Current Situation and Emerging Trends of ICT Development toward Northeast Asian Economic Integration

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ICT is a growth sector on its own, but it also serves as the critical infrastructure to other sectors and enables various applications, such as intelligent transport systems, single windows, paperless trade and smart grid to name a few, thus making ICT connectivity a strategic initiative which shapes the future of the region. Accordingly, there has been phenomenal growth in ICT connectivity in Asia and the Pacific. For the first time, over 55.6% of the global fixed broadband subscriptions are registered in the ESCAP region, followed by Europe (20.3%) and North America (13.1%) according to a recent ESCAP report, "Artificial Intelligence and Broadband Divide: State of ICT Connectivity in Asia and the Pacific 2017".

However, this development has been unevenly distributed across ESCAP sub-regions and countries. According to the study, 75% of the fixed broadband subscriptions in the ESCAP region were found in East and Northeast Asia alone. When further disaggregated by country, it becomes clear that the region's expansion in fixed broadband access is driven by China which now holds more than 50% of ESCAP's fixed broadband subscriptions. At the same time, there are 18 ESCAP member countries with less than 2 fixed broadband subscriptions per 100 inhabitants in 2016, while the Republic of Korea registered over 40 for the same indicator. In the case of Northeast Asia, the challenges also include the digital disparities between coastal and inland regions, impact of natural disasters and need for deepening the use of ICT applications for inclusive and sustainable development.

The reasons for these persistent gaps are multi-facetted. Various ESCAP analyses—identified some of the main causes, such as lack of investment in regional and national ICT infrastructure, effective Internet traffic and network management, conducive and enabling regulations and capacity and awareness among policy makers, regulators and other key stakeholders. If unaddressed, the increasing broadband divide in Asia-Pacific will have negative consequences on the capabilities of countries to effectively achieve the Sustainable Development Goals (SDGs) and economic integration, in particular SDG 9. Furthermore, the above mentioned ESCAP report underlined the need for robust and ubiquitous broadband connectivity in uptake, development and application of emerging Artificial Intelligence.

Recognizing the urgency to address the persistent connectivity deficits, the ESCAP member countries recently endorsed the Asia-Pacific Information Superhighway (AP-IS) Master Plan and Regional Cooperation Framework Document which outlined the principles, deliverables, timeline and financing mechanisms towards narrowing the digital divide and accelerating the achievement of the SDGs. The AP-IS initiative aims to increase the availability, affordability, resilience and reliability of broadband networks across Asia and the Pacific, by strengthening the underlying Internet infrastructure and promoting terrestrial and submarine fibre-optic connectivity. The initiative focuses on four pillars: (1) connectivity; (2) Internet traffic and network management; (3) e-resilience and (4) broadband for all.