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**Submissions from entities in the United Nations system and elsewhere on
their efforts in 2016 to implement the outcome of the WSIS**

Submission by

United Nations Economic and Social Commission for Asia and the Pacific

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 20th session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

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Part One: Executive Summary

[Activities undertaken]

The ESCAP secretariat is mandated by its members to undertake a regional review on the implementation of the WSIS action lines every biennium in Asia and the Pacific region. In addition, the ESCAP secretariat, through its intergovernmental regional platforms, provided opportunities for the ESCAP member countries to discuss and facilitate the implementation of WSIS action lines.

Inherently regional and global by nature, the improvement in the ICT infrastructure needs to be addressed beyond national borders. At the same time, ICT infrastructure is the meta-infrastructure which supports other infrastructure such as trade, transport, smart grit, disaster risk reduction among others. Together with support in these sectors, ICT is a critical and indispensable component of regional connectivity and economic integration by facilitating the movements of people, goods, services, money and knowledge across the region. In addition to ICT being a development enabler and growth sector, the regional broadband connectivity is a strategic initiative which can help advance the digital economy and society in support of SDGs.

One of the ESCAP's major initiatives towards the WSIS implementation is the Asia-Pacific information superhighway (AP-IS)¹ which aims to improve regional broadband connectivity and develop an enabling Internet ecosystem for the ultimate objective of achieving the SDGs. The AP-IS initiative will increase the availability and affordability of broadband Internet across Asia and the Pacific, by strengthening the underlying Internet infrastructure in the region through four pillars: (1) physical infrastructure development; (2) Internet traffic and network management; (3) promoting e-resilience and (4) broadband for all. The ESCAP secretariat organized the first meeting of the Working Group on the AP-IS in Incheon, Republic of Korea², in 2015, and the second meeting of the Working Group in Guangzhou, People's Republic of China³, in 2016. Building on the outcomes of the two Working Group meetings, the ESCAP member countries endorsed the Asia-Pacific information superhighway (AP-IS) Master Plan⁴ and Regional Cooperation Framework Document⁵ during the inaugural session of the Committee on Information and Communications Technology, Science, Technology and Innovation (CICTSTI)⁶ in October 2016. The ESCAP secretariat also conducted several analytical studies⁷ with the objective of providing insights to the state of ICT, and in particular the four pillars of the Asia-Pacific Information Superhighway (AP-IS), critical for informed decision making and policy dialogue of ESCAP member countries.

¹ <http://www.unescap.org/our-work/ict-disaster-risk-reduction/asia-pacific-information-superhighway>

² <http://www.unescap.org/events/first-meeting-working-group-asia-pacific-information-superhighway>

³ <http://www.unescap.org/events/second-session-working-group-asia-pacific-information-superhighway>

⁴ http://www.unescap.org/sites/default/files/pre-ods/CICTSTI1_2E_rev1.pdf

⁵ http://www.unescap.org/sites/default/files/pre-ods/CICTSTI1_3E_rev1.pdf

⁶ <http://www.unescap.org/official-documents/committee-information-and-communications-technology-science-technology-and-innovation/session/1>

⁷ <http://www.unescap.org/resources/state-ict-asia-and-pacific-2016-uncovering-widening-broadband-divide>

The Committee provided a regional platform for 62 member countries to share good practices and lessons learned as well as build regional consensus towards common challenges and opportunities in the area of ICT. The Committee reviewed the reports prepared by the ESCAP secretariat on the state of ICT in Asia and the Pacific, modalities in conducting the WSIS regional review and key elements of e-resilience as a basis for region's broadband infrastructure development. Based on the analytical work, the member countries reaffirmed the urgency in narrowing the widening broadband divide in the region and provided guidance and recommendations for future actions through regional cooperation and concerted actions, including the above mentioned AP-IS. Prior to the Committee, the ESCAP secretariat organized the preparatory meeting for the WSIS regional review in cooperation with the Asia-Pacific Telecommunity (APT) and the International Telecommunications Union (ITU) on 4 October 2016⁸. The meeting reviewed the proposed modality of the WSIS regional review and reaffirmed the role of action line coordinators in future reviews.

Furthermore, the ESCAP secretariat organized the meetings of the Inter-Agency Working Group on Information and Communications Technologies (IAWG on ICT) in Asia and the Pacific on a yearly basis to coordinate with relevant regional partners. In collaboration with APT and ITU, the ESCAP secretariat co-hosted the 20th Meeting on IAWG on ICT⁹ in November 2016, with the objective of sharing information on existing work and future plans on ICT and development in the region. The ESCAP secretariat, through its regional institute – the Asian and Pacific Training Centre for ICT for Development (APCICT/ESCAP) – continues to support its member States in their ICT human and institutional capacity development for policymakers, civil servants, youth, and marginalized groups, particularly women entrepreneurs.

[Progress and Challenges]

While Asia and the Pacific region have experienced tremendous growth in ICT connectivity, the digital divide continues to widen. Private investment on ICT infrastructure is hampered by poor regulation thereby highlighting the important role of public-private partnerships (PPPs) in funding ICT infrastructure projects, given that a conducive and credible investment regulation to private investment is in place. Furthermore, policies and regulations need to be updated, taking into account rapid technology development, and relevant capacity needs to be built among government officials. Mainstreaming and implementing ICT issues in national policies continues to be a challenge for some ESCAP member countries. In addition, a mismatch and changing priorities over time between global WSIS action line facilitators and their respective regional offices is a challenge for effectively conducting regional review of WSIS at the regional level.

Part Two: WSIS action lines implementation experiences in Asia and the Pacific

⁸ <http://www.unescap.org/events/world-summit-information-society-wsis-and-inter-agency-working-group-ict-meeting>

⁹ <http://www.unescap.org/events/20th-meeting-regional-interagency-working-group-information-and-communication-technology-ict>

Based on a regional survey conducted by ESCAP on WSIS outcomes in Asia and the Pacific in 2013¹⁰, and publicly available data suggest that there has been significant progress in the past decade towards achieving the WSIS objectives. However, progress is incomplete, and in some instances the digital divide has actually increased as more advanced countries have surged ahead in implementation of WSIS objectives.

The digital divide continues to widen. Recent ESCAP study¹¹ stated that although Asia and the Pacific has been leading global ICT growth in the past decade, the gap in broadband connectivity – as measured by fixed broadband subscriptions – among ESCAP member countries continues to widen and is unlikely to close without targeted interventions. ESCAP analysis revealed that 75% of the fixed broadband subscriptions are registered in East and Northeast Asia alone with more than 50 per cent of the total fixed broadband subscriptions for the Asia-Pacific region in 2015 primarily driven by China. When analysed in subscriptions per 100 inhabitants of countries, it becomes apparent that 20 countries in the ESCAP region have less than 2% fixed broadband penetration rates, while leading countries, such as the Republic of Korea, Japan and Hong Kong score over 30% for the same indicator. Nine of these countries are Pacific islands countries while the remaining are either LDCs or LLDCs. Over time, the digital divide (in terms of fixed-broadband subscription rate) is widening between low income ESCAP countries and high income ESCAP countries with no sign of catching up unless specific interventions are taken.

While there is a strong positive correlation between ICT infrastructure investment and ICT access in Asia and the Pacific¹², private investment tends to prioritize profitable markets, which has resulted in relatively larger, prosperous and urban markets receiving more financing and subsequently better ICT coverage, compared with smaller, less prosperous and profitable markets and regions. The AP-IS improves regional broadband connectivity, through a dense web of open access cross-border network infrastructure, creating a cohesive land- and sea-based fibre infrastructure with the ultimate aim of increasing the international bandwidth for developing countries in the region, to lower broadband Internet prices and to bridge the digital divide in the region,¹³ as elaborated in a report presented to the Commission at its seventy-second session.¹⁴

The recent ESCAP regional reviews of the WSIS outcomes continue to highlight the challenge of lack of updated ICT statistics collected on a yearly basis in developing countries.¹⁵ While some of these ICT indicators are regularly collected and disseminated by

¹⁰http://www.unescap.org/sites/default/files/ESCAP%20review%20of%20the%20WSIS%20Targets%20and%20regional%20perspectives_0.pdf

¹¹ ESCAP (2016), 'State of ICT in Asia and the Pacific – uncovering the widening digital divide', <http://www.unescap.org/sites/default/files/State%20of%20ICT%20in%20Asia%20and%20the%20Pacific%202016.pdf>

¹² Ibid.

¹³ For additional information, please see www.unescap.org/our-work/ict-disaster-risk-reduction/asia-pacific-information-superhighway.

¹⁴ E/ESCAP/72/17.

¹⁵ Available from http://unctad.org/SearchCenter/Pages/Results.aspx?k=http://unctad.org/en/PublicationsLibrary/dt/stict2015d3_en.pdf (2015) and

Partnership on Measuring Information and Communication Technology for Development members, other indicators are not collected on a regular basis (or not publicly available). The limited information collected from the ESCAP regional review in 2014 reflected the lack of relevant data available at the national level on several World Summit target indicators. Hence, in order for member countries and relevant stakeholders to take advantage of the opportunities provided by ICT connectivity and to measure the progress towards World Summit goals, complete and updated ICT statistics need to be collected and made publicly available on a regular basis.

Measuring the impact of the ICT sector on economic growth continued to be a challenge for some Asian and Pacific countries. While it is easier to measure inputs on the supply side of the ICT sector (for example, connectivity or the direct macroeconomic impact of the ICT sector on growth as recorded in national accounts), measuring the impact of ICT on other sectors such as health and education is less straightforward. Data availability in key areas for estimating the demand side is often lacking (for example, operators' financial reports, including expenditure figures are often not readily available in several ESCAP LDC, LLDCs and SIDS).

While mainstreaming ICT into the national strategic development policies of several ESCAP member States has, to a certain degree, been realized, ICT is still seen and treated as stand-alone programmes or projects within governments or in the private sector. This constrains the potential of leveraging the opportunities that ICT can offer to governments, businesses and individuals, in particular in the achievement of SDGs which requires integrated and concerted efforts. High geographical coverage of mobile networks in rural communities in Asia (87 per cent) and Oceania (84 per cent) provides opportunities for rural communities to use ICT more effectively for agricultural production among other socioeconomic uses. In the area of health, 85 per cent of countries worldwide had put in place e-health strategies in 2014.¹⁶ As envisaged in the World Summit outcome documents and in support of the SDGs, more efforts should be made to further enhance integration and mainstreaming of ICT in various socioeconomic sectors.

Additionally, the experience from the recent regional review conducted by ESCAP highlighted the lack of consistency in participation and changing priorities of WSIS action line facilitators over time as well as limited institutional capacities among them. While this is unavoidable, it appears that there is a disjoint between the global WSIS focal points¹⁷ and their respective regional offices in Asia and the Pacific. Therefore, this may need a revision of the list of WSIS action line facilitators/focal points in order to reflect correctly the active focal points with priorities on this area.

Part Three: ESCAP work on WSIS action lines

www.unescap.org/sites/default/files/ESCAP%20WSIS%20target%20review%20rev%2026%20May_0.pdf (2014).

¹⁶ Available from http://unctad.org/en/PublicationsLibrary/dtlstict2015d3_en.pdf.

¹⁷ For the existing list, please visit <http://www.itu.int/net/wsis/implementation/meetings.asp>

The ESCAP secretariat through **its intergovernmental regional platforms** provided opportunities for 62 ESCAP member countries to discuss and facilitate the WSIS implementation of action lines. For instance, the secretariat incorporated the WSIS action lines implementation challenges during the seventy second session of ESCAP Commission in May 2016¹⁸ and also during the inaugural session of the CICTSTI in October 2016¹⁹, in addition to other regional meetings and workshops²⁰.

In the ESCAP resolution 72/10, the Commission mandated the ESCAP secretariat to collaborate with international and regional organizations to coordinate **the regional review** of the WSIS action line implementation at the CICTSTI and hold the regional preparatory consultations, taking into account the new requirements associated with the SDGs and emerging technologies and development trends. The preparatory meetings were designed to assess opportunities and challenges towards the implementation of the World Summit action lines. The contributions from different stakeholders, including the private sector, civil society organizations, academia and the mass media, provided invaluable insights and help catalysed and synergized often disparate and unconnected efforts towards common goals.

At CICTSTI, the ESCAP secretariat presented **the modality of the WSIS regional review** in its report²¹, which was endorsed by the member countries. In preparation for the CICTSTI deliberations, several consultation meetings were organized prior to the Committee session. The Asia-Pacific Internet and Development Dialogue²² was organized jointly with the Internet Society and attended by 200 representatives from CSOs, private sector and regional think tanks and research institutes. Another meeting²³ was organized for government representatives to seek their views on the proposed modality of the WSIS regional review. These **preparatory meetings** confirmed the validity of ESCAP's proposal and paved the way for the future regional review.

The ESCAP secretariat also organizes **the Inter-Agency Working Group** on Information and Communications Technologies (IAWG on ICT) in Asia and the Pacific on a yearly basis to coordinate with relevant regional partners. Subsequently, the ESCAP secretariat, co-hosted with APT and ITU the 20th Meeting on IAWG on ICT in November 2016. The meeting was attended by UN agencies and other regional partners to discuss their work and upcoming plans on ICT and development in the region, thereby identifying synergies and opportunities for potential collaboration. The inputs from the meeting are expected to serve as a basis for collaboration among the agencies, the subsequent WSIS regional reviews, deliberations at the ESCAP intergovernmental platforms and the global processes on WSIS coordinated by the Economic and Social Council, the General Assembly and ITU.

¹⁸ http://www.unescap.org/sites/default/files/E72_17E_0.pdf

¹⁹ http://www.unescap.org/sites/default/files/pre-ods/CICTSTI1_4E.pdf

²⁰ For additional workshops, please visit <http://www.unescap.org/our-work/ict-disaster-risk-reduction/asia-pacific-information-superhighway/events/past>

²¹ http://www.unescap.org/sites/default/files/pre-ods/CICTSTI1_4E.pdf

²² <http://www.unescap.org/events/asia-pacific-regional-internet-and-development-dialogue>

²³ <http://www.unescap.org/events/world-summit-information-society-wsis-and-inter-agency-working-group-ict-meeting>

In order to address the widening digital divide and develop the digital economy in Asia and the Pacific, the ESCAP member countries decided to launch a **regional broadband initiative**, AP-IS. The initiative aims to increase the availability and affordability of broadband Internet across Asia and the Pacific, by strengthening the underlying Internet infrastructure in the region through four pillars: (1) physical infrastructure development; (2) Internet traffic and network management; (3) promoting e-resilience and (4) broadband for all. The ESCAP member countries endorsed the AP-IS Master Plan²⁴ and Regional Cooperation Framework Document²⁵ during the inaugural session of the above mentioned Committee. The documents outline the principles, deliverables, timeline and financing mechanisms towards developing regional broadband networks, narrowing the digital divide and accelerating the achievement of the SDGs and WSIS targets. The AP-IS Master Plan provides a regional platform that brings together several stakeholders including ESCAP member governments, donors and financiers, research and academic institutions, regional and sub-regional organisations, and private sector.

The ESCAP secretariat conducted **analytical studies** on ESCAP sub-regions with the objective of providing insights to the state of ICT, critical for informed decision making and policy dialogue. For instance, the secretariat published the ‘State of ICT 2016 in Asia-Pacific: uncovering the widening digital divide’²⁶ in August 2016, which provided useful insights and analyses on the state of fixed-broadband and mobile-broadband connectivity in ESCAP countries, highlighting the alarming digital divide that widen over time²⁷. These analysis and studies highlights the challenges and opportunities in the implementation of the WSIS action lines and achievement of SDGs in the region. The findings and ESCAP activities are also shared on **the ICT and DRR Gateway**²⁸ of ESCAP and its online communities for stakeholder engagement.

The Asian and Pacific Training Centre for ICT for Development (APCICT), a regional institute of ESCAP, continues to support member States in **strengthening their human and institutional capacities** on utilizing ICT for sustainable development. Its flagship programme, the Academy of ICT Essentials for Government Leaders, has been implemented in 35 countries to provide training to government leaders and civil servants on various ICTD themes such as e-Government; information security and privacy; ICT for disaster risk management, climate change and green growth; and social media for development. Its second flagship programme, the Primer Series on ICTD for Youth, which enhances awareness among students on ICT for sustainable development, has reached over 150 universities and colleges in the region.

In line with the 2030 Agenda’s call for inclusiveness and to promote **gender equality and women’s empowerment**, APCICT developed its third flagship programme called Women ICT Frontier Initiative (WIFI). Its overall mission is to promote women entrepreneurship

²⁴ http://www.unescap.org/sites/default/files/pre-ods/CICTSTI1_2E_rev1.pdf

²⁵ http://www.unescap.org/sites/default/files/pre-ods/CICTSTI1_3E_rev1.pdf

²⁶ <http://www.unescap.org/sites/default/files/State%20of%20ICT%20in%20Asia%20and%20the%20Pacific%202016.pdf>

²⁷ For additional technical studies on ICT and development, please visit <http://www.unescap.org/our-work/ict-disaster-risk-reduction/asia-pacific-information-superhighway/publications>

²⁸ <http://drrgateway.net/>

through ICT capacity development. It will strengthen capacity of current and potential women entrepreneurs in the region on using ICT in their businesses as well as the capacity of policymakers to create an enabling environment for ICT-empowered women entrepreneurs. Following its regional launch in June 2016, WIFI is now being rolled out at sub-regional and national levels.