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Submissions from entities in the United Nations system, international organizations and other stakeholders on their efforts in 2019 to implement the outcomes of the WSIS

Submission by

Economic and Social Commission for Western Asia

This submission was prepared as an input to the report of the UN Secretary-General on "Progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society at the regional and international levels" (to the 23rd session of the CSTD), in response to the request by the Economic and Social Council, in its resolution 2006/46, to the UN Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the WSIS as part of his annual reporting to the Commission.

ESCWA contribution to the CSTD report

Technology for Development Division

Part One: An executive summary (half a page) of activities undertaken by all stakeholders, progress made, and any obstacles encountered.

Knowing the great potential that technology, mainly the Information and Communication Technology (ICT) has to help deliver the SDGs, and in line with the global process, ESCWA launched in 2017 the first Arab High-Level Forum (AHLF) on WSIS and 2030 Agenda for Sustainable Development that focused on the linkages between the WSIS action lines and the 2030 Agenda. The Second Arab High-Level Forum (AHLF-2) was held in Beirut, during 19-21 March 2019, bringing together various stakeholders in the information society, digital economy and Internet governance in the Arab region. It reviewed and discussed the linkages of ICT and SDGs as well as the Internet governance issues and priorities for the Arab region with a particular focus on the theme of the global 2019 High-level Political Forum (HLPF) on Sustainable Development, namely empowerment and inclusiveness.

In the same context, ESCWA launched in 2018 the Arab Digital Development Process (ADDP) to assess the status of digital technologies in the Arab region and how they are harnessed for sustainable development through a series of reports named Arab Digital Development Report (ADDR)[1], starting in 2019, based on and accompanied by National Digital Development Reports (NDDRs) for individual Arab countries. The NDDRs covered the status of the national policies, initiatives, plans and measurement methods in the areas of digital development. Ten Arab countries contributed this year to this process and prepared their NDDR. These countries are: Iraq, Jordan, Kuwait, Mauritania, Oman, Palestine, Sudan, Syria, Tunisia and United Arab Emirates, and they are quite representatives of all Arab countries as they include high-income, middle-income and low-income Arab countries from GCC and from MENA.

The primary focus of the ADDRs is to provide a thorough review of digital technologies in the Arab region in its quest to close rapidly widening gaps before 2030. The secondary focus of the reports is a developmental lens that is largely derived from the theme of the High-Level Political Forum (HLPF) which was "Empowering people and ensuring inclusiveness and equality" for HLPF 2019. This 2019 report presents the status and progress made in the main areas of digital technologies in the Arab region, with an extended up-to-date situational analysis of main efforts exerted, challenges faced and policy reforms undertaken in the Arab region in the field of digital technologies and digital development through implementation of WSIS outcomes. Linkages to development are discussed with a focus on its main theme, namely "Empowerment and inclusion".

The main challenge of the ADDP in 2019 for ESCWA and for the focal points of this process in the countries was the weak coordination mechanism among the various stakeholders in the country. This coordination is very important for the 2030 Development Agenda and it is crucial to implement cross-sectoral development projects and to collect data and information.

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[1] The report will be published by the end of this year, and could be found under:
https://www.unescwa.org/publications/publications-list

Through the ADDR, ESCWA aims at assessing the status of digital technologies in the Arab region, promoting the linkages between ICTs and SDGs, pinpointing the existing gaps with the rest of the world and developing a set of actions that aim at the achievement of these goals. The template that was designed to guide national focal points in collecting data and information regarding digital development, was structured in five clusters of the action lines adopted at World Summit on Information Technology (WSIS), namely: Digital Strategic Frameworks; Infrastructure, Governance and Legal Environment; Digital Economy, Employment and Trade; Digital Transformation and Social Inclusion; and Culture and Media. In the NDDRs received from the ten participating Arab countries (Iraq, Jordan, Kuwait, Mauritania, Oman, Palestine, Sudan, Syria, Tunisia and United Arab Emirates), each of these areas of digital technologies, activities undertaken by stakeholders in Arab countries are presented as well as progress made and encountered obstacles. The ADDR 2019 summarizes these activities and presents the progress made in the main areas of digital technologies in the Arab region. This is followed by a situational analysis of efforts exerted, challenges faced and policy reforms undertaken in the Arab region in digital development through implementation of WSIS outcomes. Linkage with sustainable development goals 4, 8, 9, 10, 13, 16, and 17 are the focus of this report since they constitute the main goals focusing on technology, infrastructure and innovation for sustainable development. The review of 2017 and 2018 National Voluntary Reports on SDGs for Arab countries provides case studies to concretise the linkage between WSIS action lines and the above SDGs.

Main findings:

In the Arab region the following behaviour trends of Internet users should be noted: (i) mobile telephony is on the rise, particularly 3G and 4G mobiles; (ii) the gender gap in the use of the Internet is much smaller in the Gulf Cooperation Council (GCC) countries than in the other Arab countries, which is higher than the average gender gap in developing countries; (iii) social media applications are most used on the Internet, particularly voice/video calling apps; (iv) e-commerce applications have less than average use in the Arab region, with e-government and financial services even less used; (v) affordability of the Internet is rather low in most Arab countries. A review of the information society status in the Arab region, based on the 10 NDDRs that were prepared by participating countries[2], followed by a comparative analysis of the collected information for each of the five clusters of WSIS action lines, led to the main findings summarised below.

Cluster 1 (Action lines 1 and 11): All participating countries have some form of sectoral ICT strategy, including e-government strategies and one or more of e-health/e-education/e-commerce/e-payment strategies, but necessarily a long-term vision on ICT for achieving SDGs. Few have action plans for broadband, cyber security, smart mobility or artificial intelligence. A number of national initiatives aimed

at achieving WSIS action lines and empowering the society as a whole by including women, youth and the disabled in building the information society. However, measurements of the digital divide, including the gender gap, are still limited in most of these countries. At the regional and international levels, the GCC countries show more coordination and collaboration than the other countries.

Cluster 2 (Action lines 1, 2, 5, 6, 10 and 11): Telecom regulatory authorities in the ten participating countries in the ADDR provide licensing for basic telecommunication services, mobile telephony companies and Internet service providers (ISPs), the latter two becoming fully competitive. Mobile phone penetration in all countries continues to grow, with penetration rates between 70 percent and 200 percent. Internet access from households is nearing 100 percent in GCC countries and between 45 and 80 percent for most of the others. Coverage of population by mobile services is high (80 to 100 percent) for most countries. Fixed-broadband subscriptions are for medium and high speeds in GCC countries and Jordan, and lower speeds in the other countries. Countries suffering from conflicts are focusing on rebuilding digital networks enabling universal access to ICTs, with broadband connectivity, using optical fibre connections. National backbones provide broadband network infrastructure, including WiFi hotspots, WiMAX services, 3G/4G mobile networks and Internet exchange centres, with links to submarine cables. A variety of partnerships exist among stakeholders to cover key areas of the information society, particularly in ICT capacity building, entrepreneurship and infrastructure development. Between 2008 and 2018, participating countries enacted important legislations for the cyberspace including e-transactions, e-signature, e-payment and e-commerce. They developed a cybersecurity strategy and/or official cybersecurity standards, with cybercrime laws issued and specific units established to fight abusive activities.

Cluster 3 (Additional action line 12 on Building the ICT sector): In the ten participating countries, telecommunications firms are generally few, government owned and with high revenues and number of employees, while information technology (IT) companies are small in size, count in the hundreds and are mostly private companies. Data on the IT companies are lacking, particularly on their structure, revenues, employees and gender segregated data. ICT research, development and innovation (RDI) strategies are still weak as well as mechanisms/tools for implementation. Only few countries have well formulated RDI plan/initiatives on ICT for SDGs. Limited funds exist to encourage small and medium size projects through incubators by young entrepreneurs and in special economic zones. ICT sector (essentially telecom) contribution to the GDPs of participating countries vary between 0.6 percent and 6 percent, based mainly on telecommunications revenues. While e-banking, e-commerce and e-business are flourishing in GCC countries, it is not the case in other Arab countries that are struggling to get e-commerce practiced by companies and citizens on a larger scale. Loss of jobs due to increased automation may be partially offset by new jobs for youth in digital technologies. Various forms of e-employment are practiced in the participating countries, particularly through employment portals and social networks, by posting of CVs and work announcements. However, teleworking is very limited in spite of its importance for women and the disabled.

Cluster 4 (Action lines 3, 4, and 7): Although community access centres are available in few remote and disadvantaged areas to enhance inclusiveness by facilitating the use of the Internet and providing training, they do not cover the geography of the countries. Broadband access from homes and smartphones is not affordable for low-income families. Few virtual universities have been established to facilitate studies using online technologies, delivering knowledge to students in an interactive manner and preparing

modern learning curricula. Adult literacy centres or schools are common, including some dedicated to girls, with computer labs for use in teaching. A number of participating countries have introduced IT as a subject in their school curricula and digitised textbooks to facilitate e-learning. Few initiatives, some dedicated to women, have been launched to increase digital literacy. E-government services are expanding in the region, with GCC countries reaching more advanced stages than most of the others, with e-payment and e-procurement lacking in half of the participating Arab countries. The e-government program is assigned to a specific entity (Ministry/authority) in each country. This entity is responsible of providing a portal with static information in all countries, and interactive services/e-payment in several countries. The ministries of health of all participating countries provide on their websites awareness raising information about public health issues for men, women and children, including sexual and reproductive health. Hospital management systems are quite common, with limited linkages between hospitals and health centres. Telemedicine for the purpose of diagnosis and remote health care in disadvantaged areas is not common. However ICT tools, including early warning systems, are used for tracking and monitoring cases of communicable diseases to limit their spreading.

Cluster 5 (Action lines 8 and 9): The Arab region possess a rich cultural heritage and digitisation of historical documents, manuscripts and museum artefacts is being carried out in most participating countries. Centres of historical documentation have been established, and two or three-dimensional documentation of historical buildings, produced using high-quality digital photography as well as sound heritage are being built using e-platforms and websites to preserve the information and promote cultural activities. However, given the high cost of all these systems, many countries are slowly building them and may stop their development in times of crisis or economic difficulty. The media landscape in the Arab region is diverse with governmental control in some countries and complete independence in others. While traditional media are still important and trusted by citizens, digital media increased the sources of information and their variety, lessened governmental control and provided two-way communications. It should be noted though that wherever gender disaggregated data are available, men still dominate the leadership in media companies. The worldwide convergence of ICT with various forms of media (Internet, TV, radio and newspapers) led the Arab countries to prepare for this convergence, albeit not at the same accelerated rate as in developed countries. All Arab countries agree that social media has changed the way people live, think and work in the region, sometimes for the better and sometimes for the worse. Awareness raising about positive and negative aspects of social media are essential for a balanced and healthy use.

Main obstacles:

The main obstacles and difficulties encountered by ESCWA in implementing the ADDR process and by other stakeholders with regard to the commitments and recommendations pertaining to their respective Clusters (action lines) at national and regional levels, can be summarized by the following:
- Lack of data at the national level regarding a number of socioeconomic aspects, including ICT sector data and gender disaggregated data;
- Collaboration among various national sectors in participating countries to provide needed information regarding different clusters was limited.

Part Three: A brief description (1–2 pages) of:
(a) Innovative policies, programmes and projects which have been undertaken by all stakeholders to implement the outcomes. Where specific targets or strategies have been set, progress in achieving those targets and strategies should be reported.

There are national and regional initiatives on ICT for development and information society in the Arab region, however, the ADDP, is the only regional initiative on digital technology for achieving WSIS and SDGs. In fact, national/regional policies and strategies for achieving the SDGs using digital technologies seem to be limited, since even in the 2017 and 2018 National Voluntary Reports on SDGs for Arab countries incorporate very few projects using ICT to achieve some goals.

In this context, ESCWA formulated the following main strategic messages and recommendations that will be promoting with all stakeholders at regional and national, to improve the facilitation and ensure full implementation in each of the action lines and themes, and to overcome obstacles:

a) National and regional digital strategies for SDGs:

- Formulate regional and sub-regional strategies to provide an umbrella for coordination of digital strategies for SDGs in Arab countries.
- Develop a long-term vision for the country and sectoral digital strategies in partnership with other stakeholders in the private sector and academia. These strategies should include programmes for inclusiveness and empowerment of women, youth, people with disabilities, people in remote/disadvantaged areas;
- Encourage the use of internationally agreed indicators to periodically measure the digital divides and other aspects of the information society, as part of the strategic planning, with gender disaggregated data.

b) Infrastructure, governance and legislations:

- Provide a competitive environment for telecommunications, including fixed and mobile broadband, through partnership between Government and the private sector to reduce prices and improve services;
- Provide Arabised ccTLDs and domain names to facilitate Internet access to all people;
- Involve Arab countries in Internet Governance (IG) at the International, regional and national levels, through governments, private sector and NGOs;
- Adopt and enforce cyber laws for the protection of privacy and digital data to increase safety and legality of e-transactions, e-documents and e-authentication through adoption of international standards for digital environments.
- Develop strategies and legal arsenals to fight cybercrime and protect the children from abuse on the Internet, including capacity building of judicial personnel at the national and regional levels.

c) Digital economy, employment and trade:

- Provide information on ICT firms, including small IT companies, particularly their classification, size, revenues and workforce by gender, and collect information on ICT goods export, online trade, including the contribution of the ICT sector to the national economy;
- Develop national research, development and innovation strategy aligned with the needs of the industry, including regional and international collaboration by various stakeholders.
- Increase governmental facilitation for investment, including development of special economic zones with tax reduction and procedure simplification;
- Facilitate the development of e-payment and e-commerce processes;
- Collect and provide statistics on e-employment and employment in the ICT sector, with disaggregated data for women and youth;
- Provide legislation for teleworking as a legitimate form of employment to empower women, youth, and people with disabilities or living in remote areas;
- Enhance the entrepreneurship eco-system and encourage the creation of supporting mechanisms for entrepreneurs such as incubators, science and technology parks.

d) Digital transformation and social inclusion:

- Expand access/knowledge centres to cover most remote and disadvantaged areas and to provide e-services and training;
- Increase broadband connectivity from home and reduce its cost in order to make it affordability for low-income families;
- Create lifelong learning and training centres focused on ICT technology and advanced tools;
- Establish virtual schools and virtual universities to facilitate empowerment of girls/women and youth in remote areas, while providing high quality education;
- Develop modern teaching/learning curricula in schools using e-books, with ICT as a basic subject and as a tool for e-learning;
- Expand e-government services to include interactive services, e-payment and e-procurement with the possible use of social media and apps for smartphones and tablets;
- Formulate e-health strategies that include networked hospital management systems and pharmaceutical management systems, as well as telemedicine and follow-up digital systems.

e) Culture and Media:

- Digitise public libraries, their archives, historic manuscripts, museum artefacts and historic buildings, and develop multimedia websites for museums and libraries;
- Formulate and implement official convergence strategies between ICT and media;
- Carry out awareness-raising about social media, their usefulness, effectiveness and harmfulness through unrestrained behaviour.

In addition to the ADDP, ESCWA implemented two additional initiatives for supporting digital government transformation in the Arab region and accelerating the achievement of the 2030 Development Agenda, especially SDG 16. The first initiative is on "Fostering open government in the Arab region" and the second one is on "Measurement of Government Electronic and Mobile Services".

In 2017, ESCWA launched an initiative to foster open government in the Arab region[3] as of its positive impact on enhancing transparency, accountability, participation and citizen-engagement in government decision making. Open government has also positive impact on several SDGs such as SDGs: 3, 9, 11 and 17. ESCWA proposed a four-phased framework for the application of open government[4] considering the cultural, governance and developmental needs in the Arb countries. Today more than 8 Arab countries have open data initiatives, 6 have adopted access to information law and 3 Arab countries are member of the Open Government Partnership.

In 2017, member States validated the Government Electronic and Mobile Services (GEMS) maturity index as a tool for policy makers to measure and assess their national progress towards digital transformation. In 2019, ESCWA collaborated with 12 member States to assess the maturity of their services using the GEMS and ESCWA analyzed the results[5] recommending a focus on marketing the availability of electronic government services, where they exist, in parallel to building the capacities of individuals to access and use these services while also improving the user experience by delivering these public services thru mobile applications.

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[3] https://www.unescwa.org/sub-site/open-government-arab-region
[4] https://www.unescwa.org/publications/fostering-open-government-arab-region-2018
[5] The report will be published by the end of November. It could be found at:
https://www.unescwa.org/publications/publications-list