

Led by a bold stroke of innovation that demonstrates its strong faith in its future , in September 1999 , the Egyptian government made a decision , whose objective was to facilitate transition into global information society by splitting transport from telecommunication , and conveying communication and information thus forming

"The Ministry of Communication & Information Technology".

His Excellency The President has shown leadership in galvanizing Egypt's scientific and technological communities , and has wisely declared that high-tech growth is now a first priority for the country . Nations are no more identified by roads and reservoirs , but by their position in the global information society . There are a lot of activities to reach this goal such as focusing on removing the red tape in importation / exportation , and on encouraging investment in technology , telecommunications , information technology , and etc.

Dr. Ahmed Nazif has been assigned to lead this ministry in this very critical period for that industry . And from the first day , he declared his goal " To develop the usage of telecommunication & information technology to serve Egypt's objectives towards development. He stressed on the following

- 1. Telecom Regulatory Authority
- 2. Communications & Information Technology master plan for the coming 3 years
- 3. The Human Element

And to create and develop the above mentioned new elements , three working groups were formed . These working groups were attended by all the interested telecommunication society such as members from Telecom Egypt Co. , ITU , interested government bodies , and private sector such as telecom operators & services providers , marketing & consultancy companies , telecommunication products vendors , and finally information technology products & services providers . The three working groups were as follows :-

- 1. Legal working group , which is responsible of shaping the Telecom Act.
- 2. Technical working group , which is responsible of preparing a master plan for the networks in Egypt the coming 3 years .
- 3. Business Development & Services Definition working group.

Firstly, Telecommunication Regulatory Authority (TRA)

In the past, Telecom Egypt – ARENTO previously - used to be a monopoly in two parts. Firstly, to provide all telecom services to Egypt, and secondly, it was the government arm for controlling all the telecommunications business in Egypt. For example, giving licenses to those who wanted to do something related to telecommunications, and for certain equipment to be used in the country such as the frequency sector. For example, if any entity would like to use frequency band, it would need authorization, and this authorization was granted by Telecom Egypt. When Telecom Egypt was established as a company, the monopoly was already starting to disappear. Soon Telecom Egypt will be just a player in the market. When it was converted to a company, the role of providing the service is what remained, the other role was moved to a governmental body called the TRA

(Telecommunications Regulatory Authority), which has now assumed the role of providing licenses to provide services in all the telecommunications business.

Because of the liberalization of telecommunication, it was very important to establish a Telecom Act. Much efforts were done to create a new Act. Many versions have resulted from the collaboration of the private sector companies. And finally the last version had been reached to, and it will be sent to Parliament for further discussion and approval. So hopefully by January or February a Telecommunications Act will be approved, to help arranging and monitoring the activities of the Telecommunication Regulatory Authority. Without this ACT there are many grey areas and uncertainties which discourage people from investing in this sector. All of these points have been addressed in the Act.

a framework for the Telecom Act . The following is Empowering of Telecommunication Regulatory Authority. Licensing national companies for management and operations of networks and service provision . Opening the market and encouraging competition with full transparency. Protecting the rights of the consumer to have an effective service at affordable tariff . Considering the social dimensions of people with private needs and rural areas. Maximizing the economic return of the usage of the frequency spectrum as a natural resource. Organizing the licensing of wired and wireless communication devices. Protecting national security in field of communications . And finally , opening of new markets for communication services from Egypt.

Secondly, Communication & Information Technology (TIC) Plan

In an effort to translate the abstract goal of an "Egyptian Information Society " into a tangible reality , The Ministry has proposed the national Communication & Information Technology plan.Its mission is to develop the use of Telecommunications & Information Technology to serve Egypt's development objectives . Its main goals are to develop Egypt's information society , and to create a strong industry that can contribute positively to job creation and export expansion .

The plan, *The first objective* of which, is The Infrastructure Development, which is to provide reliable, effective and affordable telecommunications services in Egypt and the region by using state of the art technologies to build and operate an advanced national network. *The second objective* is The Human Resource Development, which is to prepare qualified professionals, skilled labor and topnotch graduates capable of developing and using leading-edge technologies for progressing their careers and supporting socio-economic development. *The third objective* is the Business Development, which is to build a strong industry that can fulfil local demand and compete favorably in the international market. *The final objective* is The Information Base Building, which is to build the information infrastructure that can provide accurate, reliable and timely information to support planning and decision making in the government and the private sector.

The cornerstone of the plan is a 1\$ billion , three year investment to establish the most advanced telecommunications network possible – a high speed core backbone necessary in any modern day , information driven society . Such a network will not only ease the transfer of information within Egypt as it links us with the rest of the world , but it is also essential to the establishment of Information Technology - related industries such as software development . Establishing such a network will be accomplished by liberalizing the telecommunications industry , developing and upgrading Telecom Egypt , and enhancing the role of Telecom Regulatory Authority .

The plan also proposes creating "technology incubators ", an effective method of encouraging new companies in a designated industry. The companies are provided financial, administrative, technical, and marketing assistance. The plan aims to establish incubators to accommodate 100 new companies in the immediate future.

"Smart Villages " are at the core of the plan . Within each "Smart Village " the government will provide private business with an enabling environment for any successful venture , namely land and a state of the art , high-tech infrastructure . Development of businesses within the village will be dependent on investment from the private sector . The village will be located near the residential and services centers , and will be built and operated by the private sector .

Thirdly , The human element

The most important investment Egypt is making is an investment in its people . Human resource are a critical component of the Communication & Information Technology industry . Despite of the abundance of human resources in Egypt – represented by university and higher institute graduates – additional specialized training is required in order to compete strongly in international markets . The ministry is collaborating with multinational corporations to develop and implement training programs in all fields of telecommunications targeting all age groups.

Experience has proven that graduates of specialized Information Technology training programs become invaluable to the companies they join in Egypt and abroad. Some graduates even go on to establish new companies, contributing to the growth of the industry. The plan aims to train 5000 young professionals annually in conjunction with several well-known international companies. These young people will soon become the foundation of Egypt's future information society.

Egypt is investing in the future of its youth through the establishment of Information Technology Youth Centers and 21st Century Kids Clubs . Over 200,000 children have already been provided with the proper tools and knowledge needed to enable them to interact efficiently with the computer age . This program will continue and expand at the rate of 200 new centers per year .

As in all great societies, the participation of every age group in any endeavor is essential. For this reason, the plan aims to establish 50 Technology Access Centers annually that will provide communication and information services, directly benefiting all citizens of Egypt.

For example , The Egyptian Ministry of Communications and Information Technology and Cisco Systems , the world-wide leaders in networking for the Internet , signed an agreement to implement a long term program to generate the growing shortage of high-tech skilled engineers in Egypt . The initial target is to have 1000 engineers with the latest skills in high-tech networking available to the flowering Egyptian technology industry within one year . The agreement consists of two main parts : a human resource development program , the objective of which will be the establishment of a number of training academies (regional academies & local academies) . The ultimate goal is to establish the capability in Egypt of hosting the first Cisco Network Training Hub for the Arab and African region . This training hub aims at training the trainers in the region . The second main part of the agreement is the technology planing program .

<u>Telecom Egypt Co.</u>

Telecom Egypt is today a company . It was converted to a joint stock company two years ago . Presently all the shares are owned by the government and parts can be sold to shareholders and that is what going to happen later on this year .

For some services we still have an effective monopoly like fixed line services , however this will not continue forever . We also provide other telecommunication services for fixed lines , like ISDN . We provide now Internet services jointly with several ISPs .

We have a lot of projects underway ; mainly the expansion of the fixed network . One of our main targets is to increase the telephone density in Egypt , 1 million new lines are planned to be added every year . Most of our projects are involved with expanding existing exchanges whilst adding newer ones . Of course we are also interested in expanding our international services . We also have several projects to add new services , like the ISDN , which is currently available . With ISDN we have many services , like video conferencing , for example , that is of very high quality. We are also looking to expand our Internet services . And of course modernizing the equipment is a constant priority ; we still have in some rural areas semi-automatic exchanges , which will be replaced by automatic ones and all the manual exchanges are being replaced for digital ones . Finally Telecom Egypt expects to resume offering mobile telephony services in Egypt in November 2002 as the third mobile network operator in Egypt .

Telecom Egypt strategy aims to protect and enhance its leading position in the Egyptian fixed line telephony services market by rebalancing its tariffs, satisfying excess demand in the Egyptian market with an aggressive network build-out program, and offering improved and new services to its customers. At the same time, the company intends to capitalize on Telecom Egypt's strengths, including its backbone and access networks, to take advantage of the expected growth in the data and Internet markets in Egypt.

The entire evolution of telecommunications in Egypt was initiated by Telecom Egypt, even the mobile phones . That was the first license . Then the network and equipment were sold to MobiNil . We also started the pay phone business in Egypt, then the license was given to two other companies to provide the service in competition with Telecom Egypt . The trend is to open the market . So Telecom Egypt started facing open competition and already has some competition.

For this competition, only from less than a year, a new department has been established dedicated for "*New Services & Marketing* ". Its main responsibility is to propose and implement all the marketing policies for the company. Also to manage all the activities concerning services development, market research, sales (national & international) and customer service.