



**ECONOMIC AND SOCIAL  
COUNCIL**

Distr.  
LIMITED  
E/ESCWA/TDD/2017/IG.1/4(Part I)  
6 January 2017  
ORIGINAL: ENGLISH

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

Committee on Technology for Development  
First session  
Dubai, United Arab Emirates, 11-12 February 2017

Item 5 (a) of the provisional agenda

## **Information and communications technology for development issues**

### **International and regional processes**

#### **Summary**

The present document covers the information and communications technology (ICT) sector, mandated by the overarching process of the United Nations World Summit on the Information Society (WSIS), and the space and satellite sector mandated by the United Nations Committee on Peaceful Use of Outer Space (COPUOS). The aim is to promote effective engagement of the Arab region in these processes, towards more synergy at the national and regional levels.

The document calls upon member states to support ESCWA in its role in the area of ICT for development, and solicits their opinions on whether ESCWA should pursue the process related to the peaceful use of outer space, taking into consideration limited resources, or better direct its efforts to the areas of ICT for development, which includes the digital economy, smart societies, Internet governance, smart government and competitiveness.

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## Introduction

1. At the national level, the information and communications technology (ICT) sector, and ICT ministries and other specialized agencies, are the main actors responsible for ICT for development processes, in conjunction with other ministries, such as those responsible for administrative or cabinet development, media and mass communications or industry. However, there is a related ICT for development subsector that does not always fall under the ICT sector: the space and satellite sector. At the United Nations level, there are also two distinct processes mandated by the General Assembly, one for the ICT sector and another for the space and satellite sector.

2. The present document mainly covers the ICT Sector and sheds light on the space and satellite sector and related processes, with the intention of describing the nature of relevant United Nations mechanisms and how they are related to the overarching notion of ICTs and development, and how ESCWA has engaged in them. The General Assembly mandated the World Summit on the Information Society (WSIS) process for the ICT sector and its derivatives, on both the international and regional levels, and the space and satellite sector to the Committee on Peaceful Use of Outer Space (COPUOS). ESCWA is entrusted to follow-up and contribute to these processes at the international and regional levels, encourages the effective engagement of member States in those processes, and promotes synergy between these disciplines at the national and regional levels.

3. The present document complements another ESCWA document entitled *Digital economy and the shift towards smart societies in the Arab region*, which focuses on selected substantive issues rather than on United Nations governing processes. Both documents were prepared by the ICT Policies Section as an input to the first session of the Committee on Technology for Development. These documents are closely related to a newly conceived ESCWA programme entitled the Information Society and Digital Economy Hub for the Arab Region (ISDEHAR).

4. ISDEHAR is an ESCWA multifaceted programme promoting the achievement of the Sustainable Development Goals (SDGs) in the Arab region by 2020, as defined in the 2030 Agenda for Sustainable Development. Since the inception of WSIS, ESCWA has been instrumental in spearheading regional efforts targeting the development of the information society, and is currently pioneering efforts of promoting the digital economy and smart societies in the Arab region towards ICTs for the implementation of the SDGs. The ISDEHAR programme aims to achieve the following: enhance the capabilities of policymakers and various stakeholders from the business sector, civil society and academia to promote the digital economy and smart societies in the region; and promote initiatives that contribute to the transformation towards smart and sustainable societies and strengthen digital economies for inclusive growth. The programme is built around the following four pillars: cross-cutting regional strategic frameworks and regional agendas; governance, legal and regulatory frameworks; ICT industries, production, competitiveness, and economic growth; and enterprise development, transformation, and social inclusion.

<b>ISDEHAR framework</b>		
<b>Economy</b>	<b>State</b>	<b>Society</b>
<b>Competitiveness</b>	<b>Governance</b>	<b>Digital transformation</b>
<b>Production for economic growth</b>	<b>Infrastructure, policy and legal environment and rights</b>	<b>Institutional development for social inclusion</b>
<b>Capacity-building</b>		

**I. INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)  
SECTOR: OVERARCHING PROCESS OF THE WORLD  
SUMMIT ON THE INFORMATION SOCIETY (WSIS)**

A. INTERNATIONAL PERSPECTIVE: THE INCEPTION AND EVOLUTION OF THE WSIS PROCESS

5. The information society processes information efficiently and gears it towards socioeconomic development. The process includes the production, exchange, adaptation and use of information for the purposes of development, the enhancement of quality of life, and the improvement of working environment for all citizens. The information society relies chiefly, but not solely, on the use of smart technologies.

6. Significant differences exist in the capacity of countries to adapt to the rapid changes in technology and knowledge. The move towards the information society constitutes a real challenge to developing countries. In this context, the General Assembly adopted resolution 56/183 of 21 December 2001 to endorse a proposal presented by the International Telecommunication Union (ITU), aimed at convening WSIS. The Summit sought to reduce the digital divide between developed and developing countries and promote the creation of an equitable and all-inclusive information society, by increasing awareness of the benefits of the information society, and by presenting mechanisms to help developing countries advance towards such a society. WSIS was held in two phases. The first phase took place in Geneva in 2003, and the second in Tunis in 2005.

1. *WSIS phase I*

7. Participants in the first WSIS phase adopted the Geneva Declaration of Principles, and the Plan of Action.<sup>1</sup> The Geneva Declaration of Principles sets out a commitment to build a “people-centered, inclusive and development-oriented information society” with equal access for all. It recognizes the uneven distribution of ICTs and states the intention to eliminate the digital divide and to harness the potential of ICTs in achieving the internationally agreed development goals, including those contained in the Millennium Declaration.

8. The Plan of Action defined its objectives as follows: “To build an inclusive Information Society; to put the potential of knowledge and ICTs at the service of development; to promote the use of information and knowledge for the achievement of internationally agreed development goals, including those contained in the Millennium Declaration; and to address new challenges of the Information Society, at the national, regional and international levels”.

9. The Plan of Action contains 11 action lines, which are numbered C1 to C11, and address the following: C1- Role of Governments and all stakeholders in the promotion of ICTs for development; C2- Information and communication infrastructure; C3- Access to information and knowledge; C4- Capacity-building; C5- Building confidence and security in the use of ICTs; C6- Enabling environment; C7- ICT applications: benefits in all aspects of life; C8- Cultural diversity and identity, linguistic diversity and local content; C9- Media; C10- Ethical dimensions of the information society; and C11- International and regional cooperation.

10. Although Member States agreed on the WSIS action lines, a prominent controversial issue was Internet governance. The disagreements revolved around how it was being governed and by whom. This issue continued after both WSIS phases.

2. *WSIS phase II*

11. The second phase of WSIS reviewed the progress made since the first phase and re-affirmed participants’ commitment to build a people-centered, inclusive and development-oriented information society.

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<sup>1</sup> Both the Declaration of Principles and the Plan of Action are contained in the report of the WSIS Geneva phase, document WSIS-03/GENEVA/9(Rev.1)-E. Available from [https://www.itu.int/dms\\_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0009!R1!PDF-E.pdf](https://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0009!R1!PDF-E.pdf).

The outcome was the Tunis Commitment and Tunis Agenda for the Information Society.<sup>2</sup> The Tunis Commitment focused on key subject areas and their related issues, namely Internet governance and financial mechanisms, in addition to universal access to information and knowledge, democracy, sustainable development, freedom of expression and the free flow of information. The document also raised awareness of the benefits that ICT could bring to humanity and the manner in which it can transform and improve people's activities, interaction and lives.

12. The Tunis Agenda stressed that the implementation of WSIS at the international level should be organized in accordance with the themes and action lines originally set out in the Geneva Plan of Action, and that it should be moderated or facilitated by United Nations agencies, when appropriate. A clear mandate was given to regional commissions, and was clearly stipulated in the Tunis Agenda.

13. The Tunis Agenda tackled the issue of Internet governance by establishing the Internet Governance Forum (IGF) that is multi-stakeholder in nature, and an Intergovernmental Enhanced Cooperation process. The IGF process was launched in 2006, while the other faltered.

### *3. Renewal of the WSIS and the IGF mandates*

14. In 2015, the WSIS mandate was renewed for 10 years, from 2015 to 2025. The outcome document of the WSIS+10 Overall Review,<sup>3</sup> extended the mandate of the WSIS process to 2025, so as to feed into the overall review of the 2030 Agenda for Sustainable Development. The overarching message was that development is increasingly digitally-based, and the resolution resulting from the WSIS+10 meetings was dominated by ideas related to digital development. It also has strong links to the 2030 Agenda for Sustainable Development. The mandate of regional commissions received a similar extension. In addition to the 11 WSIS action lines, new topics were emphasized, including human rights, trust, security and Internet governance. The mandate of the IGF itself was also renewed till 2025.

## **B. REGIONAL PERSPECTIVE: ROLE OF ESCWA IN THE FOLLOW-UP TO WSIS**

15. The regional commissions play an important role in regional WSIS follow-up activities. During the 2003 and 2005 WSIS processes, the regional commissions coordinated their efforts at the WSIS Forum and reported on regional activities and plans. In the light of the WSIS+10 Review, the role of regional commissions became particularly relevant, especially in aligning WSIS with the SDGs.

### *1. WSIS Forum: preparatory and follow-up activities*

16. In the Arab region, ESCWA has been playing a leading role in the WSIS process since its inception. Prior to and after the Geneva and Tunis phases of WSIS, ESCWA organized preparatory and follow-up conferences to enable the engagement of Arab countries, resulting in 2004 with the production of the Regional Plan of Action for Building the Information Society (RPOA). ESCWA has also created a network of ICT policymakers for promoting regional and international cooperation and identifying mechanisms for the implementation of regional projects, specifying models for the formulation of ICT strategies and plans of actions and disseminating best practices and lessons learned.

17. The RPOA originally included 10 programmes and 38 projects and was enriched in 2007 with additional projects that were proposed by the League of Arab States and other regional stakeholders. It was further updated during the 2009 regional follow-up activities to the outcome of WSIS, which also resulted with the

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<sup>2</sup> Both the Tunis Commitment and the Tunis Agenda are contained in the Report of the WSIS Tunis phase, document WSIS-05/TUNIS/DOC/9(Rev.1)-E. Available from <https://www.itu.int/net/wsis/docs2/tunis/off/9rev1.pdf>.

<sup>3</sup> It was adopted by the General Assembly in its resolution 70/125 of 16 December 2015. Available from <http://workspace.unpan.org/sites/Internet/Documents/UNPAN96078.pdf>.

Damascus Declaration for the Development of the Information Society. Various projects proposed within the RPOA and its programmes were adopted by the League of Arab States under the Arab ICT Strategy.

18. ESCWA has made it a priority to encourage member States to draft, adopt and implement national ICT/information society strategies. To that end, ESCWA published in 2005 a study entitled *Towards an Integrated Knowledge Society in the Arab Countries: Strategies and Implementation Modalities*,<sup>4</sup> which provided a framework and a guide for the design, development and implementation of national strategies aimed at the realization of a knowledge society and the advancement of knowledge-based economies in Arab countries. In 2007, ESCWA produced *Guidelines for the Formulation and Implementation of ICT Policies and Strategies*<sup>5</sup> to assist policymakers in the formulation and update of ICT policies and strategies. Several studies and activities related to the ICT sector and the WSIS action lines were conducted over the period 2006-2015.

19. ESCWA developed the Information Society Portal (ISPER)<sup>6</sup> as a follow-up activity to the outcomes of WSIS. It is a dynamic, bilingual (English/Arabic), database-driven, open-source application that provides stakeholders with essential information on the current status of the information society in the ESCWA region. The Portal provides required information on progress and achievements in each of the WSIS specified action lines, and seeks to facilitate cooperation and regional integration.

20. In support of Governments and other information society stakeholders, ESCWA has produced, since 2003, seven issues of the biennial publication entitled *Regional Profile of the Information Society*. Based mainly on information provided by member States, the Regional Profile contains information covering all the WSIS action lines, and highlights regional and national ICT initiatives that impact the achievement of the Millennium Development Goals (MDGs). The 2015 issue of the report covered the progress of Arab countries in building their information societies since the 2003 WSIS, and provided an analytical representation of the status of the Arab region against a selection of action lines, with highlights of recent developments. It noted impressive improvements in the Arab region on some fronts, such as the increase in mobile phone penetration rates from less than 25 per cent in 2005 to over 108 per cent in 2015 and the increase in regional Internet penetration rates from around 10 per cent in 2005 to 37 per cent in 2015. On the other hand, the broadband penetration rate in the Arab region remained at 3.7 per cent, which is lower than the world average of 10.8 per cent. It also identified challenges facing the Arab region, such as cyberspace security and trust and the limited development and use of e-services, and highlighted the ICT priorities of the region beyond 2015 to achieve WSIS+10 and SDG priorities.

## 2. Arab Internet governance process: roadmap and forum

21. ESCWA created, in partnership with the League of Arab States, an initiative entitled Arab Dialogue on Internet Governance. They also issued a 2009 study entitled *Internet Governance: Challenges and Opportunities for ESCWA Member Countries*<sup>7</sup> and the 2010 *Arab Regional Roadmap for Internet Governance: Framework, Principles and Objectives*.<sup>8</sup> This Roadmap was adopted by key stakeholders in October 2010, who also confirmed the need for an Arab IGF through the Call of Arab Stakeholders: Towards Activating Comprehensive Arab Cooperation for Internet Governance, Regionally and Internationally.<sup>9</sup>

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<sup>4</sup> Available from [www.unescwa.org/sites/www.unescwa.org/files/publications/files/ictd-05-3.pdf](http://www.unescwa.org/sites/www.unescwa.org/files/publications/files/ictd-05-3.pdf).

<sup>5</sup> Available from [www.unescwa.org/publications/guidelines-formulation-and-implementation-ict-strategy](http://www.unescwa.org/publications/guidelines-formulation-and-implementation-ict-strategy).

<sup>6</sup> See <http://isper.escwa.un.org/>.

<sup>7</sup> Available from [www.unescwa.org/publications/internet-governance-challenges-and-opportunities-escwa-member-countries](http://www.unescwa.org/publications/internet-governance-challenges-and-opportunities-escwa-member-countries).

<sup>8</sup> Available from [www.unescwa.org/publications/arab-regional-roadmap-internet-governance-framework-principles-and-objectives](http://www.unescwa.org/publications/arab-regional-roadmap-internet-governance-framework-principles-and-objectives).

<sup>9</sup> Available in Arabic from <http://css.escwa.org.lb/ictd/1301/16.pdf>.

### C. WAY FORWARD

22. The 2015 review of the WSIS process invited the regional commissions to continue their work on the implementation of the WSIS action lines, including holding periodical regional reviews to assess progress and adapt or readapt plans of action.

23. Many initiatives related to the implementation of WSIS in the Arab region were carried out in partnership with international and regional organizations. Collaborative efforts are coordinated primarily with the Governments of ESCWA countries, non-governmental organizations, a host of stakeholders from the private sector, other regional commissions, United Nations specialized agencies and programmes, and the League of Arab States.

24. In the Arab region, the linkages between the SDG community and the WSIS community are still weak. Even within the WSIS community itself, the linkages between technology sectors and the administrative development sector need significant improvements. For the effective implementation of the SDGs, there has to be full ownership of the WSIS-SDG process by the aforementioned sectors. It is crucial for ESCWA member States to establish information societies if they aspire to lay the foundations for sustainable development and achieve internationally agreed development goals.

25. The WSIS process remains the most overarching interdisciplinary process in the field of technology for development. ESCWA will continue its efforts to narrow the digital divide and help build an inclusive, people-centred and development-oriented information society. This will be targeted through the implementation of programmes such as ISDEHAR for the development of enabling environments, capacity-building, Internet governance, smart society and smart government policies and guidelines, as well as building the ICT sector.

## II. ICT SECTOR, WSIS AND INTERNET GOVERNANCE

### A. INTERNATIONAL PERSPECTIVE: INCEPTION OF THE INTERNET GOVERNANCE FORUM AND ENHANCED COOPERATION PROCESSES

26. As indicated in the previous section, the topic of Internet governance was controversial in the 2003 Geneva WSIS. The role of the Internet Corporation for Assigned Names and Numbers (ICANN), as a private corporation under contract to the United States Government, created controversy among States, especially Brazil, China, South Africa and some Arab countries. Since no general agreement existed, even on the definition of Internet governance, the Secretary-General formed the Working Group on Internet Governance (WGIG) to clarify the issues and report back before the second phase of WSIS.

27. WGIG defined Internet governance as “the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet”. The public policy issues that are relevant to Internet governance were defined by the WGIG, as called for in paragraph 13(b) of the Geneva Plan of Action. Those issues are: administration of the root zone files and system; interconnection costs; Internet stability, security and cybercrime; spam; meaningful participation in international policy development; capacity-building; allocation of domain names; IP addressing; intellectual property rights; freedom of expression; data protection and privacy rights; consumer rights; and multilingualism.<sup>10</sup>

28. At the second WSIS, held in Tunis in 2005, after much controversial debate, participants agreed on a compromise to allow for wider international debate on policy principles, through the establishment of the Internet Governance Forum (IGF) and the launch of the process for Enhanced Cooperation. The mandate of the IGF is set out in paragraph 72 of the Tunis Agenda.

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<sup>10</sup> WGIG Report, 2005, pp. 5-8. Available from [www.wgig.org/docs/WGIGREPORT.pdf](http://www.wgig.org/docs/WGIGREPORT.pdf).

29. An important aspect of the IGF is that it is designed as a multi-stakeholder forum for deliberations without decision-making capacity. It addresses international Internet governance issues without resulting in a negotiated outcome document, which has many benefits particularly in bringing all stakeholders together for policy dialogue that automatically influences decision-making at all levels. The term ‘recommendations’ was replaced by ‘messages’, which are not binding. The expectation is that the high-level dialogue will produce important messages that will be taken into account when organizations make decisions on specific issues, projects and treaties.

30. As for the Enhanced Cooperation Process, it was not launched due to political reasons. However, the General Assembly created several working groups to discuss it further. Discussions on the Process focused on the role of stakeholders and the nature of their cooperation under the implementation framework, mainly the role of Governments vis-à-vis other stakeholders. One view is that the process towards enhanced cooperation involves all stakeholders in their respective roles. Another view is that there is a specific emphasis on Governments, as defined in the Tunis Agenda, and that it should be intergovernmental in nature. Currently the League of Arab States and ESCWA are working together on both topics.

#### B. REGIONAL PERSPECTIVE: THE CREATION OF THE ARAB INTERNET GOVERNANCE FORUM

31. As indicated earlier, the partnership between ESCWA and the League of Arab States resulted in the Arab Dialogue on Internet Governance initiative and the 2010 *Arab Regional Roadmap for Internet Governance: Framework, Principles and Objectives*. The Roadmap has fulfilled the Dialogue’s aim through a clear strategic framework for tackling Internet governance matters from a regional perspective. It was presented at the 2010 IGF, and was further discussed by Internet experts from the Arab region. Those experts issued the Call of Arab Stakeholders<sup>11</sup> to advocate the launch of the Arab Internet Governance Forum as a platform for policy dialogue and collaboration among all stakeholders in the Arab region. They asked ESCWA and the League of Arab States to advance efforts towards that purpose. Building on that, in 2011, the League of Arab States presented these outcomes to the Arab Telecommunications and Information Council of Ministers (ATICM), which called upon ESCWA and the League of Arab States to convene Arab-wide consultations to confirm the need for the Forum and prepare for its establishment.

32. Subsequently, ESCWA and the League of Arab States held a conference and public consultations in 2012<sup>12</sup> aimed at establishing the Arab IGF and exploring the availability of partners willing to host the Forum and provide technical secretariat services for the first four years (2012-2015). The League of Arab States submitted the outcome document of the consultations to the thirty-first session of the ATICM Executive Bureau (Beirut, 2 February 2012), which endorsed the establishment of the Arab IGF. ESCWA adopted resolution 306 (XXVII) on the development of the Arab IGF process and sustaining efforts in the Arabic domain names field, which supports continuing efforts on the Arab IGF process and partnership with the League of Arab States.

33. The Arab IGF was established in 2012 to be in line with the mandate of the IGF. It engages stakeholders, including Governments, the private sector, civil society, technical practitioners, the academic community and regional organizations, in open dialogue on Internet-related public policy issues such as access, privacy and security, and openness.

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<sup>11</sup> Call of Arab Stakeholders (in Arabic). Available from <http://css.escwa.org.lb/ictd/1301/16.pdf>.

<sup>12</sup> See the report on the conference in document E/ESCWA/ICTD/2012/WG.2/Report, available from [https://www.unescwa.org/sites/www.unescwa.org/files/events/files/report\\_reportreport\\_e.pdf](https://www.unescwa.org/sites/www.unescwa.org/files/events/files/report_reportreport_e.pdf).



### **Objectives of the Arab IGF**

1. Discuss policy issues related to Internet governance, in particular those raised within the global IGF, with a view to promoting access to the Internet and ensuring its security, stability and development.
2. Facilitate the exchange of information, best practices, lessons learned and knowledge, particularly with experts in public policy, technology and academic matters; and disseminate the recommendations and proposals emanating from discussions held within the Arab IGF;
3. Reach a common understanding of the priorities of Internet governance and mechanisms to respond to the specific needs of Arab countries;
4. Discuss emerging technologies and make recommendations thereon;
5. Contribute to capacity-building and development in the area of Internet governance in Arab countries; and promote the involvement of all stakeholders to fully utilize available knowledge and expertise;
6. Disseminate the Arab perspective regarding Internet governance at the global level and support Arab stakeholders in the formulation of Internet governance policies, without assigning oversight functions to the Arab IGF or turning it into a substitute for existing mechanisms, institutions or organizations;
7. Communicate with regional and international forums on Internet governance to facilitate experience sharing and knowledge transfer.

Source: E/ESCWA/ICTD/2012/WG.2/Report, available from [https://www.unescwa.org/sites/www.unescwa.org/files/events/files/report\\_reportreport\\_e.pdf](https://www.unescwa.org/sites/www.unescwa.org/files/events/files/report_reportreport_e.pdf).

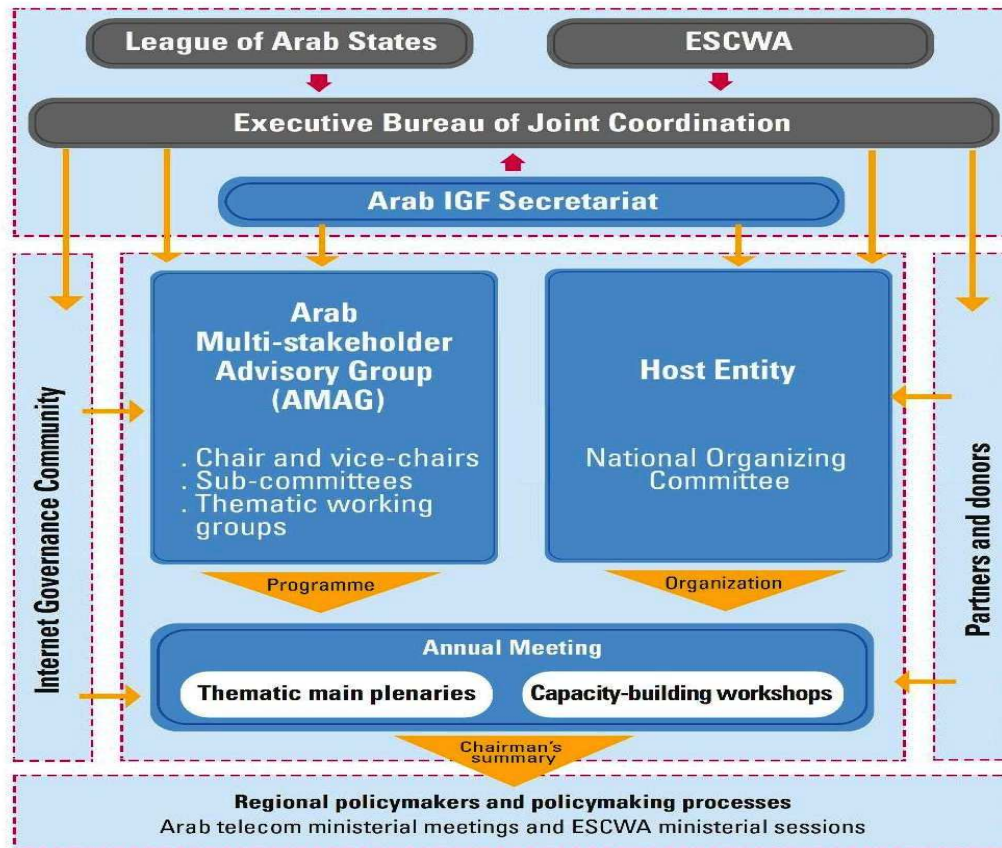
#### *1. Key components of the Arab IGF and the role of ESCWA*

34. ESCWA and the League of Arab States serve as umbrella organizations for the Arab IGF. In the first four years of the Forum, the National Telecommunication Regulatory Authority (NTRA) of Egypt acted as its secretariat. In 2013, the Executive Bureau for the Joint Coordination of the Arab IGF was established, with ESCWA and the League of Arab States as leading agencies and the secretariat of the Arab IGF as a member. The Bureau takes major decisions related to the overall Arab IGF process. In addition to identifying the roles of partners, it is tasked with establishing an Arab IGF multi-stakeholder advisory group and selecting the host party for the Forum's annual meetings.

35. The Bureau also coordinates between key partners, the host and the advisory group on preparations for the annual meetings. It promotes the broad involvement of stakeholders in Internet governance, on the one hand, and formal communication with policymakers, on the other, with a view to ensuring the sustainability and success of the Arab IGF process. Preparations for meetings include identifying a hosting entity. ESCWA and the League of Arab States designate the host on an annual basis in coordination with the Arab IGF secretariat.

36. The Arab Multi-stakeholder Advisory Group (AMAG) comprises representatives of all stakeholders in the Arab region and undertakes a number of tasks, notably the identification of the technical themes to be addressed at the Forum's annual meetings. The Group was first established in 2012 and restructured in 2014 to include 34 experts representing stakeholders. The 2015 Group was chosen in April of the same year. Application for AMAG membership is kept open to encourage government representatives to be more involved in the development of the Arab IGF process.

**Figure 1. The Arab Internet Governance Forum process**



## 2. Activities of the Arab IGF

37. Preparations for the Arab IGF annual meetings include the identification by AMAG of an overriding theme, focus areas and meeting agenda; selection of the host entity following the adoption of related terms of reference of roles, responsibilities and requirements; and logistical and organizational preparations for the meeting by the host entity.

38. Since its inception in 2012, the Arab IGF has held four annual meetings:

- The First Arab IGF meeting (Kuwait, 9-11 October 2012), was attended by over 300 participants, and hosted by the Kuwait Information Technology Society, on the theme “A better Internet for a better Arab world”;
- The Second Arab IGF meeting (Algiers, 1-3 October 2013), was attended by some 800 participants, and hosted by the Ministry of Post, Information and Telecommunications Technologies, on the theme “Partners for development”;
- The Third Arab IGF meeting (Beirut, 25-27 November 2014), was attended by some 500 participants, and hosted by ESCWA, on the theme “Arab perspective for shaping the future of the Internet”;
- The Fourth Arab IGF meeting (Beirut, 16-18 December 2015), was attended by 650 participants, and hosted by the Lebanese OGERO Telecom in Beirut, on the theme “Internet Economy for Sustainable Development”.

39. Key strategic messages were issues to help policymakers in the Arab region take adequate decisions in the field of Internet governance. Although it is difficult to measure the impact of the Forum, it is clear that policy dialogue has a positive impact. In this context, ESCWA and the League of Arab States launched, at the conclusion of AIGF-IV (Beirut, 2015), the AIGF2020 Initiative, a pan-Arab community-wide initiative to review the elapsing phase of the Forum (2012-2015) and to develop it in the next phase, which could extend until either 2020 or 2025 (the end of the current WSIS+10 mandate).

### 3. *ESCWA-League initiative to improve the Arab IGF process (AIGF2020)*

40. The implementation of the AIGF2020 initiative started in 2016 and included several components and interrelated activities, which began with the formation of the Technical Cooperation Working Group (TCWG), which seeks to assist the umbrella organizations, ESCWA and the League of Arab States, in the implementation of the initiative. TCWG met three times in 2016, and is due to finalize the outcome of the initiative in early 2017.

41. The main objectives of the AIGF2020 initiative can be summarized by the following:

- (a) Analyse the achievements of the first mandate of the Arab IGF process (2012-2015) with regard to the targets of the ESCWA Roadmap on Internet Governance (2010);
- (b) Assess the impact of the Arab IGF on Internet governance policies in the Arab region;
- (c) Discuss challenges that faced the first mandate;
- (d) Make proposals for developing the second issue of the Arab Regional Roadmap on Internet Governance and the second mandate of the Arab IGF, to be geared towards implementing the SDGs.

### C. WAY FORWARD

42. An AIGF2020 survey was conducted, on the basis of which the TCWG will propose enhancements for the second phase. Based on the final outcome of the AIGF2020 initiative, ESCWA and the League will draft a new charter for the next phase of the Arab IGF, which will be used to improve the Forum in the next phase and update the Arab Regional Roadmap on Internet Governance.

43. ESCWA will continue its efforts in the IGF domain through ISDEHAR programme activities, including analytical studies, meetings, advisory services and training workshops, and act as a catalyst for change and innovation in policymaking. Arab countries are invited to study the ISDEHAR programme and communicate to ESCWA ways they can benefit from it and the partnership level they can engage in.

## III. ICT SECTOR, WSIS AND DIGITAL TRANSFORMATION

### A. INTERNATIONAL PERSPECTIVE: E-GOVERNMENT APPLICATIONS AS A KEY WSIS ACTION LINE

44. The Geneva Plan of Action includes ICT applications to promote the transformation towards smart societies. E-government applications have the most important role in such a transformation. ICTs have had a significant impact on public administration and governance. Taking advantage of the spread of the Internet, many Governments around the world originally focused on the development of electronic services that were chiefly aimed at simplifying and speeding up government procedures.

45. The evolution of e-government services has led to the creation of new governance models that promote transparency, citizen participation and collaboration. Over the past couple of decades, Governments have spent heavily on large scale digital transformation programmes, driving the development of key enabling factors, such as ICT infrastructure and human capabilities, to ensure the adoption of the latest technologies. The implementation of e-government varies across regions and between countries, and differences in the maturity levels of initiatives contribute to increasing the digital divide.

## B. REGIONAL PERSPECTIVE: ESCWA ROLE IN E-GOVERNMENT PROGRAMMES IN ARAB COUNTRIES

46. In the Arab region, all countries have launched national e-government initiatives,<sup>13</sup> albeit with differing maturity levels. For example, e-government initiatives in Bahrain and the United Arab Emirates have shifted focus from basic e-services to more advanced open data concepts. In Lebanon, e-government initiatives have not progressed beyond the basic. Regardless of the maturity level of e-government initiatives, all Governments in the Arab region have, at the very least, drafted an e-government strategy or updated an existing one.<sup>14</sup> ESCWA has played a major role in supporting national e-government programmes.

### 1. *E-government policies and strategies*

47. To complement its work on ICT policies and strategies, ESCWA has highlighted the institutional dimensions of e-government policies and promoted the measurement of their impact. The establishment of an e-government entity at the national level has a positive impact on various e-applications. In 2007, ESCWA assisted the Government of Yemen in the formulation of a national e-strategy, and the Government of Jordan with the development of a research and development strategy for a national ICT sector.

48. In promoting e-government, ESCWA produced a 2013 study entitled *Progress on the Implementation of e-Gov Strategies in the ESCWA Region*. Its main objectives were to help ESCWA establish a clear path and vision for its involvement in current and future e-government policy implementations and to entice Arab Governments to increase their efforts towards the speedy implementation of e-government strategies.

### 2. *Mobile-governments initiatives*

49. In the Arab region, the number of users of mobile and mobile-enabled devices is higher than the number of users of classical computing devices, namely desktops and laptops. Online access is more likely to take place from a mobile device than from a fixed setup.

50. In 2014, ESCWA, in partnership with the Dubai Government, finalized a study entitled *Mobile Government Applications in the Arab Region: Status and Future Prospects*. Its primary objective was to encourage Governments to start implementing m-government solutions and initiatives in parallel to e-government application development efforts.

51. The study concludes that significant progress has happened in the region as far as computer and Internet penetration is concerned, and that cellular penetration in most of the countries studied has touched or crossed the 100 per cent mark. On the other hand, it shows that mobile government initiatives in the region are still in their infancy phase. Backend applications required to automate the government processes are either non-existent or in the initial stages of development. Advanced mobile based transactions, like bill payments, are not happening regularly and the overall environment for ushering in mobile government is still feeble. The study therefore recommends that creating an enabling environment for mobile government should be the first priority of Arab Governments.

### 3. *Maturity index of government electronic and mobile services*

52. New technologies require massive investments. To justify ever-increasing expenditures on e-government services, leaders ask for proof of tangible benefits. These are measured in terms of government delivery, efficiency and customer satisfaction. To satisfy the demand of Governments for verifiable measurements, various organizations have developed and established metrics that assess the digital maturity

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<sup>13</sup> ESCWA, E-Government Strategies in the Arab Region, 2013.

<sup>14</sup> ESCWA, Regional Profile of the Information Society in the Arab Region 2003-2015, 2016.

of countries and their Governments. The resulting indices and reports are widely used as references of maturity levels, but they lack the tools that are necessary to measure usage and customer satisfaction.

53. In the light of these considerations, ESCWA has led an initiative, in cooperation with the Office of the Prime Minister of the United Arab Emirates, aimed at developing a government electronic and mobile services (GEMS) maturity index that can be applied across countries, while taking into consideration regional specificity. The index is an assessment tool that can be used by policymakers to measure the level of digitization and sophistication in the delivery of e-government and m-government services to the public. The tool goes further than earlier methods that had generally focused on high-level assessments. This index combines key performance indicators that measure service availability and sophistication, service usage, and public outreach. In addition to analysing the services provided and their maturity, GEMS emphasize the demand side of government services; in other words, the actual usage of services by individuals and their satisfaction with these services.

54. The deployment of GEMS encourages policymakers in government entities to increase the supply of sophisticated and mature digital services. Consequently, it improves the delivery of e-government services. GEMS has been rolled out as a pilot implementation in 10 Arab countries (Bahrain, Iraq, Jordan, Lebanon, Morocco, Oman, Palestine, the Sudan, Tunisia and the United Arab Emirates).

#### 4. *Academy of ICT Essentials for Government Leaders in the ESCWA Region*

55. The project entitled Academy of ICT Essentials for Government Leaders (AIGLE) in the ESCWA Region<sup>15</sup> builds upon lessons learned and the achievements of a similar academy launched in 2008 by the Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT).<sup>16</sup> Established in early 2013, AIGLE aims to help ESCWA member States build enhanced capacities among policymakers to narrow ICT human resources gaps, reduce barriers to ICT adoption, and promote the application of ICT in accelerating socioeconomic development and achieving development goals.

56. In 2015, AIGLE produced four core training modules in Arabic, with an associated English-Arabic glossary of terms and adapted case studies for the Arab region. The titles of the modules are as follows: Linkage between ICT and Development; ICT for Development Policies: Main Elements and Tools for Management; E-government: Policies, Strategies and Applications; and Internet Governance.

57. To ensure wider reach, accessibility and sustainability for the project, ESCWA has provided the Training of Trainers Workshops to around 104 experts from 14 Arab countries. It has also developed an online training platform that supports distance and auto-learning and provides access to AIGLE training modules and related content, and enables the trainers to register and engage with other experts through the online platform. During the second half of 2015, a sustainability plan which extended the lifetime of the project's benefits was produced, through the development of national training plans in 11 Arab countries to be integrated in the partner institutions of the project and provide training to government officials in the region.

#### 5. *Council of Directors of E-Government Programmes in the Arab Region*

58. In its continuing effort to promote regional integration in the Arab region, at the 2014 Government Summit held in Dubai, ESCWA proposed the creation of a council to bring together the directors of or key players in e-government programmes in the Arab region. The Council of Directors of E-government Programmes in the Arab Region aims chiefly at encouraging the exchange of knowledge and information on local, regional and international best practices and new trends in e-government.

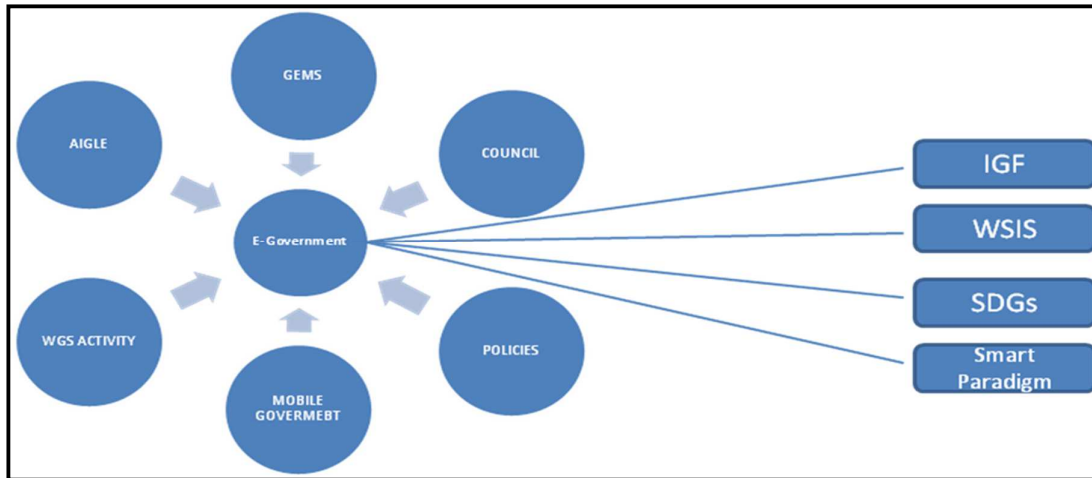
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<sup>15</sup> See <http://escwa-aigle.org/en>.

<sup>16</sup> See <http://www.unapcict.org/>.

59. In this context, ESCWA has held consultative meetings with e-government programme directors and key players from the Arab region, and discussed the rules of procedure and proposed activities for cooperation for the years 2016-2017. Participants reached a preliminary agreement on the structure, functions and activities of the Council. The Council is expected to be officially launched in 2017.

**Figure 2. ESCWA e-government engagements**



**C. WAY FORWARD**

60. ESCWA will continue implementing e-government initiatives aligned with the priorities of the Arab region. The most recent initiative is a study on smart government applications entitled *Guidelines for Smart Government Policies and Strategies*, which will be published in the first half of 2017. The study aims to help countries in the Arab region conceive, develop and transition to smart government services that meet the needs of citizens, assist in the achievement of a better life through economic growth and increased employment, and encourage the move to digital economies. The study will also help Governments to develop smart government policies and strategies, by offering guidance on appropriate smart solutions.

61. ESCWA will continue its efforts to help Arab countries transform into inclusive, people-centred smart societies. This will be achieved through the conceptualization and implementation of pillar 4 of the ISDEHAR programme related to smart society and smart government policies and guidelines, as well as by building the ICT sector.

**IV. SPACE AND SATELLITE SECTOR: PEACEFUL USES OF OUTER SPACE PROCESS**

**A. INTERNATIONAL PERSPECTIVE: UNITED NATIONS COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE**

62. In 1958, after the launching of the first artificial satellite, the General Assembly decided in its resolution 1348 (XIII) to establish an ad hoc committee designated the Committee on the Peaceful Uses of Outer Space (COPUOS). In 1959, the General Assembly adopted resolution 1472A(XIV) in which it made this Committee a permanent body and reaffirmed its mandate.<sup>17</sup> Members of the Committee increased from 18 to 24. In 1961, the General Assembly in its resolution 1721(XVI) mandated the Committee with international cooperation in

<sup>17</sup> All information on outer space affairs is available from the United Nations Office for Outer Space Affairs website: [www.unoosa.org](http://www.unoosa.org).

the peaceful exploration and use of outer space, and requested the Secretary-General to maintain a public registry of launchings, based on the information supplied by States launching objects into orbit or beyond.

#### 1. *Mandate of COPUOS and related organs*

63. COPUOS membership has increased to 77 States, as well as intergovernmental and non-governmental international organizations and observers, making it one of the largest committees in the United Nations. It comprises 13 Arab States, namely Algeria, Egypt, Iraq, Jordan, Lebanon, Libya, Morocco, Oman, Saudi Arabia, the Sudan, the Syrian Arab Republic, Tunisia and United Arab Emirates. It convenes annually to consider questions raised by member States and to make recommendations to the General Assembly.

64. In 1961, COPUOS created two standing subcommittees, namely the Scientific and Technical Subcommittee and the Legal Subcommittee, aimed at strengthening cooperation and governance on the peaceful uses of outer space, and maximizing the benefits of the use of space science and technology and their applications.

#### 2. *ESCWA role in exploring new frontiers for Arab countries*

65. In 2013, ESCWA participated in the Symposium on Basic Space Technology that took place in Dubai, United Arab Emirates, as part of the Basic Space Technology Initiative, carried out under the framework of the United Nations Programme on Space Applications. The Symposium considered the efforts for space technology development in Western Asia, including the status, plans and visions for the future, opportunities and challenges, and the role of regional cooperation. For several decades, Arab countries have been considered users not developers of space technology and its applications.

66. Assessments of regional needs indicate a need for ESCWA to play a policy coordination role in the space and satellite technologies field, at the regional and national levels, as a strategic liaison between COPUOS/ United Nations Office for Outer Space Affairs (UNOOSA) on the one side and stakeholders in the region on the other. There is also a need for enhancing regional cooperation, to ensure that the capabilities of the countries in the region complement each other, through competitive advantages and specialization.

67. ESCWA participated in the 2014 annual session of COPUOS that discussed the following:

(a) Use of space and satellite technologies in food, water and energy security, sustainable agricultural activities, fishing, ocean monitoring, combating desertification, monitoring of arable land, urban environmental planning and disaster prevention;

(b) The impact of space activity on economic growth and reaching a common understanding of space technology as a catalyst for development;

(c) The contribution of space activities to employment, job creation, poverty alleviation, health and other development issues;

(d) Exploring possible benefits of coordination and cooperation among the Arab countries.

#### B. REGIONAL PERSPECTIVE: ESCWA ENGAGEMENTS ON THE PEACEFUL USES OF OUTER SPACE

68. For over a decade, ESCWA has been a major player in the fields of ICT policies, cyber legislation, Internet governance, ICT infrastructure, ICT applications, smart governments and science and technology. Additionally, General Assembly resolution 68/75 emphasizes that regional and interregional cooperation in the field of space activities is essential to strengthening the peaceful uses of outer space (PUOS), assisting States in the development of their space capabilities, and contributing to the achievement of the goals of the United Nations Millennium Declaration and those of the 2030 Agenda for Sustainable Development.

69. ESCWA recognizes the strong connection between space technology and the modern infrastructure that underpins the knowledge economy and contributes to economic, social and environmental development, for which a long-term vision and a clear strategy are necessary to help the Arab region benefit from space technology and its applications. To guarantee sustainability, an effective regulatory environment that ensures stability and confidence is necessary to attract private industry. Additional elements to ensure the success of initiatives include strong policy support from Governments and regional and international cooperation.

70. ESCWA is following up on deliberations on the themes of space and sustainable development, and the use of space within the United Nations system, and recognizes the roles of all stakeholders in the promotion of safety and sustainability of outer space activities. An assessment of regional needs indicates a need for ESCWA to play a policy coordination role in the field of space and satellite technologies.

#### C. WAY FORWARD

71. ESCWA is calling upon member States and major players from the international space community to consider providing resources and to partner with ESCWA in convening a meeting on space and satellite technologies for development in the Arab region. The aim is to establish contact with PUOS players and stakeholders in the Arab region; engage partners from various PUOS sectors in the region for the creation of a network of experts; establish PUOS priorities for the region in an accurate and beneficial way; and create a long-term plan for the region that includes assessments, studies and practical solutions.

#### V. ENDING REMARKS

72. ESCWA calls upon member States participating in the first session of the Committee on Technology for Development to provide the necessary strategic support and resources for its role in supporting the ICT for development processes at the international, regional and national levels. It also invites them to engage in its ISDEHAR programme.

73. Pillar 3 of the ISDEHAR programme is the only pillar that does not, to date, have a regional or General Assembly mandated process. This pillar deals with the ICT industry, competitiveness and the production of ICT goods and services (in other words, the digital economy), which represent the main hope for transforming the region from a consumer to a producer of ICTs. There is a need for political commitment to induce such a transformation.

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