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**Economic and Social Commission for Western Asia (ESCWA)**

## **REPORT**

### **CAPACITY-BUILDING WORKSHOP ON INFORMATION SOCIETY MEASUREMENTS: HOUSEHOLD AND BUSINESS SURVEYS CAIRO, 20-21 JUNE 2007**

#### **Summary**

The Capacity-building Workshop on Information Society Measurements: Household and Business Surveys was held in Cairo from 20 to 21 June 2007 under the patronage of the Ministry of Communications and Information Technology (MCIT) in Egypt, the Information Technology Industry Development Agency (ITIDA) and the League of Arab States (LAS). It was organized by the Economic and Social Commission for Western Asia (ESCWA), the United Nations Conference on Trade and Development (UNCTAD), the Arab Regional Office of the International Telecommunication Union (ITU-ARO) and the Organisation for Economic Co-operation and Development (OECD).

The Workshop focused on the technical and methodological aspects of capacity-building, the measurement of the information society as well as on the use of surveys for the collection of data for the core indicators related to the use of information and communication technology (ICT) by households and in businesses. It explored the global and regional experience in ICT measurement, ICT business and household statistics as well as statistics for the ICT sector. The Workshop also presented the Arab ICT strategy and outlined its objectives and measurement indicators. Finally, it presented the regional initiative for ICT indicators with particular focus on the progress made towards its implementation.

Several topics of great interest to Arab countries were tackled in the Workshop, namely: household/individual and business data sources; ICT topics in housing censuses and economic surveys; sampling and sample frames; ICT infrastructure surveys; ICT household and individual surveys; ICT business surveys; regional initiative on capacity-building of measuring ICT indicators; and the objectives, areas and measurement indicators of the Arab strategy on ICT. The Workshop constituted a forum for the dissemination of country experiences and best practices, which has provided a practical insight into new processes that could be directly applied to improve measurement efforts of the information society in the region.

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## Introduction

1. Within the implementation framework of the recommendations of the World Summit on the Information Society (WSIS), the Arab Group adopted a Regional Initiative for Capacity-building on Measuring ICT Indicators. It was one of the initiatives adopted in the declaration of the League of Arab States (LAS), Towards the Activation of the Geneva Plan of Action, 2005, and one of the major initiatives in the Regional Plan of Action for Building the Information Society launched by the Economic and Social Commission for Western Asia (ESCWA) in November 2004. In addition, this initiative is one of five Arab initiatives led and supported by the International Telecommunication Union (ITU). The support of Arab institutions and regional and international organizations depicted the important role that information and communication technology (ICT) indicators can play in building the information society and highlighted the need for capacity-building in the Arab region, in particular with respect to defining, developing and measuring these indicators.
2. In addition, within the framework of the Partnership on Measuring ICT for Development, ESCWA and the Arab Regional Office of ITU (ITU-ARO), in collaboration with national and regional partners, carried out two capacity-building workshops for the Arab region. The first workshop was held in Beirut, Lebanon, from 7 to 10 June 2005, and the second one in Amman, Jordan, from 10 to 12 December 2006. Both focused on capacity-building planning, insofar as it determines the critical elements of capacity-building and recommended actions for stakeholders in order to promote the adoption and collection of core ICT indicators. Particular interest was directed towards developing a list of core ICT indicators, including usage and impact indicators, for the Arab region, and building the capacity of national statistical offices (NSOs), ICT ministries and agencies to facilitate the collection of data for those indicators.
3. The 38<sup>th</sup> session of the United Nations Statistical Commission, held in New York from 27 February to 2 March 2007, endorsed the core list of ICT indicators proposed by the Partnership on Measuring ICT for Development, in order to encourage countries to use the core list in their data collection programmes. It also encouraged the Partnership to continue its work on improving and updating the list of indicators for measuring the use of ICT in education, government, households and businesses. It also encouraged the Partnership to assist countries in their capacity-building efforts for ICT indicators data collection.
4. The Arab group responsible for formulating the Arab ICT strategy in the LAS has recently updated it through the report "Arab ICT Strategy - Building the Information Society 2007-2012", and is currently developing the plan of action which includes targets and indicators of measurement for the assessment of the strategy.
5. To follow up on the above, the Workshop mainly aimed at providing training and capacity-building to the NSOs and statistics units in ICT establishments in Arab countries on collecting core ICT indicators through household and business surveys. It also aimed at exploring the Arab strategy for ICT and measuring the progress made towards its implementation.

### I. RECOMMENDATIONS ISSUED BY THE WORKSHOP

6. The Workshop focused on the technical and methodological aspects of capacity-building for measuring the information society, as well as on the use of surveys for the collection and presentation of data for core indicators on infrastructure, and the use of ICT by households and businesses. It presented the regional initiative for ICT indicators with particular emphasis on the progress made towards its implementation. Discussions following the different sessions of the Workshop and the round table on the needs for ICT business and household statistics in the region raised several important issues, as summarized in the recommendations and follow-up actions listed below:

(a) Provide practical training to NSOs and statistics units in ICT establishments at the national level in a number of Arab countries. International organizations and Arab countries advanced in ICT indicators collection can help other countries, particularly in designing questionnaires, sampling, collecting, validating and analysing data;

(b) Follow international definitions, measurements, methodologies and classifications, such as the International Standard Industrial Classification of all Economic Activities (ISIC), when collecting information technology (IT) data in the whole Arab region;

(c) Re-enforce cooperation between the ministries of ICT and the NSOs in Arab countries with respect to measuring, collecting and analysing ICT indicators;

(d) Stratify and represent the community through the existing statistical methodologies available in statistical bodies;

(e) Raise the awareness of policymakers with regard to the need to emphasize the collection and analysis of ICT indicators in IT-related policies and strategies;

(f) Develop ICT gender-related indicators for the Arab region while taking into consideration women equality and the existing differences between women in rural and urban areas;

(g) Emphasize the need for NSOs and ICT statistical units to participate in follow-up workshops in order to ensure continuity and effectiveness;

(h) Unify the efforts related to the development of statistical systems for the collection and management of indicators, make the ESCWA Statistical Information System (ESIS) available to organizations in member countries for their in-house usage in managing indicators and provide the necessary training for set-up, administration and efficient use;

(i) Create a database for existing expertise in ICT indicators in the Arab region to facilitate the exchange of knowledge and accelerate the implementation of work;

(j) Call upon international donors to help Arab countries finance their own initiatives on collecting and analysing IT indicators.

## II. DISCUSSION TOPICS

7. During the two-day Workshop, participants discussed various topics including household and individual data sources, ICT questionnaires, samples and framework models, data collection strategies, the Arab ICT strategy as well as the regional initiative for ICT indicators and capacity-building for information society measurement. The obstacles that hinder the use of ICT by households, individuals and the business sector as well as country experiences and best practices in the region were also presented and discussed.

### A. GLOBAL AND REGIONAL EXPERIENCES IN ICT MEASUREMENT

8. The first presentation explored the Partnership on Measuring ICT for Development, a global, multi-stakeholder initiative composed of key stakeholders working on ICT statistics and an umbrella for the coordination of similar ongoing activities and for the planning of future activities based on the commitment of the partners. Most importantly, the presentation highlighted the fact that the Partnership is a framework for raising additional resources to assist developing countries in reaching the main objectives of the Partnership, namely: defining and analysing internationally comparable statistical indicators on ICT and developing methodologies; assisting developing countries in the collection of ICT statistics; helping countries monitor and assess their ICT policies; and developing a global database on ICT indicators. The presentation also stressed on the contribution of the Partnership to the WSIS process and highlighted the role of the United Nations Conference on Trade and Development (UNCTAD) in this regard.

9. The second presentation addressed the Guide to Measuring the Information Society that the Organisation for Economic Co-operation and Development (OECD) released at the end of 2005. The Guide collects the work of the OECD Working Party on Indicators for the Information Society that has been active since 1997 in compiling concepts, definitions, classifications and methods for information society measurement. In addition, it includes statistical work on information society statistics from other OECD areas and general information about the activities of member and non-member countries and other

organizations. The main purpose of the Guide was “to establish a set of definitions and methodologies to facilitate the compilation of internationally comparable data for measuring various aspects of the information society, information economy and electronic commerce”.<sup>\*</sup> In other words, the Guide was meant to help in consolidating efforts towards information society measurement in OECD member countries, share best practices with newly participating countries and assist those countries in starting, extending or developing measurement programmes in this area. The presentation also explored the conceptual model of the Guide as well as the changes carried out so far and concluded by listing the upcoming modifications that will be taken into consideration.

10. The third presentation focused on the need to develop internationally comparable indicators for ICT in businesses, collect data and maintain a database, disseminate information in a timely manner and provide technical assistance to help build ICT statistical capacity through advisory missions, training and technical workshops. Within this context, the presentation explored the work of UNCTAD on ICT measurement. In particular, UNCTAD has contributed to the publishing of a study entitled *Core ICT Indicators*, and has conducted a survey on ICT business data for developing countries. The survey tackled ICT usage from different angles, namely, size scope, geographic scope and industrial classification. It also studied the workforce and the value added of the ICT sector. Results highlighted several issues at the comparability and availability levels, including the lack of continuity in data collection, differences in types of surveys, sampling units, frames, sizes and denominators and the lack of coordination between government entities. All in all, the survey pointed out that ICT business indicators are scarce in developing countries. Indeed, most countries currently collect basic access indicators, such as availability of computer, Internet and website, while only a small number of developing countries currently collect ICT business indicators. Data collection is mainly done through surveys of manufacturing and service establishments, which most NSOs already have in place. However, more advanced indicators are collected through specific ICT surveys, the results of which are published in detail by UNCTAD in its annual *Information Economy Report*. UNCTAD has also provided technical assistance under the umbrella of capacity-building. In particular, it assisted statistical agencies in developing countries in their ICT data collection and dissemination efforts through advisory missions, developed and delivered a specialized manual and training course and conducted technical workshops at the regional level.

11. Finally, ESCWA presented an overview of its activities in ICT measurement and its “Regional Profile of the Information Society in Western Asia”, which it has produced biannually in both English and Arabic since 2003 to depict the status of information societies in ESCWA member countries and the region and to measure the progress made in building these societies. It is based on national profiles of the information society of the 13 ESCWA member countries and contains comparative analyses at the regional and global levels. ESCWA also explored the different round tables, workshops and expert group meetings it organized in collaboration with various international and regional bodies, including the Round Table on Information Society Indicators and Profiles for Western Asia, Beirut, 4-5 October 2004; the Capacity-building Workshop on Information Society Measurement: Core Indicators, Statistics and Data Collection, Beirut, 7-10 June 2005; the Capacity-building Workshop on Information Society Measurements: Core Indicators, Statistics and Data Collection, Amman, 10-12 December 2006; and the Expert Group Meeting on ICT Indicators Adoption and Data Collection: ICT Indicators in Education and E-Government, Cairo, 13-15 February 2007. Several ESCWA publications related to information society measurement were mentioned, especially those which proved to be of benefit to ESCWA member countries, including the “Regional Plan of Action for Building the Information Society”, “Information Society Indicators”, “Core ICT Indicators”, “Guidelines on ICT Indicators” and the Arabic translation of the “Core ICT Indicators”.

## B. ICT BUSINESS STATISTICS

12. UNCTAD focused on ICT business statistics, particularly on indicators for ICT use by businesses, which are part of the core ICT indicators. The different indicators were presented along with their definitions

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<sup>\*</sup> OECD, Working Party on Indicators for the Information Society - Guide to Measuring the Information Society, DSTI/ICCP/IIS(2005)6/FINAL, 8 November 2005.

as listed in the Core ICT Indicators study and which are: proportion of businesses using computers; proportion of employees using computers; proportion of businesses using the Internet; proportion of businesses with a Web presence; proportion of businesses with an intranet; proportion of businesses receiving orders over the Internet; proportion of businesses using the Internet by type of access; proportion of businesses with a local area network (LAN); proportion of businesses with an extranet; and proportion of businesses using the Internet by type of activity. UNCTAD also referred to the possibility for countries to add or split categories according to their data requirements. The response categories are also defined in the Core ICT Indicators document.

13. Finland's national statistical institution, Statistics Finland, presented model questions and questionnaire design on the use of ICT in business surveys. It showed how dynamic ICT is in business surveys and how survey questions change over time. The presentation also went through the core indicator model questions, discussed a number of their aspects and presented possible indicators for countries wanting to have more than the core indicators. In addition, aspects related to questionnaire design were explored and lessons learned on question formulation and questionnaire design were highlighted. Finally, Statistics Finland pointed out that, during the formulation process, it is important to follow the internationally agreed upon wording of the questions as closely as possible and that particular attention should be attributed to the language in order to preserve the meaning of the questions. It also recommended that the capacities of statisticians should be built to adequately understand the substance area they are asking about and that they should acquire a general understanding on the situation in the country before running the survey to be able to assess feasibility and to formulate questions the right way.

14. The Central Agency for Public Mobilization and Statistics (CAPMAS) in Egypt presented an overview of its core ICT indicators project to measure the advancement towards the information society. This project is being implemented collaboratively by the Ministry of Communication and Information Technology (MCIT), the Central Agency for Public Mobilization and Statistics, and various ministries. The focus of the presentation was on the technical aspects of sampling and design of surveys, in particular household and business surveys. The data collected was presented and discussed.

15. Statistics Finland delivered another presentation on data collection, surveying tools and methodologies. It explored the survey processes and its vehicles in addition to sampling, weighting and data validation. It used the case of Finland for illustration purposes and discussed the details of each phase.

### C. ICT SECTOR STATISTICS

16. OECD focused on ICT sector statistics by exploring the original classification of the ICT sector. It stated that, according to the OECD Working Party on Indicators for the Information Society, the development of a statistical infrastructure to provide support and information to policymaking in this domain should begin by mining existing data, in particular the rich industry and product (goods and services) data available to OECD. The latter required an agreement on industry and commodity definitions, bearing in mind that developing those definitions was one of the early challenges in the process. Indeed, the goal was to put in place common international statistical classification standards (definitions) of ICTs, information content products and related economic activities to help answer basic questions concerning their role in economy and society. OECD emphasized the importance of collecting data for core ICT indicators and trade in ICT goods.

17. UNCTAD delivered another presentation on ICT sector surveys. It focused on the importance of surveying this sector since it contributes to economic development and employment growth as well as on the ICT uptake and the imports and exports of ICT goods and services, which could help in boosting the economies of the countries. However, the surveying activity faces many challenges. For instance, there is a need to capture the entire domestic market and have a sampling frame; define and classify internationally comparable results; design questionnaires; produce and analyse data; and check data quality. In order to illustrate the concepts presented, UNCTAD considered the case of Egypt, whose main objective was to obtain detailed firm-level data on ICT industry to benchmark ICT sector performance against policy targets and identify the product portfolio of the ICT sector, imports and exports, key trading partners, workforce,

key financial indicators, participation in public support programmes and barriers to growth. To fulfill those objectives, Egypt has collaborated with UNCTAD through MCIT.

18. MCIT presented the ICT-related questionnaire designed in cooperation with UNCTAD and tested among ICT companies through three national governmental organizations. The aim of the questionnaire was mainly to test the perception of companies and measure their response towards submitting financial data. It stated that there were three different options for data collection, namely: national and international market research organizations and CAPMAS. MCIT discussed the steps for building one consolidated database for ICT companies and the methodology adopted to design questionnaires. It explored issues related to data collection, sample size, analysis and reporting, research timing and quality standards.

#### D. ICT HOUSEHOLD STATISTICS

19. OECD contributed two presentations to this session, one on ICT Access and Use by Households and Individuals, in particular on model surveys, model questions and questionnaire design, and another one on Frames and Sample Selection. The first presentation explored the OECD model survey of ICT access and use by households and individuals, released in 2002. The latter was revised over a two-year period and released by the end of 2005. It aimed at improving the harmonization between national ICT surveys for better international comparison and to make the content as relevant as possible to current policy issues. It also tackled the scope of the OECD model survey of ICT access and use by households and individuals as well as its structure and content. The second presentation discussed various aspects of household surveys, in particular frames and sample selection as well as data collection methods, namely: personal interviews, face-to-face interviews, telephone interviews, computer-assisted interviews, postal survey and electronic surveys. Finally, various data processing techniques aimed at producing an error-free data file were explored. It was stressed that data quality control to identify errors can be done in different ways. It can be carried out on-line, at the moment of the data capture by the interviewer or in the statistical institute by using electronic questionnaires, or even after the data entry process is over.

20. Within this context, the Palestinian Central Bureau of Statistics (PCBS) presented its experience in data collection, in particular in what relates to household statistics. PCBS reported some differences between its official statistics and those provided by ITU-ARO for the same years, in particular in the number of mobile phone subscribers and a few others. PCBS also highlighted the importance of exchange of expertise among Arab countries in order to manage establishing a database for existing experiences in Arab countries in the area of data collection and assessment.

21. Jordan contributed to this session a presentation providing details about the experience of the Jordanian Department of Statistics in collecting ICT statistics specifically through family surveys, including population and housing censuses, multi-purpose household surveys, employment and unemployment surveys, household expenditure and income surveys, and population and family health surveys. It presented the latest statistics for basic indicators drawn from some of those surveys. The presentation highlighted Jordan's intention to be among the first countries to obtain the best communication devices, in particular in the Arab region, especially in the area of mobile phones. In 2007, Jordan started to conduct surveys and is currently planning to initiate others by the end of this year to be able to identify types of communication and use of communication devices by Palestinian families and institutions. The country is currently in the process of applying its experience on the business sector.

#### E. ROUND TABLE: CAPACITY-BUILDING NEEDS FOR ICT BUSINESS AND HOUSEHOLD STATISTICS IN THE REGION

22. This round table provided the representatives of NSOs in Arab countries with the opportunity to discuss their needs with respect to ICT household statistics. Representatives of the participating countries raised several issues, including challenges and advancements in the field.

23. During the round table, countries expressed the need to identify an optimal method to offer assistance and technical support provided by different international and regional organizations and required by most

Arab countries. In fact, the requirements of Arab countries vary according to the level of growth and progress in the area where research and field studies are undertaken to measure the use of ICT for households, individuals or businesses. It has been noted that many countries, such as Egypt, are pioneers in implementing the recommendation of the information society and collecting data on the use of ICT in households and businesses. Some countries, such as Jordan, Tunisia, and Palestine, are still in the process of carrying out surveys on the business sector. Other countries, such as Iraq, Lebanon, Sudan, the Syrian Arab Republic and Yemen, have not yet conducted such field surveys. Regarding the priorities of countries as far as the type of research studies is concerned, most countries have agreed on the importance of receiving support to measure the use of ICT at the household, individual and business levels. Sudan proposed to develop an action plan in collaboration with international organizations to raise community awareness in countries which have not conducted such surveys. Such campaign would promote the significance of measurements conducted in the field of ICT and their benefits to decision makers.

24. Regarding the priorities of countries with respect to technical assistance needed from international organizations, most countries have agreed that international organizations may have a bigger role in supporting them in the phases of questionnaire development, ICT study frame, sampling methods, data collection, validity, and analysis at the statistical and economic levels. In particular, Sudan stressed the importance of identifying the sample community taking into consideration the degree of discrepancies in prevailing socio-economic conditions. Several Arab countries have highlighted the need to obtain technical consultations from international organizations, while some expressed their desire to have ICT indicators guidelines and booklets translated into Arabic and stressed the importance of implementing specialized training programmes.

25. The recommendations made during the round table are available in section I of this report.

#### F. INFORMATION SOCIETY MEASUREMENT INITIATIVE IN THE ARAB REGION

26. The Workshop discussed the Arab ICT strategy and focused on its objectives and indicators for measurement. Discussions mainly focused on the indicators for policy and legislation put to achieve a competitive market for the Arab information society as well as on the indicators related to ICT infrastructure and building the digital Arabic content.

27. ITU-ARO presented the regional initiative for ICT indicators aimed at establishing indicators for an information society and building skills to enable collection of data and statistics related to the information society in the Arab region. The main objectives of this initiative are numerous, namely: development of indicators for measuring the transformation towards the information society; training of human resources within NSOs and ministries of ICT on data collection methods for regular updates; development of a regional online ICT indicators database; and improvement of the mechanisms used to obtain data and statistics. ITU-ARO mentioned that regional databases are intended to be based on as well as be compatible with the existing ITU ICT Eye database and other international databases. The project is planned in three phases. The first phase relates to establishing and agreeing on a group of ICT indicators suitable for the Arab region. The second phase comprises two activities, namely: study the countries' requirements to collect the statistics necessary to measure the information society; and provide technical and technological assistance necessary to those countries. The third and final phase relates to the creation and development of a regional information society indicators database online. The end results of the project were also tackled and discussed. Indeed, the project is expected to indicate the basic characteristics of an Arab information society compared with others worldwide, enable those evolved in decision-making and planning to use the database for the development of an Arab information society, enhance studies and research toward the information society through the provision of information and knowledge, and increase awareness of the importance of indicators in general and ICT indicators in particular. Financial issues and possible partnerships for the project were also discussed.



28. The Information Technology Industry Development Agency (ITIDA) in Egypt discussed the country's ICT indicators project, whose main objectives are: to establish national information society indicators and build capacities, thereby facilitating the measurement of ICT indicators; to compare rural with urban areas in Egypt as well as with other countries for benchmarking; and to make the updated ICT indicators in Egypt available to national and international users. The project depends on a combination of qualitative and quantitative methodologies focusing on data collected through surveys by MCIT, the National Telecommunications Regulatory Authority (NTRA) and CAPMAS. The different partners and methodology chosen for this project were pointed out. As part of the lessons learned, ITIDA reported on the need to ensure field mapping in line with international indicators; increase cross-checking samples based on different data collection mechanisms; develop data verification techniques to eliminate inconsistencies and ensure data integrity; and identify the need for a centralized platform (Portal) to share, update and publish ICT indicators among data owners and further disseminate the data to beneficiaries at local and international levels. Many questions related to the project still need to be answered, such as the optimal sampling size to be used in different surveys and new mechanisms for validation.

29. ESCWA surveyed ICT gender indicators in the Arab region, focusing on the current lack of ICT gender-related data, and demonstrated the need for such data in order to provide policymakers with information on the status of men and women vis-à-vis ICT; measure the gender gap in the digital divide between developed and developing countries; and ascertain through measurement whether men and women are equally benefiting from ICT and its tools. Based on this information, decision makers can take corrective measures at the national and regional levels by defining priorities in initiatives and programmes and developing specific projects for bridging the gender gap within the digital divide. ESCWA emphasized the different areas of gender-disaggregated statistics in ICT and pointed out WSIS recommendations with respect to this issue. It also pinpointed articles promoting the empowerment of women in the Geneva Declaration of Principles, Geneva Plan of Action, Tunis Commitment, and Tunis Agenda for the Information Society, with the intention to draw the attention of NSOs in all Arab countries to the need to accelerate the process of the empowerment of women and, in particular, improve their status in the ICT sector. An overview of ESCWA activities within this context was presented together with a list of proposed gender indicators divided into three categories, namely: the empowerment of women through ICT; the education of women in ICT; and women in the ICT sector.

30. ESCWA also thoroughly explored its statistical information system ESIS and focused on its main benefits in helping Arab countries in systematically storing and retrieving indicators, monitoring data pertaining to various social and economic development sectors and integrating cumulative statistics from these sectors as well as providing policymakers in the region with a reliable platform for analysis, evaluation and benchmarking. ESCWA further depicted system requirements at the sides of both server and client and detailed the different conceptual design aspects of ESIS, including its main dimensions, user groups, input/output modules as well as the structure of indicators and countries or regions. A demonstration for the Web and desktop components of the system was given in order to practically illustrate the capabilities of the system.

31. Additionally, international organizations proposed a regional frame governing the provision of support and technical assistance. Tunisia, in return, suggested a new measure to govern the common Arab action on the basis of areas of cooperation, stressing the importance to develop training programmes for trainers in Arab countries, and raise awareness on the urgency to implement the Arab strategy. It also pointed out the importance of adopting the core indicators defined by the Partnership on Measuring ICT for Development in Arab countries as basic indicators to measure the progress achieved.

32. At the conclusion of the meeting, participating NSOs and statistics units in ICT establishments expressed their satisfaction of the Workshop, which should have an impact on the practical side of designing household and business surveys for collection of data related to core ICT indicators. It was also mentioned that ESCWA has the opportunity to play a major role in building the capacity of NSOs and statistics units in ICT establishments in ESCWA member countries to collect and analyse data, in collaboration with the Partnership on Measuring ICT for Development, especially that it recognizes the considerable differences that exist between its member countries in data collection capabilities and experience with respect to ICT indicators. In addition, it has been noted that the partnership between international and regional organizations with complementary focus and expertise is essential for the success of comparable workshops.

### III. ORGANIZATION OF WORK

#### A. VENUE AND DATES

33. The Workshop was held in Cairo from 20 to 21 June 2007 under the patronage of the MCIT in Egypt, ITIDA and LAS. It was organized by ESCWA, UNCTAD, ITU-ARO and OECD.

#### B. OPENING

34. Ms. Hoda Baraka, First Deputy of MCIT, delivered the opening speech, which covered context and objectives of the Workshop and focused on the role of partnership in promoting ICT-related statistics. She called upon internal capacities of ICT institutions, ICT researchers and experts, NSOs, telecommunications regulatory authorities in Arab countries and experts from international and regional organizations and higher scientific institutes to support the process of strategic national and regional planning for the development of the information society.

35. Mr. Mansour Farah, Team Leader on ICT Policies in ESCWA, focused in his opening speech on the context and objectives of the Workshop. He stated that the main reason behind this Workshop is to explore the technical and methodological aspects of capacity-building for measuring the information society, as well as the use of surveys for the collection and analysis of data for core indicators on households and businesses.

36. Ms. Susan Teltscher, Chief of ICT Policy and Analysis Unit of UNCTAD, focused on expectations arising from this Workshop. She highlighted the need to examine the existing surveys and databases used to measure the information society as well as to discuss the Arab ICT strategy and the regional initiative for ICT indicators.

37. Mr. Ebrahim al-Haddad, ITU Regional Representative and Head of ITU-ARO, delivered ITU's opening speech and explored the importance of ICT indicators being used as a tool to measure the information society and their usefulness in bridging the digital divide. He thanked the participants from international and regional organizations, including the NSOs, for their attendance and contributions.

#### C. PARTICIPANTS

38. The Workshop was attended by 77 participants from 15 Arab countries, namely Comoros, Egypt, Iraq, Jordan, Lebanon, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen. In addition, the Workshop was attended by the heads and representatives of multinational entities, including the University of Yaounde and Statistics Finland. Regional and international organizations participating in the Workshop included UNCTAD, ESCWA, ITU, OECD, the Centre for Environment and Development for the Arab Region and Europe (CEDARE), and the Arab Business Forum for Information and Communication Technology (ABFICT). The list of participants in this Workshop is provided in annex I of this report.

#### D. AGENDA

39. The agenda of the Workshop is summarized and set forth below:

1. Opening session;
2. Global and regional experiences in ICT measurement;
3. ICT business statistics;
4. ICT sector statistics;
5. ICT household statistics;
6. Capacity-building needs for ICT business and household statistics in the region;
7. Information society measurement Initiative in the Arab region;
8. Recommendations and closing session.

#### E. DOCUMENTS

40. A list of the documents presented at the Workshop is contained in annex II of this report.

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Annex II

**LIST OF DOCUMENTS**

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Title
Partnership on Measuring ICT for Development
OECD Work on ICT Measurement
UNCTAD Work on ICT Measurement
ESCWA Work on ICT Measurement
Core Indicators on ICT Use by Businesses
Model Questions and Questionnaire Design
Country Presentation (Egypt)
Data Collection and Survey Vehicles
ICT Sector Classification
ICT Sector Survey: The Case of Egypt
ICT Households Statistics
Country Presentation (Palestine)
Country Presentation (Jordan)
ICT Households Statistics
Arab ICT Strategy
Regional Initiative of ICT Indicators
ICT Gender Indicators for the Arab Region
ESCWA Statistical Information System (ESIS)

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