Telecommunication Development Sector INTERNATIONAL TELECOMMUNICATION UNION



Regional Development Forum for the Asia Pacific Region (RDF-ASP) Bangkok, Thailand, 21-22 May 2018

1. Introduction

The ITU Regional Development Forum for the Asia-Pacific (RDF-ASP) was organized by the Telecommunication Development Bureau (BDT) of the International Telecommunication Union (ITU) in Bangkok, Thailand, from 21 to 22 May 2018, at the kind invitation of the Ministry of Digital Economy and Society (MDES) of the Kingdom of Thailand. Its overall theme echoed the WTDC-17's focus on "ICT 4SDGs: Towards the implementation of WTDC17" outcomes".

The objective of the ITU Regional Development Forums was to provide an opportunity for high-level dialogue between the BDT and decision-makers, governments and regulators, ITU Member States, Sector Members and other UN agencies. RDFs serve as a platform for assessing strategic orientations that may have an impact on BDT's regional work plan in between world telecommunication development conferences. In this context, these Forums aim at reporting on the activities of the Buenos Aires Action Plan, with particular emphasis on regional initiatives in order to get feedback from membership to adjust BDT's work in the regions.

A major aim of the RDF-ASP 2018 was to develop an implementation plan (2018-2021) for the five Asia-Pacific regional initiatives adopted by WTDC-17 in the areas of:

- 1) Addressing special needs of least developed countries, small island developing states, including Pacific island countries, and landlocked developing countries
- 2) Harnessing ICTs to support the digital economy and an inclusive digital society
- 3) Fostering development of infrastructure to enhance digital connectivity
- 4) Enabling policy and regulatory environments
- 5) Contributing to a secure and resilient environment.

The implementation plan is based on a series of proposals and commitments from Secretariat, Member States and other stakeholders. The forum also provided an opportunity for extensive dialogue on strengthening synergies between regional initiatives and the activities of ITU-D study groups, ITU Academy, ITU Centres of Excellence, Other UN agencies, Academia and membership.

2. Participation

The meeting was attended by 94 participants representing 15 Member States.

3. Documentation

RDF-ASP was paperless. **Twenty nine (29)** presentations were delivered during the meeting. Relevant documentation, including Agenda and Presentations and Reference Materials were made available at the RDF-ASP website. Links have also been provided to specific presentations in this document.

PROCEEDINGS OF THE FORUM

Opening ceremony

The opening ceremony was addressed by H.E. Dr. Pichet Durongkaveroj, Minister, Ministry of Digital Economy and Society of Thailand and Mr. Brahima Sanou, Director, Telecommunication Development Bureau, ITU. The opening ceremony also included a short video on "Community Digital Broadcasting in Thailand" that was played after the speech by the Minister. Minister Dr. Durongkaveroj highlighted the steps that Thailand has undertaken towards achieving digital economy. He emphasized the all-encompassing role that ICTs are playing in today's world. Mr. Sanou welcomed the participants and invited participants' attention to the SDGs and the role of ICTs. He said that the world needs the SDGs and the SDGs need ICTs. Mr. Sanou also spoke about collaboration among members and with different sectors. He mentioned that ITU is working in the forefront of technologies that are at the heart of enabling digital economy. Technologies like artificial intelligence, 5G, cloud computing and the Internet of Things (or IoTs) are opening new frontiers and also new possibilities.

The opening session was followed by a group photo session and then by a special session that outlined the role of ICTs in SDGs and elaborated the WTDC 17 outcomes.



Session 1. ICT for Sustainable Development Goals: WTDC 17 Outcomes

This session provided a review of the WTDC 17 outcomes and the role of ICTs for achieving SDGs. Following were the titles of the presentation and list of speakers with links to their presentations and bios:

- Review of WTDC 17 and Asia Pacific Regional Initiatives, Mr. Ioane Koroivuki, Regional Director, ITU Regional Office for Asia-Pacific [Bio] [Presentation]
- APT and Preparation for ITU's Global Conferences, Ms. Areewan Haorangsi Secretary General, Asia-Pacific Telecommunity [Bio] [Presentation]
- Achieving SDG and inclusive development in Asia and the Pacific, Ms. Atsuko Okuda, ICT and Development Section, ICT and Disaster Risk Reduction Division, ESCAP [Bio] [Presentation]
- ITU Interactive Transmission Maps, Mr. Sameer Sharma, Senior Adviser, ITU Regional Office for Asia-Pacific [Bio] [Presentation]

Summary of the session

The WTDC-17 outcomes were presented by Mr. Ioane Koroivuki, Regional Director, ITU Regional Office for Asia-Pacific. These outcomes deal with:

- -Strategic Plan
- -Action Plan
- -Regional Initiatives
- -Study Groups
- Resolutions (New, Revised, Merged and/or Abrogated)

He mentioned that these outcomes will serve as the guiding principles for BDT from 2018-21. He also provided details of the five regional initiatives for the Asia-Pacific. The presentation was very well received, especially due to the fact that although the ASP region is the most diverse but is well covered by the five regional initiatives.

Ms. Areewan Haorangsi Secretary General APT introduced the APT and the work that it undertakes in the region. Specifically focused on the work undertaken by the APT in support of the ITU WTDC. She outlined the preparatory mechanism and the process undertaken in preparing the region for WTDC that was done by consolidating regional inputs as common proposals into the conference. APT also drafted the ASP Regional Initiatives as input into the Conference which were subsequently endorsed as the RIS for the region. She then went on and provided an overview of the preparatory work APT undertakes for the ITU major conferences including PP, WRC, WTSA and WTDC.

Ms. Atsuko Akuda, Chief IDD, ESCAP, highlighted the inequality that exists in the region today not only with the digital divide but the social and economic impacts that now exist today. And how these could be addressed. She went on to provide an overview of the analytical work ESCAP was undertaking in regards to broadband fixed and mobile connectivity and the challenges faced, the new technological advances especially frontier

technologies such as AI and its impacts on the digital divide. She went to emphasize the challenges faced in our attempt address what's impacting our effort to bridge digital divide. She also highlighted the work ESCAP is undertaking regards to the Asia Pacific Information Superhighway.

Mr. Sameer Sharma, Senior Adviser, ASPRO, presented on the work ITU was undertaking in regards to Transmission Maps. He elaborated on the maps and its usefulness, including the global coverage of maps including submarine and terrestrial cable, and microwave networks. The presentation was further emphasized by a video on the transmission map implementation. The presentation was very well received.

REGIONAL INITIATIVES FOR THE ASIA-PACIFIC

Five sessions of RDF-ASP served as a platform for presentations on different aspects of the regional initiatives. The spectrum of speakers was quite diverse, coming from the government sector, the private sector and other UN agencies. Following is the summary of these five sessions.

Session 2. Regional Initiative ASP1 – Addressing special needs of least developed countries, small island developing states, including Pacific island countries, and landlocked developing countries

In this session the speakers shared the ongoing development activities and plans of ITU Members, partners and other agencies with focus on meeting the special needs of least developed countries (LDCs), Small Island Developing States (SIDS) and landlocked developing countries (LLDCs). Following were the Moderator, title of the presentations (with links) and Speakers in the session:

Moderator: Ms. Renga Teannaki, ICT Policy Analyst, Ministry of Information, Communication, Transport and Tourism Development, Kiribati [Bio]
Panelists:

- APT and ASP 1, Mr. Jongbong Park, Director, Project Development, Asia-Pacific Telecommunity [Bio] [Presentation]
- Mr. Fred Christopher, Manager, Pacific Islands Telecommunications Association
 [Bio] [Presentation]
- Mr. Konesh Kochhal Director, Industry Ecosystem Engagements, Strategy Marketing, South Pacific Region, Huawei [Bio] [Presentation]
- UNCDF SHIFT, Mr. Robin Gravesteijn, Data Management Specialist (Analytics and Research), UNCDF [Bio] [Presentation]
- ICT Development in Vanuatu, How We Are Doing It? Mr. Brad Partridge, Office of the Telecommunications and Radiocommunications Regulator, Vanuatu [Bio] [Presentation]

Outcomes of the session:

- APT Highlighted its efforts in addressing ASP1:
 - Addressing special needs of least developed countries, small island developing states, including Pacific island countries, and landlocked developing countries
 - Supplementary work, program Structure and delivery mandate of APT in the region
 - Key work areas such as Policy & Regulation, Spectrum Management, Cybersecurity
 - Delivering Pilot Projects in Connectivity, Innovation and Disaster Management
- PITA highlighted the following that it is doing in the Pacific:
 - Key drivers to stay relevant
 - Ubiquitous telecommunications
 - Digital development and Next Industrial Revolution
 - Continuity and Addressing Digital Transformation and the future
- Huawei focused on the theme of Broadband for All, and discussed the need for the following in less connected geographies
 - o The importance of National Broadband Plans
 - o Enabling ICT Infrastructure Development
 - Establishing UASF and tapping into Global Resources
 - Business models for accelerated connectivity
 - Realization among the stakeholders that wireless is key to connecting the unconnected
- UNCDF provided an introduction and background to the work they do in the region:
 - o Identifying the gaps that exist in ASEAN Financial Inclusion
 - o Insights to remittances, and its promotion for inclusive and sustainable markets
 - Co-investment partners launching digital financial pilots in ASEAN LDCs
- TRR (Vanuatu) provided an introduction and background to the Vanuatu situation, addressing:
 - Geopolitical environment
 - Competitive landscape
 - Universal access
- TRR also highlighted the following activities contributing to ICT development
 - Availability
 - Accessibility
 - Affordability
 - Stressed the importance of satellite connectivity and why it works in Vanuatu and its contribution to remote communities
 - o Future challenges for development

Session 3. Regional Initiative ASP2: Harnessing ICTs to support the digital economy and an inclusive digital society

This session shared the needs and requirements of ITU Members in the Asia-Pacific region as well as the partnerships and plans of development agencies, and partners in utilizing ICTs to reap the benefits of the digital economy and in addressing the human and technical

capacity challenges for bridging the digital divide. The details of the session moderator and panelists is as follows:

Moderator: Dr. Syed Ismail Shah, ITU Area Representative for Southeast Asia & Timor-Leste and Head, ITU Area Office, Jakarta, Indonesia [Bio] [Presentation]

Presentation Title and Panelists:

- UNESCO's Support for ICT-enabled Lifelong Learning for All, Dr. Jonghwi Park, Programme Specialist, ICT in Education, Section for Educational Innovation and Skills Development, UNESCO [Bio] [Presentation]
- Unleashing the potential of 5G, Mr. Guillaume Mascot, Head of Government Relations AP J & India, Nokia [Bio] [Presentation]
- The development of FinTech in China, Ms. Han Han, Chief Engineer, China Academy
 of Information and Communications Technology, Ministry of Industry and
 Information Technology [Bio] [Presentation]

Outcomes of session:

- ICTs are cross-sectoral in character and form a critical enabler to meet the UN Sustainable Development Goals. Examples from Asia-Pacific include FAO-ITU cooperation in e-agriculture (Strategy guide, country assistances to Afghanistan, Bhutan, Fiji, Papua New Guinea, Philippines, Sri Lanka, case study publication; WHO-ITU cooperation in e/m-health (India, Philippines), UNESCO-ITU cooperation in areas such as digital Citizenship and digital literacy;
- The new ICT network architecture, embracing sensors, networks, physical infrastructure, and data analytics provides a platform to deliver a range of applications and services. However, it necessitates developing appropriate ecosystem taking into account privacy and security requirements, enabling environment, digital skills, digital inclusion and innovation
- There is a need to adopt a digital transformation framework and roadmap that helps scales up and replicate pilot implementations;
- An important element to meet SDG 4 "Ensure inclusive and equitable quality education and lifelong learning for all" is the successful integration of ICTs in education. A number of important projects were highlighted by participants e.g. ICT in Education Master Plan and Policy (UNESCO); Digital Kids Asia Pacific (UNESCO with support from ITU, UNICEF, Google and Korea Funds-in-Trust)
- 5G is more than just the next generation of LTE as it is driving new user (machines and industrial) demands with extremely diverse requirements. It is an important technology powering up the 4th Industrial Revolution bringing together IOT, Cloud, Al and Robotics
- To prepare society for the fourth industrial revolution some of the important requirements are investments in ICT infrastructure, understanding evolution in skill

- demand, recognizing the importance of education, understanding new employeremployee relationships, and the socio-economic structures.
- Digital finance is an important element of digital society as it also has cross-sectoral impact. The application of ICT in financial industry is now in the third era including Electronic Finance (1.0), Internet Finance (2.0) and FinTech (3.0). There is a high growth rate of digital payments experienced in countries (e.g. China).
- Cloud Computing, Big data, Artificial Intelligence and Block chain are the key technologies of FinTech.

Session 4. Regional Initiative ASP3: Fostering development of infrastructure to enhance digital connectivity

This session shared needs and requirements of ITU Members in Asia-Pacific region as well as the partnerships and plans of development agencies and partners in utilizing ICTs to reap the benefits of the digital economy and in addressing the human and technical capacity challenges for bridging the digital divide. The details of the session moderator and panelists is as follows:

Moderator: Mr. Paul Wilson, Director General, APNIC [Bio] [Presentation]

Presentation Title and Panelists:

- Inclusive Internet Index Asia, Ms. Tenzin D. Norbhu, Head, Connectivity & Access Policy, APAC Facebook [Bio] [Presentation]
- Fostering development of infrastructure to enhance digital connectivity, Mr. Bill Lan, Chief NBN Strategist, Huawei [Bio] [Presentation]
- Fostering development of infrastructure to enhance digital connectivity, Mr. Foong
 Chee Keong, Group Head of Regulatory, Axiata [Bio] [Presentation]
- Mr. Petter-Børre Furberg, EVP Emerging Asia Cluster, Telenor Group [<u>Bio</u>]
 [<u>Presentation</u>]

Outcomes of session:

- The panelists recognized that ICTs are power tools to reap the benefits of the digital economy and in addressing the human and technical capacity challenges for bridging the digital divide.
- Efforts to build capacity and train ICT professionals on ensuring safe and secure
 Internet as well as migration from IPv4 to IPv6 were presented.
- Inclusive Internet Index based on Availability Affordability, Readiness and Relevance highlighted the need to address connectivity, gender balance, and digital literacy in holistic manner was discussed.
- The digital divide issue to consider the gap of bandwidth supply and demand as well
 as addressing the Right of Way, access difficulties encouraging clear mandate
 on infrastructure sharing and joint construction to reduce cost of access.

 Partnering with local authorities in fostering the deployment of broadband access and development of competition and to simplify administrative proceedings and ensure timely response to requests for infrastructure sharing.

Session 5. Regional Initiative ASP4: Enabling policy and regulatory environments

This session discussed the priorities of Members in the areas of developing appropriate policy and regulatory frameworks, fostering innovation, enhancing skills, increasing information sharing and strengthening regulatory cooperation, thereby contributing to a supportive regulatory environment for all stakeholders. The details of the session moderator and panelists is as follows:

Moderator: Ms. Derval Usher, Pulse Lab Indonesia [Bio]

Presentation Title and Panelists:

- Ms. Tenzin Dolma Norbhu, Head, Connectivity and Access Policy, APAC Facebook [Bio] [Presentation]
- Ms. Mila Romanoff, Global Pulse Privacy and Ethics expert [Bio] [Presentation]
- Enabling policy and regulatory environment an ASEAN digital revolution, Mr. Foong Chee Keong, Group Head of Regulatory, Axiata, Malaysia [Bio] [Presentation]
- Creating an enabling regulatory environment: Mr. Wangay Dorji, Chief, Licensing &
 Compliance Bhutan InfoComm and Media Authority [Bio] [Presentation]

Outcomes of the session:

- Related to Data Protection and Privacy
 - Ethical and legal use of data was emphasized
 - Cross border movement of data should be allowed with proper mechanisms in place
 - Regulatory Frameworks should be revised
 - Impact of General Data Protection Regulations (GDPR) (that came in force on 25th May 2018) should be evaluated
 - Awareness and Data Literacy is a key to take advantage of the use of ICTs
 - o Key elements for Data for SDGs is collaboration
 - o Safe space for data sharing should be encouraged

Enabling Regulatory Environment

- With digitization things have changed. There are now many social issues rather than technical only. Regulators need to adapt to new challenges
- Fifth Generations of regulations should be promoted that is based on collaboration.
- Connectivity is still an issue in many countries and one important piece in this regard is spectrum, which should not be considered as a way to earn money
- Technology and service neutral licensing should be adopted

- Universal Service fund should be used not only for connectivity but for provision of digital services
- o Lack of digital literacy creates a problem and should be addressed
- Suitable strategy is to have a Collaborative approach
- Regulations and Policies in the New Business Model
 - ICTs have changed from Telecommunication to Internet. From Voice to connectivity, Distance sensitive to distance insensitive, Time sensitive vs time insensitive, Networks have evolved (IP based), Competition has changed, therefore, the Policies and Regulations also need to change.
 - Regulations should support innovation, focus should be on consumers, partnerships between online companies and operators is essential, there is no one size fit all. Balance is required. Not about control but about empowerment.
- Enabling Environment: Operator's perspective
 - o The new buzz word is Digital Economy and there many players in this field
 - o In ASEAN the Digital economy has a potential of up to USD 1 trillion
 - Things have evolved from broadband to mobile financial services to Digital Innovation
 - However, nothing will work without connectivity
 - o There is a need to have futuristic policies for allocating spectrum
 - o Adoption of digital financial services and digital identity is essential.
 - o Predictability and consistency in regulations is a must for the country to progress.

Session 6. Regional Initiative ASP5: Contributing to a secure and resilient environment

This session focused on development and maintenance of secure, trusted and resilient networks and services, and addressing challenges related to climate change and disaster management. Following were the Moderator and Speakers in the session:

Moderator: Ms. Lindl Rowe, Director, International Engagement and Strategy, Department of Communications and the Arts [Bio]

Presentation Title and Panelists:

- ICT for disaster management including MDRU, Mr. Hideo Imanaka, Senior Manager
 NTT Advanced Technology [Bio] [Presentation]
- Building Institutional Capacity for Multi-Hazard Early Warning in Asia and the Pacific, Mr. Keran Wang, Sector Chief, Space Applications Section, ICT and Disaster Risk Reduction Division, ESCAP [Bio] [Presentation]
- A Multi-Stakeholder Approach in the Fight Against Cybercrime, Ms. Shina Miyuki,
 Digital Crimes Officer, Interpol [Bio] [Presentation]

- Mr. Thomas Muller, Deputy Executive Director for Network Development and External Relations, ECPAT [Bio] [Presentation]
- Mutually Agreed Norms for Routing Security, Mr. Aftab Siddiqui, Technical Engagement Manager, Internet Society, [Bio] Presentation]

Outcomes of the session

The panel of this session focused on development and maintenance of secure, trusted and resilient networks and services. The session covered diverse topics under the RI including of:

- A. Emergency Telecoms
- B. Disaster Risk reduction using Geospatial information
- c. Tackling Cybercrimes
- D. Child Online Protection
- E. Enhancing cybersecurity through countering routing incidents

The panel noted that

- Role of Movable and Deployable ICT Resource Unit (MDRU) in disaster recovery has been successfully observed especially during 2016 Kumamoto earthquake in Japan. These units have the capability to provide basic voice and data connectivity during disasters for recovery operations and other services.
- Geo Spatial Information services helps not only in disaster risk reduction but also during disaster response. Al, IoTs, Big Data and machine learning techniques have helped to develop tools which help smart cities of future in developing multi-hazard Early warning systems.
- Cross border cybercrime prevention and investigation requires a Public Private partnerships within and across regions. There have been examples of regional approaches for harmonized policies and regulatory mechanism including ASEAN cyber surge operations. ITU has signed Cooperation Agreement with Interpol on 26th March 2018 for collaborating at multiple levels.
- Access to ICTs is also enabling complex criminal activity. SDGs 16.2, 5.2 and 8.7 give
 a high level initiative and commitment from Governments to address the issues of
 Child Online protection. It was mentioned that some regional initiatives in ASP in
 this domain include ASEAN declaration on Child Sexual Exploitation (CSE) and South
 Asia Initiative to End Violence Against Children (SAIEVAC) regional strategy for
 SAARC. In addition private sector should support activities of CoP using their CSR
 programs, consumer education drives, and support in technical criminal
 investigation.
- Routing incidents are increasing globally and the reason is the inherent lack of security and protection in the BGP protocol. MANRS initiative provides crucial fixes to eliminate the most common routing threats.

The panel emphasized the diversity of activities needed at multiple levels and across horizontals to achieve the diverse objectives set out under this Regional Initiative.

Session 7. Facilitating Asia-Pacific Regional Initiatives through research, study, initiatives, partnerships and capacity building

This session focused on research, studies, capacity building, projects and partnerships to facilitate meeting the objectives of ITU Asia-Pacific Regional Initiatives. *In particular the* following topics were discussed

- ITU-D Study Groups Cycle 2018-2021
- ITU Special Initiatives
- ITU Centres of Excellence, Membership/Academia
- Projects and Partnerships

Following were the Moderator and Speakers in the session:

Moderator: Dr. Mohammad Azizi, Chairman, ATRA [Bio] [Presentation]

Presentation Title and Panelists:

- ITU Asia-Pacific Centres of Excellence and MDES, Thailand, Ms. Kalaya Chinatiworn, Director of International Organizations Group, International Affairs Bureau, Ministry of Digital Economy & Society of Thailand [Bio] [Presentation]
- Making innovation with ITU-D, Mr. Yoshiaki Nagaya, Deputy Director, Ministry of Internal Affairs and Communications, Japan [Bio] [Presentation]
- Associate Professor Lunchakorn Wuttisittikulkij, Chulalongkorn University, Thailand [Bio] [<u>Presentation</u>]
- ITU-D Study Groups and Projects, Mr. Ashish Narayan, Programme Coordinator, ITU Regional Office for Asia-Pacific [Bio] [Presentation]

Outcomes of the session:

- ITU-D study groups form an important activity to enhance research on thematic areas in the region. Innovation, interaction and implementation are important characteristics for study group activities; Workshops and capacity building activities are seen as effective means to discuss and share the outputs with larger stakeholders. There is a need to continuously innovate and focus on new areas and also develop a fast cycle to share research outputs.
- Some of the areas highlighted include Disaster management, Cybersecurity, Smart Society, Submarine cable, Telemedicine, e-logistics.
- Digital inclusion is a requirement to realize the sustainable development goals and an equitable digital society.
- Accessibility is a key requirement for digital inclusion and assisted ICT solutions needs to be promoted and adopted. (E.g. Afghanistan has set up committed to identify what assisted technologies are needed in the country, high schools for visually impaired). Government needs to be leading this in cooperation with other stakeholders.
- Members shared experiences of projects in digital inclusion. There are ongoing initiatives to learn from and share experiences.

- In a dynamic sector like ICT, it is important to enhance research collaboration and work closely with the Academia.
- Development of digital skills and that too in a timely manner are extremely important and is a focus for ITU-D Members and partners. ITU Asia-Pacific Centres of Excellence serves as a very good mechanism for building highly specialized digital skills and called for support. There is a need however to emphasize on digital literacy and skills that enhance the employability and scale out capacity building in the digital society in an inclusive manner. Partnership amongst stakeholders is critical for the success. Thailand is an example which brings together multiple stakeholders including government, regulator, international organization and industry;
- Projects and partnerships are critical to the implementation of the ITU Asia-Pacific Regional Initiative. Members and partners were invited to support projects for implementation of ASP RI.

Closing session

The Regional Director delivered closing summary of the forum. He delivered a comprehensive presentation on the deliberations and outcomes of the two days. All stakeholders were thanked for their contributions to the process of establishing the implementation plan for the regional initiatives for the Asia-Pacific. BDT and Participants thanked the Ministry Digital Economy and Society, Thailand for hosting the RDF for the Asia-Pacific and warm hospitality during their stay in Bangkok, Thailand.

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