



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

## **REPORT**

### **EXPERT GROUP MEETING ON ROLE OF ICT IN SOCIO-ECONOMIC DEVELOPMENT BEIRUT, 9-10 APRIL 2013**

#### **Summary**

The Expert Group Meeting on the Role of ICT in Socio-economic Development was held at United Nations House in Beirut, Lebanon on 9 and 10 April, 2013. The meeting represented the continuing research of the Economic and Social Commission for Western Asia on the cross-cutting aspects of ICT for development in the region. As such, a wide variety of topics were analyzed, including e-services, innovation and entrepreneurship, ICT infrastructure and assessment mechanisms. The panel of experts evaluated these topics and created a set of recommendations for key actions which can be taken to maximize the development impact of ICTs.

In addition to these discussions, the experts in attendance provided feedback on a forthcoming ESCWA study on the “Impact of Selected E-Services on Socioeconomic Development in the Arab Region”. The research contributed to the basis of the meeting and was considered in conjunction with the other materials presented. Success stories and country case studies were provided to illustrate the important and interdisciplinary nature of the contribution of ICTs across the region and in neighbouring countries.

The meeting resulted in a number of valuable outcomes. First, important and targeted recommendations were made which outlined priority areas for stakeholders in the region as well as the focus of ESCWA’s future work. Second, feedback on the study was carefully collected and reviewed in light of the comments received. Third, through knowledge exchange, the meeting promoted more effective use of ICTs in socio-economic development in the region.

The meeting was attended by 38 participants from 10 ESCWA member countries as well as experts from leading national, international and regional organizations involved in ICT for Development.

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## **Introduction**

1. In an increasingly connected world, ICTs are playing a major role in enabling change. Globalization has altered the landscape of trade, employment, communication and many other areas. Social change is no exception to this trend. This effect can be clearly seen in the recent turmoil in the Arab region, in which governments, economies and social mores have changed in ways that have drawn the attention of the world. Because the increased use of ICTs correlates with many of these developments, and in some cases may drive such changes, understanding the role of ICT in socio-economic development in the Arab region is of great importance.
2. This meeting examined the role that ICTs are playing in selected, high-impact sectors, such as governance, economic competitiveness, social relationships, and innovation and entrepreneurship. Together with the beneficial impacts of these changes, the increasing use of ICTs comes alongside new risks. This meeting explored the positive and negative impacts of technology at the regional and sub-regional levels. While the role of ICTs generally was the main focus of the meeting, the role of selected specific technologies and applications was also examined. This included the socio-economic impact of ICT, the role of social media, the increasing relevance of mobile technologies, and ICT-enabled services.
3. The importance of these themes has been identified by member countries of the United Nations for many years. Rising to greater global prominence in the World Summit on the Information Society in 2003 and repeatedly emphasized by high-level follow-up, the role of ICT in socio-economic development has been increasingly acknowledged by a variety of stakeholders, including Governments, the private sector and civil society. Most recently, the Rio+20 process agenda validated the important role of access to information in Principle 10. Building on this momentum, as member countries move forward in defining the international agenda for socio-economic development, understanding and applying the important role of ICTs is of vital importance for the Arab region.

## **I. RECOMMENDATIONS**

4. Participants in the expert group meeting highlighted the important role which ICT plays in economic and social development, and called for ways to measure its impact on the overall development process in the Arab region.
5. The following is a list of the main recommendations; they have been classified according to several themes given their diversity.

### **A. MEASURING THE IMPACT OF ICT ON DEVELOPMENT**

- (a) Lay down a road map, including practical steps which Arab countries could adopt, in order to improve the collection of indicators on the information society and knowledge-based economy. In addition, Arab countries need to adopt measurement methodologies that are able to analyze indicators properly, while taking into account the specificities of the region;
- (b) Develop a set of indicators specific to the Arab region in order to measure and benchmark the information society and knowledge-based economy;
- (c) Promote national and regional efforts for measuring the information society, and support National Statistical Offices (NSO) and their efforts to include indicators on the information society within routine surveys;
- (d) Encourage the cooperation and exchange of information between national government institutions in order to produce an integrated and coherent set of indicators and indices for measuring the information society;

(e) Conduct analytical studies for measuring the information society and knowledge-based economy, and avail the results to decision-makers for drafting evidence-based policies and strategies. Resorting to indicators and indices alone is often not sufficient to portray the overall socio-economic landscape of society;

(f) Apply the OECD methodology adopted by the Egyptian Government to collect data and information on the use of ICT and its socio-economic impact in other Arab countries.

#### B. E-SERVICES AND THEIR IMPACT ON DEVELOPMENT

(a) Raise awareness of the importance of e-services for improving government effectiveness and increasing transparency and accountability, and highlight the positive impact of e-services on economic growth;

(b) Raise awareness of the importance of e-government services for improving the delivery of services; and strive to expand these services through the launch of local and regional initiatives tailored to the needs and priorities of citizens, while emphasizing the importance of privacy and data protection;

(c) Develop a framework to support and promote the use of e-services in the Arab region, while focusing on stimulating demand;

(d) Promote the exchange of best practices, and work towards the deployment of successful services, applications, and e-solutions in the Arab region;

(e) Encourage e-participation and promote the use of the latest advances in technology, such as open data and mobile apps, in e-government services.

#### C. ICT POLICIES

(a) Update ICT policies while emphasizing their role in socio-economic development; and link these policies with national and regional development policies;

(b) Encourage Arab countries to develop policies and strategies for digital Arab content;

(c) Include in ICT policies measures for improving investments in innovation and entrepreneurship, and for developing the software and digital content industries;

(d) Develop ICT policies aimed at addressing and stimulating both the supply and demand aspects of ICTs;

(e) Emphasize the importance of introducing modern technologies such as Machine-to-Machine (M2M) communications and the Internet of Things (IoT) in order to find solutions for pressing economic problems;

(f) Expedite the implementation of the ICT Academy project for government leaders in the ESCWA region.

#### D. DIGITAL ARABIC CONTENT (DAC)

(a) Develop a clear framework (by ESCWA) for the advancement of digital content and its industry in the Arab region, given the importance of DAC for the region, and its positive role in stimulating economic growth and creating job opportunities for Arab youth and women;

(b) Launch government and national initiatives for the promotion of digital content in several areas such as the digitization of Arab cultural content, and the development of educational and health content. The region should note the strong links between the availability of digital content and the adoption and use of ICT for development;

(c) Launch initiatives for the promotion of crowd-sourcing and provide adequate platforms for its development;

(d) Promote the development of mobile applications (apps), especially those supporting the advancement of digital Arabic content;

(e) Implement ESCWA's initiative for promoting the digital Arabic content industry; encourage innovation and entrepreneurship; and call upon all Arab countries to actively participate in this initiative.

#### E. THE SOCIAL IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY

(a) Carry out studies on the social and interactive changes associated with ICT and its applications, in an effort to predict social impact. This could be helpful despite the difficulties associated with measuring the social impact of ICT usage;

(b) ICT is a multi-faceted technology with projected social, cultural, legal and environmental impact. While not all sorts of impact are positive, future programmes of work and studies carried out in the Arab region should take all impacts into account;

(c) Harness the power and penetration of social media and social networks and use them as key enablers in e-government services and socio-economic development;

(d) Develop guidelines on best practices for using ICT and social networking;

(e) Engage with universities in the region to conduct research and studies on the social impact of ICT and its applications;

(f) In light of the growing economic, social and political roles of social networks, decision makers should start collecting statistics and data on social networking and use them for decision-making, as well as to enhance e-government services.

#### F. CREATIVITY, ENTREPRENEURSHIP AND TECHNOLOGY SECTOR OF INFORMATION AND COMMUNICATION

(a) Emphasise the role of Governments in supporting innovation and entrepreneurship through the provision of an appropriate enabling environment;

(b) Encourage investment and promote the creation of start-ups working in the field of information and communication technology;

(c) Develop a regional initiative to support innovation and incubation in the Arab region;

(d) Devise a well-structured and diversified system for entrepreneurship;

(e) Support open community labs for youth that encourage entrepreneurship, such as Hacker spaces and Girl Geeks;

(f) Promote the private sector, particularly small and medium enterprises (SME) working in the field of ICT, by reducing associated taxes and government fees, and inviting them to participate in governments projects;

(g) Encourage the development of private ICT enterprise as a key economic sector leading the transition to a knowledge-based economy in the Arab region.

6. Finally, participants in the EGM requested that the above list of recommendation be sent to all regional organizations concerned with ICT in the Arab region, particularly the League of Arab States, the international Telecommunication Union – Arab Regional Office (ITU-ARO), and the Arab Information and communication Technologies Organization (AICTO), in order for these recommendations to be taken into consideration when developing ICT work programmes and plans of action for the Arab region.

## II. PRESENTATIONS AND DISCUSSIONS

7. Meeting presentations were allocated to sessions covering the dynamics of ICT and socio-economic development. These presentations included regional and sub-regional analysis, country case studies and original research. Discussion sessions focused on identifying recommendations and determining priorities for highest-impact applications of ICT for development.

### A. ICT ENABLED E-SERVICES

8. This session which was chaired by Ms. Nibal Idlebi and included two presentations, the first on the impact of e-services on socio-economic development in the Arab region, and the second on best practices in e-Government in Turkey.

9. Mr. Rami Zaatari provided an overview of the upcoming ESCWA study on the “Impact of Selected E-Services on Socioeconomic Development in the Arab Region”, prepared by ESCWA consultant Mr. Souheil Marine. The presentation covered the challenges of measuring the information society, current impact frameworks and models and the different methodologies of measuring impact. The use of statistical indicators and their shortcomings were further highlighted. In covering selected services in the region, the presentation focused on e-Government, e-Commerce and its use by the business sector and mobile applications. Despite an increase in the availability of e-Government services in the region, usage remains the same. In terms of the Network Readiness Index (NRI) indicators, countries in the region vary greatly in their global rankings and are more or less uniformly spread from the first quartile of the scale to the very last. In terms of e-Commerce, there is a lack of official data, with much of the information coming from private data sources. Furthermore, the presenter identified trends which could be used to leverage socio-economic development. The presentation concluded by highlighting strategic priorities to improve ICT impact, policy initiatives and recommendations.

10. Mr. Ramazan Altinok provided an overview of eHealth activities in Turkey, covering the scope and vision of the initiative. He presented the eHealth system architecture and processes, the interactions between the different health institutions and the different planned and implemented phases of the project, of moving towards a more collaborative integrated health service system. The audience was presented with a scenario of what an average patient’s experience would be like within the new system, from initial consultation, using unique identity cards and personal identifications numbers, to the doctor’s diagnosis and prescription on a central patient database, to finally collecting and purchasing medicine at the pharmacy through the unique patient cards and centrally stored prescription information. He also briefly covered other aspects of e-Government services, showcasing public self-service portals for bidding on seized and auctioned properties and vehicles, which are normally administered by the Government and municipalities.

## B. ECONOMIC DEVELOPMENT

11. This session was chaired by Mr. Fares Kobeissi and encompassed four presentations, two from the Arab region, and two from two international organizations.

12. Ms. Diana Korca presented recent UNCTAD research on the role of the software development industry in economic development. The research data shows that while ICT can be a highly productive sector, there is a danger of the software sector becoming an isolated niche in the economy. A potential growth sector is the promotion of free and open-source software. UNCTAD's research emphasizes the value of FOSS, which continues to gain market share on a global basis. However, present data indicates that adoption in the Arab region tends to be low, creating an opportunity for stimulation of the open source market through user support services. In this regard, Governments should focus on their procurement efforts as a way of using eServices to encourage the economic growth of local software industries.

13. Mr. Andrea de Panizza and Mr. Piotr Strykowski jointly presented research undertaken by the OECD on the relationship between ICT and development issues in the Arab region. Data from the global level was used to illustrate the ICT sector's potential for significant productive capacity, even though the total size of the sector may be small. A significant regional difference was identified in access to Internet services by gender. In the OECD, no significant gender gap was observed, while available data for the ESCWA region suggested important differences in Internet usage between men and women. In addition, the presentation included material on the presence and growth of Digital Arabic Content and the importance of growth in this area.

14. Mr. Abdulilah Dewachi described the research produced during the ESCWA Digital Arabic Content Project, which estimated that the size of the digital Arabic content market is expected to grow a great deal. However, structural challenges in the content generation market remain problematic, leading to a primarily consumptive rather than productive sector. The obstacles include a need for greater penetration of broadband services, which are closely linked to the growth of Arabic language content and economic development generally. In this regard, national ICT strategies should contain specific provisions for promoting digital Arabic content in a holistic manner.

15. Ms. Nagwa El Shenawy provided quantitative data to analyse the role of ICT in Egypt's socio-economic development. In this regards, ICT is acknowledged as an important driver for economic and social welfare among all social groups. The Egyptian national strategy has promoted the growth of household use of ICTs, with 93.5 per cent of households using a mobile phone and 36 per cent of households using the Internet. While access and usage levels have developed in Egypt, digital divides can be observed by age and gender. Usage is measured on an annual basis in order to identify trends in this data which can be used to drive further decision making. While usage in the business sector is improving, ICT use in some sectors, such as education, tends to be much higher than in other sectors, such as healthcare.

## C. ICT INFRASTRUCTURE AND ACCESS

16. Mr. Sulaiman Zuhairi chaired this session, dedicated to the impact of ICT infrastructure and access.

17. Opening the session, Ms. Diana Abou Ghanem stated that universities have a vital role in training the individuals who will become high-tech entrepreneurs. This includes direct research and development and the promotion of innovative ways of thinking. In addition to these issues, the Lebanese Ministry of Telecommunications is pursuing several key projects to develop the ICT sector, including the deployment of a 4G network and enhancements to the fixed broadband infrastructure. Affordability has also become a priority, with significant decreases in costs for consumer communication products, such as a 90 per cent decrease in the tariff for fixed line connectivity.

18. Mr. Hosein Badran presented research on the proliferation of technology in our daily lives, which he argued has led to more and more connected devices. As these applications have grown in sophistication, interconnection has become the new trend. This has spurred an increase in the use of devices communicating with one another in a machine-to-machine paradigm. Manufacturing and sensor-driven analytics are examples of this effect. These processes create improvements in business processes, with increases in efficiency and productivity. Regional applications of this technology can be seen in automated agriculture and water resources management technologies.

19. Ms. Mona Badran provided a quantitative approach to measuring the digital divide based on household survey data in Egypt. The results of this analysis illustrate a prominent urban/rural digital divide. Specifically regarding youth, current demographics in Egypt indicate that 40 per cent of Egyptians are considered youth. The data provided in this research and the accompanying presentations were very useful in understanding the challenges and opportunities facing Egyptian youth today.

#### D. ICT STRATEGIES

20. This session was chaired by Mr. Bassel Alkheshi and included four presentations related to ICT strategies.

21. Ms. Raja'a Al-Behaisi presented an overview of the activities and results of Kuwait's national ICT strategy. These include government efforts to realize the objective of economic diversification by investing in the ICT sector. This goal is known as the Digital Oasis. As part of the business model for this initiative, the Government has provided the real estate and tangible investments needed to catalyze the creation of new jobs, thus improving the competitive position of the ICT industry in the country. In addition, improvements to the country's legal and regulatory structure is necessary in order to provide a hospitable environment for future development.

22. Mr. Omar Aboueich reviewed the challenges facing Egypt related to land use and spatial planning. The planning process followed both top-down and bottom-up approaches in order to solicit input from multiple sources. The use of Geographic Information System technology to help understand the challenges facing the Egyptian people had resulted in several important observations. For example, significant differences in poverty rates were revealed, with urban areas resting at rates of approximately 5 per cent, while 17 per cent poverty was recorded in rural areas. Moreover, the total number of urban residents living in slums dropped to 1.9 million people, contributing to progress on the Millennium Development Goals (MDGs).

23. Mr. Ahmad Otoom gave an overview of the role of the National Information Technology Centre (NITC) in Jordan and the varied activities and projects it has implemented. NITC's Knowledge Stations Programme has provided ICT-based training and services to community members including women and youth and has been accordingly able to increase employment opportunities. Other activities being implemented by NITC include: managing and registering domain names for Jordan's country code top-level domain, providing training to university/college graduates, and hosting the National Information Centre. The presentation then discussed the achievements and results of the e-Government programme and concluded with a description of NITC's future plan to establish a national computer emergency readiness team.

24. Ms. Mirna Barbar presented a summary of the Academy of ICT Essentials for Government Leaders in the ESCWA Region (AIGLE), which aims to provide the necessary capacity building and ICT skills training for civil servants in the Arab region. This academy will be focused on developing human capacities in order to better use ICT for the purpose of promoting socio-economic development. The activities of the academy will focus on training, advisory services and research.



## E. SOCIAL DEVELOPMENT

25. Ms. Raja'a Al-Behaisi chaired the session on social development, which included three presentations on the social impact of ICT.

26. Mr. Nouredin Cheikh Obeid presented a regional analysis of the effects of social media in the region. As part of his analysis, he related that because of the lower rates of ICT adoption, the improvements in social media applications will take time to scale up and benefit from wide-scale use. Because the countries in the Arab region are highly heterogeneous, the impact and profile of social media use will be significantly different among and between the countries of the region. At this stage, the impact of social media and user-generated content can be seen in a realignment of traditional power structures in industries such as news and media, in that there are viable alternatives to established media companies and systems.

27. Ms. Ghinwa Jalloul described the experience of \*.Technology Sarl in using ICTs to overcome barriers to economic development in its IKRAA initiative. As a local example, websites assisting women in marketing artisanal goods to a global market were described. By creating an accessible training package, the programme was able to upgrade the skills of the participants to assist them in understanding how to benefit from ICTs in their work. In addition, in areas such as illiteracy and unemployment, there has been insufficient progress. Technology can be used to overcome these problems and accelerate regional progress. The speaker described several ICT solutions for addressing difficult issues such as illiteracy and basic job skills.

28. Mr. Fadi Salem related the research conducted by the Dubai School of Government, published in the recurring Arab Social Media Report. In relative terms, social media use has increased significantly, particularly among young men. A significant gender gap in Facebook use has been identified, but recent data suggest that this gap is narrowing. While the limited use of tools such as Twitter makes representative findings difficult, analysis of the content shows an increase in Arabic use and interconnectedness. In particular, a stronger sense of connection to their communities and societies among individuals who use social media was identified. The institutional use of social media, such as the integration of social media in eGovernment services in the United Arab Emirates, indicate that customer outreach was one of the most popular applications. This approach correlates to positive views by the public of the performance of eGovernment applications.

## F. INNOVATION AND ENTREPRENEURSHIP

29. This session was chaired by Mr. Omar Christidis and included two presentations about innovation and entrepreneurship in the region, and two case studies from ESCWA member countries.

30. Mr. Matthew Perkins delivered a presentation that was prepared in collaboration with Mr. Nicolas Rouhana on the role of innovation and entrepreneurship in the social and economic development of the Arab region, with a focus on the case of Lebanon. He began his presentation by providing contextual data to illustrate the market economics facing the region in terms of education, employment and economic conditions. The growth in the number and variety of incubators, accelerators and financing mechanisms was described with specific examples. He also provided detail on the firms incubated by Berytech, which illustrated the number and variety of jobs created. This helped provide insight into the role that such institutions play in promoting economic development in the Lebanese market. Finally, he emphasized the need for a holistic approach to promoting start-up businesses, including financing, the modernization of infrastructure and the development of local talent.

31. Mr. Mustapha Mezghani presented the idea of an enabling environment for ICT innovation and economic growth. This covered various definitions of innovation and some common myths about innovation from the perspectives of risk, products, ideas, teaching, process, cost and behaviour. Mr. Mezghani discussed how to achieve a favourable innovation environment through fostering creativity and innovation,

developing capacity and human resources and economic transformation. Furthermore, he outlined the role of different actors, paying particular attention to the role of Government.

32. Ms. Salam Yamout and Ms. Carole Sadaka presented the entrepreneurship ecosystem in Lebanon. They provided an overview of the employment situation in Lebanon and the Middle East, particularly highlighting youth unemployment, and outlined the elements which drive ICT start-ups and where youth fit into this relationship. Various government initiatives and projects were outlined, together with a visual map of the entrepreneurship landscape that illustrated the funders and facilitators which have emerged over time. The entrepreneurial ecosystem was dissected in order to identify its basic pillars, different elements and enablers and the various actors and their relationships. The presentation concluded with a list of actions that should be taken in order to improve and influence the entrepreneurial ecosystem, with several success stories highlighted as examples.

33. Ms. Fadwa Murad described the mission, objectives and scope of the ICT Incubator established by the Syrian Computer Society. The ICT Incubator focuses on high-impact and high-growth ICT start-ups and has contributed to a general change in perceptions of entrepreneurship, particularly over the last 10 years. The ICT Incubator gives considerable attention to networking on the regional and international levels as well as partnerships with various stakeholders, including the private sector, academia, and chambers of industry and commerce. The presentation explained the requirements for accepting applicants, the services and facilities provided by the ICT Incubator, the results achieved and success stories.

#### G. ICT ENABLED E-SERVICES

34. Mr. Nawar Al-Awa chaired this session, which included three presentations on success stories from three ESCWA member countries, namely Jordan, Lebanon and the Syrian Arab Republic.

35. Mr. Hasan Hourani described the experience of the Jordanian eGovernment initiative. As part of the holistic plan, the approach to eGovernment features utilization of social media to enable improved communication between Government and citizens. In order to take full advantage of the opportunities of eGovernment, it is necessary to adopt an open data approach to improve communication with citizens and develop new services.

36. Mr. Ibrahim Osman presented the idea of reassessing eGovernment services from a stakeholder's perspective. He provided information on both the projects on 'Citizen-oriented Evaluation of eGovernment Systems' and 'Integrated Model for Evaluating eGovernment Services Transformation' and their objectives. The presentation looked at different measurement models, identifying how they are derived, calculated and used. The definition of stakeholders was reiterated, covering stakeholder engagement processes and evaluation frameworks in the form of COBRA (cost, opportunities, benefits and risks). The evaluation of e-Services was presented within the COBRA framework using data from both Turkey and the United Kingdom. The presentation concluded with identified areas of further research and recommendations.

37. Ms. Dima Dirani presented the experiences of the Syrian Arab Republic Ministry of Health in deploying eServices to modernize their sector. Beginning with the digital healthcare map of all facilities and centres in Syria, she described the Ministry's present and future activities in this regards. The Ministry has been able to successfully pilot management information systems in three hospitals and is currently working on developing a national database for chronic diseases. It has also recently completed, as part of a UNDP project, the studies and plans for automating the medical licenses registration process. These studies include a business process re-engineering in order to achieve improved efficiencies. It was noted that the main obstacles facing the Ministry in implementing these activities relate to resistance to change and limited ICT literacy among caregivers and health practitioners.

### III. ORGANIZATION OF WORK

#### A. VENUE AND DATE

38. The EGM was organized by the ICT division at ESCWA and was held during 9-10 April, 2013 at the United Nations House, Beirut, Lebanon.

39. It included a number of general presentations and case studies from selected ESCWA member countries on the above topics as well as discussion sessions focusing on the identification of priority high-impact ICT applications for promoting growth in the ESCWA region. The meeting concluded with a discussion devoted to necessary future steps.

#### B. OPENING

40. The session was opened by remarks from Mr. Nadim Khouri, Deputy Executive Secretary of ESCWA, who spoke on the importance of the Commission's mandate in promoting socio-economic development. The links between the founding mandate of ESCWA and the work of ICTD was established. He mentioned that ICT has caused a transformation across sectors, from manufacturing to administration, and that businesses which have failed to keep pace with technological innovation have seen their competitiveness fall behind that of their peers in other countries and regions. Mr. Khoury stated that understanding the advantages and disadvantages of ICTs in the Arab region is vital to identifying solutions to urgent problems facing the region, such as youth unemployment and inclusive economic growth. Participants were reminded that their recommendations and deliberations would be carefully considered in the determination of the future work priorities of the organization.

41. Mr. Haidar Fraihat thanked the contributing members to the meeting and acknowledged the valuable contribution of their expertise to the field. He highlighted the main activities of ICTD for the establishment of a knowledge-based economy in the region, such as its support of the development of an ICT sector in the Arab region and its promotion of Digital Arabic Content. He cited the efforts undertaken by ICTD to measure the information society. He also indicated the major themes that ICTD had recently focused on, such as Arab Internet Governance and Cyber Legislation.

#### C. PARTICIPANTS

42. The meeting was attended by 38 participants from 10 ESCWA member countries as well as experts from leading national, international and regional organizations involved in ICT for Development. Participating experts represented government ministries, authorities, and selected public institutions and the private sector in ESCWA member countries who have been involved in statistical analysis, measurement exercises and/or socio-economic development issues. The list of participants is contained in Annex I of this report.

#### D. AGENDA

43. Presentations and discussions were made over eight sessions, and the meeting agenda is summarized and set forth below:

(a) The role of a human rights-based approach to freedom of information, affordable accessibility, and ICT infrastructure;

(b) The impact of e-Services to enable socio-economic development, how to improve their delivery to citizens and customers in areas such as education, learning, health and governance;

(c) The role of ICT, particularly social media on selected aspects of social development, including the empowerment of youth, the reduction of gender inequality and the empowerment of marginalized groups;

(d) The impact of ICT on sustainable development, including entrepreneurship, start-ups and SMEs, digital Arabic content, effects on innovation, incubation models, and emerging regional trends in software development particularly for mobile platforms.

#### E. DOCUMENTS

44. The documents submitted to the meeting are contained in Annex II of this report and available on the ESCWA website.

## Annex I

### **LIST OF PARTICIPANTS**

#### A. PARTICIPATING COUNTRIES

##### Egypt

Nagwa Elshenawy  
Director, Information Center  
Ministry of Information and Communication  
Technology  
[nagwash@mcit.gov.eg](mailto:nagwash@mcit.gov.eg)

Hosein Badran  
Board of Directors  
National Telecommunications Institute  
[hoseinb@hotmail.com](mailto:hoseinb@hotmail.com)

Mona Badran  
Assistant Professor, Faculty of Economics and  
Political Science  
Cairo University  
[samifarah.mona@gmail.com](mailto:samifarah.mona@gmail.com)

Hedayatalla Nabil  
Economic Researcher, International Organization  
Unit, Information Centre  
Ministry of Information and Communication  
Technology  
[hedaia@mcit.gov.eg](mailto:hedaia@mcit.gov.eg)

Omar Aboueich  
Deputy Assistant Foreign Minister for  
International Cooperation for Development  
Ministry of Foreign Affairs  
[oeich@hotmail.com](mailto:oeich@hotmail.com)

##### Jordan

Hasan Hourani  
Director, E-Government program  
Ministry of Information and Communications  
Technology  
[hasan.h@moict.gov.jo](mailto:hasan.h@moict.gov.jo)

Ahmad Otoom  
DG's Advisor for Policies and Strategies  
National Information Technology Center  
[ahmad.otoom@nitc.gov.jo](mailto:ahmad.otoom@nitc.gov.jo)

##### Kuwait

Raja'a Al-Behaisi  
Director of Department of DG office  
Central Agency for Information Technology  
[ralbehaisi@cait.gov.kw](mailto:ralbehaisi@cait.gov.kw)

Hashmiya Taqi  
Supervisor of Strategic Planning  
Central Agency for Information Technology  
[htaqi@cait.gov.kw](mailto:htaqi@cait.gov.kw)

##### Lebanon

Diana Bou Ghanem  
Head of ICT Office, Technical Advisor to the  
Minister  
Ministry of Telecommunications  
[diananbg@gmail.com](mailto:diananbg@gmail.com)

Salam Yamout  
National ICT Strategy Coordinator  
Presidency of the Council of Ministers – UNDP  
Project  
[syamout@pcm.gov.lb](mailto:syamout@pcm.gov.lb)

Carole Sadaka  
Senior ICT Officer  
Presidency of the Council of Ministers  
[csadaka@pcm.gov.lb](mailto:csadaka@pcm.gov.lb)

Linda Kassem Moukashar  
Senior Legal Trade Specialist, Legal Consultant  
Ministry of Economy and Trade – UNDP Project  
[lqassem@economy.gov.lb](mailto:lqassem@economy.gov.lb)

Ibrahim H. Osman  
Professor & Convenor, Business Information and  
Decision Systems  
American University of Beirut  
[io00@aub.edu.lb](mailto:io00@aub.edu.lb)

Fares Kobeissi  
Chairman, Association of Lebanese Software  
Industry  
CEO, Blueringsal  
[fares.kobeissi@bluering.com](mailto:fares.kobeissi@bluering.com)

Lebanon (continued)

Ghinwa Jalloul  
CEO  
\*.Technology sarl  
[ghinwa.jalloul@technologysarl.com](mailto:ghinwa.jalloul@technologysarl.com)

Jad Jalloul  
Manager Digital Market and Marketing  
\*.Technology sarl  
[jad.jalloul@technologysarl.com](mailto:jad.jalloul@technologysarl.com)

Omar Christidis  
CEO and Founder  
Arabnet  
[omar@arabnet.me](mailto:omar@arabnet.me)

Palestine

Sulaiman Zuhairi  
Deputy Minister  
Ministry of Telecom and Information Technology  
[szuhairi@mtit.gov.ps](mailto:szuhairi@mtit.gov.ps)

Imad Lahham  
PR Senior Director  
Paltel Group  
[Imad.Lahham@paltelgroup.ps](mailto:Imad.Lahham@paltelgroup.ps)

Mohammad Alami  
Chairman  
Mada  
[alami@mada.ps](mailto:alami@mada.ps)

Rajai Issaid  
Co-Founder & CTO  
Mada  
[rajaie@mada.ps](mailto:rajaie@mada.ps)

The Sudan

Sudad Hussein  
Manager of Planning & Projects Department  
National Information Centre  
[nicsudan@nicsudan.gov.sd](mailto:nicsudan@nicsudan.gov.sd), [sudadmh@gmail.com](mailto:sudadmh@gmail.com)

Mutasim Abdelmawla  
Associate Professor  
University of Gezira  
[abdelmawla2004@uofg.edu.sd](mailto:abdelmawla2004@uofg.edu.sd)

Syrian Arab Republic

Bassel Alkheshi  
Deputy Minister  
Ministry of Communications and Technology  
[balkheshi@moct.gov.sy](mailto:balkheshi@moct.gov.sy)

Fadwa Murad  
Director  
ICT Incubator – Syrian Computer Society  
[director@ti-scs.org](mailto:director@ti-scs.org), [fadwa.murad@gmail.com](mailto:fadwa.murad@gmail.com)

Dima Deirani  
ICT Manager  
Ministry of Health  
[dima\\_deirani@yahoo.com](mailto:dima_deirani@yahoo.com)

Azza Abdrabbo  
IT Manager Deputy  
Ministry of Health  
[azza.abdrabo@gmail.com](mailto:azza.abdrabo@gmail.com)

B. INTERNATIONAL ORGANIZATIONS

Diana Korka  
Associate Economic Affairs Officer  
UNCTAD  
[Diana.Korka@unctad.org](mailto:Diana.Korka@unctad.org)

Andrea de Panizza  
Directorate for Science, Technology and Industry  
OECD  
[Andrea.DePanizza@oecd.org](mailto:Andrea.DePanizza@oecd.org)

Piotr Stryszowski  
Administrator, Structural Policy Division  
Directorate for Science, Technology and Industry  
OECD  
[piotr.stryszowski@oecd.org](mailto:piotr.stryszowski@oecd.org)

### C. CONSULTANTS

Abdulilah Dewachi  
Consultant  
ESCWA  
[adewachi@gmail.com](mailto:adewachi@gmail.com)

Noureldin Cheikh Obeid  
Professor  
Arab International University  
[nour100@gmail.com](mailto:nour100@gmail.com)

Souheil Marine  
Telecom and ICT4D Consultant  
[souheilmarine@yahoo.fr](mailto:souheilmarine@yahoo.fr)

### D. ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA

Haidar Fraihat  
Director, ICT Division  
[fraihat@un.org](mailto:fraihat@un.org)

Matthew Perkins  
IT Officer, ICT Applications Section  
ICT Division  
[perkinsm@un.org](mailto:perkinsm@un.org)

Nibal Idlebi  
Chief, ICT Applications Section  
ICT Division  
[idlebi@un.org](mailto:idlebi@un.org)

Mirna El-Hajj Barbar  
IT Officer, ICT Policies Section  
ICT Division  
[barbarm@un.org](mailto:barbarm@un.org)

Ayman El-Sherbiny  
Chief, ICT Policies Section  
ICT Division  
[el-sherbiny@un.org](mailto:el-sherbiny@un.org)

Syed Ahmed  
Associate IT Officer, ICT Applications Section  
ICT Division  
[syed.t.ahmed@un.org](mailto:syed.t.ahmed@un.org)

Nawar Alawa  
Regional Advisor  
ICT Division  
[alawa@un.org](mailto:alawa@un.org)

Hania Sabbidin Dimassi  
Research Assistant, ICT Applications Section  
ICT Division  
[dimassi@un.org](mailto:dimassi@un.org)

Rami Zaatari  
First IT Officer, ICT Applications Section  
ICT Division  
[zaatari@un.org](mailto:zaatari@un.org)

Zahr Bou-Ghanem  
Research Assistant, ICT Policies Section  
ICT Division  
[bou-ghanem@un.org](mailto:bou-ghanem@un.org)

## Annex II

### **LIST OF DOCUMENTS**

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	<b>Title</b>
1.	Documents:
-	Agenda
-	Information Note
-	Social Aspects of ICT and Social Media ( <i>Arabic</i> )
-	The Impact of Social Media on e-Government Service in the UAE ( <i>Arabic</i> )
-	ICT Indicators in the Sudan: Trends and Impact
2.	Presentations:
-	Impact of e-services on socio-economic development in the Arab region
-	e-Government best practices in Turkey: focus on the justice and health sectors
-	Socio-economic impacts of ICT in OECD countries
-	Status of the digital Arabic content industry in the Arab region
-	The software industry and developing countries
-	Contribution of the ICT sector to the national economy of Egypt
-	Lebanese telecom sector leveraging the socio-economic development
-	Role of Internet of Things (IoT) in economic development
-	IT role in Kuwait's development plan
-	ICT for development: South-South cooperation case study
-	The role of NITC in socio-economic development ( <i>Arabic</i> )
-	Academy of ICT essentials for government leaders in the ESCWA region
-	Social effects of ICTs and social networks on the Arab region
-	"Ikraa" initiative for e-jobs and e-entrepreneurship: strategy and success stories
-	Impact of growth of social networking technologies on governance and development in the Arab region
-	Role of innovation and entrepreneurship in ICT for job creation and employment in the Arab region
-	Enabling environment for ICT innovation & Economic growth
-	Lebanon Entrepreneurship Ecosystem
-	Role of Innovation and entrepreneurship in socio-economic development - Syria ( <i>Arabic</i> )
-	Role of e-government in modernizing citizen-government interaction
-	Re-assessing e-government services from stakeholders' perspectives
-	Young people and the digital divide in Egypt
-	Utilizing ICTs to improve health service delivery - the case of the Syrian Ministry of Health ( <i>Arabic</i> )

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