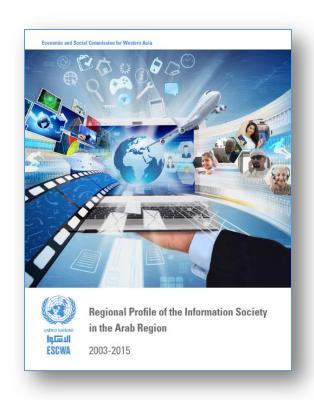
# Regional Profile of the Information Society in the Arab Region, 2003-2015



## The March Towards a Digitally Integrated Arab World

## **Executive Summary**



The information society, in which information is processed efficiently, including the production, exchange, adaptation and use of information, is the appropriate environment for achieving sustainable development and enhancing the quality of life for all citizens. However, the transition towards the information society constitutes a real challenge to developing countries, particularly in view of the expanding digital divide with developed countries, thus rendering them increasingly vulnerable to a reduction of their productive and economic capacities.

In the framework of follow-up activities to the outcomes of the World Summit on the Information Society (WSIS), ESCWA launched in 2003 its initiative "National and Regional Profiles of the Information Society in Western Asia" to monitor and evaluate various aspects of the information society in its member states, and measure the progress towards building such society. Since then, ESCWA has published a series

of reports on the National and Regional Profiles of the Information Society on a biennial basis for the years 2003, 2005, 2007, 2009, 2011, and 2013.

The latest issue of the *Regional Profile of the Information Society in the Arab region 2015* covers the period 2003-2015, as it portrays the development and achievements of the region in building the information society based on the ten action lines defined by the WSIS. Each chapter highlights the progress of member states in one of these action lines, providing objective analyses and comparisons based on findings and statistics drawn from renowned sources, as well as selected success stories from various countries in the region. Furthermore, every chapter discusses the strengths and weaknesses of the Arab region, and concludes with a set of actionable recommendations for the corresponding action line.

The final chapter of the report is dedicated to highlighting the most important areas of interdependence between development priorities of the information society in the region and the newly adopted 2030 Development Agenda.

#### Strength of the Arab region in building the Information Society

While the Arab region still has a long way to go before realizing the information society, the analysis provided in the report shows a great deal of improvement over the years, and major achievements in many areas of the information society. Bright spots were seen in the formulation and modernization of national ICT policies and strategies, the development of a modern ICT infrastructure, and the creation of an enabling environment.

Most Arab countries have taken significant steps to improve their ICT infrastructure and have adopted necessary measures to encourage competitiveness in their telecommunication sectors. A noticeable and favorable relationship is seen in the region between the liberalization of telecommunication services and the uptake of ICT services, which reflected an increase in penetration rates of mobile phone and internet services. The average mobile phone penetration rate in the region reached 108.2 per cent in 2015, exceeding the global average at 96.8 per cent. In addition, the average internet user penetration rate reached 37 per cent in 2015, slightly lower than the global average at 43.4 per cent. In contrast, the average penetration rate of mobile broadband attained 40.6 per cent, much lower than global average at 47.2 per cent, due mainly to high associated costs.

The region also saw the launch of many initiatives and activities that aimed at promoting digital content and open access to data. Computers are now more readily available in schools, especially in GCC countries, where they are being used in education and training of teachers. In most Arab countries, Public Private Partnerships (PPPs) are being developed to provide support to national capacity building programmes, especially in vocational ICT training.

A sizable number of Arab countries, especially those belonging to Gulf Cooperation Council (GCC), found success in the introduction and utilisation of ICT in public administration, and the online delivery of government services. The region has also witnessed an impressive growth in the production of digital Arabic content, due to a number of initiatives dedicated to developing this content; consequently, digital Arabic content became a priority in the national ICT strategies of several countries.

The Arab region has made considerable improvement to its legal and regulatory framework, essential for the development of the Information society. Most Arab countries adopted international treaties and protocols on intellectual property, and passed or ratified cyber legislations on e-signature, e-transaction, e-commerce and cybercrime. The promulgation of cyber legislations greatly improved trust in the use of ICT and its applications, especially with the establishment of Computer Emergency Response Teams (CERTs) in most Arab countries, though they vary in functionalities and capabilities. Furthermore, 18 Arab countries have signed and committed to the "Arab Convention on Combating Information Technology Offences" which was conceived by the League of Arab States in 2010.

The tremendous growth of the telecom sector in the region lead to an increase in revenues as a percentage of GDP; furthermore GCC countries started investing in the sector outside of their borders. The number of companies working in the ICT sector has also increased supported by an expansion of technology parks and incubators, which facilitated the establishment of various start-ups.

At the regional level, an Arab strategy and a regional plan of action for the development of the information society have been drafted. In addition, the region has implemented several initiatives in order to promote the Arab Information Society, perform policy coordination, and strengthen regional

cooperation and the exchange of success stories among Arab countries. The League of Arab States, ESCWA, the ITU Arab regional office and the Arab ICT Organization (AICTO) were the driving force behind those regional initiatives.

Despite the progress made in developing the Information Society, the Arab region still faces persisting challenges especially in the areas of cyber security, ICT sector, capacity building, and expanding affordable broadband services.

### Recommendations for addressing the challenges of Information Society in the Arab region

The Arab region has made considerable progress in building the Information Society and has witnessed many success stories in harnessing ICT for development. However, with the acceleration of technological development and its increasing importance in the development process, the Arab region needs to exert additional efforts to bridge the digital and knowledge divides and achieve sustainable social and economic development, in line with the Development Agenda 2030 and the outcomes of WSIS+10. In this regard, this Regional Profile report adopts the following recommendations to address the challenges facing the Arab region:

- Conduct periodical reviews of national visions for the information society, and ICT strategies to
  ensure their harmony with national priorities; coordinate strategies with plans of actions; and
  strengthen the chances of success of strategies and plans of action through cooperation
  between concerned parties.
- Accelerate the liberalization of the telecommunication sector; instigate competitiveness in its subsectors; and continue to set up independent, proficient, transparent, and effective institutions to regulate the telecom sector in member states.
- Give particular attention to projects that aim to improve the quality of fixed and mobile broadband services and lower their costs; support the creation of national and regional Internet Exchange Points (IXPs); and deploy fibre optic cables as the infrastructure of choice for interconnection while reducing associated costs.
- Adopt access policies and launch initiatives targeting the participation and inclusion of all
  citizens especially women, people with special needs, and vulnerable populations like those
  living in remote and marginalized areas; and enact legislations which guarantee the right of free
  access to information, especially public domain information.
- Revise educational curricula and integrate the use of ICT teaching tools; promote connectivity between educational institutions using the Internet; expand ICT professional training programmes for all levels while taking into account available technological advancements.
- Build confidence and trust in cyberspace by: developing national cyber security strategies with a
  clear plan of action; enacting comprehensive cyber legislations in line with international
  conventions and treaties, in particular those related to cybercrime, privacy, and confidentiality
  of personal information; establishing related law enforcement institutions; and increasing
  cooperation at national, regional, and international levels in order to combat cybercrime.

- Modernize e-transaction and e-signature laws, promote cyber safety measures; and complete legislations targeting intellectual property protection in the areas of electronic publishing, digital content, and related software.
- Encourage investments in the ICT sector, and the establishment of venture capital funds to promote the creation of start-ups working in the field of ICT; develop the spirit of innovation and entrepreneurship and include the private sector in efforts and initiatives targeting the improvement of the enabling environment.
- Allocate appropriate resources to implement and improve e-government initiatives, and to focus
  on open government and provide citizen-centric interactive services; promote coordination and
  coherence among various government institutions; and improve access to e-government tools
  and services while availing it at affordable prices.
- Promote private sector initiatives in e-commerce; provide secure electronic payment systems; establish national e-payment gateways and raise awareness about it; and create a pan Arab electronic market with participation from the private and public sectors.
- Set up strategies and plans of action for the development and enrichment of electronic services and digital Arabic content at national and regional levels; support initiatives targeting the digitization of Arab cultural heritage; and promote Arab cooperation through regional initiatives dedicated to the development of digital Arabic content.
- Promote the development of the ICT sector as a key enabler for the transition to a knowledge based economy in the Arab region, through the development of appropriate legal and legislative frameworks; support research, development, and innovation; and improve regional cooperation and technology transfer between institutions and research teams.
- Promote the cooperation of all stakeholders and support regional cooperation for building the Arab knowledge society; encourage the exchange of lessons learned, success stories, and technical-based solutions between Arab countries; and launch regional and sub-regional initiatives targeting sustainable economic and social development.
- Encourage efforts dedicated to measuring the progress made in realizing the information and knowledge societies; Develop the necessary tools and measurement methods through the work of the "Partnership on Measuring ICT for Development"; and encourage governments to collect data and information related to measurement indicators, while segregating data according to gender.
- Strengthen the economic and social development process in the Arab region by developing national policies and strategies that are in line with the Post-2015 WSIS goals and the 2030 Agenda for Sustainable Development, through the cooperation of all stakeholders.
- Stimulate the participation of Arab countries in globally organized events dedicated to follow up
  on the 2030 Development Agenda; promote regional cooperation for its implementation; create
  a platform or an online portal to disseminate information about the progress of SDG
  implementation; and establish a regional technology bank.