



ITU-NBTC Asia-Pacific Regulators' Roundtable

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The 9th Asia-Pacific Regulators' Roundtable under the theme of “Digital Transformation through Collaborative Regulation” was successfully organized from 2-3 September 2019 in Bangkok, Thailand. The Roundtable was jointly organized by the National Broadcasting and Telecommunications Commission (NBTC) and the International Telecommunication Union (ITU) with support from the Department of Communications and the Arts (DoCA), Government of Australia. The Roundtable was attended by 71 participants from 22 countries from Asia-Pacific region.

General Sukit Khamasundara, the Acting Chairman of NBTC, delivered the opening remarks. Addressed to high level regulatory and policy decision makers from the Asia-Pacific region, the opening remarks focused on emerging regulatory issues and challenges and the adaptation of existing regulatory settings, infrastructure, and policies to face these changes and challenges.

The session was followed by keynote speeches by Mr. Sameer Sharma, Senior Advisor, ITU Regional Office for Asia and the Pacific and Mr. Takorn Tantasith, Secretary General of the NBTC. Mr. Sameer Sharma addressed the importance of digital transformation and how digitization has been a key driver in driving economy and society around the world through industrial disruptions as termed as 4th Industrial Revolution. In addition, it has been contributing to the enhancement of products and services in the ICT industry. In defining the way forward, policy makers and regulators need to take the ICT ecosystem that intertwines the advancement of regulation and technologies into account as well as the expansion of

the development to the industry. Providing the example of 5G, he highlighted the importance of holding discussions to exchange on technology evolution, challenges and emerging issues. He stated the importance of the role of the regulators in keeping pace with the advancements of technology and expanding the regulatory frontiers to serve as ground for technological development. He also pointed out that the Roundtable aims to assist membership by allowing them to benefit from exchanging with peers and sharing cases studies and experiences. ITU also took this opportunity to present the White Paper “Digital Infrastructure Policy and Regulation in Asia-Pacific” which provides information on available infrastructures and the challenges characterized by the vast diversity in Asia-Pacific region. This Roundtable, he said, this year also includes a session to bring in the views from the ICT industry on 5G connectivity, investments and its challenges. Celebrating its 9th edition, the Roundtable continues to provide a platform for discussions on partnerships of regulators as well as with other relevant stakeholders to bring about true benefit of inclusive digital economy.

Subsequently, Mr. Takorn Tantasith, Secretary General of the NBTC, emphasized the impact of digital disruption today and the need to balance consumers’ interest and innovation when regulating such developments. He recognized the importance of sharing relevant case studies as well as experiences among member states’ policy makers and regulators as this would provide insights into how to address emerging issues in the digital era and adopt appropriate practices. It was expected, he said, that the different sessions during the event would be useful for participants to share information, and define outcomes, practices, and recommendations. Providing the example of Thailand provided the example of the development of multi-band spectrum allocation in different frequencies that would result in auctions in 2020. The provision of the multi-band spectrum, he said, would enable usage of 5G technologies benefiting other industrial sectors and economic activities ranging from infrastructure, investments which can value up to 2.3 trillion Baht or 75 billion USD by 2035.

SESSION 1:

Accelerating Digital Transformation: Enablers for Digital Economy

Session Moderator: Mr. Leong Keng Thai, Deputy Chief Executive of IMDA, Singapore

The moderator opened the session by deliberating on the changing nature of the ICT sector that has become a horizontal pillar and contributes to supporting other industries as part of the digital ecosystem. ICTs, he said, are a means to achieve a future empowered by digital transformation. However, there is a need to interact closely with other sectors to achieve digital transformation. Challenges were also discussed, such as cybersecurity and the need

for resilient infrastructure, as well as ICT skills and literacy which are likely to affect future employment. Discussions with stakeholders should be more proactive and implementation should be collaborative to effectively address challenges and manage the emerging risks in ICT industry. The role of regulators is no longer just about ~~policing~~ enforcing but should also focus on being a facilitator to enable new technologies and changes and encourage stakeholders to adapt to, embrace, and trust technologies supporting digital transformation.

Most countries have come up with Digital Strategies and Agendas as part of their respective National Development Plans. Digital infrastructure requires effective connectivity as well as policy and regulation to help drive the success forward. Digital government/governance has also become important in terms of availability of services to citizens. Trust is also an critical enabler for the public to utilize digital services; therefore, governments need to ensure ~~that~~ cybersecurity and personal data security ~~are guaranteed~~. The example of Bhutan reflects the limitations of geographical challenges that required a huge capital investments to achieve ~~greater~~ nation-wide connectivity. Given these limitations, cross-sectoral collaboration and investment are ~~endorsed there~~ important to ensure the success of transformation together with the key enablers, for example, development of e-service.

The floor discussed extensively on the challenges in measuring progress in developing connectivity ecosystem, enablers for the development and trust of the public on ICT facilities and services ~~that posed~~ by data security and cybersecurity challenges. To address these challenges and achieve a truly connected and inclusive digital society, collaborative regulation, including inter-agency and cross-border approaches, are ~~as~~ crucial in enhancing digital infrastructure while promoting awareness of ICT utilization to the public, ICT related skill sets, and basic literacy. ITU also shared various tools, research and platforms that member states can utilize, including the ICT regulatory tracker, ICT data and statistics and recent research on economic contribution of broadband, digitization and ICT regulation.

SESSION 2:

Addressing the Barriers for Development of Digital Connectivity

Session Moderator: Mr. Sunil Kumar Gupta, Secretary, Telecom Regulatory Authority of India

The Moderator highlighted the drastic changes in Regulatory Framework to cope-up with upcoming Technological developments particularly, after launch of package switch technology and challenges of regulating OTT, IoT, Machine to Machine communications etc. It was highlighted that various sectors of economy use the telecom services and it has become an important instrument for growth of GDP. While

the legal framework to regulate telecom services, has still not changed to the extent required, ensuring growth of telecommunication has several challenges to ensure pace with technological developments. The development of both wireline and wireless technologies, huge investment in infrastructure and protection of interest of consumers are vital for conducive regulatory environment.

ITU shared the findings of the white paper “Digital Infrastructure Policy and Regulation in Asia-Pacific” that reflects the challenges and propose recommendations for Asia- pacific countries to developing ecosystems that encourage effective digital infrastructure. Promoting and setting policies and measures to facilitate the delivery of digital infrastructure remain keys for the development.

The floor shared case studies and information on their national regulatory framework, strategy, and frameworks for infrastructure development to ensure digital connectivity. There is progress in terms of broadband coverage; however, there is often limited utilization of fixed broadband due to lack of devices that connect people to the services or lack of affordability thereof. To address these challenge, regulators offered that they must create enabling environment for infrastructure development and ICT adoption by promoting local awareness on the importance of access to digital infrastructure. This, they added, would also bring about regional economic advancements.

The way forward is to ensure that regulatory frameworks are conducive to the development of network connectivity and investment while also considering economic feasibility for service providers to manage their cost in providing digital services. Data security, cybersecurity, as well as long-term national framework to monitor affordability and price of services were also discussed as key components for regulators in guaranteeing sustainable access to digital connectivity.

SESSION 3:

Setting out a Vision for 5G in Asia: Roadmaps and Pathways to a Fully Connected Future – Industry-Regulator Dialogue

**Session Moderator: Mr. Notachard Chintakanond, Acting Executive Director,
International Affairs Bureau, NBTC, Thailand**

The session discussed the current state of mobile networks, as well as national visions for regional ICT development, in particular 5G technologies, IoT deployments and implications of operator's business model to support such development. The intervener from Myanmar shared perceived potential socio-economic benefits of 5G in Myanmar, including effects from the business value chain that may also create over 22 million jobs in the world. Myanmar has formulated its vision 2020 with the theme to connect people, to Innovation and Digital Transformation, and E-government in its Telecommunication Master Plan. The second intervener from P.R. of China shared 5G development's contribution to better and stronger network performances, and highlighted how next-generation information technologies are expected to critically transform socio-economic development. 5G is expected to also facilitate profound changes in manufacturing processes and industrial patterns. The trends of increasing subscribers and mobile internet traffic in China are the results of growth and demands of economic activities spurring to new platforms. ~~Full-fledged~~ 5G commercialization in China has been driven by the development of international standards, the acceleration of technological research and development, introduction of ~~new~~ 5G spectrum, issuance of commercial licenses, and strong cooperation across sectors.

From the perspective of industry, the intervener of Telenor considered that IoT, 5G, and AI are key developments that are expected to bring about the new era of connectivity. The introduction of IoT has led to the new stream of data, or so-called data economics. The intertwined relationships of the three technologies has meant that policymakers need to consider new perspectives of technology for sustainable development, along with attention to develop digital skill sets and digital infrastructure that would facilitate the digital transformation. In addition, with the promotion of creating an inclusive society, Telenor highlighted how they have used IoT and 5G technology to promote smart agriculture in Thailand as part of the company's CSR program to enhance sustainability and productivity. Regulations should be adapted and flexible to frame and enhance development of 5G and relevant technologies. Meanwhile, the intervener from Huawei highlighted the differences between 4G and 5G and the structural impacts that 5G will introduce, as seen in the case of China where 5G is considered as the key driver of digitization of industries. The development of 5G, he said, has contributed to the development of sustainable technology as well as enhanced eco-efficiency. In addition, the improved technology of Virtual Reality and Augmented Reality and compact 5G devices will enhance customer experiences, as well as create new business opportunities and profit streams.

During the open discussion, Thailand shared the 5G roadmap, spectrum management and the regulatory sandbox to create areas with regulations conducive to R&D in compliance with 5G technology. A intervener from the industry sector also noted that spectrum management may need to consider the industry's readiness in operating in particular

spectrum which are wide spread internationally, for the benefit of pacing R&D of relevant 5G technologies and balancing the cost of investment.

SESSION 4:

5th Generation of Regulation

Session Moderator: Ms. Sofie Maddens, Head of Regulatory & Market Environment Division, ITU

The session deliberated on the 5th generation of ICT regulatory framework that needs to focus on regulatory collaborations for the benefit of society and contributing to achieving SDGs. The moderator reiterated that regulators should think holistically and focus on developing collaborative regulations that are inclusive of stakeholders, and work across sectors to build trust and skills needed for enhancing digital transformation and digital economy. Policy makers and regulators should also work collaboratively as one single constituency to drive digital transformation at the national level. Panelists recognized that collaboration is needed since ICTs are the backbone for many verticals, but not always easy. Although technology has evolved and continues to evolve quickly, the structure of regulation has not. There is a need to learn, unlearn and relearn so as to define the necessary policy and regulatory tools for digital transformation.

Examples and experiences of establishing an enabling environment for collaborative regulations were widely shared by interveners and the floor, with focus on convergences and synergies of regulators across the sectors and relevant regulatory frameworks across sectors (e.g. financial and ICT as a driver for financial inclusion; and disaster preparedness and ICT as a response and assistance delivery enabler), as well as balancing the roles of regulators as facilitator and its independence to regulate for further cross-sectoral collaboration. Vanuatu Regulator, as chair of 2019 Global Symposium of Regulator (GSR 2019) presented the GSR 2019 Best Practice Guideline, which focuses on consultation and collaborative ICT regulatory ecosystem to fast forward connectivity, and sharing ITU tools to establish, enhance, and monitor collaborative ICT regulations..

Participants raised the question of collaboration within the sector, in particular collaboration between the policy maker and regulators. Examples were discussed of ICT policy in regulation, highlighting that independence does not mean lack of accountability. Although the policy maker in general sets the vision and strategy for the sector, and the regulator implements such vision through regulatory tools and mechanisms, participants also highlighted that the actual structure depends on the legal and administrative tradition of the country. What is important is that the mandate is set out clearly, preferably in legal texts, so that functional, structural and financial independence can be achieved and the mandate carried out.

The floor discussed extensively on the challenges for regulators in maintaining its role as a strong enforcer while facilitating collaboration. Various regulators shared their journey to create collaboration with government, other stakeholders, and service providers, while keeping pace of ICT development, innovations, and capacity of regulators. The floor also noted that it is important to think of collaboration as sharing platforms where regulators from other fields can collaborate with ICT regulators. Collaborative regulation is an evolution, and not a revolution.

SESSION 5:

Protecting Consumer Interests in Digital Era

Moderator: Mr. Ilyas Ahmed, Chief Executive, Communications Authority of Maldives (CAM) Maldives

The session started by stressing importance on balancing the protection of consumers' interest and driving the development of collaborative approaches especially regulatory aspects to facilitate digital transformation. The moderator underlined the need to consider the capacity to keep pace with the shift of behavior in the new digital era. In addition, building consumers' confidence in using the new digital services, such as online payments and providing inclusive digital services to vulnerable groups has become the main challenges for digital sectors. These developments highlight the need for regulations to comprehensively adapt to fit this context.

Trust has become one of the key topics in the development of digital economy, where consumers have become more aware of data sharing in online platforms and data security. Regulations, therefore, need to give regard to protect data security but also to encourage ICT and platform utilization, which also highlight the importance of data in digital transformation and digital economy. Discussing on the regional practice, the condition in Asia-Pacific is quite fragmented as defined as "fragmented regulatory regimes". The intervener from Singapore highlighted their experience in introducing Personal Data Protection Act in 2012, which has been the main cross-sectoral legal framework and requires cross-sector collaboration in strengthening data protection. However, it is still necessary for Singapore to subsequently amend regulations to catch up with changes of digital behavior. There is also the need to change people's perception that providing process for data protection are costly; instead, protection should be perceived as a necessity for risk mitigation. The sessions stressed the need to build trust in the digital ecosystem through enabling policies, transitioning compliance to accountability, and development of standards.

The interveners discussed the issues faced by consumers in the telecommunications sector, e.g., information asymmetry, over-promising incentivized by competition, privacy and data protection responsibility, as well as the lack of representation for consumers and low visibility

of regulators. The discussion emphasized the need for effective digital infrastructure, platforms, and spaces for collaboration with industry. In addition, the floor noted that the issues should not be addressed in a disintegrated manner, but rather through a holistic approach such as single portal system implemented in Singapore. In addition to regulatory adaptation, human and intellectual capitals should be prepared and developed to keep pace with rapid digital and technological transformation. Quality of service was also a topic of discussion among participants; the issue which many countries have initiated measures or frameworks to ensure the service quality, as well as having third-party quality auditor and the system to detect blind spots of service coverage.

SESSION 6:

Innovative regulatory policies for promoting affordable access and encouraging investment

Session Moderator: Mr. H. Pradeep Rao, Member, Telecom Regulatory Authority of India (TRAI), India

The session covered extensive discussions on policies and regulations conducive to accelerating investments in telecommunication facilities and infrastructures. For the investment to effectively promote digital inclusion, it is vital to make the services affordable and accessible for all groups in society, including marginalized groups and sectors with limited access to digital technology. At the same time, access to digital services and infrastructure enhances development and governance. The two main approaches discussed are incentive based regulations and open access policy focusing on affordability. Interveners from Vanuatu and Afghanistan shared their experiences in development of infrastructure, policies and regulations in line with these solutions, and concluded that establishing such policies require political support, cross-sectoral and multi-stakeholder collaboration, and innovation.

The floor shared further a vast degree of regulations countries could deploy to incentivize enhancement of connectivity and affordability, from free spectrum and tax incentive, to managing appropriate degree of competition and creating momentum for utilizing ICT in specific sectors, such as agriculture and public health care. In continuing this effort, it is important to identify bottleneck of creating incentives for investment, accessibility, and affordability. Frequent cases on point include cost of infrastructure development in rural areas, use of appropriate and new technologies, and identifying cost of market entry. ITU also shared that ICT regulators have important roles in promoting the use of digital technology and promote accessibility so that all parts of society can enjoy the infrastructure and ensure digital inclusion. On the other hand, service providers have important roles in collaborating with regulators in measures to enhance cost-saving which contributes to affordability of services, such as infrastructure sharing. The floor was also noted that the

concept of affordability is subjective, depending on regulatory, geographical, and demographic context of the country.

SESSION 7:

WAY FORWARD

Session Moderator: Mr. Sameer Sharma, Senior Advisor, ITU

The session started by asking how do we imagine the future of these new digital technologies and how can we prepare skills and talents to embrace the changes and digital transformation. Preparing human and intellectual capitals to effectively uptake the new ICT and innovation is in current demand. The intervener from Indonesia shared the development on expansion for the broadband network that connects all regions of Indonesia. She stressed importance of capacity building and digital skill advancement in uptaking and maximizing utilizing digital. She added on raising the issue of ICT knowledge discrepancy in Indonesia that resulted in the introduction of Indonesia's strategy to digital skills to transform the country to be a leader in the region by 2025. For Indonesian developmental context, the building of digital economy requires regulatory flexibility and adaptation, as well as cross-sectoral and multi-stakeholder development approach.

The Pakistani intervener discussed the overview, initiatives, and challenges of the telecommunications sector in Pakistan. Currently, the internet network has covered most part of the country, including the submarine network. Given such development, teledensity, broadband and cellular mobile subscribers have drastically increased contributing to improvement in financial inclusion and socio-economic development. Pakistan has different initiatives to tackle social and financial exclusion, for instance, Asaan Mobile Accounts help bring unbanked people to the financial system. Key challenges in Pakistan's ICT development are the need in developing judicial system; mitigate social impact from network construction, and social media.

Mr. Sereedorji Dashzeveg, Vice-Chairman, Communications Regulatory Commission of Mongolia proposed to host the Regulators's Roundtable and International Training Program 2020 in Ulaanbaatar, Mongolia.