



Egypt: Convergence of ICT & Broadcasting

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Summary

The Information Technology and Communications (ICT) industry achieved a 25% growth rate in recent years. The number of fixed lines, mobile, and Internet users are increasing annually. Mobile 3G and 3.5 technologies are being introduced to the market. The Ministry of Communications and Information Technology (MCIT) is focusing on the convergence of ICT and the broadcasting industry, a trend followed in many countries. The merge between ICT and media will result in a number of business opportunities for U.S. firms.

Market demand

The Government of Egypt recognizes that a well-developed ICT platform is the key to achieving high and sustainable economic growth. In October 1999, the Government committed to this ideal by creating the Ministry of Communications and Information Technology (MCIT). MCIT has succeeded in creating a vibrant ICT sector growing at about 25% annually. IT has matured in recent years, and is attracting multinationals looking to expand their presence into new regions. A developed telecommunication infrastructure, an available pool of skilled engineers, and low labor costs, are among the factors that attract foreign investment into Egypt. IT awareness is increasing and most sectors such as banks, oil and gas, and other industries are keen on acquiring state-of-the-art IT technologies.

The telecommunications sector has been going through many positive changes in the last few years. Currently, there are 10.9 million fixed line users with a 7% penetration rate. Also, there are 18.5 million mobile users with a 20% penetration rate; this figure is expected to reach 30% in the next few years. The number of Internet users grew from 300,000 in October 1999 to 6.4 million in January 2007. Recently, about 250,000 users use Asymmetric Digital Subscriber Line (ADSL). In addition to the existing two GSM operators, Mobinil and Vodafone, a third entrant "Eitesalat" will begin operation in May 2007. In 2005/2006, the telecom industry contributed USD 4 billion to the State's budget. This amount came from two sources, one being the proceeds from the privatization of the incumbent operator, Telecom Egypt. The other source being the sum Eitesalat paid for the 3rd mobile license.

Communication Indicators in Egypt

	Unit	Oct 1999	Jan 2006	Dec 2006	Jan 2007	% Rate of Change
Fixed Lines in Operation	Million	4.9	10.4	10.8	10.9	0.85
Mobile Users	Million	.654	13.9	18.0	18.5	2.84
Internet Users	Million	0.3	5.1	6.0	6.4	6.67
International Internet Bandwidth	Gbps	0.02	4432	9996	9373	-6.23
ADSL Users	Thousands		96.1	206.2	216.1	4.78

Source: MCIT

With an active ICT industry, a movement towards convergence with the broadcasting industry is anticipated. Media convergence is the provision of video programming, interactive entertainment, and voice and data services over the same broadband wireless or wire line infrastructure. An example of this is the integration of video, Internet, and mobile telephone services.

Given the importance of media convergence in the Egyptian market, MCIT organized a regional conference, Convergence of ICT & Broadcasting Industry, in May 2006. This was held prior to the World Economic Forum (WEF). The conference covered media, IT and communication from all aspects ranging from content to service delivery and marketing as well as technical transfer, business cases and successful experiences. Abstracts from the materials delivered during the conference are quoted in this market research.

Conference Outcomes:

1. Restructuring of ICT industry through modifying the existing business models and regulations is one of the main necessities for the integration of the different niches and new business opportunities.
2. Technology is imposing quick change especially in media distribution and delivery mechanisms.
3. Business opportunities in Convergence of ICT and Broadcasting Industries are now opening new doors for investors.
4. Egypt can play a leading role in the development of Convergence of ICT and Broadcasting industries in the Middle East region.

Four elements form convergence of ICT and the broadband industry:

- Mobile
- Fixed Lines
- Internet
- Broadcasting

Egypt is ready to embrace convergence of ICT and Broadcasting industries and has a number of opportunities for convergence. These opportunities are in the areas of infrastructure, technology, and service provision. Egypt has several success factors that rank it among the more promising destinations in the field of Convergence of ICT and Broadcasting. These factors are summarized below.

Infrastructure Providers

Egypt provides a huge opportunity for establishing backbones and broadband access networks for customers capable of delivering the bandwidth intensive applications.

Technology Vendors

Egypt could provide an opportunity for developers of new technologies and software related to digital media processing.

Service Providers

Companies working in the area of content aggregation and value added services could benefit from the presence of a common market for converged services in terms of customer preferences and regulatory obligations.

Multimedia convergence is already implemented on a limited scale in the Egyptian market. During the last Cairo ICT Exhibition held in February 2007, Eitesalat, the 3rd GSM operator, and Vodafone launched the 3rd mobile generation system (3G/3.5G) and demonstrated what it offers in terms of mobile TV & video telephony. The 3 and 3.5G systems use a higher level of spectrum, which improves the service quality and provides a faster Internet connection (4 times faster than ADSL). With this technology, mobile sets become an info-entertainment tool to eventually replace computers. Internet Service Providers (ISPs) offer their customers' video services or IPTV to watch media such as movies and sports. Broadband Internet is the platform for the multimedia convergence. Cable TV is not yet available in Egypt, but Fiber-to-the-Home (FTTH) is being introduced into the market and being installed in newly developed cities.

Multimedia convergence is also implemented and studied in several countries such as Sweden, Korea, Taiwan, and the Philippines. In countries where 3G technologies are now utilized instead of terrestrial broadcasting, the trend is to rely on digital broadcasting through the Internet and mobile phones. In some cases users can access a vast number of channels on their mobile phones for a monthly fee. This is a popular option as IPTV and TV channels from the Internet are increasing and nearing 100+ channels. Convergence is also found between fixed lines and mobile phones. This type of convergence is used when a customer can receive mobile calls using the fixed network.

The latest statistics reveal that 90% of Internet users are clustered in Cairo and Alexandria. The Egyptian Government is making extensive efforts to increase accessibility to ADSL services and broaden the base of Internet users in all governorates. The National Telecommunication Regulatory Authority (NTRA) made headway in June 2006 by reducing the prices of ADSL by 40%.

The private sector plays an important role in convergence through the addition of powerful media content in both radio and television. Egypt is on the verge of setting up a new regulatory framework for the broadcasting sector. Arabic content on the Internet is very minimal and makes up less than 1% of all content. Egypt has the skill and capability to build this structure. Egyptian media content, in all categories, is the most in demand in the Middle East region.

The first Egyptian satellite (Nilesat 101) was launched on April 28, 1998. Nilesat 101 was dedicated to TV channels, information, and multi-media transmission. The satellite contained 12 digital transponders each capable for transmitting several TV and radio channels. On August 17, 2000 a second satellite (Nilesat 102) was launched to provide more channels, including eight specialized TV channels in addition to the Egyptian Satellite Channel (ESC). Currently, there are eight terrestrial state-owned broadcast channels in Egypt. The first private channel, "Dream TV", launched in 2001 and in 2002 a second private channel "el-Mehwer TV" was established.

The Egyptian Satellite Co. Nilesat was established in 1996 to operate Direct-To-Home (DTH) Broadcasting Satellites and their associated ground control and up-linking facilities. Nilesat offers digital direct-to-home TV and radio channels on a MPEG2/DVB platform enabled on one network. They deliver more than 355 television & audio channels through up-to-date digital technology and offer a wide variety of Egyptian, Arabic & International channels. Nilesat carries exclusively two of the three pay TV operators for the Arab world and also Pay Per View (PPV) service. Nilesat made the first step in convergence of ICT and Broadcasting when it offered dual play platform for DTH TV and high speed Internet.

There are three requirements for convergence to ensue. First, there must be a regulator for telecom and media. Second, adequate deregulation for the media content must be present. Lastly, there needs to be a widespread use of broadband.

Convergence creates new services and stimulates innovations. It creates many new opportunities for social and economic development (E-Business, E-Learning, E-Health, Outsourcing E-services over long distances and information accessibility).

Best prospects

These are the technologies that are in most demand in the industry:

- 3G (as is implemented by mobile operators)
- ADSL (successfully implemented)
- CATV (new initiative under MCIT)
- Core/Edge Networks (IP – based core infrastructure) (technology already installed by US and Europeans Vendors in Telecom Egypt Network)
- Expansion on Optical – Ethernet capabilities
- FTTH (Fiber to the Home)
Several fiber access architectures have been considered over the years to bring fiber as close as possible to the customers. The architectures varied in terms of the technology used and how close the fiber reached the customer's location-hence the terms FTTH (Fiber-to-the-Home), FTTC (Fiber-to-the-Curb), FTTB (Fiber-to-the-Building), etc. Fiber-to-the Premise or FTTP is a generic terminology that covers all the options. Many market trials were conducted all over the world with various levels of success
- IP/ATM edge network (Installed in Telecom Egypt Network)
- IP-soft switch (Installed in Telecom Egypt Network)
- Triple Play
- Wi-fi (Egypt Telecommunications Master Plan Update has provided a framework for the policy, strategy and deployment of Wi-Fi services in Egypt. Today, private sector has installed many Wi-Fi networks and provided various services. For example, many hotels operating in Egypt and cafes have launched wireless Wi-Fi Internet connection in cooperation with local providers. The service was installed to meet the growing demand from business people and tourists regardless of the direct revenues. While the rapid growth in the Wi-Fi market has been driven primarily by the demands of business travelers and increasingly mobile consumers, the more recent emergence of the IEEE 802.16 standard and the consequent Wi-Max initiative for Fixed Broadband Wireless Access appears to usher in a wider range of applications for broadband wireless communications.)
- Wi-Max (Pilot test under USAID project fund is taking place at Sharm El Sheikh and Luxor to cover a wide area for tourists to access the Internet. Content is needed to provide tourism information, maps, schedule of events, transportation, hotels etc.)

Wi-Max provides new capabilities as well as enhanced applications in the wireless sector. MCIT is interested in a detailed study of Wi-Max (802.16) technology and its suitability and applicability in Egypt. The study should encompass not only the use of Wi-Max as an adjunct to Wi-Fi technology (e.g., as an element of backhaul), but also as an alternative to Wi-fi for broadband wireless access at distances greater than can be supported by Wi-Fi.

Key Suppliers:

The telecom market is dominated by European brands (Nokia, Siemens, Alcatel, Ericsson), American brands (Motorola, HP, Cisco) and Chinese brands (Hwawei, and ZTE).

Prospective Buyers:

Major telecom operators (Telecom Egypt); mobile operators (Mobinil, Vodafone, Eitesalat), ISPs (214 companies); fixed lines, mobile, and Internet users.

Market Entry

Egyptian law requires all foreign companies to retain an Egyptian commercial agent to submit bids on public sector tenders. Foreign firms are not required to have an agent when dealing with the private sector or when sales are financed by USAID. However, most foreign firms have found it advantageous to engage a local agent who could deal with problems related to communications, bureaucratic procedures, local business practices, and marketing.

In many cases, large tenders call for the supply of a wide variety of commodities, all of which a single U.S. firm might not be able to provide. A consortium of U.S. companies, however, can offer a bid package. U.S. firms should be aware that while the purchasing company may simply accept the lowest bid meeting specifications, it may also attempt to bargain with one or more of the lowest bidders to negotiate better terms. Therefore, U.S. firms should be prepared to empower their agents to take measures to increase competitiveness.

Egypt joined the Information Technology Agreement (ITA) of the WTO in April 2003. As of September 2004, there are no customs tariffs on computer/telecom equipment and accessories. The only applicable tax is a 10% sales tax, in addition to 3% miscellaneous taxes. Type approval from NTRA is required for import of network terminal equipment. Local laws do not permit import of used network equipment. Procedure and forms for type approval can be downloaded and submitted online through the Type Approval section of the NTRA website: www.ntra.gov.eg

Market Issues and Obstacles

Working directly with the government is time consuming and bureaucratic, and the tender announcement process is not fully transparent. Identifying a good local agent is key to navigating the system.

U.S. suppliers will need to customize their products to meet Egyptian requirements. Competing with European products means offering cost competitive technologies that are easy to maintain without intensive training and do not require replacement of expensive spare parts.

There are no strict language requirements in Egypt. English is acceptable; Arabic is official.

Trade Events

The annual Cairo ICT Fair was held on February 4-7, 2007. Two important announcements were made at the ICT this year. One was the launch of Eitesalat, Egypt's third mobile network. The other was the demonstration of the 3G/3.5G technologies.

In March 2007, NTRA held a conference on “Regulation in the Era of Convergence” in Sharm el Sheikh, Egypt. The purpose of the conference was to bring together many stakeholders from different countries, including regulators, policy makers, private sector managers, and media representatives, who have similar communications challenges and concerns. Attendees were able to discuss and share experiences and aspirations, and derive creative decisions and solutions to shared issues.

Information on this conference can be found on the following website:

<http://www.ntra.gov.eg/convergence/reader.aspx?PT=3&PID=5d757216-ab99-45a1-8ff2-d0596a641537>

Resources and Key Contacts

Ministry of Communications and Information Technology
Smart Village
Km 28 Cairo/Alex Road, Giza
www.mcit.gov.eg

National Telecommunication Regulatory Authority (NTRA)
Smart Village
Km 28 Cairo/Alex Road, Giza
www.ntra.gov.eg

Telecom Egypt (TE)
26 Ramsis St., Cairo
www.telecomegypt.com.eg

Ministry of Information
Radio and Television Building
Corniche El Nil, Cairo
www.minfo.gov.eg

Egyptian Radio and Television Union (ERTU)
Radio and Television Building
Corniche El Nil, Cairo
<http://www.minfo.gov.eg/ertumaster.htm>

Websites:

Telecom

<http://www.mobinil.com.eg/>
<http://www.vodafone.com.eg/>
<http://www.smart-villages.com/>
<http://www.cite.com.eg/>
<http://www.egypt.gov.eg/arabic/default.asp>
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