**Economic and Social Council**

**Economic and Social Commission for Asia and the Pacific**

Committee on Information and Communications Technology,
  Science, Technology and Innovation

**First session**
Bangkok, 5-7 October 2016
Item 2 (d) of the provisional agenda[*]
**Policy issues for information and communications
technology: regional capacity-building on information
and communications technology for development**

# Report of the Asian and Pacific Training Centre for Information and Communication Technology for Development on its activities during the period 2014-2016

*Summary*

The mission of the Asian and Pacific Training Centre for Information and Communication Technology for Development is to build the human and institutional capacities of members and associate members of the Economic and Social Commission for Asia and the Pacific to use information and communications technologies (ICT) for their socioeconomic development. In pursuance of this mandate, the Centre develops and implements programmes congruent with its interrelated pillars of training, research and knowledge-sharing, and advisory services.

With its programmatic approach to ICT capacity development, the Centre developed flagship programmes that have seen wide adoption and institutionalization in Asia and the Pacific and other regions. These programmes include the Academy of ICT Essentials for Government Leaders and the Primer Series on ICT for Development for Youth. The Centre also launched, in June 2016, its third flagship programme, the Women and ICT Frontier Initiative, which aims to create socially and economically empowered women through ICT-enabled entrepreneurship.

Launched in 30 countries, the Academy is increasingly institutionalized by the Centre's national and subregional partners. Various modules are available in 16 languages. The Primer Series has been utilized by more than 150 universities in 14 countries, and the Primer Series issues are available in seven languages. To date, the Centre's programmes have reached more than 54,000 participants through face-to-face and online training.

To complement and reinforce its capacity-building work, the Centre produces knowledge products that provide valuable information and guidance on various themes and topics related to ICT for socioeconomic development. It provides a platform for regional and multi-stakeholder dialogue, knowledge-sharing, networking and cooperation on ICT human capacity development.

_____

[*]   E/ESCAP/CICTSTI(1)/L.1.

# I.    Introduction

## A.    Background

1.    The Declaration of Principles of the World Summit on the Information Society, adopted at the first phase of the World Summit in Geneva in 2003, stated that each person should have the opportunity to acquire the necessary skills and knowledge in order to understand, participate actively in, and benefit fully from, the information society and the knowledge economy. It called for international and regional cooperation in the field of capacity-building and the fostering of effective international and regional cooperation among Governments, the private sector, civil society and other stakeholders.

2.    In response to this call, the Economic and Social Commission for Asia and the Pacific (ESCAP) adopted resolution 61/6 of 18 May 2005, in which it established the United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development. The Centre's mission is to strengthen the efforts of the 62 members and associate members of the Commission to use information and communications technologies (ICT) for socioeconomic development by building human and institutional capacity for ICT.

3.    The Centre was established for an initial term of five years (2006-2011). Noting its successful performance, the Commission, in its resolution 66/14 of May 2010, recommended the Centre's operations be continued beyond its initial five-year term.

## B.    Institutional linkages

4.    The Centre's programmes and activities contribute to subprogramme 5 (Information and communications technology and disaster risk reduction) of the Commission's strategic framework for 2014-2015[1] and subprogramme 5 (Information and communications technology and disaster risk reduction and management) of the strategic framwork for 2016-2017.[2]

5.    In particular, the Centre contributes to expected accomplishment (d) of subprogramme 5 of the strategic framework for 2014-2015, regarding the strengthened capacity of member States to apply ICT for inclusive and sustainable socioeconomic development policies and programmes, and expected accomplishment (c) of subprogramme 5 of the strategic framework for 2016-2017, regarding the strengthened capacity of member States to apply ICT, space applications and disaster risk reduction strategies and management for inclusive, equitable, sustainable and resilient development.

6.    The Centre's Governing Council is composed of representatives of eight ESCAP member States and a representative nominated by the host country, the Republic of Korea. At its seventy-first session, in 2015, the Commission elected Bangladesh, Cambodia, India, Indonesia, Pakistan, the Philippines, Sri Lanka and Thailand as members of the Governing Council for the period 2015-2018.

---

[1]    A/67/6 (Prog. 16).

[2]    A/69/6 (Prog. 16).

## II. Alignment of the programme of work with regional needs for capacity-building on information and communications technologies for sustainable development

7.     The rapidly evolving ICT landscape presents new opportunities for government leaders and development stakeholders across the world. In Asia and the Pacific, remarkable advances have been made in connectivity. Mobile-cellular subscriptions increased from 28.8 per 100 inhabitants in 2006 to 93.0 in 2015.[3] With increased connectivity comes the proliferation of new technologies, which are transforming how governments and the private sector do business and provide services to improve the lives of people and communities. There is now greater awareness of the role of ICT in development, resulting in the expansion of ICT-based services, such as e-government applications.

8.     Looking beyond the positive developments in the ICT landscape, challenges remain. The digital divide persists in the Asia-Pacific region. Six of its countries show the most progress in the world in development of ICT, and yet the region is home to ten of the world's least connected countries.[4] Access to the benefits of ICT has progressed much faster in more developed countries than in low-income countries and in urban areas than in rural areas. This divide is exacerbated in terms of gender, as women continue to face disadvantages resulting from their lack of access and capacity to use these technologies.

9.     The degree to which countries are able to fully leverage ICT will depend not only on the availability of and access to ICT infrastructure but also on their human resources' capacities to effectively use such technologies.

10.     The outcome document of the World Summit High-level Event held in Geneva in June 2014 called for fostering ICT capacity-building and ensuring that professional expertise keeps pace with advancing technology by building mechanisms for ICT skills development to support economic development, help generate jobs and allow more people to benefit from the information society.[5]

11.     In the 2030 Agenda for Sustainable Development, States Members of the United Nations recognized that the spread of ICT and global interconnectedness had great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies. Furthermore, they highlighted, in Sustainable Development Goal 5, the need to achieve gender equality and empower all women and girls and, in means of implementation 5.b, the need to enhance the use of enabling technology, in particular ICT, to promote the empowerment of women.

---

[3]   International Telecommunication Union, World Telecommunication/ICT indicators database. Available from http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx.

[4]   International Telecommunication Union, *Measuring the Information Society Report 2015* (Geneva, 2015). Available from www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf.

[5]   *WSIS+10 Statement on the Implementation of WSIS Outcomes* and the *WSIS+10 Vision for WSIS Beyond 2015*, June 2014. Both are available from www.itu.int/net/wsis/implementation/2014/forum/inc/doc/outcome/362828V2E.pdf.

12.     The Centre has been continuously calibrating its programmes to meet regional capacity-building needs and priorities. Efforts were made to realign training content in light of the changing ICT landscape and the new sustainable development agenda. The T-strategy was developed to not only expand training coverage but also to provide in-depth coverage of specific topics on ICT for development. Recognizing that the goal of sustainable development is to leave no one behind, the Centre established a new flagship programme focusing on the ICT capacity development of women entrepreneurs, the Women and ICT Frontier Initiative.

## III.    Results and outcomes achieved since the last session of the Committee on Information and Communications Technology

13.     Since the fourth session of the Committee on Information and Communications Technology, which was held in October 2014, the Centre has continued to provide the region with demand-driven ICT capacity development programmes and activities along its interrelated work pillars of training, research and knowledge-sharing, and advisory services. As a regional hub for ICT capacity development, the Centre also provides a platform for regional dialogue and exchange of experiences on ICT human capacity development.

### A.    Training

14.     To ensure greater focus in and impact of the Centre's ICT capacity development work, it employs a flagship-programme approach to providing capacity-building support to ESCAP member States. These flagship programmes, which are aimed at different audience groups, include the Academy of ICT Essentials for Government Leaders; the Primer Series on ICT for Development for Youth; and the newly launched Women and ICT Frontier Initiative.

### 1.    Academy of Information and Communications Technology Essentials for Government Leaders

15.     The Academy, launched in June 2008, targets government officials, policymakers and civil servants. The programme aims to equip them with the requisite knowledge and skills to leverage ICT in their national development strategies and programmes. It consists of 11 information and communications technology for development (ICTD) modules that were developed through a rigorous needs assessment and by engaging various stakeholders in the content development process.

16.     Current modules include The Linkage between ICT Applications and Meaningful Development (module 1); ICT for Development Policy, Process and Governance (module 2); E-Government Applications (module 3); ICT Trends for Government Leaders (module 4); Internet Governance (module 5); Information Security and Privacy (module 6); ICT Project Management in Theory and Practice (module 7); Options for Funding ICTD (module 8); ICT for Disaster Risk Management (module 9); ICT, Climate Change and Green Growth (module 10); and Social Media for Development (module 11).

17. The Academy is used in an increasing number of countries in Asia and the Pacific and in other regions, benefitting institutions[6] and individuals. The programme has been launched in 30 countries in cooperation with national and subregional partners. More than 298 Academy-related workshops and activities have been organized by the Centre and its partners. Together with the online course enrolments in the Virtual Academy, more than 30,000 participants from 152 countries, representing government officers, policymakers, trainers and other officials, have benefitted from the programme.

18. The programme has seen increasing institutionalization, as evidenced by its integration into national civil service human resource development frameworks. In the countries that have been reached thus far, there has been expansive use of the Academy among a wide array of organizations as well as individuals, not only in central Governments, but also at the local level in provinces and districts.

(a) **Strengthening the Academy curriculum**

19. Prompted by the need for effective governance to support the implementation of the Sustainable Development Goals, partner governments and institutions have increasingly requested more in-depth coverage of specialized modules on e-government and cyber-security. In line with the Centre's T-strategy, it conducted a global-scale survey to assess the current status of training needs on e-government. More than 180 e-government experts across the world, from Asia and the Pacific, Africa, Europe and Latin America, have participated in the survey. The results show that in Asia there is a demand for advanced e-government training in areas such as planning and strategies for e-government, open data for government and information security. Based on these results, the Centre is developing in-depth modules on e-government, data-smart government and information security.

20. The Centre enhanced its Academy module on ICT for Disaster Risk Management to incorporate the latest ICT trends and technologies, particularly the use of social media. Government officials, particularly disaster risk management professionals, are now recognizing the power of social media as one type of ICT they can use. To provide them with learning resources on how to utilize social media effectively in disaster risk management activities, the module now includes information on social media applications, and a guidebook on social media and disaster risk management was produced as reference material for civil servants and disaster risk management practitioners.

(b) **Promoting the institutionalization of the Academy programme**

21. The Centre promotes the sustained use of the Academy programme in the region through content localization as well as by expanding the pool of national resource persons through training-of-trainers courses and workshops at the national and regional levels.

---

[6] These institutions include ministries of ICT, civil service training organizations, international and regional development organizations, civil society organizations and academic institutes.

*Localization*

22.     To date, various Academy modules have been localized into 16 languages, including Arabic, Armenian, Azeri, Chinese, English, Indonesian, Khmer, Mongolian, Myanmar, Pashto, Persian, Russian, Spanish, Tajik, Turkmen and Vietnamese.

23.     All modules, together with nine other knowledge products of the Centre, were localized into Persian by the Ministry of Information and Communications Technology of the Islamic Republic of Iran. More than 40,000 copies of these knowledge products were distributed by the Ministry to civil servants from the country's provinces.

*National-level adoption and use*

24.     The Academy programme has been institutionalized in the civil service human resource development frameworks of member States, resulting in continued roll-out to civil servants through country-led initiatives. Recent developments demonstrating national-level use of the Academy include:

        (a)     In Bhutan, the Centre supported the Government in developing its social media policy by conducting a series of high-level briefings and workshops for the Prime Minister, ministers and secretaries in April 2015. The country officially adopted its social media policy for Government in January 2016;

        (b)     In the Islamic Republic of Iran, the Information Technology Organization of the Ministry of Information and Communications Technology launched the Academy in Tehran in July 2015. More than 900 government officers and policymakers were trained, and the Academy will be further disseminated in all 31 provinces;

        (c)     In the Lao People's Democratic Republic, the Ministry of Posts and Telecommunications launched the Academy in March 2015, officially marking an important step in integrating the Academy within the Ministry's capacity-building programme for civil servants;

        (d)     In Myanmar, the Union Civil Service Board integrated the Academy in its training programme for government officials. It is now part of an eight-week government executive officials management course conducted annually by the Board for the country's senior government officials;

        (e)     In the Philippines, the Information and Communications Technology Office of the Department of Science and Technology used the Academy's training modules on social media for development and disaster risk management in a national workshop held in October 2015. Government officials from national ministries and local governments were taught a hands-on approach to using social media in various disaster risk management activities;

        (f)     In Sri Lanka, parliamentarians, ministers, heads of organizations and chief information officers of the Government were introduced to the role of social media in development and governance through a national workshop held in October 2015.

*Partner-led Academy implementation*

25.     Numerous Academy-related initiatives have been implemented by many of the Centre's partners in countries such as Azerbaijan, Cambodia,

Kazakhstan, Kyrgyzstan, Mongolia, Myanmar, Pakistan, the Philippines, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan and Vietnam.

26.     Such partner-led activities demonstrate strong national ownership of the Academy programme. In Tajikistan, the ICT Council, under the President of Tajikistan, recommended that the Academy modules be used by the Public Administration Institute for training civil servants. In Uzbekistan, the Ministry of Development of Information Technologies and Communications adopted the Academy for its regular civil service training programme.

*Regional-level implementation*

27.     A regional training-of-trainers workshop on paperless transit transport facilitation was co-organized with the Transport Division of ESCAP on 30 June and 1 July 2015 in Incheon, Republic of Korea. Government officials from landlocked developing countries and transit countries participated and shared their experiences and best practices on securing reliable and efficient transit transport.

28.     To promote the Academy among civil service organizations, particularly in the Central Asian region, during the Global Conference on a professional civil service for the successful implementation of institutional reforms, which was organized by the Academy of Public Administration, under the President of the Republic of Kazakhstan, and held on 25 May 2016, the Centre conducted a roundtable discussion. National partners from Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia and Tajikistan spoke about their ICT capacity development programmes for civil servants and their utilization of the Academy programme.

**(c)     Supporting information and communications technology capacity development beyond Asia and the Pacific**

29.     As a result of the global relevance of ICT human capacity development, there has been strong demand for the Centre's programmes from other regions. The Centre continues to collaborate with the regional commissions and other regional organizations to facilitate the roll-out and use of the Academy programme among civil servants in Africa, Western Asia, and Latin America and the Caribbean.

30.     The Economic and Social Commission for Western Asia (ESCWA) launched the Academy of ICT Essentials for Government Leaders in the ESCWA region in Beirut in June 2015. It is modelled after the Centre's Academy programme. It aims to help policymakers in Arab countries to build capacities and reduce barriers to ICT adoption and to promote the application of ICT in accelerating socioeconomic development.

31.     The Centre provided ESCWA with technical advice on content development and programme roll-out, based on its experience providing capacity-building support in Asia and the Pacific. In the ESCWA programme, Academy modules 1 to 4 were translated into Arabic and customized for the region. ESCWA organized two regional training-of-trainers workshops in July 2015 and August 2015.

**2.     Turning today's youth into tomorrow's leaders**

32.     The Centre initiated the Primer Series on ICTD for Youth to equip youth with the knowledge and skills to use ICT to promote sustainable development. Within this programme, a series of ICTD curricula was

developed as a practical and valuable learning resource for colleges and universities in Asia and the Pacific.

33.    The Primer Series is now being used by an increasing number of institutions of higher learning in the region. Launched in February 2012, the Primer Series has been rolled out in 14 countries, and more than 55 Primer Series-related workshops and activities have been organized by the Centre and its partners. More than 150 universities in Asia and the Pacific are using the Primer Series in academic curricula, reaching more than 24,000 students and faculty members.

34.    Through the Primer Series, universities in the region are able to develop ICTD-oriented programmes and courses for graduate and undergraduate students. In Kazakhstan, for example, the Kazakh-British Technical University, using the Primer Series issues, developed a mandatory course on field projects for information systems, which has been accredited by the Accreditation Board for Engineering and Technology (United States of America).

**(a)    Enhancing the information and communications technology for development curriculum for youth**

35.    The Primer Series consists of primer issues on topics such as An Introduction to ICT for Development (primer 1); Project Management and ICTD (primer 2); ICT for Disaster Risk Management (primer 3); and ICT, Climate Change and Green Growth (primer 4). The Centre recently released a new Primer Series issue on Exploring Social Media's Role in Development (primer 5).

36.    The most recent Primer Series issue aims to equip students with a sound understanding of the different types of social media; introduce how social media is used in society as well as in social development, economic growth, political development and participation, and sustainable development; examine potential drawbacks in using social media; and enhance understanding of the safe and productive use of social media.

**(b)    Promoting Primer Series use by institutions of higher learning**

37.    *Localization*. The Centre continues to assist partners in localizing the Primer Series to facilitate greater adoption and use among national universities. Issues 1 to 4 were localized into Persian by the Ministry of Information and Communications Technology of the Islamic Republic of Iran. Various Primer Series are now available in seven languages: Azeri, English, Indonesian, Mongolian, Persian, Russian and Tajik.

38.    *Primer Series implementation*. The Centre continues to promote the adoption of the Primer Series programme in the region through national workshops and awareness-raising activities. The Centre and its partners organized sensitization and capacity-building activities that helped to expand the use of the programme among institutions of higher education. These activities include:

(a)    In Azerbaijan, in order to expand the pool of universities and resource persons for the Primer Series on Project Management and ICTD, a training-of-trainers workshop was conducted by Qafqaz University for 13 universities. The university developed new introductory courses in ICT for undergraduate- and graduate-level programmes using the Primer Series issues;

(b)     In Myanmar, the University of Computer Studies Yangon convened a national training-of-trainers workshop on project management and ICTD in Yangon in July 2015. The workshop helped participants to integrate the Primer Series into university curricula, thereby contributing to the expansion of ICT project management education in institutions of higher learning in Myanmar.

39.     *Partner-led Primer Series implementation*. Attesting to the increasing use of the Primer Series, numerous partner-led Primer Series workshops were held in universities in various countries in the region, such as Azerbaijan, Cambodia, India, Indonesia, Kazakhstan, Kyrgyzstan, Myanmar, Nepal, the Philippines, Sri Lanka, Tajikistan, Turkmenistan and Uzbekistan.

(c)     **Linking information and communications technology for development education to community development**

40.     In order to strengthen students' learning in the ICTD Primer Series, the Centre initiated the engaged learning in ICTD education strategy. It is a pedagogical strategy that links classroom learning to community development practices within a credit-based university curriculum. It provides students with learning opportunities by engaging with local communities through ICT-based innovation.

41.     To advocate the engaged learning approach for ICTD across the region, two publications, *Engaged Learning Toolkit for Faculty*[7] and *Engaged Learning Guidebook for Students*,[8] were developed in collaboration with Cornell University (United States of America). These publications provide practical guidance for faculty members, students, community partners and other stakeholders in the region on planning, implementing and evaluating the engaged learning courses.

42.     To ensure the quality of the content and its effectiveness in the educational field, the publications underwent a peer-review process by experts in higher education through expert group meetings and online reviews. Pilot testing of the publications was conducted in three partner universities: Mahasarakham University (Thailand), where students built an online database and a website for a local museum for sustainable tourism;[9] the University of the Philippines Los Baños (the Philippines), where students produced an educational broadcasting programme for rural vegetable farmers;[10] and Kathmandu University (Nepal), where students created a mobile-based information systems for rural migrant workers.[11]

(d)     **Assessing the impact of the Primer Series programme**

43.     To provide partners with guidance on capturing the progress and impact of their Primer Series implementation efforts, a monitoring and

---

[7]     Asian and Pacific Training Centre for Information and Communication Technology for Development, *Engaged Learning Toolkit for Faculty: Using ICTs for Community Development* (Incheon, 2016). Available from www.unapcict.org/ecohub/resources/engaged-learning-toolkit-guidebook-using-ict-for-community-development/at_download/attachment1.

[8]     Ibid., *Engaged Learning Guidebook for Students: Using ICTs for Community Development* (Incheon, 2016). Available from www.unapcict.org/ecohub/resources/engaged-learning-toolkit-guidebook-using-ict-for-community-development/at_download/attachment3.

[9]     www.youtube.com/watch?v=tWucv8S5Dss&feature=youtube.

[10]     https://youtu.be/B9NCMME0uew.

[11]     www.youtube.com/watch?v=qP_peBrM30A.

evaluation guidebook for the Primer Series[12] was produced. The guidebook is intended to help partners to determine the extent to which students have attained the Primer Series learning objectives and outcomes. It was developed in consultation with partners using the Primer Series, as well as monitoring and evaluation experts and ICTD educators.

### (e)   Internship opportunities for youth

44.    The Centre provides internship opportunities for students to gain experience in the field of ICTD. Students who are enrolled in undergraduate and graduate programmes contribute to the Centre's research and training activities.

45.    The Centre partners with the Association of Southeast Asian Nations (ASEAN) University Network, the Ministry of Foreign Affairs of the Republic of Korea, and Daejeon University to host 10 students from ASEAN countries for a two-month period. Since the start of the programme, 62 ASEAN students have participated in the internship. The Centre also participates in and supports the official United Nations internship programme and hosts interns and volunteers from around the world.

### 3.   The Women and ICT Frontier Initiative

46.    In support of the call in the 2030 Agenda to promote gender equality and empower all women through the use of ICT, the Centre developed its third flagship programme, the Women and ICT Frontier Initiative.

47.    The Initiative's overall mission is to create socially and economically empowered women through ICT-enabled entrepreneurship. It aims to strengthen the capacity of current and potential women entrepreneurs in Asia and the Pacific to use ICT in support of their businesses and to strengthen the capacity of government leaders and policymakers to create an enabling environment for ICT-empowered women entrepreneurs.

### (a)   Programme development

48.    A series of preparatory and consultation activities was undertaken to develop the Initiative. A global stocktaking and in-depth analysis of existing capacity development initiatives and training programmes were conducted. Approximately 127 initiatives were reviewed with a view to identifying gaps and challenges in supporting women entrepreneurs. The findings identified (a) a lack of integrated training for women that encompasses both ICT skills and entrepreneurship skills; (b) that training support to women entrepreneurs tends to be sporadic; and (c) that support for policymakers in creating an enabling environment for women entrepreneurship is needed. These findings were incorporated into the formulation of the Initiative strategy and training methodology.

49.    A series of expert group meetings and consultation workshops were held as part of the development of the Initiative. Training modules were subjected to a rigorous review by subject matter experts (in ICT, gender and entrepreneurship), training specialists, the Centre's partners and government officials. To ensure that the modules were relevant to national contexts, pilot

---

[12]   Asian and Pacific Training Centre for Information and Communication Technology for Development, *The Primer Series on ICTD for Youth: Monitoring & Evaluation Guidebook* (Incheon, 2015). Available from www.unapcict.org/ecohub/primer-series-monitoring-evaluation-guidebook.

workshops were held in Pakistan (December 2015) and the Philippines (May 2016). These were useful in obtaining feedback from women entrepreneurs and policymakers on the Initiative's training content.

**(b)    Training content**

50.    The following training modules were developed for women entrepreneurs and policymakers:

(a)    *Core Content: Module 1 on Women's Empowerment, the Sustainable Development Goals and ICT.* The module introduces key concepts with regard to women's empowerment, barriers and enablers, and challenges and opportunities in using ICT to promote it;

(b)    *Core Content: Module 2 on the Enabling Role of ICT for Women Entrepreneurs.* This module introduces key concepts of women's entrepreneurship and describes the barriers to and enablers of women entrepreneurs and the role of ICT in promoting women's economic empowerment;

(c)    *Women Entrepreneurs Track: Module 1 on Planning a Business Using ICT.* The module provides information on fundamental business concepts, analytical tools and basic ICT applications in business planning;

(d)    *Women Entrepreneurs Track: Module 2 on Managing a Business Using ICT.* The primary objective of this module is to enhance women entrepreneurs' understanding of the skills, knowledge, attitudes and values useful in actualizing and operating business activities;

(e)    *Policymakers Track: Module on Government, ICT and Women's Entrepreneurship*. The module introduces the concept of gender-responsive government and provides guidelines on how to create an enabling environment for ICT-empowered women entrepreneurs.

**(c)    Regional and national implementation**

51.    The Initiative was officially launched by the Centre at the Regional Forum on ICT Human Capacity Development, held on 9 and 10 June 2016, on the occasion of the Centre's tenth anniversary. Following the regional launch, national implementation plans and strategies are now being developed.

52.    For 2016, the Centre is supporting partners in Cambodia, the Philippines and Sri Lanka to bring the Initiative to specific target groups of women entrepreneurs in those countries. To institutionalize the Initiative, partners are supported in efforts to localize the modules and build a national pool of resource persons who can bring the Initiative to the community level.

53.    Partners from Azerbaijan, Bangladesh, Bhutan, India, Indonesia, Kazakhstan, Myanmar, Pakistan and Tajikistan have also indicated their intentions to adopt and introduce the Initiative within their programmes.

54.    Complementing the face-to-face training events, the Centre is diversifying the delivery channels for the Initiative to include WIFI InfoBank¸ a knowledge repository of training resources, and a mobile learning platform that will help enhance its reach to and accessibility for a broader audience.

### B. Regional platform for dialogue and cooperation on information and communications technologies capacity development

55.     As a regional hub for ICT capacity development, the Centre organizes regional dialogues and conferences among ICTD stakeholders to identify new and emerging ICT capacity development needs; facilitate an exchange of perspectives and experiences among ICTD stakeholders; and promote regional cooperation on effective ICT capacity development.

#### 1. Regional dialogues on information and communications technologies capacity development

56.     In view of the transition from the Millennium Development Goals to the Sustainable Development Goals, the Centre organized regional dialogues to discuss the enabling role of ICT in promoting inclusive and sustainable development.

57.     The Regional Dialogue on ICTD Capacity-building for Sustainable Development was held in Incheon in November 2014. Bringing together more than 80 participants from 30 countries, the meeting examined the status of ICTD capacity-building in the region; analysed the implications of the changing ICT landscape on capacity development; and identified steps to align the Centre's work with the evolving sustainable development agenda.

58.     Following the adoption of the 2030 Agenda, the Regional Dialogue on ICTD Capacity-building for Inclusive, Resilient and Sustainable Development was held in Incheon in December 2015. Attended by more than 100 participants from 32 countries, sessions addressed how ICT could leverage impact in three areas of the 2030 Agenda – fostering effective governance, building resilience to disasters and promoting inclusive development.

59.     On the occasion of the Centre's tenth anniversary, it held the Regional Forum on ICT Human Capacity Development on 9 and 10 June 2016. Partners and ICTD stakeholders deliberated on themes such as national strategies for ICT capacity development; harnessing data for smart government; ICT-enabled women's entrepreneurship; and digital competencies required for civil servants and youth, who are tomorrow's leaders. The Forum was an occasion for the Centre and its partners to reflect on their collective achievement in ICTD human capacity-building during the previous decade, renew their commitments and chart a vision for ICT capacity-development aligned with the 2030 Agenda.

#### 2. Annual partners meetings

60.     Seven Academy Partners meetings and four Primer Partners meetings have been held by the Centre. These annual meetings provide a valuable opportunity for the Centre's national partners to collectively assess the implementation of the Academy and Primer Series at the national level as well as share experiences and good practices. The seventh Academy Partners Meeting and fourth Primer Partners Meeting were held in Incheon from 1 to 4 December 2015, in conjunction with the Regional Dialogue on ICTD Capacity-building for Inclusive, Resilient and Sustainable Development.

61.     To provide additional opportunities for national partners to share their experiences in implementing the Academy and Primer programmes, the Centre organized poster sessions during partners meetings. Country posters – in digital and printed formats – are displayed to showcase the ICTD capacity-

building programmes and projects of national partners as well as lessons learned and future plans.

## C.    Research and knowledge-sharing

62.    With its integrated approach to ICT capacity development, the Centre undertakes research and knowledge-sharing activities that complement and reinforce its flagship capacity-building programmes. It generates knowledge products that provide valuable information and guidance on various themes and topics related to ICT for development.

63.    *Knowledge-sharing Series.* The Knowledge-sharing Series provides government officers and ICT practitioners with practical guidelines and know-how on developing and implementing ICT initiatives and projects. A new issue on enterprise architecture was produced to introduce government information technology managers and employees to its concept and benefits and to suggest ways to use enterprise architecture practices in their organizations.

64.    *Brief on ICT Trends.* The Brief on ICT Trends aims to increase awareness of new and emerging ICT trends, how these trends can be utilized in national development strategies and programmes, and the need to reflect trends in ICT capacity development work. An issue on big data and its relevance to developing countries presents various applications of big data and is a useful starting point from which policymakers and other stakeholders can enhance their understanding on the topic.

65.    *Briefing Note on ICT Competency Standards.* The ICTD Briefing Note Series provides high-level and senior government officials and policymakers with concise and policy-oriented information on key ICTD issues. A Briefing Note on ICT Competency Standards was developed to provide a set of recommendations for the development of national ICT competency standards, including a step-by-step guide on how to initiate the process.

66.    *ICTD Case Study Series.* The ICTD Case Study Series is a compilation and analysis of applications of ICT in development that aims to promote the diffusion of good ICT practices in the region. To complement the Briefing Note on ICT Competency Standards, a Case Study Series issue was published on the ICT competency standards and practices of selected countries, including Indonesia, the Philippines, the Republic of Korea, Singapore and Thailand.

## D.    E-learning and online platforms

### 1.    Virtual Academy

67.    The Virtual Academy, an online distance learning platform for the flagship programmes, is part of the Centre's strategy to diversify its training delivery channels, extend outreach, and facilitate continuous and self-learning. The Virtual Academy offers video lectures and synchronized presentations of the Academy of ICT Essentials for Government Leaders, the Primer Series and the Knowledge-sharing Series.

68.    The Centre strengthened its promotion of the Virtual Academy to local institutions such as civil service organizations and universities. Partners were encouraged to adopt a hybrid approach in the training, by

complementing their on-site training with online Virtual Academy courses. These efforts have resulted in increased enrolment in the learning platform.

69.    There have been more than 11,370 online course enrolments since the launch of the Virtual Academy platform, representing an increase of 1,970 enrolments since the last session of the Committee on Information and Communications Technology. Registered users are from 152 countries, with 35.3 per cent of the users from government agencies, 32.1 per cent from academia, 13.7 per cent from non-governmental organizations, 11.8 per cent from the private sector and 7.1 per cent from development agencies.

70.    A specialized Virtual Academy training on social media for disaster risk management is available on the distance learning platform. In addition to English content, localized versions of several modules of the Academy of ICT Essentials for Government Leaders are also offered. The Virtual Academy version of module 10 (ICT, Climate Change and Green Growth) in Indonesian is completed. Virtual Academy versions of modules 9 (ICT for Disaster Risk Management), 10 and 11 (Social Media for Development) were developed in Vietnamese.

71.    Enhancements to the Virtual Academy were made by applying mainstream e-learning technologies, such as screencasting, animation, whiteboard-style drawing and Flash-based interactive quizzes. These changes aim to create a more interactive and engaging learning experience for users of the Virtual Academy.

## 2.    E-Collaborative Hub

72.    The e-Collaborative Hub is a repository of knowledge resources including ICTD publications, reports, journal articles, working papers, practical guidelines, training manuals, case studies, web portals and blog sites that are useful to the ICTD community. Two hundred ninety new resources have been added to the e-Collaborative Hub, bringing the total to 1,189 resources available as of July 2016. The portal has received more than 138,000 page views in this reporting period, bringing the total to 360,000 page views since its launch in 2008.

## E.    Advisory services

73.    The Centre provides technical assistance and advisory services to countries in the region on developing and implementing ICTD human capacity-building programmes. It offers consultation and advice to national governments, universities and training partners on how to institutionalize the Centre's three flagship programmes in their ICT capacity-development work. Customized training consulting is provided to partners on course design and curriculum development and their incorporation into national capacity-building frameworks.

74.    Advisory services are provided to the Government of the Republic of Korea for its international cooperation programmes, particularly in the area of ICT capacity development engaging government officials from other countries.

## F.    Advocacy and outreach

### 1.    The Centre's website

75.    The Centre's website (www.unapcict.org) is its main online platform for communicating and disseminating the ICTD capacity development programmes, resources and activities of the Centre and its partners. Since its launch in June 2008, the website has already generated more than 1,080,300 page views as of July 2016 (an increase of 185,300 page views).

### 2.    Advocacy on information and communications technology capacity development at international and regional conferences

76.    The Centre has promoted the importance of ICTD capacity-building through a number of presentations, keynote speeches and the facilitation of panel sessions at notable events, which also helped strengthen the Centre's networking and partnership-building with other international and regional organizations. These events included:

(a)    The Tenth Annual Symposium for the International Network for Postgraduate Students in the area of ICT4D on 15 May 2015 at Nanyang Technological University in Singapore;

(b)    The Asia Media Summit 2015 from 26 to 28 May 2015 in Kuala Lumpur;

(c)    The Pacific ICT Ministerial Meeting 2015 and Pacific ICT Officials' Meeting from 17 to 19 June 2015 in Nuku'alofa;

(d)    The International Conference on Capacity Development during Public Administration Reforms on 9 and 10 July 2015 in Baku;

(e)    The 2015 Global Saemaul Undong Forum from 14 to 16 September 2015 in Gyeongju, Republic of Korea;

(f)    The ASEAN Education Summit and twentieth anniversary of the ASEAN University Network on 6 November 2015;

(g)    The Asia Media Summit 2016 from 24 to 26 May 2016 in Incheon;

(h)    The summit organized by Microsoft Philanthropies, Enabling Opportunities, on 28 and 29 June 2016 in Singapore.

77.    The Centre intensified its advocacy on ICTD capacity-building to inspire and inform students from various universities and high schools through lectures and presentations. The following activities were undertaken in the Republic of Korea and helped to increase the visibility of the Centre:

(a)    Visit to the Centre by high school students arranged by the Incheon International Relations Foundation on 27 and 30 July 2015;

(b)    Special lecture on the United Nations and the changing world arranged by the Incheon International Relations Foundation on 21 August 2015, attended by 225 high school students;

(c)    Presentation on the United Nations and the Centre at Inha University on 10 November 2015 in Incheon, attended by 450 undergraduate students;

(d)    Exhibition at the celebration of the seventieth anniversary of the United Nations, held on 22 October 2015 in Incheon;

(e)     Exhibition and presentation at the Incheon career fair on 11 September 2015;

(f)     Visit to Dong-am Middle School, Republic of Korea, 18 March 2016;

(g)     Presentation at the State University of New York Korea, 10 May 2016;

(h)     Visit to Buheung Middle School, Incheon, 15 June 2016.

### 3.     Media

78.     Since the last session of the Committee on Information and Communications Technology, the Centre's programmes and activities have been featured in 187 articles in electronic and print media from international outlets and outlets of the Republic of Korea, bringing the total to 607 news features since the Centre's establishment. These articles are further complemented by the Centre's range of online and offline tools, including brochures and informational videos.

79.     A range of social networking channels, such as Facebook, Google+ and Twitter, are being used to engage with stakeholders, promote the Centre's programmes and activities, and enhance its visibility.

## G.     Strategic partnerships

80.     Networking and forging partnerships at the regional, subregional and national levels are central to the Centre's programmatic strategy for building ICTD capacities in Asia and the Pacific. Partners contribute at all stages of the programme development cycle, from conceptualization and development of training content to delivery in the region.

81.     To date, the Centre maintains partnerships with more than 140 organizations comprising national Governments and agencies, academic and research institutions, United Nations and international organizations, regional organizations and networks, civil society organizations, the private sector, the media, and host country Governments and agencies.

## H.     Governing Council

82.     Annual sessions of the Centre's Governing Council are held to review the administrative and financial status of the Centre, the implementation of its work programme and the development of its work plan for the coming year. The ninth session of the Council was held on 15 October 2014 in Bangkok in conjunction with the fourth session of the Committee on Information and Communications Technology. The tenth session was held on 3 December 2015 in Incheon. The reports on those sessions of the Council were endorsed by the Commission at its seventy-first and seventy-second sessions, respectively.

# IV.     The way forward

83.     The year 2016 is the first year of the 2030 Agenda. Given the enabling role of ICT in achieving the Sustainable Development Goals, the demand for ICT capacity development will continue to grow.

84.     Drawing on the lessons learned from its 10 years of operation, the Centre will strengthen its ICT capacity development work in the region, in alignment with the goals and targets of the 2030 Agenda. The Centre will

intensify its efforts to support member States in integrating ICT in their sustainable development strategies and programmes.

85.     *Flagship programme approach to ICT capacity development.* The Centre will maintain its flagship approach by enriching the Academy of ICT Essentials for Government Leaders, the Primer Series, and the Women and ICT Frontier Initiative and expanding their reach in the region. The flagship programmes will be enhanced to continue to engage partners and stakeholders throughout the project development cycle. Training content will be updated to respond to evolving regional and national ICT capacity development needs. Linkages among the three flagship programmes will be facilitated, and the Centre's pillars of work – training, research and knowledge-sharing, and advisory services – will be closely integrated in support of the flagships.

86.     *Women and ICT Frontier Initiative.* Following the regional launch of this programme, implementation at subregional and national levels will be undertaken with strong collaboration with partners and focal organizations. The Initiative will be tailored to unique national contexts and integrated into national programmes for women's entrepreneurship. The Centre will partner with the full range of relevant stakeholders that can build the ecosystem to support ICT-empowered women entrepreneurs.

87.     *Institutionalization for sustainability.* The Centre will strengthen the institutionalization of the Academy, the Primer Series and the Women and ICT Frontier Initiative programmes in the region. It will assist countries by building their pool of resource persons, supporting the localization/customization of training content and integrating the flagship programmes into their human resource development frameworks.

88.     *Development and dissemination of knowledge resources.* To reinforce its ICT capacity development work, the Centre will invigorate its research and produce knowledge resources that can help deepen understanding on issues related to ICT, sustainable development and human resource development.

89.     *Diversifying delivery channels.* The Centre will leverage recent advances in connectivity, media technologies and mobile applications to enhance the Virtual Academy, its distance learning platform. The Centre will provide opportunities for knowledge-sharing through online portals such as the WIFI InfoBank and the e-Collaborative Hub.

90.     *Strategic partnerships.* The Centre will place a high priority on forging strategic partnerships for ICT human capacity development. It already has a network of government agencies and partners with mandates in ICT human capacity-building, which work closely with the Centre in developing and delivering programmes. In maintaining these partnerships, the Centre will ensure that its ICTD capacity-building programmes are aligned with the needs of member States.

## V.     Issues for consideration

91.     The Committee on Information and Communications Technology, Science, Technology and Innovation may wish to provide the Centre with guidance and support on carrying out its mission on ICT human capacity development. The Committee may wish to provide advice on the following topics:

(a)    Advocacy for and securing high-level support on leveraging ICT to achieve the 2030 Agenda and the importance of ICT capacity development;

(b)    Identifying appropriate partners and champions who will support the expansion of the Centre's flagship programmes;

(c)    Strengthening the institutionalization of the Centre's flagship programmes in national human resource development frameworks;

(d)    Facilitating the exchange of experiences and lessons learned through knowledge networks and communities;

(e)    Effectively responding to the increasing demand for ICT capacity development support and expanding the Centre's resource base.

_____