Regional Cybersecurity Drill</td>
<td></td>
<td>Colombo, Sri Lanka</td>
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<tr>
<td>Asia-Pacific e-Government Forum</td>
<td>August 2015</td>
<td>Bangkok, Thailand</td>
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<tr>
<td>ITU-AIBD Asia Media Summit 2015: Transforming Broadcasting in the Social Media Era</td>
<td></td>
<td>Kuala Lumpur, Malaysia</td>
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<td>ITU-ABU Pacific Media Partnership Conference 2015</td>
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<td>Apia, Samoa</td>
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<td>Girls in ICT Day 2015</td>
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<td>Bangkok, Thailand</td>
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<td>ITU-ABU Women with the Wave High Level Forum</td>
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<td>TBC</td>
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<td>Regional Knowledge Exchange Forum</td>
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<td>Manila, Philippines</td>
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<td>Pacific Forum 2015</td>
<td>April 2015</td>
<td>TBC</td>
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<tr>
<td><strong>ITU Asia-Pacific Specific Activities 2015</strong></td>
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<td><strong>Policy &amp; Regulation</strong></td>
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<tr>
<td>Wireless Broadband Master Plan</td>
<td>Thimphu, Bhutan</td>
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<td>Cost Modeling for ICT Services Bangladesh, Sri Lanka</td>
<td>Dhaka, Bangladesh</td>
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<td>Dispute Resolution Mechanism</td>
<td>Kabul, Afghanistan</td>
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<td>OTT Policy in Cambodia</td>
<td>Cambodia</td>
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<tr>
<td>Assistance to Mongolia on Policy and Regulation</td>
<td>Ulan Bator, Mongolia</td>
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<tr>
<td>Review of the National ICT and Broadband Policy</td>
<td>Suva, Fiji</td>
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<td><strong>Infrastructure Development</strong></td>
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<td>Maintenance and development of the interactive transmission map for the Asia-Pacific Region</td>
<td>Bangkok, Thailand</td>
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<tr>
<td>Review on Post-Liberalization of the Telecommunication Sector in Timor Leste</td>
<td>Dili, Timor-Leste</td>
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<td>Supporting IPv6 implementation in Asia-Pacific region</td>
<td>Asia-Pacific</td>
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<td>Conformity and Interoperability in Asia-Pacific region</td>
<td>China</td>
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<tr>
<td>Affordable Access to Internet</td>
<td>Male, Maldives</td>
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<td>Enabling efficient and optimum spectrum resources usage by the industries and users</td>
<td>Thimphu, Bhutan</td>
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<tr>
<td>National Workshop on Cloud Computing</td>
<td>Colombo, Sri Lanka</td>
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<tr>
<td>Harnessing the Benefits of New Technologies</td>
<td>Islamabad, Pakistan</td>
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<td>Concentrated Assistant to Tuvalu on Satellite Connectivity and Telecentres</td>
<td>Tuvalu</td>
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## Cybersecurity & ICT Applications

<table>
<thead>
<tr>
<th>Activity</th>
<th>Location</th>
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<tbody>
<tr>
<td>Cybersecurity and COP Awareness and Network readiness assessment for Afghanistan and Nepal</td>
<td>Kathmandu, Nepal (Republic of)</td>
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<tr>
<td>National Cybersecurity Law in Lao PDR</td>
<td>Vientiane, Lao P.D.R.</td>
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<tr>
<td>Deployment of e-applications in Asia-Pacific region</td>
<td>TBC</td>
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<tr>
<td>ICT application deployment for Smart Sustainable Society/Cities</td>
<td>TBC</td>
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<tr>
<td>e-Government Assessment and Feasibility Study for ASP countries</td>
<td>ASP</td>
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<tr>
<td>mHealth Policy and Roadmap Development for ASP countries</td>
<td>ASP</td>
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<tr>
<td>Concentrated assistance on mHealth Deployment in Tonga</td>
<td>Tonga</td>
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<tr>
<td>Text-to-Speech Development for Lao and ASEAN</td>
<td>Lao</td>
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## ITU Asia-Pacific Specific Activities 2015 (cont’d)

### Human Capacity Building & Digital Literacy
- **Strengthening human capacity building in Asia-Pacific**
- **Institutional capacity building of the regulator**
- **ITU-ASEAN Partnership on ICT Development**
  - [ASEAN]
- **Digital Literacy for children in the rural areas and promoting awareness of children and teachers on staying safe online.**
  - **Kuala Lumpur, Malaysia**

### Green ICTs & Emergency Telecommunications
- **Capacity building on Green ICT Strategies**
  - **TBC**
- **Study and comprehensive assessment of ICT use for Emergency Telecommunications**
  - **Dili, Timor-Leste**
- **Assistance to ASP countries in Common Alerting Protocol (CAP) and early warning system**
  - **TBC**
2) Issues and Challenges in e-Government
Action Line C7. ICT applications

1) The biggest challenges in providing all these supportive activities are: moving and innovating with time. The socio-economic and especially technical conditions affecting innovation change over time. We need to further disseminate new, effective practices and tools and provide support to build intrinsic government, government and public administration capacities.

2) Effective advisory missions lead to a couple of countries’ embrace of open data approach and government officials’ participation in related events are success. But while celebrating success in all of these projects and programmes, there are challenges such as imbalance among participating countries in competing events and projects.
Targets achieved? Mixed results (incredible progress in expansion of communication networks but much to do in terms of bringing everyone online and achieving high development impact)

Challenges of monitoring: targets not clearly defined (vague), no formal WSIS monitoring process (until 2010), data availability poor beyond basic connectivity

Subjects of targets and action lines difficult to capture quantitatively; not linked to high-level goals; some targets outdated

Need coordination between policy makers and statistical community
WSIS+10 Review
Way forward

- Targets and action lines: move from connectivity to usage, quality and impact; role of ICTs as an enabler to achieve broader development goals; forward looking and regularly reviewed
- High-level endorsement of goals and targets; awareness building among policy makers
- Open consultation process to identify targets bringing in statistical community
- Targets should be time-bound, concrete and measurable
- Future ICT goals, targets and measurement framework need to be linked to post-2015 development agenda
- Partnership should continue to take lead in coordinating measurement of information society at the international level
Key Recommendations on e-Government (WSIS+10)

1) At the most fundamental level and ultimately, improving e-government endeavours should build on broad e-governance efforts; well beyond use of e-government tools.
2) Financing of e-government projects needs to be addressed based on creative exploring e-government financial resources, particularly for many developing countries.
3) Encourage integrated e-government services through whole-of-government approach to support the sustainable development.
4) Promote inclusive e-government through e-participation and increase availability of government data for reuse in order to promote participation in public policy-decision-making, responsiveness, transparency, and accountability.
5) Promote people-centred delivery of e-services and bridge the digital divide.
6) Address privacy and security issues through concerted efforts.
7) Promote capacity building and knowledge sharing for effective utilization of resources.
8) Utilize existing infrastructure (e.g. community access points including kiosks, community centers, libraries, and post offices) and use of intermediaries to ensure that e-government services reach all end users.
9) Improve government service through introducing open, transformational government providing multi-channel service delivery, particularly through mobile devices.
10) Enhancement of essential government services electronically to citizens through inclusive means; each government will choose an appropriate scope of the essential services through national and sub-national planning processes.
E-government can support sustainable development by promoting effective and efficient public service delivery to all people ensuring transparency, participation, collaboration:

a. Continue to implement e-government strategies focusing on applications aimed at innovating and enhancing transparency, accountability and efficiency, as appropriate.

b. Continue to support international cooperation initiatives in the field of e-government.

c. Encourage e-government initiatives and services at all levels, adapted to the needs of people and business with a view to supporting sustainable development.

d. Promote further development of e-government by engaging all people for improved communications and consultations between government and end users.

e. Foster e-government services while addressing the challenges of privacy and security.

f. Promote capacity building and knowledge sharing for effective utilization of ICT in government, delivery of e-services and ICT-based policy support for development outcomes.

g. Facilitate the access of e-government services to all people including the disadvantaged and vulnerable people.
3) e-Governance Trends
Growth of ICT uptake

Global ICT developments, 2001-2014

- Mobile-cellular telephone subscriptions
- Individuals using the Internet
- Fixed-telephone subscriptions
- Active mobile-broadband subscriptions
- Fixed (wired)-broadband subscriptions

Note: * Estimate
Source: ITU World Telecommunication / ICT Indicators database
M-Governance

Provide Government’s information and services to public employees, citizens, businesses, and nonprofit organizations through wireless communication networks and mobile devices.”

- Reduction of service processing time.
- Reduction of operating costs and less paper work.
- Early detection of problems and crisis.
- Enlarged accessibility (fast and easy access)
- Transparency: Citizen become more loyal to the government.
- Increased participation of citizen.
- Satisfaction of citizen and private users: reduction of human error due to the automated process, elimination of queues..)
Key Considerations for m-Governance Deployment

- Introducing Mobile government technology means that the work conditions are changed and the environment is modified, therefore existing policies, practices, and regulations may need to be updated or even created: **Revisiting current policies** to make certain that they are still valid and appropriate for the new environment and ensuring privacy and security of government data.

- Establishing **technical infrastructure must be reviewed** to identify if and how it can support a more mobile workforce.

- Governments **must make a data base** about their staff work and citizen's needs and types of devices could be used to help them do their jobs better or make their lives easier: Developing apps for multiple platforms is more expensive, but can allow people to use Gov apps with their existing mobile devices.

- Mobile government implementation pass through 3 steps: mobile access, mobile content, mobile services and applications: **the private sector and organizations can play a crucial role**
Mobile Money Growth

Source: GSMA
Digital Financial Services

ITU has produced two Technology Watch Reports on Mobile Money
Thinking smart, acting sustainable, living fulfilled

The 3 dimensions of smart sustainable cities

- Sustainability
- Quality of life
- Smartness

SSC
Some city facts...

Cities account for about two-thirds of global energy demand.

Buildings produce a fifth of the world’s CO2 emissions.

Cities produce up to 70% of global greenhouse gas emissions.

Buildings account for roughly 40% of the world’s energy use.

An estimated 80% of global GDP is generated in cities.
Some population facts...

Every second, the **urban population** grows by 2 people.

More than half of the world's population will be living in **urban areas** by 2008.

In the world, over 750 million live in urban areas without adequate shelter and **basic services**.

By 2050, it is expected that **70% of the world population** will live in urban areas.

1/3 of people in developing countries living in cities, live in **slum/squatter settlements**.

Almost 180,000 **people** are added to the urban population each day.
The case of the Asia Pacific region

- Asia Pacific regions includes 60% of the global population with 46% of population in the areas residing in urban areas.

- By 2020, urban population in the region is expected to rise to 50%.

- Main challenges: urban poverty, congestion, rising pollution levels, corruption, limited natural resources etc.

- Need for re-assessing urban design and implementation to ensure sustainable development in region.
Technology: turning traditional infrastructure into smart infrastructure

The role of ICT:
- wireless communications,
- sensor networks,
- data analytics,
- platforms and applications,
- cloud computing,
- technical standards.

Better data = better decisions
Intelligent infrastructure
Economic competitiveness
Green and sustainability
Low carbon businesses
Social inclusiveness
Citizens’ engagement
Defining a Smart Sustainable City

“A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects”
National Regulatory Entity
(Lead Agencies Examples)

- Emergency: National Disaster Management Authority, Military, Internal Affairs
- Education: Ministry of Education, Education Boards, Local Government
- Health: Ministry of Health, Local Government
- Electricity: Ministry of Power, Regulator Local Government
- Governance: City, Municipal, provincial, Central Government Agencies
- Transport: Local Government, Department of Transport
- Water: Ministry of Finance, Banking Regulator
- Teleworking: Finance & Payment
- Universal Broadband: Competition Authority
- Sensor Networks: Standardization Bodies
- Universal Broadband: Sector Regulators
- Green ICT & E-Waste: Ministry of ICT
- Infrastructure Security: Security Agencies
- Spectrum Management: Ministry of ICT
- Standards, Conformity & Interoperability: Sector Regulators
- Governance: Ministry of Finance, Banking Regulator
3) Framework for ICT for Development in the Asia-Pacific Region (ICTD-ASP)
The ICTD-ASP is a platform for **multi-stakeholder partnerships** for **project information and knowledge sharing** and for **cross-sector development** in the Asia-Pacific region.

**Objective 1**

To provide assistance to developing countries in Asia and the Pacific for bridging the gap between their development plans and the implementation of their ICTD investments.

**Objective 2**

To share information about projects/initiatives being implemented and to mobilize resources and facilitate ICTD investment financing through coordinated partnerships among stakeholders in the Asia and the Pacific region.

**Objective 3**

To strengthen and enhance institutional ICT capacity through sharing experiences and knowledge on ICTD in Asia and the Pacific region.
KEY COMPONENTS OF THE INITIATIVE

**Project Development & Implementation**
Advisory supports for ICTD investment and prioritization, and Pre-Feasibility Studies on high priority ICTD investment projects: Proposals will be reviewed and recommendations for funding will be made on the basis of selection criteria. Selected projects will be funded and executed in collaboration with multi-stakeholders.

**Partnership & Resource Mobilisation**
Framework development for coordination and cooperation with partners and stakeholders: the framework features a set of guidelines and toolkits for mobilizing resources and creating partnerships among various stakeholders and partners promoting ICTD in the Asia-Pacific region.

**Information & Knowledge Sharing Network**
This component will identify, compile, and disseminate good practices and lessons learned for addressing development issues on ICTD. The component will include awareness campaigns, capacity-building activities, conferences and workshops, publication of lessons learned, and integration of the knowledge gained.
Universal Broadband Connectivity and Rural Development Programme

- National Broadband Policy/Plan development
- Toolkits, publications, case studies, statistics, etc.
- Annual regional meetings, providing:
  - 1st Asia-Pacific Regional Forum, March 2015, Bangkok, Thailand
- Project development and implementation
- Online knowledge sharing
e-Government and ICT Applications for Sustainable Development Programme

- ICT / e-Gov assessment toolkit
- Publications, case studies, statistics, etc.
- Annual regional meetings, providing:
  - 1st Asia-Pacific Regional Forum, August 2015, Bangkok, Thailand
- Project development and implementation
  - e-Government Master Plan for Pakistan
  - e-Government Policy for Bhutan
  - mHealth for NCDs for Philippines and Tonga
- e-Government Web Portal