



ITU Asia-Pacific Regional Forum on Reshaping Policy and Regulatory Landscape for Accelerating Broadband Access

08 - 10 September 2015,
Jakarta Indonesia

Report

ITU Asia-Pacific Regional Forum on Reshaping Policy and Regulatory Landscape for Accelerating Broadband Access was successfully organized from 8 -10 September 2015 Jakarta - Indonesia. The forum was hosted by the Ministry of Communications and Information Technology of Indonesia (MCIT) and was supported by the Department of Communications, Government of Australia and Intel. **115** representatives from more than **18** countries of the Asia-Pacific region participated in the Forum.

The Forum was held in conjunction with Indonesia's celebration of ITU's 150 years anniversary where MCIT launched the ITU 150 years anniversary commemorative stamps issued by the Govt. of Indonesia.

Brief highlights of the discussions made during the 8 sessions are provided below:

Session 1: Leveraging broadband and ICTs as an enabling cross-cutting infrastructure for a more inclusive and sustainable connected society

- *ICTs and broadband play a major role in delivering integrated, cross-sectoral, sustainable development outcomes. But to do so effectively, they must be acknowledged and embedded as enabler/engine of national growth and development in individual countries' short- and long- term development plan and strategy.*
- *ICTs have experienced significant growth from 2000 to 2015. However, there remains a huge digital gap inter-region and intra-region, particularly in the area of broadband access which require concerted actions to address the gap.*
- *A number of small Pacific Island countries experience unique demographic and technological capacity challenges to develop and implement broadband infrastructure in implementing their respective broadband master plans. They need technical assistance for said related broadband development activities.*
- *It is vital that countries prioritize broadband policy to shape its future social and economic development and prosperity.*
- *Survey conducted in 11 out of 16 countries in the Asia-Pacific region (who were assisted by ITU in developing their national broadband plan/policy) show that overall, relatively good progress has been made on regulatory and policy issues dealing with on availability, market and regulatory environment, but low progress in affordability, universal services, and sector applications. In said countries, levy on telecom operators' revenue is the most common means of collecting USOF although its scope and amount may vary among countries.*

- *To address the demand side challenges of mobile BB, development of local and relevant broadband applications and content, broadband availability mapping, transparency and control of market information, communication campaigns to increase trust and security, digital skills courses to boost consumer awareness, capabilities and interest are few strategies that should be adopted at national level.*
- *To address the supply side challenges of mobile BB, co-deployment, infrastructure-sharing of telecom and non-telecom infrastructure, co-investment to reduce prices, Timely, low cost availability of access spectrum on technology neutral basis, development of effective technical standards, spectrum re-farming, effective use of universal service obligation funds, focus on expanding network coverage, promotion of effective and functional wholesale and retail markets to lower prices are few strategies that should be adopted at national level.*

Session 2: Sustainable Finance & Investment Models for Broadband Network Roll-Outs

- *Smart subsidy policies based on efficient market and gap analysis results in broadband programs that transforms the national ICT environment.*
- *Affordability is the single most parameter that if managed well, could stimulate the adoption of BB.*
- *Broadband may be considered as an ecosystem of infrastructure, services/applications and users. It should be recognized as a tool for socio-economic development.*
- *Sustainable multi-stakeholder collaboration such as financing cooperation, R&D activities and capacity building, among others, is a key contributor to acceleration of broadband access and availability and to addressing the challenges of bridging digital divide more effectively.*
- *Roll out in rural areas come with some unique challenges including but not limited to acquiring land for infrastructure, access to remote tower locations for roll out, electricity to power telecom infrastructure and charging user CPEs, security of unmanned infrastructure premises.*

Day 1 Roundtable Discussion: Broadband Access as Human Right?

The Discussion cited that some countries like Finland and Spain have declared broadband access a human right in 2009 and both committed to have connections of at least 1Mbps available to all citizens at affordable prices in 2011. This trend is not exclusive to developed countries as countries like Chile and Brazil have announced projects in broadband access in rural areas in their countries and other developing countries have followed suit. The following declarations/statements (global and national) have also been cited implying in one way or another importance of broadband access to national social and economic development, making it as a critical infrastructure, e.g.:

- *UN Human Rights Commission (HRC/17/27): "Given that internet has become an indispensable tool for realizing a range of human rights, combating inequality and accelerating development and human progress, ensuring universal access to the internet should be the priority for all states".*
- *National Constitution, e.g. 1945 Constitution of the Rep. of Indonesia, i.e., "Every person shall have the right to communicate and to obtain information...."*
- *ITU Secretary General Statement at the Special Session of the UN Broadband Commission for Digital Development (Davos, Jan 2015): "broadband networks offer perhaps the greatest opportunity we have ever had to make rapid and solid advances in global social and economic*

development – across all sectors, including healthcare, education, new job opportunities, transportation, agriculture, trade and government services;..... Broadband networks therefore need to be considered as basic critical infrastructure, like roads, railways, water and power networks."

The participants also agreed that:

- *Broadband connectivity is becoming a critical component for the sustainable development of countries, improving productivity and national competitiveness, and improving the effectiveness and transparency of government services.*
- *Governments who initiated projects on BB connectivity in the past are now reaping the benefits of those investments.*
- *The Roundtable debated on the need to reshape policy and regulatory frameworks to accelerate BB access, particularly in the areas of spectrum, affordability, simplified licensing procedures, taxation, and promoting access in rural areas while promoting digital inclusion.*

Session 3: Promoting Broadband as Enabler for the Digital Economy and for Digital Inclusion

- *Smart cities of the future should devise a strategy taking into account the broadband plans so that the new infrastructure is ready for future technologies roll out and also are compliant with international standards, e.g. RF exposure limits.*
- *Telecom/ICT infrastructure can support in moving towards smart cities but this requires smart administrations and converged policies.*
- *It is understood from different surveys from general public, in adoption of technology/BB, education is the highest family motivation.*
- *Public Private Partnerships with governments, industry and other stakeholders is a recommended approach in achieving digital inclusion and sustainability and encouragement of SMEs, innovators etc.*
- *Adapting a horizontal layer approach for regulatory framework while ensuring healthy and sustainable competition at each layer and avoiding gridlocks between any layers that become inter-dependent is essential in developing a modern regulatory approach,*
- *The critical role of broadband as an enabler in the promotion of the digital economy and digital inclusion, particularly for persons with special needs depends heavily on the policy and regulatory initiatives and approaches in place to meet the objective.*

Session 4: Broadband for Smart Cities

- *As defined by Focus 'Group on Smart Sustainable cities in 2014, A smart sustainable city is an "innovative city that uses 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".*
- *Smart cities could be classified into three types, 1st those which are built smart from start, 2nd those which go under "SMARTIZATION" and 3rd those which are purpose built like educational, industrial cities etc.*

- *Malaysia shared its smart communities initiative which was conceptualized, planned and implemented with the beneficiary community and other stakeholders on managing floods control.*
- *Digital society is an interaction between governments, businesses and citizens via digital technologies to provide social and economic benefits around efficiency and productivity gains for improved wellbeing and living of the citizens.*
- *Global transportation challenges include CO₂ emissions, loss of money and time on road, increase in vehicles and accidents on road. Intelligent Transport System (ITS) requires a proven set of strategies for advancing transportation, safety, mobility and environmental sustainability by integrating communication and information technology applications into the management and operation of transportation systems across all modes of transport.*
- *Allocation of spectrum in globally standardized bands for ITS services is one of the policy enabler for a national ITS. The purpose of ITS in Vietnam is to unify the ITS implementation levels covering the road network in Vietnam and to build up a Regional Main Centre for solving traffic problems in the metropolitan areas.*
- *Session panellists agreed that when planning and implementing smart cities, a clear plan with defined and targeted objectives implemented in coordination with concerned communities, leadership commitment and capacity building are critical success factors.*

Session 5: Why National Broadband Plans Matter

- *Government to Government (G2G), Government to Citizens (G2C) and Government to Businesses (G2B) are priority sectors for Indonesian national broadband plan.*
- *Monitoring and evaluation of the progress of implementation of Masterplans through identified and mandated coordinator-agency is essential to achieve the objectives set in the Master-plan. Master-plans should be “dynamic but not necessarily flexible” so that developments in technology can be incorporated based on the monitoring and evaluation.*
- *As pool of IPv4 addresses lapse, only IPv6 scheme can be numbering plan of any broadband plan. Challenges related to IPv4 to IPv6 transition is an area that needs more deliberation in order to enable expedited transition/uptake*
- *ICT statistics are one of the critical information which is needed to prepare national broadband master-plans. Multiple and reliable sources should be relied on in preparing ICT stats. ITU development sector continually produces products related to ICT sector statistics which are referred to all major development and global financial agencies.*
- *National ICT strategies and broadband plans should include measurable targets and indicators.*

Session 6: Government-Industry Roundtable: Building our Broadband Future

The roundtable discussed the different aspects, challenges and opportunities in building national broadband future. Several suggestions and recommendations on policy, regulation, strategies, operations, partnerships and collaboration were shared based on individual country experiences. The industry reflected their issues in rolling out their networks and put forward suggestion of potential Government- Private-Public (community) partnerships and engagements in order to harness maximum benefits for the citizens. The roundtable agreed that broadband is key to envision a future smart city that is able to address its challenges by managing its available resources in the most efficient way through crowd sourcing.

Session 7: Success Stories and Challenges in Broadband Infrastructure Roll-Out

- For the past years (depending on the development status of the country), operators have observed a trend of decline in voice traffic and growth of data traffic. However, the growth of data traffic is not sufficient to counter the decline in voice and as a result, the overall revenues of telecom operators are declining.
- Cost v/s Competitive pricing and expensive access to spectrum, readiness of the BB backbone, coverage in areas with low business case etc. are few major challenges faced by operators to have MBB telecom infrastructure roll out nationwide.
- Clearly mandated organizations with defined objectives are necessary to regulate the fast growing and changing ICT/telecom sector.
- Fast-track processes for rights of way, mandatory infrastructure sharing, spectrum trading, inclusion of BB in the set of services to be supported by USF, sustainable increase in national productivity and efficiency support some of the policy objectives by national administration to allow sustainable development of MBB.
- Regular review of the national telecommunication policy is necessary to ensure that the benefits of all future technologies are harnessed in the best possible manner.
- Micro payment through mobile platform is one of the key earners through data traffic for mobile operators therefore efficiency of the services and systems in all sectors of the governance and economy improves with digitizing the financial transactions.

Session 8: Addressing the issue of broadband absorptive capacity

- Wi-Fi is an important access technology to connect to internet represented by the fact the 85% of tablets today is Wi-Fi only.
- Behavioural analysis of user consumption of media shows that the traffic is becoming unicast with IPTV, OTT and VoD being the services getting the most demand.
- Fibre to the most economical point is the best business case model for deployment of fixed BB
- Small cell deployment of the wireless network requires a reliable and upgraded backhaul infrastructure.
- ICT and telecommunications can help countries to move from asset/natural resources based economies to innovation and knowledge based economies.

Chairmen's Session: Synopsis of Sessions, Recommendations and Way Forward

Recommendations

- Digital Inclusion is form of bridging digital divide within a country and across the regions globally. Thus, quality, value, security, pricing and customer protection of digital services (especially digital financial services) are necessary for uptake of the applications and services by users.
- Administrations, regional and international organization should work together in facilitating the use of Ka band for satellite

- *Increased national collaboration among concerned Government agencies and internationally is required to improve the quality of the ICT statistics*
- *Centralized Network Operations Center (NoC) approach may be adopted for coordinating the activities related to implementation of National Broadband plans*
- *International Organization and Administrations should work to prepare national BB development index at national, sub-regional, regional and global level. ITU Expert Group on ICT Household Indicators (EGH) and ITU Expert Group on Telecommunication/ICT Indicators (EGTI) are the considered the most appropriate forum to work towards establishing and adoption of such indicators at global level.*
- *Apart from Universal Service Obligation Fund (USOF), alternative funding sources and approaches for sustainable BB roll out should be identified and adopted. Additionally dynamic policies are required to ensure the collected USF funds are spent in efficient manner.*
- *More deliberations may be required to evaluate whether ICT/telecom sector be considered suitable for tax breaks and subsidies.*
- *ITU is requested to continue looking look into assisting administrations in dimensioning and implementing national and regional broadband infrastructure.*
- *Collaboration among the National Statistics Office(s) (NSO), telecommunication ministry and regulator as well as the service providers is very important and should be strengthened.*

The Forum ended with a note on benefit of such cross sectoral international meetings that bring together ideas from participants of different backgrounds. The need to have such engagements regularly in future was emphasized as processes, technologies and systems become more complex.

The Forum thanked the International Telecommunication Union for organizing the Forum, the Ministry of Communications and Information Technology of Indonesia for the excellent hosting and kind hospitality and Department of Communications, Australian Government for supporting the event.