## **UNSECO** Report on the

# Implementation of the Promotion and Use of Multilingual and Universal Access to Cyberspace

### First: Development of Multilingual Content and Systems:

Egypt's online environment enjoys a number of important strengths that facilitate the development of a sustainable competitive digital content industry. Strong professional skills have been developed in a number of digital content sectors, in particular e-learning, culture and entertainment, in addition to large investments.

MCIT has entered into partnership with various international corporations, the Ministry of Culture, the National Information Center as well as local enterprises involved in content creation, development and conversion, web hosting, data security, and e-commerce and e-payment services. Work done in this field is based on a strong public private partnership, not only with the private sector, but also with different associations.

#### 1. Dot Masr Policy

The Ministry of Communications and Information Technology has launched the first worldwide internet domain name using Arabic letters to boost e-services and increase the number of people online in the most populous Arab nation. H.E Dr. Tarek Kamel, Minister of Communications and Information Technology, has announced on May 2010 that the Arabic ccTLD of Egypt "..." is now implemented in the Internet root zone. Three Egyptian companies were the first to receive registrar licenses for the '.masr' domain, written in Arabic: TE Data, Vodafone Data and Link Registrar. The three companies have been accredited by the National Telecom Regulatory Authority to be the new registrars for the Egyptian IDN ccTLD "......".

"Introducing Arabic Domain Names is a milestone in Internet history", said Dr. Kamel, "It is the harvest of many years of hard work among global and regional Internet experts. This great step will open up new horizons for e-services in Egypt. It will boost the number of online users in the country and will enable Internet services to penetrate new market segments by eliminating language barriers."

The implementation of "..." in the Internet root zone comes as a result of Egypt's application for its Arabic ccTLD within the framework of ICANN's IDN fast track process. ICANN had announced in November 2009, during the Sharm El Sheikh IGF'09 Meeting, that it has opened the door for countries using non-Latin based languages to request their country top-level domains in their official languages. Egypt was the first

country to apply for its Arabic ccTLD within the fast track process, which currently, as per the ICANN, has a total of 21 requests representing 11 languages.

The National Telecom Regulatory Authority, the "مصر" registry, had earlier this year, during the month of February, announced an RFP for entities interested in providing domain name registration services under the Arabic ccTLD of Egypt. Offers submitted by the different entities were evaluated and three companies were selected to be licensed as registrars.

The tradition of ending the websites with (.com), even for the Arabic websites, has now changed, to be (.masr) instead. The introduction of IDN Top Level Domains is an exciting proposition for the Arabic community as it provides new opportunities for Arabic speaking web users, along with Arab companies to properly express their identities, in Arabic, for the first time.

#### 2. Arabic e-content Initiative

In the first report presented in 2007 to UNESCO we highlighted some of our work on the Arabic e-content initiative. E-content remains a main focus area. We have expanded our work to include different sectors. Egypt places high regard in developing and distributing Arabic e-Content that forms the basis of intellectual and cultural inspiration for future generations. Accordingly, MCIT has led the way to the establishment of an e-content industry in Egypt through its Arabic e-content initiative. This initiative aims to enhance the competitiveness of the Egyptian e-content industry by supporting the production, use and distribution of Arabic digital content on global networks.

Arabic e-content expansion is facing a challenge, as it occupies a tiny percentage on the internet in comparison to the English online content. MCIT seeks to collaborate with major press institutions in Egypt in order to document and preserve Arab heritage for the coming generations, and to reposition the Arabic content in its appropriate status to the worldwide audience. Other institutions in Egypt are also playing a key role including Bibliotheca Alexandrina.

#### 2.1 Online Journalism:

The merger between printed, audible and viewed media, benchmarking this age, has brought forth a more distinguished new media, namely, "Online Journalism". Online Journalism is the legitimate offspring of the extraordinary development in IT, coming into existence as a result of researchers and journalists' attempts to produce electronic newspaper versions, capable of fulfilling ordinary functions of the former regular papers, adding unprecedented capabilities, through new technologies.

#### 2.2 CULTNAT

Egypt's Heritage is of a worldwide interest and importance due to its continuity over a period of more than five thousand years. It encompasses various aspects of the human civilization, represents the development of human heritage and offers a wealth of cultural as well as natural heritage of national and international value. This wealth in archaeological sites, architecture, arts, folklore and natural beauty needs to be accurately and purposefully documented. Hence, the establishment of the Center for Documentation of Cultural and Natural Heritage, CULTNAT, which is affiliated with Bibliotheca Alexandrina and supported by the Ministry of Communications and Information Technology.

The Center's mandate is to document the various aspects of Egypt's tangible and intangible cultural heritage as well as its natural heritage. This involves the implementation of the national plan of action towards the documentation program, making use of the most up-to-date information technology in collaboration with the national and international specialized organizations. The Center also aims at increasing public awareness of Egypt's cultural & natural heritage using all available media as well as building capacities of professionals in the fields of conservation and documentation of cultural and natural heritage.

CULTNAT documents the various aspects of Egypt's tangible and intangible cultural heritage as well as its natural heritage using ICTs. Its flagship which have won many awards over recent years, is Culturama with its patented technology, Eternal Egypt, and the Global Egyptian Museum which provides online access to Egyptian cultural products, are currently on display in museums around the world. The Center also aims at increasing public awareness of Egypt's cultural and natural heritage using all available media as well as building capacities of professionals in fields of conservation and documentation of cultural and natural heritage.

## 2.3 Memory of the Arab world

http://beta.cultnat.org/

The project develops a specialized portal to introduce the Arab heritage and civilization to the world, to increase Arabic content on the web and to promote previous initiatives of heritage digitization. The project was established under the auspices of and support of the Ministry of Communications and Information Technology, Egypt, represented by the Center for Documentation of Cultural and Natural Heritage, the League of Arab States, UNESCO and the International Telecommunication Union, the Library of Alexandria. http://memoryarabworld.net/

## 2.4 Digitization of Historical Maps and Arabic Papyri at the National Library of Egypt

CULTNAT, in collaboration with the National Library of Egypt, have successfully initiated and completed the digitization of two archival collections of approximately 10,000 maps and 3,500 papyri. The development of databases containing the digitized collections has made it easy for the National Library to better serve researchers and scholars. A bilingual catalogue regarding the Arabic Papyri was published covering a collection of papyri that is revealed for the first time.

http://www.darelkotob.gov.eg/

#### 2.5 National Archives of Egypt

In an ambitious project, CULTNAT is digitizing more than 90 million documents currently kept in Egypt's National Archives. The project is employing more than 1,000 recent graduates who have been given specialized training. The National Archives of Egypt (NAE) Project is a partnership between MCIT, CULTNAT and Egyptian IT companies.

#### Project Objectives:

- To preserve the physical condition of national archives by producing watermarked, highresolution digital images of 130,000 valuable documents, thereby reducing the need for physical access
- To produce digital versions of the more than 90 million documents held by the NAE for inclusion in a database currently containing over 25 million records that can be searched and accessed via the NAE intranet site
- To develop a web portal providing easy access to national archives in a digital format <a href="http://www.nationalarchives.gov.eg/nae/ar/index.htm">http://www.nationalarchives.gov.eg/nae/ar/index.htm</a>

#### 2.6 Egypt Memory Online Shop

First of its kind in the Middle East, the portal offers a unique e-commerce model for cultural heritage that provides visitors and shoppers worldwide with a variety of cultural and heritage products like books, CDs, atlases and high resolution images. The trilingual portal (Arabic, English and French) also showcases different CULTNAT projects and publications. Egypt Memory Online Shop was launched in 2008 jointly with IBM. <a href="http://www.egyptmemory.com">http://www.egyptmemory.com</a>

#### 2.7 Fekr Rama

Fekr Rama is a web portal that provides rich Arabic content in fields of culture, education, heritage, religion, sports and arts for the Arab and Western world. The portal also includes e-books, magazines, directories, news, audio files and animation for children and youth. A collaboration between the Ministry of Communications and Information Technology (MCIT), Al Azhar, the Ministry of Culture, the Ministry of Information, the Egyptian Publishers Union and the e-Learning and Business Applications Union, the portal was launched in March 2008. The result of two years of preparation, Fekr Rama currently

contains more than 6,000 titles, 3,000 of which are free to access. By 2009, some 20,000 titles will be available.

Fekr Rama, an output of the Arabic e-content initiative, is derived from Panorama El-Fikr El-Araby (Arab Intellectual Panorama) and focuses on Egypt as a pioneering civilization in the spread of knowledge and as a role model in preserving Arab heritage for future generations. The portal is an outcome of a protocol agreement between MCIT and National Archives of Egypt.

http://www.fekr-rama.com/

#### 2.8 Luxor portal

Luxor Portal was developed and launched as part of Egypt's keenness to boost tourism. The website is the official touristic portal of the city of Luxor. The portal offers tourists comprehensive, functional, and up-to-date information on Luxor in the most interactive and visually attractive manner. The portal contains a huge photo gallery of Luxor, a detailed GIS-based map of the city, a detailed illustration of all monumental sites, an updated calendar of the city's events in addition to practical information on all possible activities that tourists can engage in and a comprehensive database of all medical, hotel accommodation, dining, transportation, airlines and banking services of the city. <a href="http://www.luxoregypt.org/">http://www.luxoregypt.org/</a>

#### 2.9 Egy news

MCIT in cooperation with the news sector of the Egyptian Radio and Television Union established a news portal that started operating in October 2007. The portal delivers up-to-date international, regional and local news in Arabic covering all categories – politics, economy, science, sports, arts, etc. The website offers users a variety of interactive and functional information and services like live streaming, in-depth reports, desktop alerts, temperature reviews, market reports and site personalization based on user preferences. The average number of portal users per day has climbed from 1,000 in 2007 to 6,000 user in 2008.

http://www.egynews.net/

#### 2.10 Science and Technology Portal

Egypt's Science and Technology Portal, a collaboration between MCIT and the Academy of Scientific Research and Technology, aims to make the scientific and technological content of the Academy of Scientific Research and Technology available to the global scientific community. The bilingual (Arabic and English) portal also avails the science and technology information from the Egyptian National Science and Technology Information Network (ENSTINET) databases to the scientific community as well as interested Egyptian citizens. In addition to academic theses and research in science and technology, the portal

includes biographical databases besides featuring Egypt's achievements, prizes and awards and latest news in science and technology.

http://www.sti.sci.eg/

#### 2.11 Community Development portal

Community Development Portals (supported by the ICT Trust Fund) aim to empower Egyptian citizens in rural and urban areas to improve their standards of living through the utilization of state-of-the-art ICTs. The project was first launched in 2004 under the name of Kenana Online, a community-based portal that provides people with the necessary locally relevant knowledge and information that helps them pursue better lives both on the personal and professional levels.

To achieve its objectives Kenana provides online service to create sites and portals encouraging the Arab communities with its segments: government, civil society, individuals and experts. Providing this service encourages the community to promote dissemination of knowledge in Arabic on the Internet.

In addition to enriching the Arabic content of specialized knowledge, Kenana online promotes owners of portals and sites by providing:

- 1. Cognitive support and training to enable them to manage knowledge.
- 2. Technical support for marketing web content on the Internet.

Kenana online has about 700 thousand pages published on the Internet and almost 1000 new pages published daily on the Internet. Kenana is considered one of the top 20 online sites in Egypt in the volume of visits and it is ranked 10220 worldwide.

Due to the portal's growth in both scope and popularity, Kenana Online specialized portals spun off to include the Small and Medium Enterprises portal www.ayadina.net, which provides information for start-ups and an excellent tool to enable small businesses to open new markets on the Internet without investment just a computer and internet connection. Kenana online community consists of 1000 companies and small businesses that have their own gates and 300 site and Hundreds of these sites is ranked first on the search engines, which guarantees them tens of thousands of monthly visits to the site; the livestock production portal www.aradina.net which provides information about agricultural and animal matters such as agricultural machinery or the breeding behavior of various species; the Arab family portal www.byotna.net, which deals with family planning, basic health and disease, drug addiction, dieting and exercise; the youth portal www.yomgedid.com which aims to empower young people and enhance their participation in public life in order to contribute to their active citizenship.

The Kenana online partners with 10 associations in the fields of disability and established their websites. It has also partnership with the concerned civil society associations to configure a network and online community to include hundreds of associations working in

this field and thus enrich the disability portal with all the new knowledge. This data will support the people with disabilities in the areas of education, health care, prosthetic devices, rehabilitation and early intervention.

The Educational content was not part of the main sections of Kenana until 2010. In March 2010, we trained 40 schools as pilot in Imbaba and Luxor. This resulted in the establishment of 120 sites for the schools, teachers and students offering educational material in all stages of study.

In an attempt to best meet local needs, the portals' content is derived from local communities including NGOs, research institutions and local companies.

- http://kenanaonline.com
- http://aradina.kenanaonline.com/
- http://ayadina.kenanaonline.com/
- <a href="http://byotna.kenanaonline.com/">http://byotna.kenanaonline.com/</a>
- http://yomgedid.kenanaonline.com/

## Second: Facilitating Access to Networks and Services:

#### 1. IT Clubs

The value of the IT Clubs project is in its availability to the mass population. The concept that has been applied since 2000 and has become so widely spread is truly becoming a local window to the world. The idea behind the IT Clubs is to provide each and every person in society the chance to develop his/her skills and knowledge through the use of technology. Computer literacy has become second nature to many societies and individuals without which they find themselves isolated and excluded. The challenge is great in a country like Egypt due to the high illiteracy rate and the low incomes of many families. IT Clubs are meant to make dreams a reality for all those interested in taking part in the information society. IT Clubs are the outcome of the cooperation of multiple players in the society.

Although MCIT is the main contributor in the project, it makes sure that the private sector, public sector, individuals, and local communities are involved to ensure success. MCIT believes that full societal involvement will guarantee sustainability. MCIT makes available, through cooperation with private sector, at locations such as schools, clubs, universities, youth centers, computer labs fully equipped with computers, printers, networks, access to the internet, and most importantly the well-trained instructors. Priority is given to low income areas. Participants have the opportunity to access facilities and services of the club at any time for a nominal fee. Additionally, there is a wide spectrum of courses offered to guide participants to fully utilize the technology in their lives.

At the rate of almost 300 clubs established every year, MCIT intends to reach every neighborhood in the country, the total no of IT clubs reached 2062 at the end of Q2 2010, whereas the number of IT clubs connected to the internet reached 1884 representing 91.4% of the total number of IT Clubs. The expansion is not only in the number of clubs but also in the activities and target groups within each club. MCIT is working on activities for those with special needs, and children who have dropped out from the schooling system.

#### 2. Mobile Units

It is the aim of the government of Egypt to provide access to each and every corner in the nation. This has proven a challenge with the unbalanced infrastructure setup and the accessibility to technical requirements for such a provision. However, MCIT refused to give in to these obstacles and in an agreement with the United Nations Development Programme (UNDP) and the Italian Cooperation set it as its goal to expose rural and remote communities to ICT. MCIT finds that such exposure is the key to acting as a catalyst in human development resulting in shrinking the unemployment rates and increasing productivity.

The Mobile Internet Unit, as the term suggests, is a vehicle that is equipped with computers that travel to remote areas to provide access to technology and entrance to cyberspace. The unit is not merely equipment but it is a comprehensive program for members of the community to become equals with any metropolitan resident. Courses are offered for computer literacy, internet access, business skills, and more.

## 3. Egypt PC 2010 - Nation Online

The PC for Every Home initiative, launched in November 2002, was restructured in November 2004 through: the inclusion of National Bank of Egypt; the introduction of electronic payment using credit card/point of sale (POS) mechanisms; extension of warranties for PCs from one to three years; and provision of call center services with a dedicated number (19246). In addition, Banque Misr and National Bank of Egypt branches took on the task of serving customers in place of Telecom Egypt central exchange offices, significantly increasing accessibility.

In 2006 the PC for Every Home initiative, launched in November 2002, and restructured in November 2004, underwent another major restructuring to become a national program under the name "Egypt PC 2010 – Nation Online". The main improvements include the provision of loans via normal credit banking procedures (alongside the use of telephone lines as collateral); greater protection of end-user rights through the introduction of various quality assurance mechanisms; and establishment of a customer service website.

It is envisaged that the PCs for the Community initiative, through the Egypt PC 2010 – Nation Online program, will cover 3 million families by the end of 2010, with greater focus on citizens in the C and D economic brackets. This would represent coverage of at least 25% of Egyptian families. Currently, only 7% of Egyptian families own PCs, the majority from the A and B economic brackets.

To actualize affordability of computers, cooperation with international technology providers was realized to reach discounts up to 50% on hardware. Partners include Microsoft, Intel, AMD and Via Technologies.

Egypt PC 2010 focuses on three categories of PCs: Family; Desktop Mid/High-End; and Laptop. The Family Category offers two models starting at LE 1,585 with monthly installments of LE 43. The Desktop Mid/High-End Category, intended for professional/specialized use, offers two models starting at LE 2,900 with monthly installments of LE 84. The Laptop Category, for professional/specialized or personal use, offers two models starting at LE 3,990 with monthly installments of LE 114.

#### 4. Facilitating Access

#### 4.1 NTRA

The National telecommunication Regulatory Authority (NTRA) was established in accordance with the provision of Law No.10 for the year 2003 'the Telecom Regulation Law' as a national authority to administer the telecommunication sector, considering

transparency, open competition, Universal services and protection of users' rights as a general outline for NTRA scope of work. The mandate of the NTRA lies within the equilateral triangle of Industry, state and Consumer, set inside a regional arena, and embedded in broader context of rapid global changes.

NTRA paves the way for the steady growth of the industry by deregulating the market the furthest extent and consequently attracting investment. This is done with total consideration for Egypt's national interests, including the development and security concerns. Consumers, as the third angle of the sector also place high expectations on the shoulders of NTRA, seeing that their satisfaction and safety are crucial elements in the regulator's mission

#### 4.2 Internet Access

Internet services in Egypt started in 1993 via a 9.6K link between the Egyptian Universities Network and France carrying Bitnet as well as Internet traffic. There were only two providers: the Egyptian Universities Network (EUN) and the Information and Decision Support Center (IDSC) of the Egyptian cabinet. The user community at the time was estimated at about 2000 users.

In 1994 the Egyptian domain was divided into three major subdomains: the academic subdomain (eun.eg and sci.eg), which is served via the Egyptian Universities Network (EUN); the commercial subdomain (com.eg); and the governmental subdomain (gov.eg). The latter is served via a partnership between IDSC and the Regional Information Technology and Software Engineering Center (RITSEC).

In 1996, the Egyptian government started developing an Internet backbone and gateway facility to serve the private sector Internet Service Providers (ISPs), providing commercial Internet services in Egypt for the first time. With the formation of MCIT in 1999, several initiatives were launched to expand broadband capacity and establish a reliable and fast Internet backbone. Several ISPs were licensed by NTRA to build their own data backbones and expand their broadband capacity by obtaining separate international gateways.

Broadband access has been available in Egypt since 1998 through Integrated Services Digital Network (ISDN). Digital Subscriber Line (DSL) was introduced in Egypt following the unbundling of local loops, which took place in 2002. Licensed service providers were allowed to share the local loop with Telecom Egypt to provide broadband data services.

The Free Internet Initiative was launched 2002, offering free access nationwide without any restrictions. The initiative provides easy and affordable access to the internet at the cost of a local telephone call and with no additional subscription fees.

Having realized the need to build an 'e-society' and join the global Information Society, Egypt is leading an ambitious broadband initiative, with the objective of increasing broadband penetration. The three year broadband initiative focused on increasing ADSL

penetration, introducing WiFi hotspots in public areas, promoting WiMAX deployment and promoting wireless LANs in residential areas.

As a result the number of Internet users increased to 19.65 million at the Q2 2010, compared to 14.85 million at the end of Q2 2009, representing an annual increase of 4.8 million users and an annual growth rate of 32.31%. Mobile and USB modem was the mode of access for 36% of internet users while ADSL users represent 33% of internet users in Q2 2010. Dial-up and ISDN subscribers accounted for 16 % of Internet subscribers in Q2 2010, compared to 21 % in Q2 2009. The cost of ICT services in Egypt is considered internationally competitive. I International Internet bandwidth increased to 118369 Mb/s at the end of Q2 2010 compared to 48160 Mb/s at the end of Q2 2009, representing an annual

## The international Submarine cable

The international Submarine Cable license gives the operator the right to set up, operate and rent a submarine cable network and the core infrastructure necessary for establishing international communication. The Arabian Company for Submarine Cable and Mena are currently the only operators that gave this license, valid for 20 years and subject to renewal

## Communications Price Basket

According to the World Bank price basket methodology, the monthly cost in Egypt in Q1 2010 was USD 4.23 for a fixed line, USD 3.43 for mobile services and USD 4.46 for Internet service.

Communications Services Composite Price Index reached 86.5 point in Q2 2010 compared to 96.79 point in Q2 2009. It is worth mentioning that the ICT Services Composite Index had decreased during the period between Q1 2005 and Q4 2006, mean while it had witnessed a relative stability during the period Q1 2007 - Q3 2009

## Mobiles Services

In 1998, two Egyptian international consortia were granted licenses for providing GSM services in Egypt. These were Vodafone Egypt, which consisted of Vodafone PLC and Egyptian investors, and MobiNil, which consisted of Orange, a number of Egyptian investors, and Orascom Telecom. Several positive outcomes of the program of deregulation have been as follows:

- a. Wealth generation of almost EGP 35 billion, with competition leading to:
  - investments of EGP 10 billion by the 2 companies;
  - generation of around 5000 jobs and 15000 indirect jobs;
  - lower tariffs through affordable packages;
- government proceedings of almost EGP 7.4 billion;

- Listed mobile companies becoming the primary driver of Cairo Alexandria Stock Exchange and are attracting FDI into Egypt directly and through GDRs.
- b. Fixed teledensity has reached 14.7 percent (10.5 million subscribers) while mobile teledensity reached 19.3 percent (13.9 million subscribers) resulting in an overall teledensity of 34 percent in January 2006.
- c. Egypt is also set to become a regional leader in mobile technology through the development of Egyptian know-how in the area of design, establishment and maintenance of 2/2.5G networks.
- d. The evolution of Orascom Telecom as a regional operator through acquisition of licenses in MENA, Asia and most recently in Europe.

The past couple of years have witnessed a surge in the number of mobile subscribers and usage of mobile phones surpasses that of fixed telephone lines. To nurture the mobile market and put end to its duopoly, the NTRA issued a Request for Proposal (RFP) for 3<sup>rd</sup> mobile network in February 2006that permits the use of both 2G and 3G technologies. The final auction round was held on July 4, 2006 where the third mobile operator license was granted to a consortium led by Etisalat of Emirates.

#### 4.6 Satellite Services

Satellite Services include three different types of licenses: Inmarsat, VSAT and GMPCS. The Inmarsat licenses were issued in 2004 and 2005 and are valid for 2 years, subject to renewal. The operators have the right to offer telecommunications services through Inmarsat (R-BGAN). Two companies have Inmarsat service providing license.

There are four operators that acquired the VSAT license, the Licenses were issued in 2001 and 2005 with validity of 10 years and gave the operator the right to set up, manage and operate the core Infrastructure of a VSAT satellite network to offer local and international Data transferee, video and audio services(expect for radio and television broadcasting), connection to internet services and implementing Virtual Private Networks.

There are three operators in possession of GMPCS license, the licenses were issued in 2001 and 2005 with validity of 10 years and give the licensee the right to set up, manage and operate the core Infrastructure necessary to offer Global Mobile Personal Communication System(GMPCS) through Thuraya systems.

#### 5. Universal Service Fund

The government of Egypt believes that access to information and telecommunications services at affordable prices is a right to all citizens, and will allow the promotion of political, economic, and cultural cohesion leading to overall economic development. Hence, the telecommunication law no 10/2003 stipulated the establishment of Universal Service Fund (USF) and accorded the responsibility of its management to the NTRA. The USF was officially initiated in March 2005 with an initial budget of 50 million Egyptian Pounds, and according to Article 9 of the aforementioned law its funds should be aimed "to fund the provision of universal service in un-served or underserved area, for example through the deployment of payphones service in these area" and also "to compensate

telecommunication operators and service providers for the price differences between the approved economical price for a service and that which may be determined by the State in favor of the user".

The NTRA has a well developed strategy and has set clear steps to realize the goal of achieving Universal Service. This strategy is being implemented in the form of different stages according to the priorities envisaged by the Authority and with all time and budgetary constraints taken into due perspective.

- First stage: provision of basic telecommunications services to low-income areas where such provision is deemed economically non-feasible. Priority will be given to the more populated of such areas inhabited by minimum of 300 persons.
- Second stage: increasing the average penetration rate in each governorate to 20%.
- Third stage: narrowing the digital divide between people who enjoy tele-service on one hand and the people deprived of these services. This shall be done by means of gradual provision of Internet and data services to each region according to the administrative division of governorate.
- Fourth stage: reaching a tele-density of 100% when measured by the number of fixed phone lines per family.

#### 6. Postal sector reform

The international postal sector has changed more in the last 20 years than in the previous century and a half, leading many governments in developed and developing countries to recognize the need for effective and sustainable postal reform. Significant forces have driven this transformation: changes in postal market demand and supply, globalization, market liberalization, regulatory progress and technological advances in all communications media. Among these changes, the most important is the increasing role of the private sector in the provision of postal services. Previously, public operators were chosen to meet this obligation and were provided with monopolies, not only to preserve the integrity of the mail, but also as an economic incentive to serve unprofitable areas of the mail market. Today, the level of private sector participation in the supply of postal services is significant and growing, resulting in a more competitive postal market and an increased need for effective regulation.

The GoE recognizes that a strong universal postal service operating within a competitive postal market can serve as a valuable tool in achieving national development objectives. Efficient postal services can reduce the cost of financial and other business transactions and thereby increase national competitiveness. Nationwide postal networks can also serve as effective agents in increasing public participation in civil and economic life, reducing rural isolation and marginalization, and in distributing government benefits and services more equitably. When these networks also incorporate comprehensive financial services, they can stimulate national capital accumulation, include wider segments of society in formal financial channels and serve as catalyst for the growth a

However, recent analysis has shown that the postal market in Egypt is performing below potential and not fully meeting the needs of individual and business mailers. This is demonstrated by the low per capita level of mail in Egypt (3.2 pieces per person annually) in comparison with countries immediately above (5.8 pieces) and immediately below Egypt (5.0 pieces) in terms of GDP per inhabitant (PPP method). MCIT is therefore determined to undertake a program of postal reform and modernization to define and realize its future vision of the postal sector in Egypt by 2010.

The reform Objectives:

- To develop a world-class postal service in terms of quality, innovation and accessibility
- To increase overall levels of private sector investment in the postal market through open and fair competition and progressive regulation
- To create a new export-oriented postal industry in Egypt

As a result of the reform the total number of post offices increased to 3754 at the end of Q2 2010, compared to 3701 at the end of Q2 2009, representing an increase of 53 offices and an annual growth rate of 1.43%. The average number of people served by individual post offices was 20.628 Thousand at the end of Q2 2010, compared to 20.548 Thousand at the end of Q2 2009, representing an annual increase of 80 people and annual growth rate of 0.39%.

Number of beneficiaries of pensions' distributed through postal offices has increased to about 4.4 million beneficiaries in Q2 2010 compared to about 4.1 million beneficiaries in Q2 2009 with an annual growth rate of 7.31%. On the other hand, number of pensions distributed through postal offices in the place of residence has reached about 877 thousand beneficiaries in the period of Q2 2010.

#### 7. Incentive packages for investors

The government believes that strong partnership between the public and private sector is pivotal to the successful formation of an information society. As part of this belief, providing incentives that foster an attractive climate for investors is a primary focus. Such a climate revolves around a deregulated environment, transparency, free competition, and universal services. In emphasizing the importance of these elements, all telecommunications and information technology investments fall under investment law #8 of 1997. The law works hand-in-hand with the Telecom Act (TA) drafted by MCIT.

The Telecom Act lays the foundation for licensing national companies for management and operation of networks and services. Investment Law #8 streamlines the process for international companies to invest in Egypt. The solid legal structure is complimented with MCIT's work to create an e-friendly society; an environment in which e-businesses can flourish and an information society can thrive. This environment includes: data and internet centers, a high-tech Pyramids Smart Village, five-ten year tax exemptions, and a free zone (Telecom Hotel) for international call centers and transit regional Internet traffic.

#### 8. Training

Information and Communication Technology (ICT) training works hand in hand with other national projects such as IT Clubs, PC for Every Home, Broadband, and Laptop for Every Professional Initiatives. The national plan is to provide the technological infrastructure, make available all the resources, and develop the skills and knowledge, at an affordable fee and flexible enough to meet needs of the future.

ICT training is intended to boost the skills and knowledge of university graduates who despite their specialized education have found themselves without the necessary ICT knowledge needed for the marketplace. It is the conviction of MCIT that the rate of employment in this country will increase dramatically through the acquisition of ICT knowledge and skills. The idea is not in transforming the youth into computer programmers, but in enhancing the young with the various backgrounds and teaching them how to make technology serve their needs and provide solutions.

The Government of Egypt has devised programs in cooperation with numerous training institutes to fully meet the needs of the society. The ICT Training project is comprised of two main programs: Basic Training Program and the Specialized Training Program.

#### **8.1 ICDL**

The International Computer Driver's License (ICDL) is an internationally accredited certificate that is offered at no cost to youth who need to understand ICT to be able to join the workforce.

ICDL Egypt was launched in May 2006 by the Egyptian Ministry of Communications and Information Technology (MCIT) in cooperation with Ministries of Education, Higher Education, and Administrative Development. ICDL Egypt is available at around 223 training and testing centers across the country and is certified by the UNESCO Cairo Office as an official representative of the ECDL Foundation in Ireland.

MCIT is committed to ensuring that the ECDL Foundation quality standards are implemented throughout the project. MCIT offers the ICDL training, material, skill cards and the seven module tests free of charge to all applicants

MCIT in cooperation with Ministries of Education, Higher Education, and Administrative Development is targeting to certify one million Egyptian candidate. MCIT ICDL Program offers an average of 70 training hours for ICDL exams preparation License holders have basic IT knowledge, are able to manage files, use spreadsheets, databases, prepare presentations, and employ technology for effective communication and information use. Total numbers of ICDL certified candidates is 397,292 till 30 August 2010.

http://www.icdlegypt.gov.eg/

#### 8.2 Specialized Training

Specialized training has become available due to a large grant from MCIT, partnerships with multinational IT companies, and strong public private partnerships. MCIT is applying the step-by-step approach when it comes to human resources development in ICT. This approach gives a chance for participants to join the marketplace at any point and feel confident in what they can offer. It also provides enough flexibility for those who are stimulated to keep furthering their knowledge and skills to enroll easily in more advanced and specialized programs. The total number of specialized and professional ICT trainees reached 39.64 thousand by the end of Q2 2010, compared to 37.57 thousand in Q2 2009, representing an annual increase of 5.51%

#### • Super User Program

The Super User Program is a step higher than the Basic Skills Development Program. For a candidate to be eligible in the Super User program they must have successfully obtained ICDL. Upon completion of 300 hours of instruction, participants find new doors of opportunity available to them to find jobs in call centers, maintenance and repair, network management, office administration, or graphics and multimedia.

#### • Professional training Track

Graduates of the Professional Training Program become IT, telecommunications, Networking specialists. Available at over forty training centers across the country, the Professional Training Program offers courses, through teamwork projects, presented through eight private IT companies: ACCIT (Academy Company for Comm. & Information Technology), AMAC, Fujitsu, IBM, Orascom, Raya Academy, Synergy, and YAT The program lasts for nine months. At the end of which participants receive an internationally recognized certificate enabling them to work in a field of specialization such as software development, software engineering quality, web development, or networking. The Professional Training Program is divided into two tracks: The IT Training Program, and The Communications and Networking Program

#### • ITI Programs

The Information Technology Institute (ITI) offers more advanced training programs providing highly specialized and technical knowledge. Some of the programs allow for further expansion of knowledge. Some result in certification in a specialized field and still others culminate in a joint academic degree from both ITI and an internationally renowned university.

ITI offers intensive programs that enhance students' skills to fully obtain exposure in the software development area. Additionally, there are other specialized programs that offer the flexibility in location, timing, frequency, and subject matter. ITI has extended its scope to become an international institute with its hub in Cairo. ITI finds that in this day and age it is inevitable to exchange knowledge and expertise with counterparts in the field from across the world. To make this concept a reality ITI dedicates time, effort, and specialized staff in providing joint programs in cooperation with universities in the UK, Germany, France, and Norway.

## Third: Development of Public Domain Content

#### 1. ICT in Learning

Strengthening the benefits and potential of Information and Communication Technologies (ICT) applications and building capacities in education are key priorities in today's society. Technological advancements made in recent decades have induced dramatic improvements in the quality of education and in the way it is delivered and managed. Computers and Internet-based technologies have become the pivotal drivers for enhancing education in the 21st century. It is now evident that any progress made in the educational sector will positively influence all other sectors of the economy. The role of these technologies in the improvement of the national economy is now fully recognised.

The government of Egypt has given educational reform a high priority on its agenda for the next three years, 2007-2009. Political leaders, employers, and the public are expressing an unprecedented level of concern with the state of education in Egypt. As a consequence, the government is apportioning nearly one-third of its services budget to education, triggering a positive process of change that will impact future generations. Therefore many activities designed to improve economic and social development in Egypt are focused on the development applications of ICT in learning, aiming at the cross-promotion of these dynamic processes.

The projects and programs under the ICT for Learning initiative collectively reflect MCIT's vision to use information and its underlying technologies to further sustainable human development in Egypt and to build an information society capable of absorbing and capitalizing upon the emerging knowledge revolution.

#### 1.1 Smart schools

The Smart Schools Network Project provides schools with the latest ICT capabilities as modern tools for the educational process and management within the school.

These tools include: equipment, networks and software applications, e-learning, modern management systems and high-speed Internet connection, which enable the student and teacher to use computers and the Internet in interactive and distance learning.

Such tools also allow the administration to follow-up on the school staff and call for reports and accurate data as well as support decision-making.

The project contributes to creating community learning centers through opening schools at the non-working hours, on Fridays and on holidays to the public around the school for offering electronic services and computer training courses that would be beneficial to the community. Such project will also help generate skillful workforce qualified to work in both local and international markets. The project aims to contribute to the development of experimental preparatory schools nationwide.

#### 1.2 Egyptian Education Initiative

The EEI was launched as a public-private partnership between the Government of Egypt and the World Economic Forum's ICT community as a progressive model for reforming Egypt's education system.

Building on the established core principles of the national education system, it has become a national project transforming the lives of thousands, irrespective of age, occupation or social level. The EEI is an inclusive model that brings students, parents, teachers, community leaders, government, business and international organizations together, clearly improving the lives of individuals.

This is due in no small part to the efforts made during the program's development – including detailed analysis of learning methods and consultation with international experts – and the rigorous criteria in place for monitoring and evaluation. The EEI seeks to add value to the national education process in new and innovative ways, directly improving the quality of education. Although there are always barriers to change, these are being overcome as all stakeholders concerned recognize the very real benefits of the initiative in their daily lives. A major component of the EEI is increasing access to technology. Private-sector partners are playing a key role in this regard, providing affordable equipments, software and services. Alongside equipping educational establishments with computers and related technology, the adoption of innovative teaching methods and employment of relevant ICT applications and digital content guarantee real and lasting results.

#### 1.3 ICT for Illiteracy

The ICT for Illiteracy Eradication program produces electronic content for teaching Arabic letters and words and elementary mathematics based on the General Authority for Literacy and Adult Education (GALAE) curriculum for illiteracy eradication. The program has adopted a mixture of taught and self-study courses. MCIT established Training of Trainers programs in 15 governorates to serve growing demand for basic literacy training. Most of the training is run at IT Clubs but the CDs are available to all who need them at no charge.

#### 1.4 E-learning Competence Center

A partnership between MCIT and Cisco, the E-Learning Competence Centre (ELCC) aims to develop Egypt's E-Learning industry and lay down the necessary technical, academic and administrative foundation. The center develops E-Learning and lifelong learning curricula, creates technical delivering platforms (Learning Management Systems -LMS) and manages the programs' delivery. Training of trainers, content development, customization of Cisco materials, and development of the physical network of Academies are all coordinated at ELCC. The ELCC also has a Research and Development unit which tackles issues such as interoperability between different platforms and is currently piloting a solution to overcome this problem between two universities. http://www.elcc.gov.eg/

## 1.5 ICT for Micro, Small and Medium Enterprises

ICT for Micro, Small and Medium Enterprises (M/SME)s project was initiated in 2006 in partnership with Microsoft, Cisco and ELCC to provide ICT training programs to M/SMEs and Train of Trainer (ToT) programs to NGOs. The project focuses on three business sectors: agro-business (food production and textile), furniture and handicrafts. The project runs awareness programs to encourage the adoption of ICTs in addition to conducting competitions, creating applications for distribution of information via bi-directional mobile devices and managing a program for the impact assessment of ICT utilization by SMEs.

#### 1.6 Technical schools development

Within the overall Egyptian Educational Initiative, the purpose of this project is to enhance and strengthen the technical education and vocational training using ICT solutions. The targeted beneficiaries are teachers and students at industrial schools, as well as to the wider community surrounding these schools.

In the project 10 vocational schools of 5 years program will be modernized in ICT infrastructure, e-curricula and HR capacity building. Furthermore, an e-learning centre will be empowered to serve all technical schools' students, teachers as well as trainees from surrounding community. The centre will be operated in cooperation with an Italian institution (Don Bosco).

The selected industrial schools will serve as Vocational Community Learning Centres (VCLC), with the purpose of teaching ICT-based courses as well as vocational courses to the community at large. Trainees will become more aware of the benefits of new technologies and improve their ICT skills.

Finally, this pilot project is intended to become a model of technical education and vocational training to be replicated domestically and, possibly, internationally.

## 1.7 Schools Development Initiative (The Hundred Schools Project)

ICT has played a leading role in the past decade in improving educational services in the world. In this context, the First Lady Mrs. Suzanne Mubarak launched the 100 Schools Project, which aims to spread the culture of the ICT usage in the educational process. Such culture will help create a new generation with competitive skills required for keeping pace with the technological and scientific progress.

Putting into force this project depends on the public-private partnership principle between the government and the civil society in a new step to consolidate the role of the civil society in community-based initiatives, including education, health, culture and the positive interaction with the requirements of the surrounding community.

The project objectives involves: offering graduates of schools at all stages from kindergarten to high school, whether technical schools or usual ones, the skills of the 21st

century in addition to the basic computer skills as well as enable them to use ICT. This will help expand their knowledge and develop their research skills. The project aims to facilitate a learning environment that enables the spread of modern leading methods like active learning, collaborative learning and mutual learning. The project enhances the skills of creativity, constructive criticism and teamwork as well. A model for the integration of ICT into the educational process and administration inside the school has been facilitated to realize the desired objectives of the project.

Not only is this model related to the provision of devices, equipment, networks, software programs, applications, high-speed internet and management systems, but also in application programs for different concerned groups.

By doing this, both the student and the teacher will be able to use such techniques in fast learning, interactive learning as well as benefit from the capabilities of self-education and distance learning. Moreover, the project contributed to spreading the idea of providing learning community centers through opening schools for the public during non-working hours and holidays to offer technology services based on the needs of the surrounding community. Such services include computer courses where the available technologies can be utilized for the benefit of surrounding community to create new job opportunities. A total of 247 schools were upgraded in different educational stages (135 in Cairo – 79 in Giza and 33 schools in Luxor).

#### 2. Health

The Government of Egypt and its Ministry of Health have established several e-Health programs to bring better diagnostic and health services to a wider segment of the Egyptian society. MCIT has facilitated the integration of ICT in health services and the provision of medical education to remote or underserved areas of Egypt. The e-health initiative is inspired by pursuing equal opportunities for health services anywhere in Egypt, and expanding medical insurance to all citizens.

#### 2.1 Emergency Medical Call Center and Ambulance Service

MCIT and the Ministry of Health and Population (MoHP) are cooperating to establish an emergency call center for Greater Cairo. The project aims to develop the Emergency Medical Service (EMS) system in the Greater Cairo area and improve the speed and efficiency of its services by providing the Egyptian Ambulance Services Authority with a computerized ambulance dispatch system.

#### 2.2 National Network for citizen Health

The project provides the most recent automated systems to develop central management of treatment by the government, and direct patients to different therapeutic units, such as hospitals and specialized centers in the country.

The project aims to develop quality control and performance evaluation systems to guarantee the delivery of subsidy to those for whom it is intended, and guarantee system

efficiency. It also aims to develop the information systems and databases of the central department for citizen health treatment by the government, and connect all peripheral departments and hospitals through a Virtual Private Network.

#### 2.3 National Healthcare Capacity Building Project

The chief aim of the project is to create a pool of highly qualified and competent healthcare professionals who are capable of designing and implementing health systems and programs. To achieve so, the project provides training to MOHP staff including doctors, nurses, administrative staff and technicians). The training program is divided into three categories: Basic IT Skills, biomedical Awareness and Biomedical Informatics Professional Training. The project will also establish a central unit that links hospitals and keeps medical records, establish an electronic radiology and lab analysis medical records database for patients and transfer and circulate radiation and lab analysis between hospitals and the central unit in Fum El Khalij.

#### 2.4 Women's Mobile Health Unit Project

The national campaign for early detection of breast cancer received a boost in October 2007 when Egypt's First Lady Mrs. Suzanne Mubarak inaugurated the "Women's Mobile Health Unit Project" in Cairo as part of a joint collaboration between the Ministry of Health and Population and MCIT. Egyptian women over the age of 45 can visit the Units for mammography scans for the early discovery of breast cancer. The Units can also measure blood pressure and blood sugar levels.

The national project encompasses a hi-tech communications network, mobile units equipped with advanced medical equipment, fixed units, and a main center in Kasr Al-Aini hospital and a main center in the center of Excellence (CoE) in Fom El Khalij, staffed by specialists, to which data and images from all the units can be sent electronically, via satellites and high-speed lines. The network transmits breast scans to specialized physicians who review the scans and report back to the mobile units where recommended treatment or any medical advice is passed on.

By providing remote diagnosis, the project is expanding the spectrum of health care provision nationwide and saves the time, cost and effort of moving patients to specialized medical centers for examination or follow-up.

#### 2.5 The Suzanne Mubarak Center for Women's Health in Alexandria

This project, executed from 2006 to 2008, facilitated better health services for women in Alexandria by establishing has modern healthcare facilities and administration systems at the Suzanne Mubarak Center for Women's Health. It provided professional and specialized services in women's healthcare, specialized consultations through the telemedicine facilities, and the center created a digital health file for every patient containing personal information, disease history, medicines prescribed, and number of visits, with the records linked to the person's national ID number. A digital library for research was also established at the center, enabling hosting of national and international conferences. The projects' scope also constituted an agreement signing with research university UC Devis for remote medical consultations.

#### 2.6 National Cancer Registry Program

The program utilizes state-of-the-art data mining technologies to extract a variety of health indicators for investigating reasons behind the spread of cancer. As an initial phase, the city of Aswan was selected to be enlisted in the program. A fully equipped data collection center was prepared to be ready to receive all patients' data to be registered using the latest data mining and recording applications. A high-end data transfer application was also developed to transfer patient's data to the National Cancer Archive.

#### 3. ICT For Government

While MCIT led the introduction of e-government in Egypt and the extension of ICT into public services, this responsibility was shifted to the Ministry of State for Administrative Development in 2004. Nonetheless, MCIT remains committed to enhancing the use of ICT on many fronts, including the health sector. Today, as a general mandate, MCIT supports other ministries in their ICT-related advancement programs and is currently acting as the ICT consultancy house for the government. MCIT's activities in this regard include establishing partnernerships with multinational corporations working in ICT through frame agreements and negotiating IT licensing schemes and application packages on behalf of the government.

MCIT has signed 40 protocols with other ministries and their affiliate organizations since 2001 for collaborative work and support, and has worked on a number of initiatives, among them infrastructure and capacity-building projects, to implement these protocols. Following its involvement since 2000 in a number of pilot projects serving various government entities, the ministry is now moving into the implementation of national mega-projects. These include the automation of the Land Registration System, a project that seeks to digitize all land data and maps in Egypt in order to simplify registration procedures.

#### 3.1 National Land Registration System

MCIT has been working with the Ministry of Water Resources and Irrigation and Ministry of Justice on the Agricultural Land Registry. This mega project will enable more efficient settling of ownership disputes and will protect both state and citizens' rights. Also the Land Registry Office and the Egyptian Survey Authority (ESA) are creating simplified automated procedures and services for electronic transfer of ownership of agricultural lands. This project began in 2005 with the digitization of maps and the design of databases for maps and real estate documents, and the integration of both to constitute a database for geographical information.

Other aspects of the project involve setting the one-stop-shop principle for land transactions, establishing a web portal to provide e-services to the public, developing the corporeal registry offices operations and implementing an information network connecting

these offices in cooperation with the Cadastral Mapping Center of the Egyptian Survey Authority.

#### 3.2 Automation of Notarization Offices

Automation of Notarization Offices project, a joint collaboration between MCIT and Ministry of Justice, began with a pilot project in 2004 that automated four offices out of the 500 authentication offices affiliated with the Ministry of Justice and the establishments of the data center. The pilot successfully demonstrated that the reengineered work flow and automation of the authentication cycle improved processing time by 80%.

A total of 50 notarization offices have been automated and linked to the data center. The project's work included establishing a decision support system and data mining center affiliated to the Ministry of Justice in addition to providing training to employees from the Real Estate Registry and Notarization Offices. The automation work of the rest of notarization offices allover Egypt is expected to take place in the project's third phase.

#### 3.3 Prohibited from Transaction System Network

MCIT is cooperating with the Ministry of Justice to establish a centralized database of persons who are prohibited from undertaking real estate transactions for a variety of reasons. The project has established an Information Center and database in the Real Estate Publicity Department in the Ministry of Justice and is currently networked with 30 offices that can issue these prohibitions. The database is also integrated with Notarization Offices and the database of Corporeal Agricultural Land Registry.

#### 3.4 Automation of Chambers of Commerce

Economic activity in Egypt is benefiting from MCIT's efforts to provide better interconnectivity and automation for the Chambers of Commerce and their local branches nationwide. Aside from the infrastructure (PCs – LAN- Internet connectivity) the project is automating the workflow of the Chambers and introducing decision support systems to the Federal Union for Chambers of Commerce. It also provides training for employees in all chambers on how to use the new systems.

#### 3.5 e-Commerce Map for Alexandria Chamber of Commerce

The project comes as part of a cooperation protocol signed in June 2008 with the Alexandria Chamber of Commerce that aims to provide comprehensive and up-to-date geographic data of the chamber's activities by posting traders data on maps and allowing analysis and spatial statistics to help decision makers. The project will also establish a geographic information unit at the Chamber and an integrated geographic database of all the chamber's stakeholders on a map of Alexandria (1:2500). A geographic portal to access the chamber's data will be developed.

#### 3.6 Infrastructure Development of the City of Luxor

Infrastructure Development of the City of Luxor initiative comes after a cooperation protocol signed between Minister of CIT Tarek Kamel and Head of Supreme Council of

Luxor Dr. Samir Farag to develop technological infrastructure projects in the city of Luxor. The step came in the context of a national project adopted by the political leadership to modernize Egypt.

The protocol aimed at improving the city's public services, introducing the Egyptian cultural heritage to tourists, shedding light on various aspects of the city and optimizing coordination between the Supreme Council of Luxor and different ministries in this regards.

The protocol encompasses the implementation of and follow-up on a number of projects including the development of a portal to offer tourists functional and up-to-date information on the city; the development of IT infrastructure at the City's Tourist Information Center, the Suzanne Mubarak Women Center, Mubarak Public Library, Heritage Center in addition to the automation of Luxor's land registration offices and notarization offices.

#### 3.7 National Council for Childhood and Motherhood

Child Emergency Hot Lines are being established, along with development of mobile information centers, the equipping of one classroom schools for girls, and support for illiteracy programs. In 2008, another mobile information center was established to help spread NCCM message allover Egypt and another hotline was created to receive the emergency calls of children with disabilities. Support for illiteracy programs and training in how to use ICT applications like multimedia in teaching has been conducted. Development of the information network at NCCM to support the Child Emergency Hot Line and other objectives of the council was completed. A portal for youth www.yomgedid.com has been developed and published. The information network at the council to support the Child Emergency Hot Line has been developed.

http://www.nccm.org.eg/

#### 3.8 e-Government Applications

Supporting automation and re-engineering processes for e-government, the Ministry of State for Administrative Development (MSAD) is now the lead implementation agency for the e-Government applications and is also responsible for the e-Government Portal. Externally, government services are being made available through the Internet and this development has been under the auspices of MSAD since mid 2005, and virtually all of the government's services are now available online through the MSAD website.

## http://www.egvpt.gov.eg

### 3.9 Central Agency for Public Mobilization and Statistics (CAPMAS)

Other government upgrade projects, that include the development of databases, include a project with the Central Agency for Public Mobilization and Statistics (CAPMAS) to provide a database of industrial establishments and products, for the Administrative Supervisory Authority to update its network and information system <a href="http://www.capmas.gov.eg/">http://www.capmas.gov.eg/</a>

#### 4. e-Safety

The Cyber Peace Initiative was the first program of its kind to be launched in the region uniting between online empowerment, safety and creativity for youth. Established by the Suzanne Mubarak Women's International Peace Movement, the Initiative recognized from day one that it is addressing an issue of global concern, as well as one that enjoys widespread consensus. It acknowledged that its success depends on a solid public private social partnership, and hence the alliance with the International Telecommunication Union, the Egyptian Ministry of Communications and Information Technology, the UN Global Alliance for ICT and development, Microsoft, Cisco. Later, more entities joined including Intel, Child Net International, the Family on Line Safety Institute, IBM, iKeep Safe and others.

The Initiative adopted an ambitious model of peer to peer learning, trusting the influence and enthusiasm of the grass roots, its main work mechanism focuses on youth, parents and educators volunteers who learn, teach, aggregate and articulate the message of empowerment and safety to their communities and outreach to different Egyptian governorates.

The project had also an impactful international and regional presence. Keen to represent the view of the developing world in internet safety, we have introduced emerging knowledge economies' perspective in the ongoing debates for the first time. This effort has been institutionalized by the establishment of the International Telecommunication Union's Working Group on Child protection (WG- CP) on the basis of an Egyptian-Syrian proposal. The group chaired by Egypt and co chaired by the US and Malaysia, has offered a forum for discussion of government and the private sector on the issue of safety. The initiative has also worked closely with reputed entities internationally including: the safer internet program of the EU, children's charities coalition in the UK, the dynamic coalition on child on line safety within the internet governance forum, and many others. Encouraged by such developments, we submitted and adopted an Arab project on child on line protection which was welcome by the Arab Ministers for ICT. The first product of such project was the creation of the Arab internet safety portal AMANAK which avails material in Arabic to all concerned segments.

## Forth: Reaffirming the equitable balance between the interests of rightsholders and the public interests:

### 1. IT Conflict Resolution Committee (CRC)

MCIT has created a quasi-judicial entity, the IT Conflict Resolution Committee (CRC) to resolve conflicts that may arise in the field of communications and information technology between government entities, the public sector, and private corporations. The committee has seven members representing the government, the IT business committees and the information technology chamber and will form subcommittees to provide technical expertise required in conflict resolution.

#### 2. E-signature law

The law established the Information Technology Industry Development Authority (ITIDA), with the objective of encouraging the IT industry and promoting exports of IT products and services. ITIDA has an independent legal status under MCIT.

Looking to the future, Egypt will also be continuing its investment in its most important asset: the large pool of trained graduates. With its 73 million people, 1.2 million high school and 375,000 university graduates annually, Egypt generates a huge supply of young graduates. With the help of its intensive training programs, Egypt is preparing its labor force for the service industry and will focus on labor intensive industries such as Call Centers. Egypt recognizes that business process outsourcing is becoming one of the most important services worldwide and is getting ready to provide the international market with the human resources capacity necessary for providing services to outside parties.

MCIT is also preparing an aggressive program for the build up of technology incubators for small size companies and new young talents. A private fund has been established for this purpose and the new incubators are being hosted at the Smart Village. http://www.itida.gov.eg/En/Pages/home.aspx

#### 3. ITIDA intellectual protection office

One of the priorities for the Ministry of Communication and Information Technology's (MCIT) is to support the development of software industry, while increasing social awareness of intellectual property issues. Part of this objective includes reforming the Copyright Law, which saw a new Intellectual Property Law introduced in June 2002. The Intellectual Property Rights Office (IPR) was established to reinforce these changes and to administer a national copyright system.

Since its conception, there has been an increase in the number of seminars, workshops, and training sessions carried out, signifying a shift in the popular manner of dealing with intellectual property in the country. As a result, Egypt managed to reduce its level of

software piracy to 59% in 2009 according to the seventh annual BSA and IDC Global Software Piracy Study.

The Office guarantees efficient protection to IPR and administers the deposit of computer programs and databases, providing licenses for the legal-reproduction and translation of these for educational purposes. In addition, the IPR Office works with different bodies concerned by intellectual property rights on both national and international levels and is committed to raising awareness and understanding of intellectual property rights among the software community and general public.

Training is a vital part in the education process and ITIDA has conducted advanced training courses with 463 judges representing various courts around the country as well as 618 general prosecutors. The aim of the training was to familiarize them with sound procedures that guarantee law enforcement to its full extent. ITIDA offered additional courses to over 150 law enforcement officers from around Egypt to ensure their full knowledge of the technical aspects related to the application of the law.

ITIDA works closely with the Ministry of Culture to promote the Copyright Law and has subsequently carried out campaigns tailored to increase awareness of IPR and its role in sustaining economic growth and attracting direct foreign investment. The campaigns were designed and carried out in cooperation with various government entities, NGO's such as the Egyptian Center of Information Technology and Intellectual Property Rights (ECIPT), and multinationals, working in same fields as Microsoft and Auto Desk amongst others.

http://www.ecipit.org.eg

#### 4. Consumer Rights Protection Committee (CRPC)

Telecom law no. 10/2003 stipulated the formation of the Consumer Rights Protection Committee to protect the users of telecommunications services in Egypt. The committee starts as an affiliate to the NTRA and it is planes to turn into a non-governmental organization in a coming stage. The NTRA is in fact the first Egyptian authority, with mandate to protect consumers' rights, enhance non-monopolistic polices and free competition. it is within the mandate of the committee to organize conferences and seminars to raise the consumers' awareness, tackle concerns and interests of the consumers in an attempt to solve all related problems.

The committee primarily focuses on guaranteeing that the mechanisms of the market contribute to providing the consumers with the best quality services at affordable prices, it ensure the availability of a market free of all monopolistic polices or any harmful practice and markets with transparency and balance between the main interacting partiers in the market, namely, the government, the service providers and consumers, the committee is in charge as well of enhancing the awareness of the end use regarding his/her rights.

#### 5. Cyber Crime and Data Network Department

The Egyptian Ministry of Interior (MoI) has established the Cyber Crime and Data Networks Department to combat cybercrimes, to coordinate with ISPs and to collaborate with Interpol. The department investigates different types of cybercrime such as destruction of information systems, spy and cyber piracy, spam and identity theft, obscene and offensive content and political cybercrimes. MoI provides the community with a number of ways to receive help and advice as well as the option to report any instance of sexual contact, harmful material or any online infringements either directly to the unit or through the website, www.moiegypt.gov.eg, or the third choice dialing the hotline number 108.

#### 6. The Egyptian Computer Emergency Response Team (EG-CERT)

Launched in April 2009, The Egyptian Computer Emergency Response Team (EG-CERT) was established by MCIT in coordination with the National Telecom Regulatory Authority (NTRA), international organizations and companies. EG-CERT is responsible for dealing with online threats and emergencies. The EG-CERT staff has received training programs to manage cyberspace security in Egypt and easily detect, prevent and respond to online crimes.