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THE KNOWLEDGE ECONOMY AND INFORMATION, COMMUNICATION AND SPACE TECHNOLOGY POLICY: REGIONAL STRATEGY IN ASIA AND THE PACIFIC

Note by the secretariat

SUMMARY

The ongoing revolution in information, communication and space technology (ICST), as marked particularly by the rapid growth of the Internet and wireless communication, has had an extensive economic impact in the Asian and Pacific region. Advances in ICST have created a regional network economy that has facilitated the further integration of goods and services in the region. Reductions in information and transaction costs encourage businesses to adopt more competitive production, sourcing and marketing strategies.

Importantly, the emerging knowledge economy offers unparalleled opportunities for developing countries of the region to catch up with more developed countries on technology development. Given the improved access to information and knowledge and the opportunity to become a part of the regional supply chain, those countries are now better able to leapfrog some stages of development of technologies and knowledge-intensive industries.

The World Summit on the Information Society created a unique opportunity for all key stakeholders in the Asian and Pacific region to develop a common vision and understanding, enabling them to address the wide range of issues related to the information society, including those related to a knowledge economy, and innovation in the region. Critical issues on ICST confront every country of the region insofar as stimulation of the knowledge economy is concerned and achieving the Millennium Development Goals.

In order to gain fully from the knowledge economy, developing countries in the region need to take active steps to put in place and align ICST policies and strategies to enable them to benefit from evolving technological developments in the Internet, ICST convergence and other aspects of the wider knowledge economy in Asia and the Pacific. To this end, to fill a gap in the region, it has been proposed that a regional working group on ICST policy for the development of a knowledge economy be set up. Such initiatives would afford ways by which the economies of member countries could take full advantage of ICST to enhance their overall efficiency and bolster their competitive advantage.

The Committee may wish to take note of the various issues raised in the present document and provide the secretariat with guidance for its future course of action.

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Introduction

1. The present document addresses the newly emerging issues of information, communication and space technology (ICST) policy and strategy in the ESCAP region, where economic growth has been buoyant recently despite significant disparities within and among countries. The document contains four sections, namely, Asia and the Pacific in a new global economy and the implications for ICST development; major convergence issues in the development of a knowledge economy in Asia and the Pacific; policy implications for knowledge economy in the region; and the role of ESCAP in addressing those issues.

2. The emerging dimension of the Asian and Pacific region as a new engine of economic growth in the world economy, characterized by globalization, technology development and new dynamics of governance, are presented in the first section. The emerging issues of ICST policy, arising from a rapid change in factors of production, market and industry, as well as a persisting disparity in access to and the affordability of ICST in the region, are highlighted.

3. The second section raises the issues of convergence in the knowledge economy at various levels and takes a closer look at the role of the knowledge economy as a main driver of growth in the Asian and Pacific region that has spin-off effects on the production of goods, services and intellectual capital, accompanied by an increase in productivity and efficiency in multiple sectors, in addition to human resources development.

4. The third section focuses on the renewed role of ICST policies and strategies in the Asian and Pacific economies. It stresses the need for national and regional e-strategies to develop a knowledge economy and the policy implications for Internet diffusion and ICST convergence.

5. Finally, the role of ESCAP as a forum for addressing the main issues relating to a knowledge economy for the region is described with its current multisectoral platforms for normative, analytical and capacity-building activities. The key areas of ESCAP ICST policy initiatives to develop a knowledge economy are highlighted with strong emphasis on inter-agency and intergovernmental cooperation within the framework of the World Summit on the Information Society and other relevant global summits and international forums.

I. ASIA AND THE PACIFIC IN A NEW GLOBAL ECONOMY

6. The integration of the region's economic and financial markets and the increasing interdependence between individuals, firms and countries of the region are providing ever-increasing opportunities and challenges in the pursuit of economic growth and development. Lower barriers to trade and investment and lower transport and information technology costs are the principal driving forces behind this current phase of regionalization, helped by the increasingly important role of the Internet. The Asian and Pacific region is currently the fastest-growing region in the world, thanks to

the opportunities afforded by the integration of the world economy as well as the ever-increasing trends of intraregional trade and investment.

7. The Asian and Pacific region, being home to more than 60 per cent of the world's population and about 65 per cent of its poor, presents the greatest contrast and diversity of all the regions. For several decades, the region has shown an economic growth rate that is twice the world average, and is poised to become the epicentre of world economic growth over the coming decades. With its dynamism and rapid growth, it has accounted for two thirds of the world's economic growth in recent years.

8. The region has created a huge amount of intellectual property in several languages, and the human resources available can be utilized fruitfully as a knowledge resource. It also has excellent technological capabilities and is currently playing a significant role in the information and communication technology revolution. Japan and the Republic of Korea have already become global leaders in several areas of ICST development and applications, and both China and India are fast integrating themselves into this technological advance. China has emerged as a manufacturing-industry giant, producing high-end technology equipment, and India as a leading software-producing country. Both are setting the stage for other countries in the region to benefit from the growth of the manufacturing and service industries, in which ICST plays a vital role.

9. Throughout Asia and the Pacific, the more advanced industrialized countries are investing in the less developed economic regions, creating strong economic ties involving technology transfer. ICST is being relied upon for the regional management of enterprises and the support of collaborative research and development: all the major firms involved in the ICST sector in the region have opened research centres in China and India. The unique strengths of different locations are being used to regionalize the manufacturing and service industries. Political leaders in the region have already demonstrated the will to bridge the digital divide, and the younger generation, in particular, has fuelled the growth of the Internet and mobile phone communications. The unique characteristics and special features of the Asian and Pacific region enable it to promote the growth of the knowledge-based economy as a main contributing factor in sustainable economic development and poverty reduction.

II. DEVELOPMENT OF A KNOWLEDGE ECONOMY IN ASIA AND THE PACIFIC

10. The evolution of the world economy over the last 30 years has demonstrated that knowledge is clearly the primary source of wealth as well as contributing to poverty reduction. Many of the sectors that have been experiencing rapid growth in both output and employment are to some extent knowledge-intensive, including the following: information, communications and environmental technologies, aerospace, pharmaceuticals, finance and education. These sectors offer important enabling effects that can contribute to sustainable development in the region.

11. The satellite technology produced in the aerospace sector, for example, enables information to be tracked and collected on a geospecific and real-time basis, becoming an integral part of the knowledge-based economy. It is estimated that knowledge now accounts for approximately three fourths of the value added in the manufacturing sector in the world, and half of the growth of gross domestic product in the European Union region and some countries in Asia and the Pacific.

12. More than simply having a thriving "new economy" or "information economy" somehow separate from a stagnant "old economy", a knowledge economy is one in which the production, distribution and use of knowledge constitute the main driver of growth, wealth creation and employment across all industries. Economic integration across national boundaries is accelerated with an increasing pace of flow and transformation of information and knowledge along the movement of goods, services and capital in the region.

13. Knowledge management at the level of institutions and knowledge networking between institutions, as well as the concept of a knowledge-based economy at the national and regional levels, have been made possible by the new ICST and its ever-expanding networks. It would thus appear that capability-building in new technologies and knowledge management would help especially developing and least developed countries to acquire new factors of competitiveness and boost the existing comparative advantages to enhance cost-effectiveness, make efficient use of natural resources, integrate into the knowledge-based economy in the region and compete in the international market.

14. As a result of the critical role played by technology in the knowledge economy, the emergence, rapid diffusion and convergence of new technologies (information, communication and space technologies, nanotechnology, biotechnology and new materials) are reshaping economies and societies around the world. These new technologies are not only creating new products but also changing the characteristics and performance of many traditional products by becoming critical components in their manufacturing as well as functioning. Owing to this pervasive feature, the new technologies, which are also considered to be generic technologies, have brought about structural changes in industry and in economies as a whole. With faster rates of innovation, shortened product life cycles and rapid decreases in production costs, fast shifts in competitiveness among firms and countries have been seen.

15. These rapid technological changes, coupled with the globalization of trade and investment, have increased the importance of technological capabilities and knowledge as sources of competitiveness for enterprises in particular and countries as a whole. The globalization of national economies has transformed and deepened mutual cooperation through sharing knowledge and focusing on building economic partnerships, capabilities, competitiveness and efficiency. This has ushered in a new era of opportunities for Asian and Pacific countries, whether developed or less developed, to search for complementarities and cooperative mechanisms to pursue dynamic growth

and realize economies of scale and scope, as well as striving towards the objective of knowledge-based sustainable development in the region.

16. Countries in Asia and the Pacific recognize the importance of the knowledge economy for growth, as reflected in various national plans. In 2007, the Republic of Korea set out the "Cyber Korea 21 - Build a Leading Knowledge-based Society" Plan; in 2004, Malaysia established the national "Knowledge-based Economy Master Plan"; and in 2005, Mongolia established the Information and Communications Technology Authority to implement the "E-Mongolia Plan" towards achieving a knowledge-based economy.

17. In November 2000, ASEAN entered into the e-ASEAN Framework Agreement to facilitate the establishment of an ASEAN information infrastructure. The vision for e-ASEAN is threefold: (a) to create a common marketplace of half a billion people for ICT products and services; (b) to enhance the economic competitiveness of ASEAN through harnessing ICT in the private and government sectors; and (c) to enhance the living standards of ASEAN nationals through ICT, by narrowing the digital divide. The Agreement was followed by successive actions plans and agendas: the 2004 Vientiane Action Programme on Telecommunications and the IT Sector, the ASEAN ICT Focus 2005-2010, the 2005 Hanoi ICT Action Agenda and the 2006 Brunei Action Plan. The e-ASEAN Framework Agreement,[1] in its article 8, "Capacity building and e-society", calls for "fostering the development of a knowledge-based society" and "facilitating the freer flow of knowledge workers".

18. Similarly, the South Asian Association for Regional Cooperation, in its 2003 report on the Independent South Asian Commission on Poverty Alleviation, points out that the changing technological scenario necessitates new skills to compete in the world market. It has changed the structure of the market and given rise to new actors. However, even with the dramatically declining costs of communication technology, access by poor countries to the related tools remains negligible. South Asia, home to 23 per cent of the world's population, contains fewer than 1 per cent of its Internet users. Clearly, the benefits of the emerging knowledge economy are gravitating to the rich and educated, and unless special efforts are made to increase the competitive edge of poor people, that trend can only worsen.

19. The Special Programme for the Economies of Central Asia Project Working Group on ICT for Development supports the transformation of its member countries into knowledge-based economies mainly through (a) facilitating initiatives related to the knowledge-based economy; (b) supporting activities and programmes; and (c) serving as a forum for the discussion of issues on ICT for development.[2]

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[1] http://www.aseansec.org/6267.htm

[2] http://www.unescap.org/oes/SPECA/about/pwg_ICT.asp

20. Several institutions, such as the World Bank, the Organisation for Economic Cooperation and Development, and the European Union have elaborated frameworks and indicators to measure performance in the knowledge economy; however, there is no accepted standard for measuring it. Thus, assessing the actual status of the Asian and Pacific knowledge economies is a difficult task. Nevertheless, various indicators show that, in Asia, Japan, the Republic of Korea, Singapore, Australia and other countries are progressing towards achievement of a knowledge economy.

21. Mobile telephony is one area in which the region is already a world leader. The Asian and Pacific region counted 1.2 billion mobile telephone subscribers at the end of 2006, which accounts for 43 per cent of the 2.7 billion mobile phone users worldwide.[3] India had 200 million subscribers in 2007 and is forecast to have 300 million by 2010.[4] China had 500 million subscribers in 2007, which represented only 30 per cent of mobile phone penetration in the country.[5]

22. Moreover, their geographical particularities make Asian and Pacific countries demanding users for new wireless technology such as 3G and WiMAX, and leading adopters of such technologies. Mobile phone users in Japan and the Republic of Korea are also early adopters of advanced technology, and China and India help to shape the regional mobile phone market.[6] One trend is the convergence of mobile and fixed phones, the telecommunication and broadcasting world and mobile and financial services: the mobile phone becomes the ubiquitous device, not only for phone calls and text messaging, but also for watching and consuming multimedia products (music, video, games), and acting as electronic money and the enabler of m-commerce and m-transactions.

23. Japan and the Republic of Korea lead as regards the next generation (3G/4G) of mobile phones, with a high penetration of mobile phones in the population, at 80 and 85 per cent respectively, enabling advanced services. In Japan, over 10 million people use an electronic payment system integrated in their cell phones.[7] In addition, the Asian and Pacific region has around 500 million Internet users, representing 40 per cent of the global Internet users, and is the first region; Europe is in second place with 322 million users.[8] Building on these advantages and specificities, the Asian and Pacific region is poised to become a world leader and creator of next-generation technology and development for mobile phones and the Internet.

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[3] ITU ICT Eye <itu.int/ITU-D/icteye/>

[4] Telecom Regulatory Authority of India and In-Stat: "Booming Indian wireless market has plenty of room for growth" <http://www.instat.com/press.asp?ID=1889&sku=IN0603316AW>

[5] Ministry of Information Industry

[6] "Asia's early adopters shape mobile market" <http://www.vnunet.com/vnunet/news/2167285/japan-korea-pioneer-mobile-tech>

[7] "Mobile market and trends in Japan, Korea and China" <www.apvco.com/resources/public/Asia_Mobile_Markets_and_Outlook_200702.pdf>

[8] "Internet Usage in Asia" <internetworldstats.com/stats3.htm>

III. ICST POLICY FOR THE DEVELOPMENT OF A KNOWLEDGE ECONOMY

24. The current ICT development in the region is changing the global map of the knowledge economy, with newcomers setting up the new international division of labour.

25. The latest World Intellectual Property Organization patent report, *Statistics on Worldwide Patent Activity (2007 Edition)*[9] shows that new poles of innovation are emerging, particularly in North-East Asia. The most remarkable growth rates had come from countries in North-East Asia for the third year running and represented over a quarter (25.3 per cent) of all international patent applications. In 2006, the list was topped by applications from the United States of America, Japan, Germany, the Republic of Korea and France.

26. The Republic of Korea, which experienced 26.6 per cent growth in 2006 as compared with 2005, overtook the United Kingdom of Great Britain and Northern Ireland and France to become the fourth largest country of origin of filings, and applicants from China, whose use grew by 56.8 per cent, dislodged Switzerland and Sweden to take the position of eighth largest country of origin.

27. Asia is also a world leader in semiconductors, represented by Japan and the Republic of Korea, and in ICT manufacturing, by China, which overtook the United States as the largest exporter of ICT goods in 2004; its ICT exports continued strongly early in 2006. China is the sixth largest ICT market, about two and a half times that of India, but in 2005 its market was still only about one tenth that of the United States. China is already the world's largest mobile phone market, and the second largest PC market, with penetration in urban households roughly doubling every two years between 1997 and 2003.

28. The Asian and Pacific region also occupies an important place in software production, mostly in ICT services but also in localized software productions, such as video games: in China only, revenue from the online gaming industry reached around US$ 1 billion at the end of 2006, with earnings reaching around US$ 4.3 billion. Software developed by China holds a 65 per cent market share on the mainland, with an additional 20 million in revenue generated by users outside China, the rest of the market being held by companies in the United States, Japan and the Republic of Korea.[10] The Information Industry Ministry of China included online gaming in its 2006-2010 plan for software. Japan has two world leaders in video game hardware and is the second largest market for video games after the United States. In 2006, the total revenue of hardware and software related to video games was 5 billion dollars in the local Japanese market and 10 billion dollars in exports, totalling 14 billion dollars.[11]

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[9] http://www.wipo.int/ipstats/en/statistics/patents/patent_report_2007.html

[10] "China's online game industry on a roll" <www.english.peopledaily.com.cn/200704/13/eng20070413_366346.html>

[11] Computer Entertainment Supplier's Association, 2007 Games White Paper <www.report.cesa.or.jp/book-list/hakusyo_2007.html>

29. As an example, the strategy of India with regard to achieving progress towards a knowledge economy is spurred by its focus on developing a successful software industry. In 2000-2001, its software exports accounted for 14 per cent of total exports, with revenues of $ 6.2 billion and a growth rate that was 55 per cent higher than in the previous fiscal year. This success was based on a strategy to improve quality and technical excellence. Its knowledge society strategy is guided by a mission statement: to become a knowledge superpower. Plans have been made to reduce illiteracy, mobilize the network of national technological and management institutes as a core training and research base and expand ICT infrastructure to offer universal access. The strategy prioritizes a business environment and a special legal framework that promotes scientific businesses. In most cases, the Government provides facilities to attract and retain the most talented specialists.[12]

30. Services now account for around two thirds of output and foreign direct investment (FDI) in most developed countries and for up to 20-25 per cent of total international trade. Every country in the region is trying to emulate the success of India as the main destination for ICT-enabled services. While China is not yet ready to be the new centre for the offshoring of IT and ICT-enabled services, there is great potential for the growth of services sourcing in Asia and the Pacific, following the lead of India. Indeed, trade in ICT-enabled services is growing rapidly, as are aggregate FDI and the number of R and D centres set up by multinationals. Other indicators are also favourable to the growth of ICT-enabled services. The quality of its human resources is an important factor. Other factors are infrastructure, of high quality and at relatively low cost, and are enabling regulatory framework. Finally, the macroeconomic conditions and the business climate need to be favourable in order to attract offshored services activities.[13]

31. Countries in Asia and the Pacific are also leaders in content consumption and production: for example, the film industry in India ("Bollywood") produces on average more than 1,000 films a year while that of the United States (Hollywood) produces around 500. With the worldwide audience for "Bollywood" films being around 3 billion, in terms of audience, "Bollywood" overtook Hollywood in 2004 and has been leading since then.

32. The importance of content is increasing as, with the convergence of broadcasting and telecommunications, content becomes the differentiator between each product.

33. Another area to which the Asian and Pacific region needs to pay attention is the increasing importance of space technologies for the development of a knowledge economy. Space applications are a fundamental part of the knowledge economy, not only in their role of supporting infrastructure for economic, social, technological and environmental activities but also as a generator of leading-

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[12] World Bank Group, Introductory note to the Conference Knowledge for Development (K4D), a Forum for Middle East and North Africa (Marseilles, France, 9-12 September 2002.) - http://lnweb18.worldbank.org/mna/mena.nsf/General/689FA888DC72C1D685256C01006239C8?OpenDocument

[13] Organisation for Economic Cooperation and Development, "Is China the new centre for offshoring of IT and ICT-enabled services?" (Washington, DC, 2007).

edge technologies and an increasingly important market. The satellite industry and services market for the next decade will surpass US$ 150 billion, with a two-digit increase rate.

34. The World Summit on the Information Society created a unique opportunity for all key stakeholders in the Asian and Pacific region to develop a common vision and understanding, enabling them to address the wide range of issues related to the information society, including those connected to the knowledge economy, science and technology, and innovation. Critical issues in science and technology confront every country of the region insofar as stimulation of the knowledge economy is concerned and in achieving the Millennium Development Goals. Indeed, not only have driven science and technology and innovation developments in ICT and the globalization process, but ICT and globalization have, in turn, driven developments in science and technology and innovation.

35. The benefits of a knowledge economy can be achieved in a variety of ways: one is through properly directed innovation. New modes of learning and knowledge are capable of generating prosperity and a strong science and technology base, as well as broad research and development capacity, can facilitate progress. The capacity to direct research into new products, services and processes, ensuring that these come onto the market swiftly, can contribute to the acceleration of an economy. Innovation means coming up with new ideas about how to do things better or faster: it is about creating or offering original products or services, utilizing new ideas and employing a skilled workforce that is capable of using those new ideas.

36. On the basis that a knowledge-based economy presents opportunities for society and the economy as a whole, it is clear that a portion of the estimated economic growth in development of the countries in the Asian and Pacific region in the next few years will have to be attributed to new and better knowledge.

37. Another important means of generating the benefits of a knowledge society is through investment in people and skills by promoting the culture of lifelong learning. The acceleration in the rate of change and of learning drives an economy, which becomes a hierarchy of networks in the knowledge-based economy.

38. A further way of creating the benefits of the knowledge society is by developing communications infrastructures that reach all people; broadband is being used in more developed countries and narrowband in some of the less developed countries. Better forms of infrastructure can transform economic activity with regard to the private sector and civil society; enable the development of new activities; and provide countries with comparative advantages. Good infrastructure is necessary to ensure economic progress, just as the discovery and use of electric power drove agricultural and industrial production. Economic development in this century will primarily be driven by increases in productivity as a result of the enhanced application of information and knowledge to economic activity. Ultimately, broadband is the medium through which information

and knowledge will need to be accessed in all countries of the Asian and Pacific region, regardless of their level of development.

39. While developing a strong Internet environment is a common goal for Asian and Pacific Governments, the quality of government support varies greatly when it comes to implementing e-business and wider e-societal initiatives and fostering the necessary telecommunications infrastructure. Countries and areas such as Australia, the Republic of Korea, Singapore and Hong Kong, China are shaping technical, legal, economic and social environments to promote the use of the Internet, but many other countries are lagging behind.

40. In order to create an environment that promotes wider use of the Internet in the knowledge economy, Governments need to address the following issues:

- **Investment for universal access.** Many Asian and Pacific countries still need to develop and upgrade their infrastructure in telecommunications, the Internet and wireless technologies. Governments can play a role in accelerating investment in these sectors through a variety of policy incentives and regulatory frameworks.
- **Enabling a regulatory framework.** Australia, the Republic of Korea and Singapore have taken the lead in developing comprehensive e-legislation that covers digital signatures, encryption, public key infrastructure and the protection of intellectual property, as well as new areas of ICT convergence.
- **Human resources development.** Most of the countries in the region require revision of their educational and training curricula to reflect the ongoing development of ICT, and create productive employment to accommodate the flux of labour entering new job markets over the coming decades.

41. Lastly, the importance of convergence in the ICT policy environment also warrants priority attention because of the increasing role of convergence in national and regional economic and social development and growth. It has the potential to impact on all segments of society: it can shape the delivery of government services (education and health included), redefine the way businesses operate and provide individuals with as yet unimagined information and communication services. Adapting to convergence will expand access to communications, reduce costs and stimulate economic growth.

42. The merging of delivery platforms and content creates new opportunities for the development and delivery of services and products that can expand access to communication services in all parts of the Asian and Pacific region and better meet the needs of users. The unmet need for communications is huge in many developing countries, in spite of the rapid growth in access. For example, in Cambodia, communication users grew from 6,000 in 1993 to 1,400,000 by 2006 but relatively high costs, urban-rural disparities, and poverty mean that a large proportion of the population is still out of touch.

43. There is a need for the innovations that will flow from adaptation to convergence in order to expand network coverage and provide appropriate services to meet constantly evolving user needs. However, adaptation to convergence can only take place if appropriate policy and regulatory tools are in place, and policymakers, regulators, industry and civil society all have roles to play in moving the convergence agenda forward.

44. There is also a need for policymakers to develop regional and subregional approaches and harmonize regulatory frameworks and training programmes; develop models that can be tailored to countries at different levels of development of a knowledge economy; build convergence into technical cooperation projects addressing knowledge economy issues; and bring civil society into knowledge economy debates to ensure that the interests of society as a whole are adequately addressed. Independent regulators need to encourage regulatory associations to deepen the understanding of convergence issues, establish channels of communication between telecommunications and media regulators to develop a rationale for addressing convergence through a single regulatory framework, and put convergence issues on the agenda of their deliberations.

IV. ROLE OF ESCAP IN ADDRESSING THOSE ISSUES

45. This transition to an information and knowledge-based society therefore raises a number of important questions and issues for Asian and Pacific countries to address, and ESCAP, through its Information, Communication and Space Technology Division, and other divisions, can provide assistance and guidance to member States in finding solutions.

46. First, policy measures enabling the requisite legal, regulatory and institutional frameworks are needed, to lower entry barriers and ensure genuine competition among telecommunication service providers to achieve a competitive ICST infrastructure. In more advanced countries, there is a need to revisit the frameworks already in place to take into account the changes implied by the convergence of telecommunications and broadcasting. The Division can provide support in the development and adaptation of the regulatory and legal frameworks needed to benefit fully from a knowledge economy.

47. Once these policies are in place, it is important to monitor and evaluate their impact: ESCAP is part of the Partnership on Measuring ICT for Development, launched in São Paulo, Brazil, in 2004, which helps countries to compile reliable and comparable statistical ICT indicators. These statistics are to become an essential tool for designing evidence-based and results-oriented policies, and measuring the digital divide.

48. The important role of the Internet, in particular, as one main vector of communication for the knowledge economy, and its transformative role in the regional integration, are well acknowledged. In order to foster the sustainability, robustness, security, stability and development of the Internet for all, national, regional and global public policies for Internet governance are to be put in place. The ESCAP Division represented the Asian and Pacific region at the first Internet Governance Forum

held in Athens in 2006 and organized various regional and national workshops on Internet governance, in Nepal, the Lao People's Democratic Republic, Mongolia and Cambodia, in 2006-2007 in close collaboration with the respective Governments, the outcome of which is planned to be presented at the upcoming second meeting of the Internet Governance Forum, to be held in Rio de Janeiro, Brazil, in November 2007.

49. The issues addressed by the workshops cover a wide range of areas, some technical (administration of the root zone files and system, allocation of domain names, Internet protocol addressing), some financial (interconnection costs), some legal (intellectual property rights, spam, cyber crime), and some socio-cultural (capacity-building, freedom of expression), while others, just like the Internet itself, cover multiple areas: data protection and privacy rights, Internet security or multilingualism are legal and socio-cultural issues, with an impact on the whole society. Solutions cannot be provided by a single actor but only by a partnership of the Government, the private sector and the civil society.

50. The Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT) was set up in 2005 to strengthen the efforts of the member countries of ESCAP to use ICT in their socio-economic development through building human and institutional capacity for ICT.

51. The assets of the region, such as its cultural and linguistic diversity, need to be preserved in the transition to the knowledge-based world, just as the gender and social equities in information access have to be guaranteed, as reflected by the Action Line C8 of the Plan of Action of the World Summit on the Information Society, "Cultural diversity and identity, linguistic diversity and local content".[14] The ESCAP Division plays the role of regional inter-agency coordinator for the implementation of the follow-up to the World Summit on the Information Society and the Regional Action Plan.[15]

52. ESCAP can assist in developing strategic multi-stakeholder partnerships, including those with the private-public sectors and the donor community, to help the region finance the investment that must be made in order to narrow the infrastructure gap separating some of the region's most advanced countries from the others and ensure a regional homogeneity that will be beneficial for all countries in the region.

53. In order to promote the development of an ICST-led knowledge economy in the Asian and Pacific region, it is proposed that a regional working group on ICST policy for the development of a knowledge economy be established and supported by a network of national focal points, as well as

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[14] See A/C.2/59/3, annex, sect. B, para. 23.

[15] *Regional Action Plan towards the Information Society in Asia and the Pacific* (ST/ESCAP/2415) (United Nations publication, Sales No. E.06.II.F.20).

regional and subregional institutions, including United Nations agencies. The specific objectives of the working group will be as follows:

(a) To ensure that concerns related to the adoption of ICST are incorporated into the processes of regional, subregional and national development policymaking, planning and programming;

(b) To facilitate regional coordination among the ministries and agencies dealing with the sectoral aspects of ICST so as to ensure the multisectoral integration of mutually supportive policymaking, planning and programming regarding ICST and the knowledge economy;

(c) To analyse national situations related to the adoption of ICST as well as monitor and evaluate the relevance, impact and effectiveness of existing national policies, plans and programmes in meeting the objectives of the World Summit on the Information Society as those relate to the knowledge economy;

(d) To strengthen technical cooperation among developing member countries through capacity-building activities and the exchange of information and experience on ICST policy for knowledge economy development, including human resources development policy, with the support of the Asian and Pacific Training Centre for Information and Communication Technology for Development and the Asian and Pacific Centre for Transfer of Technology;

(e) To promote public awareness of the concept of the knowledge economy and its impact on national development.

V. ISSUES FOR CONSIDERATION BY THE COMMITTEE

54. The Committee may wish to take note of the various issues raised in the present document and provide the secretariat with guidance for its future course of action.

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