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**ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA (ESCWA)**

**NATIONAL PROFILE OF THE INFORMATION SOCIETY  
IN SAUDI ARABIA**

United Nations  
New York, 2009

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## **Introduction**

Saudi Arabia became aware of the gains that could be achieved by keeping pace with the successive developments that characterize the age of information and the interaction with its constituents. Within the prospects of the information age, the world has entered an advanced stage, with a view of harnessing the technology and the many possibilities offered by information and communication technology (ICT) to build a conscious society and a strong economy. Most countries, worldwide are seeking to keep pace with the modern world of technology and invest in what is known to progress towards the information society, in which the information represent one of the essential pillars necessary for today's human life in the areas of service and production.

In this sense, the Kingdom represented by different sectors, aims at raising the level of understanding and public awareness to support the efforts aiming at transforming the Kingdom into an information society. It seeks to double its efforts to increase the participation of all segments of the society, and increase the development of the country, emphasizing the importance of dynamic interaction which would lead to achieve the requirements of transformation into an information society; this is today a fundamental orientation among the national priorities in the Kingdom.

## I. THE ROLE OF THE GOVERNMENT AND ALL STAKEHOLDERS

### A. NATIONAL INFORMATION SOCIETY POLICIES AND E-STRATEGIES

#### 1. *The Eighth Development Plan*

The Eighth Development Plan (2005-2009), focused on the strategic areas of the Kingdom, including ICT. The Eighth Development Plan spelled out the features of the future vision of the ICT and development strategies that aim to achieve this vision. This vision was based on the National Plan for the ICT project, and the recommendations and resolutions of the World Summit on the Information Society, all of which enhanced the importance of implementing the e-government.

#### 2. *National Policy for Science and Technology*

The document on the Saudi Arabia National Science and Technology policy in one of its basis endorsed by the Council of Ministers on 8/7/2002, confirmed the importance of ICT. The document took interest in the information and how to access it. Where it stressed the necessity to provide scientific and technical information, and facilitate all means to fulfil it in the framework of systems that are compatible with the objectives of the Kingdom and its circumstances.

The strategic base of the ICT included the following eight policies:

- The support and development of national scientific and technical information bases;
- Adopting national systems and programs;
- The support and development of scientific and technological information systems and their procedures;
- Linking scientific institutions and research centres to a high speed national information network;
- Creating the necessary mechanisms to ensure information security and protection;
- Supporting and enhancing the status of Arabic in the field of information technology;
- Focus on resettlement and development of information technology;
- Developing a national plan for information.

#### 3. *National Plan for ICT*

In addition to the five-year plan, the Ministry of Communications and Information Technology prepared a comprehensive national ICT plan<sup>1</sup> to sets out the vision of ICT in the Kingdom, and how to implement this vision. The plan which was approved on 28/5/2007 with the vision as: "the transition to the information society and the digital economy, and the building of a strong industry in this sector to become one of the main sources of income." The year 2008 was the first year in the five-year plan.

#### 4. *The national strategy and the first implementation plan for the e-government program*

A national strategy for the e-government program and an implementation work plan were launched in 2005, with a specific vision: that "by the end of 2010, everybody anywhere and at anytime, should be able to obtain excellent government services". The e-government program (Yesser<sup>2</sup>) is acting on implementing the first plan, and most infrastructure projects that fall within the scope of the plan had been completed.

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<sup>1</sup> <http://www.mcit.gov.sa>

<sup>2</sup> <http://www.yesser.gov.sa>

## B. PUBLIC/PRIVATE PARTNERSHIP (PPP) OR MULTI-SECTOR PARTNERSHIP (MSP)

### *The development of a regulatory framework for building partnerships between the public and private sectors to implement information technology projects*

The 2004 Council of Ministers Decision No. (110) was issued approving the rules that govern the participation of the private sector in e-government works according to the method of sharing expected income. To implement the government electronic transactions projects, the government electronic transactions Program (Yesser) acted on developing standards and unified guidelines for the partnership between public and private sectors.

#### (a) Saudi Electronic Data Interchange (SaudiEDI) Project

The Ministry of Finance represented by the Public Investment Fund implemented this project in cooperation with the Customs Authority. It aimed at providing speed and transparency with regard to six electronic services related to import and export. The project will increase trade in all ports and airports in the kingdom. Between 2005 and 2007, the project was able to complete 1,930,200 interactive electronic transactions, and shortened the time taken per transactions, thus cutting down from one week to less than five minutes the time taken per transaction to be transferred to the customs. The project has been applied successfully in a number of airports, and is currently being extended to all ports.

#### (b) Electronic Tourist Visa

The start was with the tourist visa project in 2007. Through this system the issuance of tourist visas is done via an electronic system that implements the process of issuance. The system is linked to the databases of the National Information Centre, in the Ministry of Interior, the Ministry of Foreign Affairs, the Ministry of Hajj, and the Saudi Commission for Tourism and Antiquities.

## C. ROLE OF NON GOVERNMENTAL ORGANIZATION

### *1. The Saudi Telecommunications Society*

This society was established in 2003. Since its inception, the main objectives which the society sought to achieve are the development of scientific and engineering thinking in the field of Communications, Engineering and Information Technology.

The society adopted the following ambitious goals:

- To serve the communications community in the Kingdom technically and socially;
- To provide access to knowledge at any time and from any place;
- To contribute to the development of the performance of the communications sector;
- To help promote cooperation and coordination with related government and private agencies;
- To work on the participation of these various agencies in the policy and steer the society to serve the development of ICT in the Kingdom.

The following are among the most prominent achievements of the society:

- Designing training programs in the field of ICT;
- Organizing seminars in the field of ICT related to recent developments in technology in this area as well as on the communications sector in the Kingdom;

- Creating a website<sup>3</sup> for the society including many topics related to communications and information technology in addition to the electronic library.

## 2. *The Saudi Computer Society*

The Society established in 1988<sup>4</sup> the first national and scientific society. It is a non-profit organization dedicated to activities and research related to scientific and cultural progress in computer science and information technology. The society relies mainly on its own financial resources. The Society is also interested in organizing conferences, seminars and specialized exhibitions.

With respect to activities related to information, the most prominent achievements of the Society are:

- Organization of three forums for the work of the e-government.
- Preparing plans for electronic transactions through the employing of the society's experience in the preparation of the national plan for information technology;
- The society, in cooperation with King Abdul Aziz City for Science and Technology, organized the first national symposium on computer and Arabic in Riyadh between 25-28/3/2007;
- Between 27-30/3/2006, the society convened the 18th national conference of computer under the title "information technology and sustainable development";
- Between 4-8/11/2008, the society convened the 19th national conference of computer under the title "the digital economy and information technology industry".

## 3. *The Saudi Library and Information Association*

In 1981, the association was established by the Scientific Council of King Saud University. The association aimed at achieving several objectives including:

- The development of scientific thinking in the field of librarianship and information;
- The development of libraries and information services in Saudi Arabia;
- To promote scientific and professional communication between members of the society;
- Approving standards and measures specific to the profession of libraries and information.

## II. ICT INFRASTRUCTURE

### A. INFRASTRUCTURE

In the past few years, Saudi Arabia has progressed in expanding its communications services and information technology. The sector has seen distinct and important phases in its history, whereby it went through fundamental changes. During these phases, the core was the privatization and restructuring of the sector and gradually opening its markets to competition. This led to an increase in services and to a clear improvement in their quantity and quality.

With regard to fixed communications services, the number of operating fixed lines reached more than 4.1 million lines by the end of 2008, 3 million of which are residential lines (72.6 per cent) and the remaining lines are business lines. The penetration ratio of the residential lines reached 68.4 per cent, while the penetration ratio of fixed lines to the population in the Kingdom amounted to 16.5 per cent, which is higher than the average penetration ratio in the Arab States (11 per cent) and in developing countries (13.5 per cent).

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<sup>3</sup> <http://www.sts.org.sa>

<sup>4</sup> <http://www.computer.org.sa>

Regarding the broadband services (or fast internet), the number of subscribers grew from less than 35 thousand in 2005 to more than 1.33 million subscribers at the end of 2008, with an average cumulative annual growth of more than 175 per cent during the past three years (2005 - 2008). This is a substantial and rapid improvement in the availability of broadband connections. The penetration ratio of broadband services for the population reached about (5.3 per cent), and the rate of broadband penetration ratio for residences reached about 23 per cent by the end of 2008. This represents a growth amounting to almost double that of the previous year (2007).

With the opening of competition in fixed communications and with the new licensed companies deploying their networks and launching their services commercially, the growth opportunities in the broadband services are expected to increase. It is noted that the digital subscriber lines (DSL) amounts to about 75 per cent of the total broadband subscribers. With the rest being fixed wireless connections (WiMAX) and mobiles.

As for the Internet, the estimated number of Internet users in the Kingdom has grown from about one million users in 2001 to around 7.7 million users by the end of 2008 (average growth of about 34 per cent per annum). By the end of 2008, the penetration ratio of the Internet is estimated at about 31 per cent of the population. The reasons behind this growth are due to an increasing awareness regarding the benefits of the Internet, the growth in broadband services, and the cheaper computers, communications and Internet services. The number of licensed Internet service providers has reached 55 service providers.

On the other hand, the market for mobile communications services has witnessed a remarkable growth in recent years. This was the result of open market competition and the introduction of the third operator as a strong competitor. The penetration ratio increased to about 144 per cent, with the number of subscribers reaching 36 million subscribers, compared to only 2.5 million subscribers in 2001. The average annual growth is estimated at about 46 per cent.

**Figure 1. Penetration rates of ICTs in Saudi Arabia. 2006-2008**

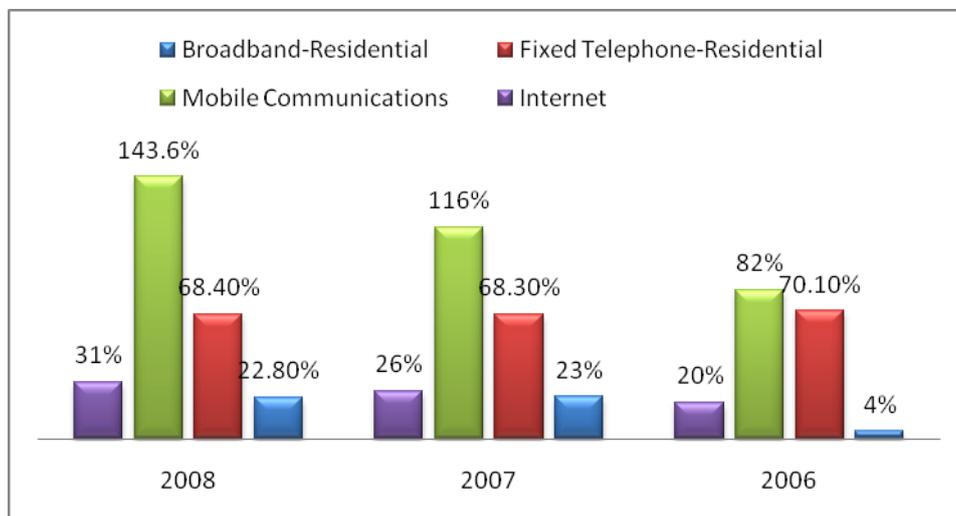


TABLE 1 – KEY ICT INDICATORS IN SAUDI ARABIA, 2006-2008

ICT Indicator	2006	2007	2008
Total lines operating fixed-line (million)	3.951	3.996	4.123
Lines operating fixed-line telephone (residential)	2.944	2.927	2.994
Lines operating fixed-line telephone (commercial)	1.007	1.069	1.128
The penetration rate of fixed-line (for residences)	70.10%	68.30%	68.40%
The penetration rate of fixed-line (for population)	16.50%	16.30%	16.50%
Total subscribers in the service of mobile phone (million)	19.663	28.382	35.962
Prepaid Subscriptions (Pre-paid) million	15.073	23.602	30.503
Subsequent payment of Subscriptions (Post paid) million	5	4,780	5.459
The penetration rate of mobile phone service	82%	116%	143.60%
Broadband Subscribers (million)	0.218	0.683	1.331
The penetration rate of broadband services (for residences)	3.90%	12%	22.80%
The penetration rate of broadband services (for residents)	0.91%	2.80%	5.30%
Number of Internet users (million)	4.71	6.32	7.7
The penetration rate of Internet services (for population)	20%	26%	31%

The licenses issued by the commission until the present time amounted to (310) licenses. More details are given in the following table:

TABLE 2 – ICT LICENCES ISSUED BY CITC

Number	Type of License	Total licenses
1	To provide fixed telephone services	2
2	To provide mobile phone services	3
4	To provide data services	3
5	To provide mobile personal communications by satellite (GMPCS)	3
6	To provide telecommunications services using the micro-stations (Alvesat)	14
7	To provide Internet service to aircraft	1
8	Mobile phone on board the aircraft (GSM 1800)	2
9	Internet Service Providers (ISP)	57
10	To provide service for automatic vehicle location (AVL)	31
11	To provide SMS services	142
12	To provide audio texts services(700)	23
13	To provide a service call centres	12
14	To provide electronic wallet services	6
15	To provide services to recharge Prepaid mobile phone	4
16	To provide service management and control of remote networks	3
17	Electronic communication service subscriber	1
18	To provide a service to host devices and communications equipment and information technology	3

#### B. INITIATIVES AND PROJECTS FOR ICT INFRASTRUCTURE AND DEVELOPMENT OF NEW SERVICES

The Government acts on a number of initiatives aimed at promoting the use of ICT in all aspects of life and at strengthening the national economy and its institutions. The following is one of these initiatives:

##### *The e-business initiative for small and medium size enterprises*

The Communications and Information Technology Commission (CITC) conducted a survey and a comprehensive study for small and medium enterprises. Hence the ratio of enterprises that are not currently using IT have been identified, and so has the reasons behind the different types of current and future

installations using IT were classified. Also the objectives and the main challenges facing established enterprises in terms of nature of their activity and sequence of their internal operations and constraints related to human resources and rehabilitation have been identified.

## C. ICT CONNECTIVITY

### 1. Government Secure Network (GSN)

Established in 2007,<sup>5</sup> and aims at connecting government agencies with the e-government transactions data centre and the e-government transactions program. This network will link various government agencies. Now and as a first phase, 41 government agencies have been linked to e-government transactions data centres. Other government agencies will be linked in subsequent phases.

### 2. Government Service Bus (GSB)

The portal<sup>6</sup> aims at giving a common infrastructure to provide e-government services and carry out the necessary integration. It acts as an integrated agent system through which many common services between governmental agencies are made available. Such services as making sure of the user's identity and information security, payment services, electronic notification, and the exchange of data. The primary operation of this portal was completed on 31/8/2008.

## D. INTERNET INFRASTRUCTURE

### 1. Internet Backbone

The design of the Internet networks infrastructure in the kingdom is characterized by its ability to adapt and its flexibility to change the path automatically (service self healing) in case of a bilateral breakdown of the Internet network. The Internet infrastructure in the Kingdom is made up of the following elements:

#### (a) National Network

All cities in the Kingdom are connected to an advanced network for Internet services through licensed service providers who have the infrastructure.

#### (b) International Network

In the Kingdom, the service providers who have the infrastructure had built international networks with large capacities to serve the current and projected loads and to provide additional capacities for use in the restoration of services in case of an emergency. The main elements of the international network that serve the infrastructure of the Internet are:

- Networks of marine cables.
- Fiber-optic networks to link borders.
- Satellite Networks.

### 2. Internet regional and international centres (exchanges)

Service providers in the Kingdom have a number of international exchanges for passing voice services, data exchange, and the Internet. All of which are linked to large Internet capacities in multi sea-cables.

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<sup>5</sup> <http://www.yesser.gov.sa>

<sup>6</sup> <http://www.yesser.gov.sa>

### *3. National networking*

One of the most important national networks is the national fiber-optic network (SNFN), to which are linked a number of service providers in the Kingdom. It is a fiber optic network between cities based on the modern network technology (DWDM). The total capacity of the network is very high measured in hundreds of gigabit. There is also a capacity for future expansion when needed. The system supports different types of SDH, and Internet and data services in general.

### *4. Internet services centre*

The centre was established to carry out the administration, management, and control systems, to filter the data in Saudi Arabia as an essential task to protect the user intellectually, morally and religiously.

### *5. Using Internet Protocol version 6 (IPv6)*

Given the rapid evolution in the use of Internet services, about 90 per cent of the potential of the fourth version of the currently used Internet Protocol (IPv4) has been consumed. The CITC has taken the initiative to form a working group comprising all relevant operators and Internet service providers and research bodies to work on ensuring the readiness of all sectors to move to use the sixth edition. For more information, visit the website.<sup>7</sup>

### *6. Projects and plans related to the development of the communications network of ISPs*

Internet service providers in the Kingdom have many projects in progress in 2009, both with regard to network within cities, expanding it and adding new routes to it.

### *7. Wi-Fi and WiMAX access points*

All service providers of data and Internet services who have the infrastructure provide the Wi-Fi and WiMAX services through access networks to these technologies in the major cities. Also the attention of the service operators is now focused on "Hotspots Wi-Fi", which provides the Internet subscribers - through digital subscriber lines DSL- the ability to surf the Internet wirelessly round the clock and without a modem.

### *8. Internet supervision and TLD registration*

The CITC registers on the Internet domain names and manages them to ensure that the registration of domain names in the Kingdom is done in a fair and reliable way. At the end of 2008, there were 15,033 domain names registered in the Kingdom, and during the same year, the number of servers (.sa) increased from 4 to 36 servers which increased the stability and reliability of the registry. Moreover, the registration of Arabic domain names was launched whereby 103 domains have been registered so far.

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<sup>7</sup> <http://www.ipv6.org.sa>

### III. ACCESS TO INFORMATION AND KNOWLEDGE

#### A. PUBLIC DOMAIN INFORMATION

##### 1. *Portal for electronic government transactions*

In January 2007, the electronic government transactions program (Yesser) launched the national gate for electronic government transactions. It is a unified electronic site on the Internet.<sup>8</sup> It aims to facilitating the transactions between citizens and residents, with government sectors and to increase level of transparency. The gate is used to provide information on government services, government institutions, rules and regulations, national plans and initiatives, e-services, and news and events. The second phase of the project, which includes the provision of registry service, alert service, and the electronic newsletter, was completed.

##### 2. *Ministry of Interior Portal Services*

The Ministry of Interior (the National Information Centre) has built an electronic gate<sup>9</sup> to provide a number of services to individuals. The first stage was launched formally in 2008. Individuals can obtain information on these services. They also can make inquiries and obtain relevant electronic forms. Work will continue in the development of this portal to enable individuals to execute services electronically to reduce the need to visit sectors related to the Ministry of Interior.

##### 3. *The portal of the Ministry of Foreign Affairs*

Since its launching in 2005, the gate of the Ministry<sup>10</sup> is considered as a common access point to information and foreign affairs. The portal content is available in several languages. The Ministry with its two branches has been linked with relevant government institutions and banks through a secure highly efficient network. Through this gate it is possible to complete transactions and to exchange data electronically. The number of visas issued annually through the electronic portal is over six millions.

##### 4. *The e-management initiative in the Medina*

The Emirate of Medina made great efforts to develop a special portal.<sup>11</sup> The Emirate with the participation of ten bodies and government departments in the region provides electronic services to individuals and business sectors through 36 services centres distributed in residential areas to serve about thirty thousand beneficiaries.

##### 5. *The national Tourism Portal on the Internet:*

In May 2003, the Saudi Commission for Tourism and Antiquities created on the Internet a national tourism portal<sup>12</sup> to be the basic tourist reference in all matters relating to tourism in the Kingdom. The gate includes detailed information on matters important to tourists.

##### 6. *The National Centre for Documents and Archives*

The centre was established in 1989, for the purpose of collecting, indexing, classifying, coding, saving, and maintaining documents and archives, and organizing their circulation. The centre collects rules,

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<sup>8</sup> <http://www.saudi.gov.sa>

<sup>9</sup> <http://www.moi.gov.sa>

<sup>10</sup> <http://www.mofa.gov.sa>

<sup>11</sup> <http://www.imaratalmadinah.gov.sa>

<sup>12</sup> <http://www.sauditourism.gov.sa>

regulations, instructions, conventions, and treaties. It also issues a guide about the classification of documents and archives and a comprehensive coding guide for government institutions and others.<sup>13</sup>

## B. ACCESS TO INFORMATION AND PUBLIC INFORMATION

### *1. Internet sites for government agencies*

Government agencies are keen on providing Internet sites and make them accessible to the public. There is main portal for government institutions which is the national gate for electronic government transactions.<sup>14</sup> This gate includes Arabic and English links to governmental web sites, Arabic and English are both used on this gate.

### *2. Media websites*

Most media organizations are keen on providing free of charge all news that they present on their websites.

### *3. Unified Arab index*

This is a non-profit collaborative project, implemented by King Abdulaziz Public Library. The project aims at creating a collaborative environment for Arab libraries, particularly through linking to a single database all libraries within and outside the Kingdom in a single database, and through standardizing indexing inside Arab libraries and adopting of international standards in this field. This will reflect positively on the circulation of the Arab book and provides an awareness of the Arab-Islamic culture. This service is available free of charge on the Internet.

### *4. "Digital Horizons" magazine*

The Saudi Computer Society regularly issues "Digital Horizons" a magazine interested in the latest technologies and news of computers community. The society also issues another peer-reviewed scientific research journal called "Saudi Computer Journal"

## C. MULTI-PURPOSE COMMUNITY PUBLIC ACCESS POINTS

### *1. Community access points (Internet cafes)*

The CITC and the Ministry of Municipal and Rural Affairs, organize the service of internet cafes in the Kingdom. These cafes contributed to promoting access to information at low prices by people from different classes in the society.

### *2. King Abdul Aziz Public Library*

The library<sup>15</sup> is a charity public institute established by King Abdullah to take care of the books and those who benefit from them. It has a structure provided with full-fledged modern equipment and systems to satisfy different users. The library system has been completed with the issuance of the approval for the establishment of a charity institute on behalf of this public Library. The aim behind the establishment of this charitable organization is to provide knowledge sources and organizing, and facilitating its use to make it accessible to researchers and students.

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<sup>13</sup> <http://www.ncda.gov.sa>

<sup>14</sup> <http://www.saudi.gov.sa>

<sup>15</sup> <http://www.kapl.org.sa>

## D. USING DIFFERENT SOFTWARE MODELS

### *Supporting the Industry for Open Source Software*

This project seeks to establish a program to support open source software in-order to promote it and serve the Kingdom's software requirements. It also aims at creating a local software industry and a developed labor market. It also aims at supporting the adoption of open source applications and supporting R&D in this area. Given the importance of this project, a program for open-source software has been established<sup>16</sup> in King Abdul Aziz City for Science and Technology

## IV. ICT CAPACITY BUILDING

### A. BASIC LITERACY

#### *1. Ministry of Education<sup>17</sup>*

The Ministry of Education carried out several projects to eradicate illiteracy and these projects include:

- The production of educational software in a number of subjects like science, mathematics, etc..;
- A project to develop the interactive e-book and disseminate its use;
- The development of learning resource centres and technology centres and updating their collections.

The Ministry has also been keen on developing the traditional methods of teaching whereby it has provided some schools with e-boards, digital laboratories, and computer labs. It has also established the educational portal on the Internet. It contains many services such as curricula, digital teaching materials, software, research articles/papers, and educational encyclopaedias, which are needed by both the student and the teacher.

#### *2. National Plan for ICT (convoys for eradicating computer and Internet illiteracy)*

Computer and Internet illiteracy are currently more spread in rural and poorer areas. The aim of this project is to send out 50 convoys annually to eradicate computer and Internet illiteracy. Each convoy is a mobile IT laboratory equipped with computers, printers, and means of communication via the Internet.

### B. ICT IN EDUCATION AND TRAINING

#### *1. The Ministry of Higher Education*

The Ministry of Higher Education<sup>18</sup> seeks to deploy ICT systems in educational institutions. This is reflected through:

- Establishing e-learning faculties in a number of Saudi universities;
- Establishing a number of private colleges for IT;
- The attendance of faculty members of conferences and seminars, related to IT within and outside the Kingdom.

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<sup>16</sup> <http://www.kacst.edu.sa>

<sup>17</sup> <http://www.moe.gov.sa>

<sup>18</sup> <http://www.mohe.gov.sa>

The Ministry also seeks to provide the suitable environment for research in the ICT field. The Ministry is keen on integrating the community in its development plans. Therefore, it has established centres for the transfer of technology from universities to the community. These centres include:

(a) Riyadh Valley Project for Technology at King Saud University

This project aims at attracting local and global partnerships for investment in the project.

(b) Sultan Bin Abdul Aziz Centre for Science & Technology at King Fahd University for Petroleum and Minerals

The centre's mission is to disseminate to the members of the community the principles of science and technology innovations through portraying them in new and interesting ways.

## *2. King Abdullah University of Science and Technology*

The University<sup>19</sup> was opened in the Kingdom as an international university for postgraduate research. The University of King Abdullah is featured as:

- Postgraduate research university;
- Backed by an endowment of several billion dollars;
- Is governed by an independent and lasting Board of Trustees;
- Adopts merit as a basis for its work and welcomes men and women from all over the world.

The University defines four strategic research themes to guide its research plan, namely:

- Resources, energy and the environment;
- Biosciences and Bioengineering;
- Materials Science and Engineering;
- Applied Mathematics and Computational Science.

In support of these themes, the university shall establish research centres for various disciplines.

## C. TRAINING PROGRAMMES FOR CAPACITY BUILDING IN THE USE OF ICT

### *1. Saudi Computer Society*

The Saudi Computer Society organizes a number of training courses for the public and private sectors and gives a number of scientific lectures.

### *2. Technical and Vocational Training Corporation*

The Technical and Vocational Training Corporation<sup>20</sup> working in the area of capacity-building seeks to:

- Develop, deliver, and license technical and vocational training programs;
- Raise the community's awareness of the importance of technical and vocational training;
- Carry out the necessary research and projects;
- Participate in the national programs that adopt the transfer and resettlement of technology.

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<sup>19</sup> <http://www.kaust.edu.sa>

<sup>20</sup> <http://www.tvtc.gov.sa>

### *3. Programs and projects included in the National Plan for ICT*

The National Plan for ICT, which was approved in 2007, contains many projects and initiatives that contribute to ICT training, and these projects include:

- ICT training for state employees;
- Convoys to eradicate illiteracy in the use of computers and Internet;
- Support for ICT training.
- Providing loans for university graduates' rehabilitation in the field of ICT.
- Providing loans for high school graduates who could not carry out their education or work to prepare them for careers in ICT.

### *4. Capacity-building initiative and skills development for public sector electronic transactions*

This program implements an initiative to train state employees on basic computer skills to obtain an international certificate. As an experiment, about 3000 employees will be trained in 2009.

## D. INNOVATION AND PATENTS

### *1. King Abdul Aziz and his Companions Foundation for Giftedness and Creativity*

The foundation<sup>21</sup> was established with the support of King Abdullah. The foundation has prepared an action plan on a number of stages. It is hoped that a strategy for taking care of the gifted until 2022 will be announced soon.

### *2. R&D program in the field of IT*

In the National Plan for Science & Technology, IT is one of the strategic technologies of the Kingdom. It is supervised by King Abdul Aziz City for Science and Technology together with the concerned authorities. As a consequence of that a national program of research and development was established in the field of IT. This program includes a research and innovation plan in the kingdom as a whole. The City is responsible for developing and implementing this plan in cooperation with the relevant authorities.

Within the scope of this program, the City is developing a number of projects including:

- Automatic evaluator of Arabic texts;
- Automatic speech recognition of Arabic;
- Automatic classification of Arabic texts;
- Arabic search engine;
- Automated generation of Arabic speech.

## V. BUILDING CONFIDENCE AND SECURITY IN THE USE OF ICTS

### A. USE OF ELECTRONIC TRANSACTIONS AND DOCUMENTS

#### *Government electronic transactions program*

In 2005, the program of government electronic transactions was created in the Ministry of Communications and Information Technology. It is co-sponsored by the Ministry of Finance and CITC. Some of its objectives are the establishment of the infrastructure necessary for government electronic

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<sup>21</sup> <http://www.mawhiba.org.sa>

transactions and urging and following-up government institutions to provide government services electronically.

## B. ONLINE AND NETWORK SECURITY

### *1. National Centre for Digital Certification*

The centre<sup>22</sup> was established in 2007 in the Ministry of Communications and Information Technology. Work is under way to operate the infrastructure for public keys, which are designed to enable different customers through the Internet do various electronic transactions, with full reliability and safety.

### *2. Information security policy of the government institutions*

The Ministry of Communications and Information Technology prepared a document which included a guide specifically for the information security policy document. The policy of information security for government institutions aims at providing the general framework to prepare information security policies that are in line with international standards. It also enables government authorities to maintain its level of information security in a way that will ensure confidentiality, availability and comprehensiveness of information resources.

## C. PRIVACY AND DATA PROTECTION

### *Regulating to protect the privacy*

Work is currently underway at the Ministry of Communications and Information Technology to develop regulations to protect the privacy and to issue it in the form of national regulations designed for this purpose. It is expected to prepare the initial versions of these regulations by mid-2009.

## D. COUNTERING MISUSE OF ICTS

### *1. Anti-spam*

To increase confidence and security in IT the CITC launched in 2007 the project of the anti-infiltration policy. The project aims at developing an organized framework to face the problem of infiltration. Defining the responsibilities and roles of service providers with regard to infiltration, increasing awareness covering the problem of infiltration and finding the means to combat it. For more information, visit <http://www.spam.gov.sa>.

### *2. CERT–Saudi Arabia<sup>23</sup>*

The Computer Emergency Response Team (CERT) was established in the CITC in 2007. It is a non-profit centre aimed at raising awareness and knowledge about information security dangers. It works in collaboration with its members and partners to coordinate prevention efforts and respond to hazards and accidents related to electronic security in Saudi Arabia. CERT is considered the first authoritative reference for information security in the Kingdom. The following are key activities and projects of the centre that were completed or are expected to be completed soon:

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<sup>22</sup> <http://www.pki.gov.sa>

<sup>23</sup> <http://www.cert.gov.sa>

- Creating an operations unit considered for network security as part of CERT for the purpose of continuous monitoring of information security at the national level. It is expected to be completed in 2009.
- On 13/2/2008 CERT received the ISO 27001 certificate in information security.
- The development of a laboratory for analyzing informational crimes. It is expected to be completed at the end of 2009.
- Developing, printing, and distributing a number of Internet information security awareness publications.
- Participating in the application of the system for fighting informational crimes.
- Developing a guide for information security policies and procedures, expected to be completed at the end of 2009.
- A five-year national program to raise awareness covering information security. The implementation of the project started in 2009.

## VI. ENABLING ENVIRONMENT

The provision of an enabling environment is essential in order to mobilize resources and provide an atmosphere that promotes the acquisition and dissemination of ICT.

### A. LEGAL AND REGULATORY ENVIRONMENT

#### 1. *Telecom Act*

This system was issued on 4/6/2001. Its executive regulations were issued on 27/7/2002. This system is designed to regulate the ICT sector and open its market to competition in a way that ensures the provision of adequate and developed ICT services, at a reasonable price.

#### 2. *Electronic transactions law*

This system was issued on 6/4/2006. Its executive regulations were issued on 18/3/2008. This system is designed to control transactions and electronic signatures, organizing it and providing its legal framework. This system reinforces the use of electronic transactions at the local and international levels in government transactions, in trade, medicine, education, in electronic payment system and other applications.

#### 3. *IT Criminal Law*

This system was issued on 26/3/2007 adopting the *IT criminal law*, the law aims at reducing the emergence of information crimes.

#### 4. *Copyright protection law*

This law was issued on 10/7/1999 adopting the law of copyright protection.

#### 5. *The National Competitiveness Centre*<sup>24</sup>

The centre was established in 2006, with the initiative of the Saudi Arabian General Investment Authority its mission was to carry out, as an independent entity, the follow-up, assessment, and support efforts to improve and raise the level of competitiveness in Saudi Arabia. The centre provides full support for the 10×10 program which aimed by the end of 2010 to take the Kingdom to the rank of the top ten countries in the world in terms of attractive investment environment.

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<sup>24</sup> <http://www.saudincc.org.sa>

## B. DOMAIN NAME MANAGEMENT

### *Saudi Network Information Center<sup>25</sup>*

The centre was established in 1995 as the body responsible for the management of domain names found under the international upper domain (.sa) for Saudi Arabia. Currently the centre is under the authority of the CITC. At the end of 2008, the number of the main servers related to (.sa) was increased from 4 to 36 servers (including 6 major and 30 reservists / copy). This dramatically increased the stability and reliability of the service. The centre is keen on supporting the use of Arabic in domain names. In order to work with transparency, since 1997 the centre publishes on its website in both Arabic and English all information related to the registry service.

Currently, the centre is executing some projects related to the opening of direct registration under the Saudi domain (.sa). It is also adopting a mechanism for settling disputes together with the development and documentation of internal procedures and current registration rules, besides, opening and freeing the domain names market.

## C. STANDARDIZATION IN ICT

The CITC<sup>26</sup> has prepared procedures for the authorization of ICT equipment and technical specifications of devices that are imported and used in the Kingdom. These procedures and technical specifications are binding to all parties that manufacture it, import it, or sell it in the Kingdom.

### *1. Approval of ICT equipment*

Many applications from companies, that wish to obtain approval for the importation of ICT equipment, are submitted to the Commission before they are imported into Saudi Arabia. The commission acts on verifying the approved technical requirements issued by the CITC, and hence the request is studied and a decision is made according to the regulations.

### *2. Preparation of new technical specifications for ICT equipment*

The technical specifications for ICT equipment are considered the technical basis for licensing the devices. To ensure the smooth importation of devices and to avoid additional costs due to the difference in standards as compared to what is used globally, the commission prepared and published (58) technical specifications covering most ICT applications.

### *3. Authorization of ICT devices*

The Commission studies the received requests that are related to the authorization of ICT devices, and makes sure that they conform to the technical specifications applicable in the Commission and issues the necessary approvals for authorization.

### *4. Development of authorization procedures for ICT devices*

The Commission receives many requests for the authorization and approval of devices. To facilitate its procedures, the Commission developed authorization and approval procedures so as to take action on such requests within 24 hours.

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<sup>25</sup> <http://www.saudinic.net.sa>

<sup>26</sup> <http://www.citic.gov.sa>

#### *5. Provide technical support regarding technical standards and devices*

Many inquiries from companies within the Kingdom and from abroad, are received by the Commission. Advice is provided. In cases of irregularities and complaints of a technical nature, the technical specifications of devices are studied.

#### *6. Automated system for the management of numbering resources*

The Commission is responsible for preparing and managing the National Numbering Plan. The commission has adopted an automated system for the management of numbering resources and symbols to achieve those requirements. The Authority is currently updating the National Numbering Plan to meet the future needs for new services of the number and symbol resources, taking into account the latest technology.

#### *7. Transfer of numbers of fixed and mobile phone services*

The Commission issued at the end of 2004 a guidance document for the transfer of mobile phone numbers immediately after issuing the second license for mobile communications services. The Commission also set up a centralized system to manage and coordinate the transfer of numbers between licensees in order to facilitate the implementation of the service. This service was launched in mid-2006.

#### *8. Quality of Service*

To ensure the provision of high quality services, a document has been issued to regulate the quality of services in the Kingdom. Its implementation was initiated in the third quarter of 2009. The Commission is currently following up and measuring indicators of the quality of service, which includes communications services provided to users, to the business sector, to wholesalers and to interconnections in harmony with global trends.

### D. SUPPORTING MEASURES

#### *ICT incubators (Bader)*

The King Abdul Aziz City for Science and Technology has established an ICT incubator "Bader", which is part of a system of national technology incubators, through it the City is seeking to develop the trading of technology in the Kingdom. "Bader" can accommodate one hundred ICT companies or institutions "resident" through several specialized programs and services. The incubator can achieve its objectives through a variety of services to resident and non-resident companies. There is also a joint project between the Saudi Computer Society and the King Abdul Aziz City for Science and Technology in the IT incubator "Bader".

## VII. ICT APPLICATIONS

### A. E-GOVERNMENT

#### 1. *General framework for e-government applications (YEFI)*

This framework<sup>27</sup> is intended to develop unified technical standards for common governmental data and basic techniques used in the public sector in order to facilitate the process of integration and sharing of data and addressing the different technologies in government institutions. The first phase was completed and it is represented by the completion of the first version of the technical manual for common data specifications and unified standards. This directory included common data from 11 government bodies.

#### 2. *The project of the National Communications Center for E-government*

This project aims to establish a National Communications Centre for E-government<sup>28</sup> with the best technical and security specifications to provide a communications centre and unified support for government bodies. Using various channels (telephone, fax, e-mail, etc...) it will provide services that respond to inquiries or support. The implementation of this project is expected to start in mid-2009.

#### 3. *E-Government Program*

A program for e-government in the Ministry of Communications and Information Technology was established in 2005. It is co-supervised by the Ministry of Finance and the CITC. Its objectives include urging and following-up government institutions to provide government services electronically.

#### 4. *Controls of e-government application*

In 2006, the control over the applications of e-government transactions was approved.

#### 5. *National Portal for e-government*

The national e-government portal<sup>29</sup> is the gate to e-government services, and the portal provides general information and guidance for government services.

#### 6. *Umra electronic system*

Designed to regulate the process of issuing Umrah visas, and automatically issuing licenses for Umrah companies and institutions. Currently more than 2000 points of contact in more than 150 countries around the world are linked to the system during the year 2007. And the system managed to process requests for 3 million pilgrims.

#### 7. *Services of receiving and processing requests for scholarship electronically*

Through its Web site the Ministry of Higher Education offers the possibility of receiving scholarship applications (BSc, postgraduate, medicine, fellowship), these requests are electronically processed and followed-up.

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<sup>27</sup> <http://www.yesser.gov.sa>

<sup>28</sup> <http://www.yesser.gov.sa>

<sup>29</sup> <http://www.saudi.gov.sa>

## *8. Services of a Unified Admission System to Technical Colleges*

The Technical and Vocational Training Corporation applied the unified admission system on 21 technical colleges.

## *9. Services of the Management System of Social Insurance Information*

The social insurance site on the web network<sup>30</sup> is the electronic interface that serves all beneficiaries of the social insurance system. The system offers on the Internet a number of electronic services to enable beneficiaries to access the corporation systems and perform the required transactions.

## *10. E-Visa System*

The Ministry of Foreign Affairs worked on internal development of a central electronic visa system to handle visa applications, visa issuance, issuing stickers of encrypted electronic visa "dual barcode", through the portal of the Ministry of Foreign Affairs<sup>31</sup>. The central electronic visa systems completed a total of 7.3 million visas. During the years 2004 to 2008 e-visa exported from representations grew annually at an average of 9.34 per cent. It was possible for individuals to electronically pay fees for 2.5 million visas.

## *11. Nationals centralized electronic system*

Internally, the development of a central citizens system was completed. The system aims at electronically serving and saving data concerning Saudi nationals abroad.

## **B. E-BUSINESS**

### *The e-payment system (sadam)*

The Saudi Arabian Monetary Agency implemented a system for electronic payments "sadam"<sup>32</sup>, whereby it is possible to convert all amounts received from payment of bills in one single working day instead of the previous period ranging from 7-30 days. Harvard University has chosen this system as one of the most innovative government initiatives in the region. And up to date 28 out of more than 40 bodies benefiting from the system from both public and business sectors have been linked together. Work is currently in progress to complete linking the rest. This project represents one of the major requirements for the application of electronic transactions and electronic commerce in the Kingdom. The total transactions executed through the system amounted to over 15 million transactions during the last six months of 2007. More than five billion Saudi riyals have been collected through the implementation of these transactions. It is worth mentioning that this payment system received the ISO 27001 certification on information security.

## **C. E-LEARNING**

### *1. The Ministry of Education*

The Ministry of Education used systems and applications of e-learning to develop the digital content of the curricula. The project of the electronic textbook has been completed. The Ministry also provided some schools with e-board, digital labs, and computer labs. It also established on the Internet educational portal, which contains many services for both the student and the teacher.

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<sup>30</sup> <http://www.gosi.com.sa>

<sup>31</sup> <http://www.enjazit.com.sa>

<sup>32</sup> <http://www.sadam.com>

## *2. The Ministry of Higher Education*

### (a) Learning network

This project aims at communicating with universities on an ongoing basis, providing services and knowledge resources as well as software and databases and sharing them. The beginnings of this project, was through linking the Ministry with some universities. The Ministry also was working hard in the area of electronic libraries, through collective participation in research information databases using information technology.

## *3. The National Center for E-Learning and Distance Learning*

The Ministry of Higher Education has established an integrated education system that depends on the techniques of e-learning and distance learning in the form of a national centre. This centre supports the educational process in higher education institutions in all of its stages and for all categories and segments without restrictions of time or place. The centre<sup>33</sup> has been working to achieve a number of key objectives, namely:

- Deploying the applications of e-learning and distance education in higher education institutions;
- Contributing to the expansion of the capacity of higher education institutions;
- Developing quality standards for the design of digital learning materials, producing, and disseminating it;
- Advising the relevant parties in the areas of e-learning and distance education;
- The building and dissemination of educational software to serve the educational process in both the public and the private sectors;

## D. E-HEALTH

### *1. Development of Internet-based systems to provide preventive health services*

In the context of health awareness and education, the website of the agency for Preventive Medicine was developed.<sup>34</sup>

### *2. The 2009 Second Health Awareness Festival*

The festival provides health education messages of interest to all Saudi individuals to raise their health awareness, within the objectives and principles of the World Health Organization (Health for All). It also urges the community to participate in the dissemination of health awareness on 28 themes including exposure to radio frequency waves from mobile phones, base stations, Bluetooth and Wi-Fi. The program is directed during ten consecutive weeks to the largest cities in the Riyadh region and its provinces (370,000 people).

### *3. Telemedicine network in Saudi Arabia*

The Ministry of Health prepared a pilot project for the national medical communication to be evaluated in three years.

### *4. Developing a specification of the electronic file for the Kingdom health sectors*

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<sup>33</sup> <http://www.elc.edu.sa>

<sup>34</sup> <http://www.weqayamoh.com/ar/default.asp>

In the context of establishing the electronic health file for the Kingdom health sector, the computerization of 150 health care centres was completed as a starting point. This was accomplished through a contract with one of the national companies.

#### *5. Developing specifications for health information that can be stored in the smart card*

The Ministry of Health prepared a project for the smart health card. It is a multi-purpose national identity smart card, with a size of 32 KB. The health information occupies a specific part of the chip. The project is carried out in cooperation with the Ministry of Interior.

#### *6. Establishment of national registers of common diseases and epidemics*

The Ministry of Health developed a system for Preventive Medicine linked to the Internet and cares about the registration of:

- Infectious diseases (42 infectious diseases);
- Non-infectious diseases such as diabetes and others;
- Chest diseases and immune deficiency diseases such as AIDS;
- Preventive health and food poisoning.

This is done for the purpose of enhancing research studies, pinpointing the accurate health indicators, updating and reviewing them. This system is currently being connected with the GIS system that links the information systems.

### E. E-EMPLOYMENT

The Ministry of Foreign Affairs established an electronic portal,<sup>35</sup> which contains sections for all individuals, staff, and Saudi representations abroad. The content is presented in Arabic, English and French, through which it is possible to recruit, liaise with the ministry, and conduct e-services.

## **VIII. CULTURAL DIVERSITY AND IDENTITY, LINGUISTIC DIVERSITY AND LOCAL CONTENT**

### A. USE OF ICT IN SUPPORT OF CULTURAL AND LINGUISTIC DIVERSITY

#### *1. The National Plan for ICT (the project of the establishment of a national, Arabic, and Islamic digital heritage center)*

The project aims at establishing a centre for digitizing national, Arabic, and Islamic heritage and publishing it after being translated into world languages. To support the efforts of Arabization on the Internet, 2 million pages will be digitized by the end of the first five years plan.

#### *2. National Center for Documents and Archives*

The centre<sup>36</sup> was established in 1989. It aimed at collecting documents and archives. To be indexed, classified, coded, saved, maintained, and organized for their circulation. The centre also issues a guide for the classification of documents and archives and a comprehensive coding guide for government agencies.

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<sup>35</sup> <http://www.mofa.gov.sa>

<sup>36</sup> <http://www.ncda.gov.sa>

## B. LOCAL AND NATIONAL DIGITAL CONTENT DEVELOPMENT

### *King Abdullah's initiative for the Arabic content*

The Arabic content on the Internet is poor. Statistics show that the percentage of Arabic digital content is scarce to the extent that percentage does not exceed 1 per cent of global content for other languages. The task of implementing this initiative has been entrusted to the King Abdul Aziz City for Science and Technology in collaboration with the concerned authorities. In the context of supporting this initiative, the City is working on a project "to electronically document the national intellectual output", which aims at digitizing Saudi universities periodicals in the fields of science and technology, and make it accessible on the internet. It also aims at including the Saudi Arabian national studies in the global knowledge base, activating the participation of the Kingdom in the transfer of scientific knowledge in the world, as well as supporting the digital book. The main objectives of this initiative are:

- Supporting and motivating efforts to enrich the Arabic content;
- Supporting and motivating the development of specific tools to enrich the Arabic content;
- Contributing to making the Arabic content and its tools accessible to users;

This initiative has resulted in the generation of a series of projects. Work on these projects is still on-going. The most important of these projects are:

A strategic Plan to enrich the Arabic content;

- The Arabic blog;
- Books of Strategic Technologies;
- The interactive computer dictionary.

## C. ICT TOOLS AND R&D PROGRAMS

Please refer to King Abdullah's initiative for the Arabic content discussed above.

## **IX. MEDIA**

Because of its capacity to reach a wide spectrum of people, and its ability to disseminate ideas, facts and information, the media plays an important role in promoting and developing the Information Society.

### A. MEDIA INDEPENDENCE AND PLURALISM

Saudi Arabia has different types of media that have evolved dramatically over the past years, especially the Arab satellite network, 22 per cent of which the Kingdom owns out of a total number of (245) channels. As for the press, there are 12 newspapers issued in Arabic, three in English, and one in Urdu. There are state media and others owned by the private sector including all types of media. The Ministry of Culture and Information has long been guided by the objectives and policies set for all types of media. One of the objectives of the Ministry is to broadcast its programs to various segments, types, and classes of society according to specific percentages.

### B. THE MEDIA AND ITS ROLE IN THE INFORMATION SOCIETY

In accordance with its specific goals and policies, The Ministry of Information seeks to produce programs either through the television, or the radio, or the press to encourage the creation of an information society. The Ministry of Culture and Information sought to establish numerous radio and television transmitters in all parts of the Kingdom. It also urged press institutions and provided continuous facilities for the delivery of newspapers to remote areas and for the direct communication with the public in those areas

via radio and television programs.

## X. INTERNATIONAL AND REGIONAL COOPERATION

Building the information society requires cooperation among all stakeholders at the international and regional levels.

### A. FINANCING OF ICT NETWORKS AND SERVICES

#### 1. *The Communications and Information Technology Commission (CITC)*

The commission plays a pivotal role in the development of the ICT sector and strives to achieve the strategic objectives of the State in supporting the national economy, diversifying sources of income, moving to a knowledge society, raising the level of competition in the provision of quality ICT, and developing qualified human resources.

#### 2. *The Saudi Arabian General Investment Authority (SAIGA)*

In 2006, the Saudi Arabian General Investment Authority established the National Competitiveness Centre (NCC) as an independent body to follow-up, evaluate, and support the efforts to raise the level of competitiveness in Saudi Arabia. As a result, the ICT Cluster Advisory Council was established in 2007 to work on promoting cooperation between public and private sectors.

There are three main areas that need development in the Kingdom in the field ICT:

- Reducing the digital gap in mobile communications and broadband technologies for Internet services;
- Increasing the level of competitiveness of the local information technology industries;
- Improving the supporting factors in the field of ICT.

For more information, please visit the websites of the Saudi Arabian General Investment Authority<sup>37</sup> and the National Competitiveness Centre.<sup>38</sup>

### B. INFRASTRUCTURE DEVELOPMENT PROJECTS

#### *The Eighth Development Plan*

The Eighth Development Plan (2005-2009) focused on the strategic areas of the Kingdom, including ICT. It presented the features of the future ICT vision and the development strategies that aim to achieve this vision. This vision was based on the project of the National Plan for ICT on the information society, and on the recommendations and resolutions of the World Summit.

### C. WSIS FOLLOW-UP

#### *The National Committee for Information Society*

The Board approved Resolution 75 of the Society (WTSA-08) and adopted the necessary amendments to expand the scope of resolution 1282 to establish a specialists group. Saudi Arabia was also nominated for the heading of this group which held its first meeting in Geneva - Switzerland on 13.02.2009.

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<sup>37</sup> <http://www.sagia.gov.sa>

<sup>38</sup> <http://www.saudincc.org.sa>

## **XI. MILLENNIUM DEVELOPMENT GOALS**

The use of ICT is an important factor for achieving the MDGs. Most governments and international organizations have increasingly embarked on merging ICT in their development plans.

### **A. PROGRESS TOWARD ACHIEVING THE MDGs**

The Kingdom has issued three national reports for monitoring the progress made in achieving the MDGs.<sup>39</sup>

### **B. USE OF ICT FOR ACHIEVING THE MDGs**

The eighth development plan of the Kingdom included a full chapter concerning ICT. The chapter contains several topics concerning assessing the current status of basic communication equipment and IT local industries and the move towards the information society. The chapter then discusses the issues and challenges related to the completion of the infrastructure, the digital Arabic content, the digital gap, and the application of the concept of the electronic government. Finally, it discusses the future vision and development strategy.

## **XII. BUILDING THE ICT SECTOR**

### **A. ICT FIRMS**

#### *The Economic Offset Program*

The program aims at circulating part of the money spent by the Government of the Kingdom on its large foreign purchases contracts, to benefit the national economy. This is done through agreements for economic offset signed with foreign bodies responsible for implementing these contracts. These bodies in turn, are working on investing in the Kingdom the equivalent of a specific percentage of the value of the contracts for the establishment of industrial and service projects in advanced technology in partnership with private sector companies in Saudi Arabia.

Since the founding of the program in 1984, agreements for balanced economy have been signed with several agencies. The most important for those agreements are those signed with Boeing, General Electric, the British and French Governments, Lucent Technologies, and Raytheon Company. The most prominent companies of the program include:

- Advanced Electronics Company.
- Interactive Saudi Arabia Ltd Company.
- International Systems Engineering Co Ltd.

### **B. R&D AND INVESTMENTS IN THE ICT SECTOR**

#### *1. The Ministry of Higher Education*

The Ministry seeks to secure sustainable financial support from the State to support research and development in universities. Universities have also subscribed to several databases, journals and periodicals specialized in ICT and they have also established ICT research centers such as:

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<sup>39</sup> <http://www.mep.gov.sa>

- Centre of Excellence in Arabic Computing, King Fahd University of Petroleum and Minerals;
- Centre of excellence in information security, King Saud University;
- Communications and computers Research Centre, King Fahd University of Petroleum and Minerals.

## 2. *The CITC*

During (2007), the efforts of the Commission focused on completing the liberalization of the sector and improving its services. One of its most prominent achievements is the licensing of the third mobile communications services as well as opening competition in the provision of fixed communications services.

### C. CONTRIBUTION OF ICT SECTOR IN THE NATIONAL ECONOMY

In 2008, the contribution of the ICT sector in the GLP was estimated at about 8 per cent and number of employees in the sector was estimated at about 80,000 employees. The sector is looking forward to a future increase in the number of jobs to reach up to 30 per cent of the total number of jobs in the economy and to increase domestic and foreign investments in the sector to become over 40 billion riyals.

The sector witnessed a significant growth in which the size of revenues had doubled from 19.8 billion riyals in the year 2001 to about 50 billion riyals by the end of 2008 with an average growth of over 15 per cent per annum.

The mobile communications revenue, as a percentage of the total revenue, increased from about 20 per cent in 2001 to about 75 per cent by the end of 2008. The revenue of communication services are expected to exceed 60 billion riyals in the year 2010 with an average growth of 15 per cent annually. This rate takes into account what the Saudi individual spends on ICT services which is estimated at about 5.4 per cent of his total income.

### D. GOVERNMENT FACILITATION

#### *The Centennial Fund*

The idea of the Centennial Fund emerged from Britain and spread later to more than 40 countries. It has proven successful in all of those countries. The idea is about a program that supports youth projects (YBI - Youth Business International). In 2005, approval was granted for the establishment of a charitable fund with the same goal under the name of "the Centennial Fund". In preparing the pilot version of the Centennial Fund program help was sought, in which forms used in the British program were used in the Saudi program after being adapted to suit the needs of the Saudi society.

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