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ESCAP Technical Paper

Measuring ICT for Development and Building of the Information Society in Asia and the Pacific

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Building of the Information Society
in Asia and the Pacific**

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Information and Communications Technology and
Disaster Risk Reduction Division

Measuring ICT for Development and Building of the Information Society in Asia and the Pacific

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Abstract

One of the major achievements of the World Summit on the Information Society (WSIS) was the global discussion, agreement and partnership towards the internationally agreed information society indicators with a view to measuring ICT for development. Based on discussions prior to and during the WSIS, the Geneva Plan of Action made a number of suggestions and recommendations which included the establishment of coherent and internationally comparable indicator systems.

This paper aims to review progress made in some countries and assess how a subregional approach could accelerate the promotion of the above indicators by sharing knowledge, expertise and experience. In particular, this paper examines the case of the ASEAN countries and how successful examples of Thailand, Malaysia and Singapore, for instance, could be applied to and assists other ASEAN countries through regional cooperation mechanisms and frameworks

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CONTENTS

1. Introduction.....	1
2. Objectives of this paper	7
3. The digital divide in Asia and the Pacific measured by ICT indicators	8
3.1. Readiness among Asian and Pacific countries towards ICT indicators	9
4. Progress made among the ASEAN countries	13
4.1 Thailand.....	13
4.2 Malaysia.....	14
4.3 Singapore.....	15
4.4 Lessons learned and good practices.....	16
5. Conclusions and Recommendations	18

List of Tables

Table 1: Proportion of countries collecting household ICT indicators	10
Table 2: Coverage of collected household ICT indicators (per cent of population).....	11
Table 3: Institutions collecting ICT indicators in the region.....	12

List of Figures

Figure 1: ITU website on Partnership on Measuring ICT for Development.....	2
Figure 2: UNCTAD website on Partnership on Measuring ICT for Development.....	2
Figure 3: Snapshot of the website on the revision to ICT indicators.....	3
Figure 4: Snapshot of <i>Manual for Measuring ICT Access and Use by Households and Individuals</i>	4
Figure 5: Snapshot of <i>Manual for the Production of Statistics on the Information Economy</i>	4
Figure 6: UNCTAD publication on ICT indicators	5
Figure 7: ITU list of national statistical offices and international agencies involved in the initiative.....	6
Figure 8: IDA facts and figures on ICT use in Singapore	15
Figure 9: Ideal virtuous circle	17

1. Introduction

One of the major achievements of the World Summit on the Information Society (WSIS) was the global discussion, agreement and partnership towards the internationally agreed information society indicators with a view to measuring information and communication technology (ICT) for development. Based on discussions prior to and during the WSIS, the Geneva Plan of Action made a number of suggestions and recommendations which included the establishment of coherent and internationally comparable indicator systems.¹

The fact that there were no such internationally comparable indicator systems posed serious drawbacks across the world. It hampered the private sector to make investment and business decisions in a certain country, while making it difficult to set up baseline figures and benchmarks in measuring progress towards narrowing the digital divide.

Driven by the international partnership among the United Nations Conference on Trade and Development (UNCTAD), International Telecommunication Union (ITU), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Bank, Organization for Economic Co-operation and Development (OECD) and the United Nations regional commissions, the initiative called Partnership on Measuring ICT for Development² was formed in 2004. The Partnership aimed to establish a common set of ICT indicators, whereas core indicators will be harmonized and agreed upon internationally. Subsequently, the Partnership also aims to build capacity among national statistical offices in developing countries to develop statistical programmes on the information society. Finally, the Partnership intends to build an international database on ICT indicators and made it available on the Internet.³

The Partnership has accomplished a number of achievements so far. Information on activities and core indicators has been made available on the Internet. The publication entitled *Core ICT Indicators*⁴ was published in 2005 to define each indicator with methodological notes.

The “Report of the Partnership on Measuring Information and Communication Technology for Development: information and communications technology statistics”⁵ was submitted to the Fourth Session of the Statistical Commission in February 2009. The report noted that progress was made in the development of standards of ICT indicators and some of the core indicators had been revised.

¹ Esperanza Magpantay, “Project document: partnership on measuring ICT for development”, paper presented at the Joint ITU/ECA regional workshop on Information and Communication Technologies (ICT) Indicators, Gaborone, Botswana, 26-29 October 2004 (<http://www.itu.int/ITU-D/ict/partnership/material/Partnership%20Project%20Document%2023%20June.pdf>).

² <http://www.itu.int/ITU-D/ict/partnership/>

³ More about the Partnership on <http://www.itu.int/ITU-D/ict/partnership/fomap.html>.

⁴ Partnership on Measuring Information and Communication Technology for Development, *Core ICT Indicators* (Beirut, UN-ESCWA, 2005).

⁵ <http://www.itu.int/ITU-D/ict/partnership/material/2009-19-ICT-E.pdf>

Led by UNESCO and other the United Nations agencies, a series of consultations on ICT indicators related to education and e-government were organized and subsequently recommended the inclusion of respective indicators as core indicators. On another front, OECD and other agencies have been spearheading international work on measuring economic impacts of ICT.

Figure 1: ITU website on Partnership on Measuring ICT for Development



Figure 2: UNCTAD website on Partnership on Measuring ICT for Development



The revised core indicators are found at http://www.itu.int/ITU-D/ict/partnership/material/CoreICTIndicators_e_rev2.pdf. The 2005 version of the core indicators are available at <http://www.itu.int/ITU-D/ict/partnership/material/CoreICTIndicators.pdf>.

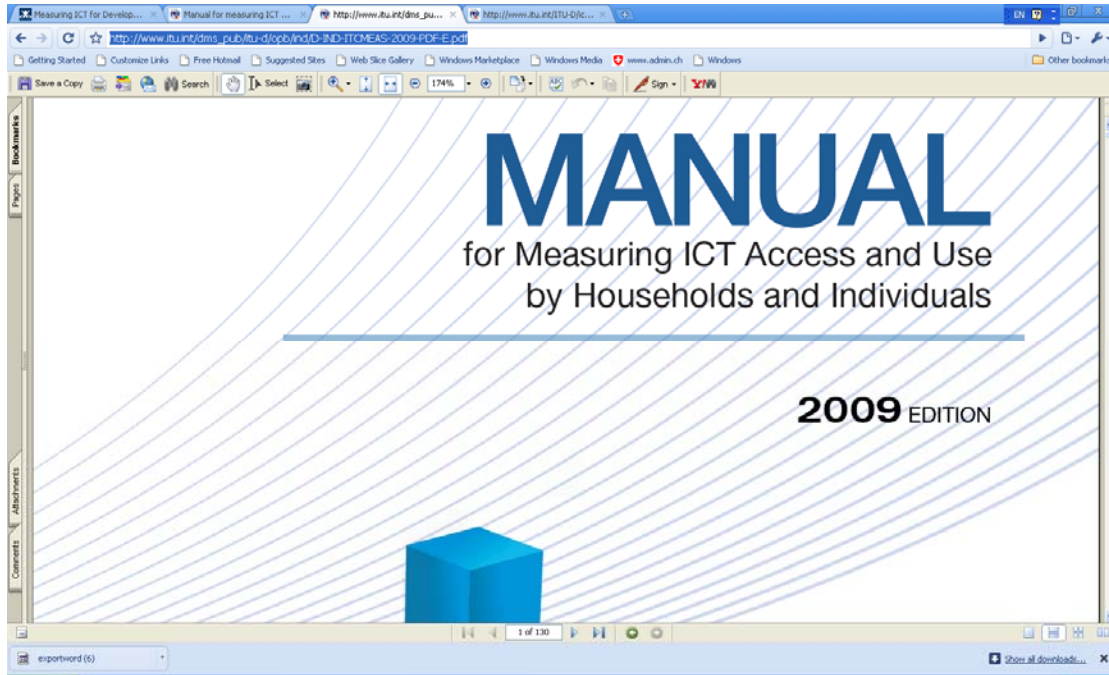
Figure 3: Snapshot of the website on the revision to ICT indicators

Core indicator	Definitions and notes	Explanation of changes
Basic-core indicators		This distinction is no longer relevant, with the deletion of the only two extended core indicators.
A1 Fixed telephone lines per 100 inhabitants	<p><i>Fixed telephone lines per 100 inhabitants</i> is calculated by dividing the number of fixed telephone lines by the population and then multiplying by 100.</p> <p><i>Fixed telephone lines</i> refer to telephone lines connecting a subscriber's terminal equipment to the public switched telephone network (PSTN) and which have a dedicated port on a telephone exchange. This term is synonymous with the terms "main station" and "Direct Exchange Line" (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscriber. The number of ISDN channels and fixed wireless subscribers are included.</p>	Some modifications to the definition of fixed telephone lines to make it clearer and harmonize the definition with the ITU handbook.
A2 Mobile cellular telephone subscribers per 100 inhabitants	<p><i>Mobile cellular telephone subscribers per 100 inhabitants</i> is obtained by dividing the number of mobile cellular subscribers by the population and then multiplying by 100.</p> <p><i>Mobile cellular telephone subscribers</i> refer to users of</p>	Slight changes have been made to the title and to the definition of <i>mobile cellular telephone subscribers</i> , based on

In the area of capacity building, various manuals were compiled and made available for national statistical offices as well as ICT and other stakeholders. The most recent manual was published by ITU in 2009 as *Manual for Measuring ICT Access and Use by Households and Individuals*.⁶

⁶ http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-ITCMEAS-2009-PDF-E.pdf

Figure 4: Snapshot of the *Manual for Measuring ICT Access and Use by Households and Individuals*



It supplements another manual published by UNCTAD in 2009, entitled *Manual for the Production of Statistics on the Information Economy*.⁷

Figure 5: Snapshot of the *Manual for the Production of Statistics on the Information Economy*



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