

## ITU Asia-Pacific Regional Development Forum 2015 Smartly Digital Asia-Pacific

**SESSION 1:** 

**ASIA-PACIFIC ICT DEVELOPMENT: 2011 - 2014** 

"Setting the Regional Context"

Ioane Koroivuki,
Regional Director
ITU Regional Office for Asia and the Pacific
21st August, 2015





#### ITU Global Telecommunication/ICT Targets - 2020

#### Goal 1 Growth - Enable and foster access to and increased use of telecommunications/ICTs

55% of households should have access to the

Internet

60% of individuals should be using the Internet 40% Telecommunications/ICTs should be 40% more affordable

#### Goal 2 Inclusiveness -Bridge the digital divide and provide broadband for all

50% of households should have access to the Internet in the developing world; 15% in 20% in the least the least developed countries

*50%* of individuals should be using the Internet in the developing world; developed countries

40% affordability gap between developed and developing countries should be reduced by 40%

5% Broadband services should cost no more than 5% of average monthly income in the developing countries

90%

of the rural population should be covered by broadband services



Gender equality among Internet users should be reached



**Enabling environments ensuring** accessible ICTs for persons with disabilities should be established in all countries

#### Goal 3 Sustainability - Manage challenges resulting from the telecommunication/ICT development

40% improvement in cybersecurity readiness

*50%* 

reduction in volume of redundant e-waste

30%

decrease in Green House Gas emissions per device generated by the telecommunication/ICT sector

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



Telecommunication/ICT environment conducive to innovation

Effective partnerships of stakeholders in telecommunication/ICT environment







#### ITU BDT : Strategy Plan Objectives (2015-18)

- Foster international cooperation on telecommunication/ICT development issues
  - Poster 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/ICT





## ITU Asia Pacific Regional Initiatives (2015-2018)

- Special Consideration For LDCs\*, SIDSs\*\*, Including Pacific Island Countries, And Landlocked Developing Countries
  - 2 Emergency Telecommunications
  - 3 Harnessing The Benefits Of New Technologies
  - Development Of Broadband Access And Adoption Of Broadband
- **5** Policy And Regulation

\*LDC: Least Developed Countries SIDS: Small Island Developing States





## ITU Asia Pacific Regional Initiatives (2011-2014)

1 Unique ICT Needs for LDCs, SIDS, and Land-locked Developing Countries

2 Emergency Telecommunications

3 Digital Broadcasting

Broadband Access and Uptake in Uptake in Urban & Rural Areas

Telecommunications/ICT Policy & Regulation in the Asia-Pacific Region

\*LDC: Least Developed Countries SIDS: Small Island Developing States





RI 1: Unique ICT needs of least developed countries (LDCs), small island developing States (SIDS) and landlocked developing countries: To provide special assistance to LDCs, SIDS and landlocked developing countries in order to meet their priority ICT requirements.

- Strengthening and harmonization of Regional and National policy and regulatory frameworks
- ICT in emergencies and disasters, policy and regulatory capacity building, skills with customized programs for the needs of the SIDSs in the Asia-Pacific. ITU PITA CoE Training
- Direct country assistances were provided in areas of respective national priorities to :
- Afghanistan (CIRT training), Cambodia (pricing regulation), Statistics Framework, IPv6), of 4G Mobile systems), Vanuatu (Cybersecurity),
   FSM (e-Government network).

Bhutan (e-agriculture, e-government), Lao PDR (National ICT Indicators and Mongolia (Policy and Regulatory aspects Nepal(regulatory assistance to NTA), Kiribati (spectrum management),





RI 2: Emergency telecommunications: To provide assistance to Member States at all phases of disaster management, i.e. disaster preparedness including early warning, disaster response/relief and rehabilitation of telecommunication networks.

- Increased capacity of the Philippines to undertake relief operations during typhoon Haiyan through ITU's deployment of satellite telecommunications equipment
- Improved capacity and awareness of members in addressing issues pertaining to Emergency Telecommunications through following activities:
  - ✓ ITU Asia-Pacific Regional Multi-stakeholder Forum on Emergency Telecommunications (2011)
  - ✓ ITU/NBTC Regional Training on Emergency Telecommunications (2012)
  - ✓ ITU ASP CoE Training on "ICT applications relating to mitigating natural disaster (2013).
  - ✓ Best practices on Emergency Communications , DOT India ( 2014)
  - ✓ ICT-enabled disaster and emergency management services for marginalized and vulnerable (2014, India)
- Cooperation agreement (Japan-Philippines-ITU) to conduct a feasibility study on restoring telecommunication and ICT infrastructure damaged by typhoon Haiyan through the use of the Movable and Deployable ICT Resource Unit (MDRU).





## RI 3: Digital broadcasting: To assist ITU Member States in making a smooth transition from analogue to digital broadcasting.

- National Roadmaps on Transition to Digital Broadcasting 24 countries
- Guidelines on Transition from Analogue to Digital Terrestrial Television
   Broadcasting including Cable, Satellite, and IPTV
- ITU/NBTC Projects on A-to-D Terrestrial TV broadcasting transition and Roadmap for digital terrestrial radio broadcasting in Thailand.
- A case study on Digital Terrestrial Television Broadcasting Implementation in Thailand
- Case Studies Digital Terrestrial Television Broadcasting Implementation in Australia and Japan
- ITU ASP CoE trainings and workshops on Digital Broadcasting Transition through several with partners with over 700 participants from 30 countries
- Interactive Multimedia Services in Asia Pacific: Trends & Insights Report





## RI 4: Broadband access and uptake in urban and rural areas: To assist Member States in the development of broadband access in urban and rural areas.

- Broadband Access and Uptake with more than 500 participants from the region and beyond through the ITU ASP CoE, in cooperation with partners.
- Planning, policy and regulatory skills in the area of Telecom / ICT infrastructure
- Enhanced ITU members' skills in the area of satellite communications
- Access Regulation on International Fiber Optic and Submarine Cable
- ICT development and Applications including Telecenter development / assessment/ deployment
- National Wireless Broadband Master Plans / National Broadband Plans in 16 countries
- National Guidelines for migration to Next Generation Networks (NGN)





# RI 5: Telecommunication/ICT policy and regulation in the Asia-Pacific region: To assist Member States in developing of appropriate policy and regulatory frameworks, enhancing skills, increasing information sharing and strengthening regulatory cooperation

- Asia-Pacific Regulators Roundtables, in 2011 (Australia), 2012 (India), 2013 (Republic of Korea) and 2014 (Australia)
- Case Studies on Broadband and Broadcasting from Asia-Pacific, used as reference materials and tools by ITU members.
- Create awareness to strengthen national policy frameworks in People's Republic of China and selected countries through ITU-MIIT (China) annual Seminars (2011-2014)
- Planned actions include training on Smart Sustainable City (with TSB), direct country assistances on ICT sector growth (Nepal), Enabling Efficiency in Energy Management through ICTs (Pakistan), Licensing (Cambodia and Timor Leste), National ICT Indicators and Statistics Framework (Lao PDR), Telecommunication Regulatory Dispute Resolution (Myanmar), Improving Interoperability framework (Mongolia), e-Agriculture (Sri Lanka), Competition framework (Bhutan), etc.





#### **Regional Projects**

#### **Implemented Projects**

- ❖ ITU/STA Rural/Outer Island Communications in the Pacific;
- Harnessing ICTs for disempowered/marginalized communities in Sri Lanka (2011-14)
- Training Capacity of the Institute of Posts and Telecommunications in Lao PDR;
- ICT Policy, Regulatory and Legislative Frameworks Support for Pacific Island States (ITU-EC);
- Roadmap: Transition from A- to-Digital Terrestrial TV Broadcasting and Mobile TV in Asia and the Pacific (ITU-KCC/MSIP R.O. Korea);
- ITU/NBTC (Thailand) Training Program Projects 2011, 2012 and 2013; Licensee Monitoring and Compliance Framework in Thailand (ITU/NBTC Thailand);
- ❖ Assistance in Telecommunication/ICT in ASP Region (ITU/COMMS Australia);
- Roadmap for Transition from Analogue to DTTB and MTV in ASP (ITU/MSIP R.o. Korea);
- Master Plan for Wireless Broadband in Asia-Pacific (ITU-MSIP, R.O. Korea)
- Connect a School, Connect a Community in Sri Lanka





#### **Regional Projects**

#### **Ongoing Projects**

- ❖ ITU/NBTC Thailand Training Program 2014 project aims to build capacity in the areas of strategic costing and quad play planning as well as Smart Sustainable Cities;
- Universal Service Obligation in Thailand aims at developing a framework for USO project bidding, monitoring and evaluation. (ITU/NBTC Thailand);
- ❖ Telecentre Applications and Services focuses on developing IT applications for operations and maintenance of telecentres.( ITU/NBTC Thailand);
- ❖ Digital Broadcasting in Thailand include: Development of a Roadmap for Transition from Analogue to Digital TV Broadcasting; Development of a Roadmap development for digital terrestrial radio broadcasting roll-out in Thailand; and DTTB Frequency Planning & Measurement.(ITU/NBTC Thailand);
- ❖ Study on Spectrum Licensing of the 1800MHz band and related spectrum under the concession aims to assist the Thai regulator in preparing necessary policy and regulations for spectrum auction in 900MHz/1800MHz bands. (ITU/NBTC Thailand);
- **Study of Telecommunications Price Regulation** in Thailand. (ITU/NBTC Thailand).





### **Regional Projects**

- ❖ ITU Centre of Excellence Network in the Asia-Pacific Region project:
  - built capacity of more than 2000 participants in the Asia-Pacific region;
- Transition from Analogue to Digital Broadcasting in Africa and Asia-Pacific (ITU/MIC Japan)
- Support for the ITU Asia-Pacific Regional Initiatives (ITU/COMMS Australia)
- ❖ Spectrum Management Master Plans (ITU-MSIP R.O.Korea); and
- Broadband Policies, Plans and Applications, (ITU-MSIP R.O.Korea);





## ITU Asia Pacific Regional Initiatives (2015-2018)

- Special Consideration For LDCs\*, SIDSs\*\*, Including Pacific Island Countries, And Landlocked Developing Countries
  - 2 Emergency Telecommunications
  - 3 Harnessing The Benefits Of New Technologies
  - Development Of Broadband Access And Adoption Of Broadband
- **5** Policy And Regulation

\*LDC: Least Developed Countries SIDS: Small Island Developing States





RI 1: Special consideration for least developed countries, small island developing states, including Pacific island countries, and landlocked developing countries.

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

- 1) Improved infrastructure and enhanced access to affordable ICT services
- 2) Improved enabling environment to facilitate ICT development
- 3) Appropriate national, subregional and regional frameworks for cybersecurity
- 4) Enhanced skills of relevant human resources
- 5) Addressing specific issues and challenges in the Pacific island countries





#### **RI 2:** Emergency Telecommunications

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

- 1) Identification of suitable technologies to be used for emergency communications
- 2) Creation of common databases to share information on emergency Communications
- 3) Design of national and subregional emergency communication plans, taking into account the impact of climate change
- 4) Development of appropriate policy, regulatory and legislative frameworks on emergency communications at national and regional level
- 5) Availability of a dedicated set of equipment for emergency radio communication in the Asia-Pacific region
- 6) Capacity building in relation to emergency telecommunications and disaster preparedness
- 7) Mechanism for sharing information and best practices on utilizing ICTs for disaster preparedness, disaster response/relief and reconstruction among countries in the region and others.





#### **RI 3:** Harnessing the benefits of new technologies

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

- 1) Assistance in the development of frameworks for new and emerging technical issues as well as for utilizing new technologies in, but not limited to, the following areas:
- a) Digitization of broadcasting; b) Next-generation network; c) Transition to IPv6; d) Digital literacy and inclusion for all (e.g. people with disabilities, etc.); e) ICT applications; f) Multilingual local content; g) Accredited laboratory; h) Spectrum management and monitoring; i) Cybersecurity, including issues such as combating spam and protection of children and other vulnerable groups, and the protection of personally identifiable information; j) Number misuse; k) Issues related to climate change and e-waste; l) Over-the-top (OTT) services; m) Cloud computing; n) Quality of service; o) International mobile roaming; p) Cable landing stations
- 2) Raised awareness and enhanced skills in relation to new technologies and technical issues as identified and others as requested
- 3) Expert and technical assistance to members on resolving technical issues as identified and others as requested
- 4) Identification of new and emerging technical issues which could be the focus of further expertise, assistance and capacity-building exercises.





#### RI 4: Development of broadband access and adoption of broadband

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

- 1) National broadband policies to meet the requirements of developing countries
- 2) Improved broadband infrastructure and access to affordable ICT services in urban and rural areas, including remote and hilly terrains as well as remote islands
- 3) Development of telecommunication/ICT applications that can support multilingualism and address local needs
- 4) Enhanced skills in the area of broadband communication networks for the relevant human resources
- 5) Implementation of solutions providing cost-effective broadband infrastructure addressing the deployment and operational challenges in rural and remote areas, including remote islands
- 6) International cooperation on multistakeholder empowerment of ICT volunteers
- 7) Capacity building and deployment of cost-effective e-health services in rural and remote areas, thereby reducing operational and administrative costs
- 8) Accelerating the evolution and deployment of next-generation network infrastructure, including mobile/wireless communication networks, land/submarine optical fibre cable networks and Internet networks, for both national and regional connectivity
- 9) Studies and assistance on effective utilization and optimization of optical fibre cable networks, especially submarine cable networks
- 10) Studies on traffic categorization and offering of necessary content bundles to reach more lower income groups.





#### RI 5: Policy and regulation

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

- 1) Development of appropriate policy, regulatory and legislative frameworks relating to the regional initiatives where necessary
- 2) Enhancing the skills of relevant human resources
- 3) Promotion of regulatory cooperation and information sharing.



# ITU: I Thank U

