Arab Republic of Egypt
Ministry of Telecommunication and Information

National Plan for Telecommunication and Information

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Introduction

By the end of the 20th century, the world is witnessing fundamental changes in the political, economic and social systems prevailing since the start of this century. Developing countries are racing to establish each for itself a distinctive presence in a world that is more open and more closer in proximity as political barriers disappear, markets unite and the scope of competition expands. New success factors surface, most importantly quality, accuracy, fast response to society needs, in addition to flexibility and the capability of adjusting to the changes of this era.

Information Technology plays a major role in giving impetus to economic and social development through the provision of information to support decision making in cases of economic and social reform. Information Technology is moreover instrumental in supporting the private sector that carries the burden of increasing investment and creating job opportunities and raising the standard of living for the realization of a prosperous society. Accordingly, both developed and developing countries have focused on the enhancement of the national infrastructure for communication and information for the purpose of building a national industry based on advanced technology and the preparation of generations of youth capable of interacting with this technology and shaping it to serve development. The target is a dynamic society that is characterized by information transparency and speed in decision making, presently referred to as the Global Information society.

His Excellency President Mubarak graciously announced the national project for technological development, which reflects the main concern of the nation with the setup and uses of the telecommunication and information industry to serve development objectives in Egypt. The establishment of a new Ministry for telecommunications and information represents the first practical step towards the implementation of this national project. This took place concurrently with the completion of studies conducted by international consulting houses and businessmen consortiums affiliated with the telecommunications and information sector, which recommended that the implementation of the national plan for telecommunication and information be accelerated, and identified the main features of the plan.

The Ministry of Telecommunication and Information has the honor to present the National Plan for Telecommunication and Information project. The objective of the plan is to translate the national project for technology development into a tangible reality through the setup and implementation of a number of ambitious projects as well as the activation of the necessary actions for the realization of a boost in industry, exports and career opportunities for youth.

Goals:

1. Promotion and development of the Communication and Information industries for the purpose of developing an advanced industry that depends on the thoughts and minds of the Egyptian youth and occupies an advanced position among our industrial exports.
2. Building an information society that can pursue and absorb the huge flow of information and up to date knowledge and optimize its usage.

3. Provision and development of the Communication and Information systems to serve the national issues associated with the reform and growth of the Egyptian economy, and raising the standard of living for the citizen and the family.
4. Provision of the manpower needed for the communication and information sectors.

Work Dimensions:

1. Promotion of the national demand for information and its application.

The local market is the first attraction for building an advanced industry of communication and information technology. The Egyptian companies start by developing manpower and acquiring the expertise and the resources necessary for this industry, so that it can compete in the international market. The governmental demand represents a significant portion of the local market, since building the Egyptian Information society initiates a number of national and sectoral projects in ministries, institutions, governorates. Those projects require the implementation of information systems, databases, communication networks, related services such as training, consultations, technical support and related industries for the production of computers, networks and programs.

Accordingly, it is expected that the government through its different organizations will tender these projects for implementation of by the private sector. That will call for an increase in the governmental investments in the current national plan.

- *1 Accelerating the rate of implementation of the national information projects.*

In the previous plans the government prepared and initiated the implementation of national projects that represent the information infrastructure. The most important project was the national Id project that reflects the information image of the society through the data of citizens, and the vital statistics project that determines the identification of the property of the agricultural land, and information projects in ministries and governorates. These projects need more investments to optimize the benefits that accrue from them. A distinct feature of these projects is the necessity for work to be conducted in more than one ministry, therefore the Ministry of Telecommunication and Information supervises and coordinates implementation among the involved institutions.

- *1 Increasing the rate of investment in information technology in ministries and institutions.*

Each ministry and governmental institution is in charge of tendering a number of projects through the sectoral plan for the development of the information infrastructure, modernization of the work systems and automation of services for the public. This will require an increase in the budget allocated to the information projects in each ministry in the national plan through the following procedures:

- 1 Appointment of an information technology consultant in each ministry.

- •2 Establishment of a projects implementation follow up unit in the ministry of Telecommunication and Information.
- •3 Preparing sectoral plans for information in each ministry.
- •4 Modification of the five year plan for the nation starting from the financial year 2000 / 2001 to increase the investments in information technology.
- •5 Tendering a number of information projects to be carried out by the private sector.

2 - Heading for the world markets in pursuance of a portion of the International demand.

- •1 *Establishment of an Institution for the development of software exports.*

For the purpose of increasing Egypt's portion from the international exports in software, a study that has been prepared by international experts referred to the importance of establishing a specialized institution that works on encouragement, promotion and enhancement of exports in the area of information technology driving towards an increase in international demand for it and the preparation of the required manpower through the following:

- •1 Study the international market in the areas of communication and information and identify the domains in which the Egyptian industries can find an external market.
- •2 Assist the Egyptian companies in obtaining contracts for implementing projects abroad.
- •3 Study the requirements of the national companies and coordinate with the government through the ministry of Telecommunication and Information to overcome the obstacles hindering exports.

- •1 *Establishment of technological incubators*

Technological incubators represent one of the modern tools for developing industry by encouraging youth to enter this industry through the establishment of new companies that are incubated for a limited period of time and providing them with the financial, technical and administrative support in marketing their products. The plan aims to construct incubators that can accommodate 100 new companies simultaneously.

- •1 *Electronic commerce*

It has become imperative that Egypt should join the electronic commerce field, to enable Egyptian companies to conduct business with the international markets involving Egyptian products, and to conduct commercial deals via modern communication channels, which is presently being utilized to increase Egypt's share in international commerce.

Following are requirements for this endeavor:

- Preparation and development of the necessary Egyptian legislations.
- 1 Enhancement of the work flow in financial institutions and the securing of financial deals conducted via the electronic networks.
- 2 Enhancement of the work flow in some governmental institutions such as customs and exports and imports supervisory institution.
- 3 Intensifying the society awareness as to the importance of electronic commerce and carrying out the training programs for the business sector.
- 4 Increasing the capability of the communication network for information transfer to accommodate the growing demand of electronic commerce applications.

- 1 *Establishment of information industry pools*

Technological cities represent one of the effective tools for developing the industry of information technology. They are characterized by the a dense concentration of the communication infrastructure and an integration of the resources needed to serve this industry. Work strategy for the growth of these cities is summarized in the following:

- Selection of locations that are close to densely inhabited and service conglomerates in the new cities.
- Starting with limited areas and expanding gradually.
- The implementation should be carried out by the private sector through companies that are charged with the establishment of the infrastructure, construction, operation and management.

1. **Development of human resources.**

- 1 *Provision of the manpower needed for the communication and information industry*

Human resources are considered the most important component in the communication and information industry. Despite the availability of manpower in Egypt, represented by university and high school graduates, they need however specialized orientation to leverage their capability for distinctive productivity that can compete in the international market.

Applied experiments proved that recipients of specialized orientation programs are the cornerstone for development in companies they worked for in Egypt and abroad. Some of them have even established new companies that contributed in the development of this industry. However the number of people working in this field is still limited with an estimate of 5000 persons. The objective of the plan is to orient 5000 persons yearly with an increase in the productivity per person from 10 to 40 thousand dollars yearly, to achieve an increase in the industry to a targeted 500 million dollars by the year 2002.

- 2 *Orientation of youth and children to join the information age*

The information age is characterized by the effective participation of youth and children from an early age. This contributes to the development of their creative and mental capabilities. It also contributes to the delivery of general information and sciences through modern and attractive channels. This spurred many countries in the world to compete to provide such technological facilities for children and youth. The Egyptian nation adopted a future investment initiative through the establishment of centers and clubs for kids of the twenty first century as well as information technology training centers in the governorates that have trained more than 200 thousand youth and children through the previous years. The ministry of Telecommunication and Information in cooperation with the ministry of youth and social fund, shall expand in establishing information technology training centers by a rate of 200 centers annually, and shall continue at the same time in establishing the 21st century kid clubs in cooperation with the ministry of education and the NGO's.

- 3 *Increasing the society awareness of the information and communication technology*

Conversion into an information society requires the essential participation of all of the Egyptian society sectors. The community information centers for communication and information services perform a main role in enabling all citizens to benefit from technological communication services and information acquisition. These centers are established in cities with emphasis on the less developed areas, so as to contribute to the realization of a step forward in civilization on all levels. The objective of the plan to establish 50 centers annually.

4 - Establishment of alliances with the international industry

One of the main tools for developing the local industry of communication and information will be through the attraction of the international companies to participate in productive and serviceable projects in cooperation with information providers in Egypt. As the Egyptian market presently represents a center for attraction to international companies specially in the communication field, these companies will be better equipped for direct investment in Egypt through the creation of fixed entities such as the production, engineering and training centers. These centers will generate work opportunities for the graduates as well as participate in transferring technology and knowledge and in raising the quality of the local industry. The ministry will work through an open local market to establish alliances between information providers in Egypt and their peers in the international companies through setting up contract regulations that emphasize the necessity of strengthening the Egyptian industry while contracting for large communication and information projects.

5 - Modernization of the communication infrastructure.

The communication network is the backbone of the development of the information society as well as being a main resource for establishing the programming industry. A major development in the communication technology has taken place combining voice, image and information transfer with very high speeds and across long distances. The plan proposes to establish the most modern communication network for information transfer inside and outside Egypt and to link this network to all countries in the world.

This is being accompanied by the liberalization of the communication industry through the development and modernization of the Egyptian company for telecommunication and the activation of the role of the institution of communication regulation in supporting the industry, preventing monopoly, controlling quality of services, and the development of the local and international tariffs.

The regulatory institution will develop an integrated plan for value added services in communication such that, companies will be invited to carry out the responsibility of establishing the required infrastructure and its operation under the supervision of the institution thereby assisting in developing and liberalizing the industry in an environment of free competition for the benefit of stakeholders in the different society sectors.

6 - Establishment of the legislative environment for industry growth.

The industry of communication and information technology is tied to a number of legislations that regulate it and provide the protection for both the creator, the producer and the agency/individual marketing its products and services. One of the most important legislations is the copyright protection as well as the procedures that guarantee its efficient implementation so as to provide protection for the software developers and owners of database distribution licenses.

In addition many countries that compete in the attraction of the industry of communication and information technology, offer relative advantages with regards to taxes and customs. Banks as well give credit facilities appropriate to this industry in view of its high risk, high value-added feature.

To present a total legislative perspective to investors, business, and industry men, the ministry will prepare a project for comprehensive information legislation and a project for communication legislation to keep pace with achievements in the development and liberalization of activities and services, and with the identification of the new government and private sector roles, and the remarkable progress taking place in the technology that drives communication and information sectors.

Expected Yearly Demand

$ Million

Year	Information	Communication	Total
1999	50	500	550
2000	100	600	700
2001	200	750	950
2002	400	1000	1400
2003	800	1300	2100
2004	1200	1600	2800
2005	1800	2000	3800
2006	2400	2400	4800
2007	3200	3200	6400
2008	4000	4000	8000
2009	5000	5000	10000

Proposed Exports

$ Million

Year	Software	Others
1999	15	5
2000	50	10
2001	100	20
2002	200	40
2003	400	80
2004	600	120
2005	900	160
2006	1200	200
2007	1600	250
2008	2000	300
2009	2500	350

Industries and Activities under Development
(By Private Sector)

Software Industry	• 1 Software for commercial and services applications • 2 Software for communication and electronics industry applications • 3 Software for special applications
Consultations Activity	• 1 Information technology consultation's for the governmental organizations • 1 Electronic commerce consultation's fort he banking sector and commercial companies • 1 Communication networks consultation's for new cities and industrial pools
Communication Industry	• 1 Development of telephone exchanges and enhancement of the existing equipment • 1 Raising the capacity of the existing communication networks • 1 Establishment of new information and communication networks in new areas • 1 Establishment of industries for some of the components required in communication networks
Training Activity	• 1 Establishment of new training centers for the graduation of trainers and teachers • 1 Development of the existing training centers • 1 Introduction of the training activity in youth centers and clubs

Industries and Activities under Development
(By Private Sector)

Management and Marketing Activity	• 1 Companies carry out activities for the management of technology for the benefit of others • 2 Specialized companies in international marketing carry out export business activities • 3 Specialized companies organize local and international fairs and conferences
Communication Services Activity	• 1 New services to be offered for the public through private companies according to the B.O.T system • 1 Coverage of new areas with modern communication networks that are established by private companies under the supervision of the institution of communication regulation
Information Services Activity	• 1 Maximization of the role of Internet service providers ISP • 1 Private companies carry out the establishment of various databases and for public access • 1 Linking the local information companies with their peers overseas through private networks that are established through them

Program for Preparation of the Required Manpower
The Expected Career Opportunities

Year	High Skilled Employment Programmers - Designers - Trainers	Average Skilled Employment Data entry – Information specialists
1999	5000	20000
2000	10000	40000
2001	15000	80000
2002	20000	120000
2003	25000	180000
2004	30000	240000
2005	36000	360000
2006	42000	360000
2007	50000	430000
2008	60000	500000
2009	70000	580000

The Required Skills and Sites for Skills Development

Manpower	Training Site
Specialized Professional Graduates (Designers – Programmers – Young leaders) Professional Development	• 1 Information Technology Institute • 2 National Institution for Communication • 3 Universities • 4 International companies that have training centers in Egypt
Graduates with skills in communication and information technology (Data entry personnel– operators – users)	• 1 Training centers in governorates • 2 Youth centers • 3 Training centers attached to ministries and institutions
Children and undergraduates	• 1 Computer labs at schools • 2 Clubs for the 21st century child
Government employees	• 1 Training centers attached to the Ministry of Administrative Development • 1 Training centers in governorates

THE LEGISLATION TO BE AMENDED

The Legislation	Reasons for Amendment
Establishment of an Institution for Development of Software Exports	A new law for the establishment of an institution with participation from the government, which will be managed by the private sector
Establishment of Industry Development Fund	A fund that is contributed to by government and private sector to finance training activities, technology incubators and the marketing of Egyptian products
Venture Capital Fund	Legislation that allows financing of small and medium projects with the promise of innovation and new ideas
Copyright	Amendments in the existing laws in accordance with the international commerce agreements (TRIPS)
Establishment of Technology Valleys or Districts (relative features)	A body of legislation that grants incentives to investors in communication and information industry in particular districts.
Electronic commerce	A body of legislation to regulate commercial transactions across information networks

THE GLOBAL ALLIANCES REQUIRED

Goals	Compile an comprehensive program to attract international companies for: • 1 The investment in productive projects in Egypt in the field of communication and information • 1 Establishment of joint companies with Egyptian investors in the same field • 1 Training and development of local manpower to work for these companies • 1 The availability of local components to replace the import of equipment and software • 1 Increase the number and qualifications of engineers capable of development on par with international standards
Results Expected	Increase the volume of the international presence in the Egyptian market, including: • 1 Addition of investments of one or two international companies in Egypt yearly • 1 Employment of 500 to 1000 Egyptian workers in these companies • 2 Contribute to increasing exports volume from $ 20 to 40 million yearly

PLAN PROJECTS

I - Communication and Information Industry Development projects

1. Project for the development of software exports
2. Project for the establishment of technology districts and incubators for communication and information
3. Project for the promotion of merges with international companies
4. Project for the formation of a legal environment favorable to the growth of the communication and information industry
5. Project for the formation of a suitable investment environment
6. Project for the development of applied research in the communications and information field

II - Human Resources Development Projects

7. Project for the specialized training for graduates (Professional development program)
8. Project for the establishment of youth training centers in the field of information technology (Youth IT Centers)
9. Project for 21st century child clubs
10. Establishment of community centers for communication and information services (High Tech Community Centers)
11. Project for training youth abroad in information technology
12. Project for training government employees on information technology
13. Project for the development of communication and information technology curriculum at the university level project

III - Projects for the Development of Communication Infrastructure

14. Comprehensive project for network development
15. Project to improve performance of the managing organization for communications utilities/services
16. Project for a comprehensive framework for communication services and tariff

IV - Projects for the Development of Information Infrastructure and Increasing Local Demand

A - National Projects Supervised by Ministry
  17. Project for National ID
  18. Project for Vital Statistics
  19. Project for an Information Network for Governmental Services (Government – on-Line)
  20. Project for Electronic commerce
  21. Project for the establishment of a unit for technical support and monitoring of international projects
  22. Project for the development of the National Postal Authority
  23. Project for the establishment of a National Center for the Documentation of Egypt's Cultural and Natural Heritage

B - Sectoral Projects with Follow-up by the Ministry with Various Ministries

- **Ministry of Education**
    - Increase the introduction of computers and Internet in schools
    - Training teachers in information technology
    - Development of educational software

- **Ministry of Interior**
    - Development of Civil Registration Offices
    - Development of Police Stations

- **Ministry of Health**
    - Health Information Network for Citizens
    - Development of Hospital Information Systems

- **Ministry of Justice**
    - Development of Courts of Justice
    - Development of Authentication Offices at Real Estate Registries

- **Ministry of Tourism**
    - National Information and Tourist Services Network

- **Ministry for Local Development**
    - Project for local information development in governorates

- **Ministry of Finance**
  - Project for General Income Taxes Information System
  - Project for Sales Taxes Information System

- **Ministry of Higher Education and Scientific Research**
  - Development of Egyptian Universities Network
  - Development of Research Centers and Institutions Network

Projects Of the National Plan for Telecommunications and information

I . TELECOMMUNICATIONS AND INFORMATION INDUSTRY DEVELOPMENT PROJECTS

Serial No.	Project	Objectives	Execution Period	Responsible Authority
1	Egyptian Software Export Development	- Establishing the Egyptian Software Export Development Organization (ESEDO) - Increasing Software Export as to reach 500 Million Dollars after 5 years	5 years	- Concerned Ministries - Private Sector
2	Establishment of areas and incubators for Communications and Information Technology	- 2-3 new areas annually in the new reclamation areas - incubators accommodating 100 companies simultaneously	5 years	- Ministry of Telecommunications and Information - Ministry of Reclamation and Housing - International companies
3	Encouraging partnership with International companies	- Preparation of a program to attract International companies (incentives, environment, facilities exemptions) - 1-2 international companies annually conduct production and service projects to serve the local and international market	5 years	- Ministry of Telecommunications and Information - Businessmen Associations

I - TELECOMMUNICATIONS AND INFORMATION INDUSTRY DEVELOPMENT PROJECTS (CONT.)

Serial No.	Project	Objectives	Execution Period	Responsible Authority
4	Arranging a legal environment [Establish the legal framework] for the growth of the Telecommunications and Information Industry	- Issuing a unified law for telecommunications - Issuing a unified law for information	2 years	- Ministry of Telecommunications and Information - Specialized Businessmen Associations
5	Establish an investment environment	- Establishing incentives for this industry - Applying Exemptions in the specified areas - Decreasing custom duties and sales taxes	2 years	- Ministry of Telecommunications and Information - Concerned Ministries
6	Developing the Telecommunications and Information Applied Research	- Inviting industry to define the required research fields - Conducting and executing Applied research contracts between Research centers and the acting firms in this field	2 years	- Ministry of Telecommunications and Information - Ministry of state for Scientific Research

II. PROJECTS OF THE HUMAN RESOURCES DEVELOPMENT PLAN

Serial No.	Project	Objectives	Execution Period	Responsible Authority
7	Specialized Training for graduates (Professional Development Program)	- Establishment of the National Institute of Information Technology - Graduation of 5000 graduates annually at the cost of L.E. 20,000 per graduate	5 years	- Ministry of Telecommunications and Information
8	Establishment of Youth IT Centers	- Establishing the first 100 centers before June 2000; each center with a training capacity of 1000 youth simultaneously - Establishing 200 centers Annually, at the cost of L.E. 100,000 per center, to train 200,000 youth annually	3 years	- Ministry of Telecommunications and Information - Ministry of Youth - Social Development Fund - Businessmen
9	Establishment of the 21st Century Child Clubs	- Establishing 20 new centers before June 2000 - Annual Establishment of 100 centers at the cost of L.E. 100,000 per center	3 years	- Ministry of Telecommunications and Information - Information Center - Private Sector

II. HUMAN RESOURCES DEVELOPMENT PLAN PROJECTS (CONT.)

Serial No.	Project	Objectives	Execution Period	Responsible Authority
10	Establishment of High Tech Community Centers	- Annual establishment of 50 centers at the cost of L.E. 500,000 per center	3 years	- Ministry of Telecommunications and Information - Ministry of National Development - Private Sector
11	Training youth abroad on advanced technology	- Annual training of 300 youth at the cost of $ 20,000 per person	3 years	- Ministry of Telecommunications and Information - International companies
12	Information Technology Training for government	- Annual training of 20,000 employee at the cost of L.E. 1000 per person	3 years	- Ministry of Telecommunications and Information - Ministry of Higher Education - Supreme Council of Universities - Egyptian and Foreign companies
13	Updating [develop/modernize] the university curriculum of Telecommunications and Information Technology	- Updating the curriculum of the following selected faculties: Engineering, Science, and Faculty of Computers and information	4 years	- Ministry of Telecommunications and Information - Ministry of Management Development

III. COMMUNICATIONS INFRASTRUCTURE DEVELOPMENT PROJECTS

Serial No.	Project	Objectives	Execution Period	Responsible Authority
14	Integrated Project to update the communications network	- Establishing Network Strategic Plan - Defining an Execution Framework (BOO) [BOOT?] - Requesting bids from the private sector for the implementation and management of the Integrated Network	3 years	- Ministry of Telecommunications and Information - Private Sector Companies
15	Telecommunications Performance Improvement	- Setup the organizational framework and human resources preparation - Establish performance evaluation criteria and the needed quality assurance agencies - Perform trial projects for novel technology and new services [in order to present them]	3 years	- Ministry of Telecommunications and Information - Foreign Expertise
16	Integrated Framework for services and tariffs of communications	- Reduction of information transfer tariff - Reduction of the international communications tariff - Establishing and executing conformance procedures with world trade agreements - Signing international agreements for the benefit of the communications sector in Egypt	3 years	- Ministry of Telecommunications and Information

IV. PROJECTS FOR INFORMATION INFRASTRUCTURE DEVELOPMENT AND INCREASE OF LOCAL DEMAND

A- National Projects under the supervision of the Ministry

Serial No.	Project	Objectives	Execution Period	Responsible Authority
17	National ID	- Proposing projects to be implemented by the Private Sector in the following state agencies to benefit from the National ID project: Taxation, Justice, Social Insurance, Interior, Military, and Health services	5 years	- Ministry of Telecommunications and Information - Ministry of Interior - Private Sector
18	Registration of Real Estate project[al Sigil al ainiy]	- Proposing development projects to each of the following: Real Estate Authority, Survey Authority, Tax Authority	6 years	- Ministry of Justice - Ministry of Works and Water Resources - Ministry of Finance - Private Sector
19	Governmental Services Information Network "Government-on-Line"	- Offering governmental services over the Internet at the rate of 2 new services per year	5 years	- Ministry of Telecommunications and Information in coordination with all the ministries

IV: Projects For The Development Of Information Infrastructure And For The Increase Of Local Demand (Continued)

(A) National Projects to be Overseen by The Ministry [of Telecommunications And Information]

Serial	Project	Objectives	Duration	Responsible [entities]
20	Electronic Commerce	• Establishing plans for the introduction of electronic commerce in Electronic procurement, the banking sector, Customs, and Taxes. • Establishing a plan for the creation of the Egyptian network for electronic commerce • The creation of [entity] for the organization and certification of financial [dealings].	3 years	• Ministry of telecommunications and information • State [entities] concerned with internal and external trade, and tourism • [government run] Industrial and commercial business sector • Banks
21	Creation of technical support and [follow-up] unit for national projects	• The preparation of sectoral plans within each ministry • [] information projects in each ministry and the follow-up of their execution	5 years	• Ministry of telecommunications and information

IV. PROJECTS FOR INFORMATION INFRASTRUCTURE DEVELOPMENT AND INCREASE OF LOCAL DEMAND (CONT.)

A - National Projects under the supervision of the Ministry

Serial No.	Project	Objectives	Execution Period	Responsible Authority
22	Development of The National Post Authority	- Annual Automation of 200 offices	5 years	- Ministry of Telecommunications and Information
23	The National Project for the documentation of Cultural and Natural Heritage	- Establishing a national Plan for the documentation of cultural and Natural Heritage - Establishing a national center for the documentation of cultural and Natural Heritage	3 years	- Ministry of Telecommunications and Information - Ministry of Culture - Supreme Council of Antiquities - Ministries of Environment, Industry, Petroleum, Agriculture and Tourism

IV. PROJECTS FOR INFORMATION STRUCTURE DEVELOPMENT AND INCREASE OF LOCAL DEMAND (CONT.)

B - Sectoral Projects implemented in coordination with different ministries

Ministry	Project	Deliverables
Education	- Expand the introduction of computers and the Internet in schools - Information technology training for teachers - Educational software development	To be arranged in coordination with the other ministries
Ministry of] Interior	- Civil Registration office development - Police stations development	
Ministry of] Health	- Health Information Network for citizens - Development of Hospitals' Information system	
Ministry of] Justice	- Court Development - Real Estate documentation [notary] office development	

IV. PROJECTS FOR INFORMATION INFRASTRUCTURE DEVELOPMENT AND INCREASE OF LOCAL DEMAND (CONT.)

B - Sector Projects implemented in coordination with different ministries

Ministry	Project	Deliverables
Tourism	- Information and Tourist services network	To be arranged in coordination with the other ministries
Local Management	- Local Development for Governorates Information Project	
Finance	- General Income taxes information system project - Sales taxes information system project	
Higher Education and Scientific Research	- Egyptian Universities Network Development - Research centers and institutes network development	

INVESTMENT BALANCE SUMMERY OF THE NATIONAL
TELECOMMUNICATIONS AND INFORMATION [DEVELOPMENT] PLAN

Cost in L.E. 1000

Projects	99/00	00/01	01/02
Information and Export industry development projects	1500	40950	40500
Human resources development projects	15700	195250	195250
Telecommunications infrastructure development projects	3000	18000	28000
development projects for Information infrastructure and the increase of local demand	3750	260000	274000
Total	23950	514200	537750

METHODS OF FUNDING

The investments required for implementing the plan reach L.E. 24 million during the fiscal year 99/2000, L.E. 514 million for the fiscal year 2000/2001, and L.E. 537 million for the fiscal year 2001/2002.

The following sources are expected to fund the investments mentioned above:

The State's Investment Budget
The state provides a portion of the required investments and directs them primarily towards human resources development projects and governmental information technology projects, which participate in increasing the local demand for the benefit of the development of advanced technological industries.

Private Sector
Both the Egyptian Private Sector and the International Private Sector have a principal role in funding the training projects. In addition, they directly invest in the telecommunications infrastructure development via licenses issued from the national telecommunications agency.

The international firms show great willingness to support the local industries through establishing design centers and quality centers, in addition to software production centers and training centers. Reinvesting part of the international companies' revenue in the development of the local industry will become a precondition.

Governmental Funds
The government has established several funds that can participate in the development of the information infrastructure and the local market. Among these funds there is the National ID Fund, the [Real Estate Registration Fund], the Ministry of Justice Court Buildings Fund and other funds of ministries and organizations that can allocate part of its investments for service improvement and raising the efficiency of administrative work.

Private Funds

There are two types of private funding mechanisms that need to be setup for the development of the telecommunications and information technology industry. These are:

- Industry Development Fund: participated in by the Private sector and the government for the sake of establishing the entities needed to support the industry , such as software export development organization, and E-commerce dealings authentication organization. The Industry Development Fund will also participate in [the development of] technological incubators and training programs.

- Venture Capital Funds: participated in by specialized funding organizations according to the mechanisms applied in these funds.

I. TELECOMMUNICATIONS AND INFORMATION INDUSTRY DEVELOPMENT PROJECTS:

1. Egyptian Software Exports Development Project

OBJECTIVES

- Increase in the value of Egyptian software exports to $ 500 million within 5 years
- Open foreign markets for the Egyptian software industry through fixed channels that link the producers in Egypt and these markets
- Marketing the Egyptian expertise in information technology and specially the human expertise in the form of technical support consulting contracts in the Arab region and Africa

COMPONENTS

- Complete survey of the available human resources in the field of software development in addition to assessing the number of those capable of developing software for export
- Precise survey of the amount and type of the current export
- Specification of the short-term Export Plan with the specification of the targeted markets
- Establishment of the Egyptian Software-Export Development Organization and setting up its marketing branches in the targeted countries
- establishing training programs specifically for software marketing
- Encouraging the strategic partnership between the Egyptian and foreign for subcontracting software development in Egypt.
- Participation in specialized exhibitions held abroad to present the Egyptian companies capabilities
- Executing the tax exemption and export motivation pollicies.
- Request support from the international consultancy offices in monitoring [directing] the exporting policies

BENEFICIARY

- The Egyptian companies working in the software development field
- Consultancy offices and the Egyptian expertise in the information technology field

TIME PERIOD

- Establishing the Software Export Development organization during the first year of the plan
- The required amount of export will be fulfilled within 5 years ($ 500 million)

IMPLEMENTATION RESPONSIBILITY

- The Egyptian Private Sector cooperates with the Government to establish the Software Export Development organization that will then implement the project

2. Project for Establishing Areas and Incubators for Telecommunications and Information Technology

OBJECTIVES

- Setting up high Tech Areas to encourage investors to create Communications and Information industries
- Offering benefits for [housing] the Communications and Information Technology industry through positive incentives related to location(Land Price, Services Prices, Customs and Taxes Exemptions)
- Establishing incubators encouraging the youth to establish small companies and help them obtain projects and to market their products for limited periods till they become self-reliant.

COMPONENTS

- Selecting outstanding areas close to the new [cities?]and offering them at low rates to the companies that will develop them
- Private Sector companies will design and implement the advanced infrastructure of the technological areas then market it to the companies working in the Telecommunications and information industries
- Establishing training centers, development centers and centers for industrial services inside the new areas
- Announcing the mechanisms of incubators creation to attract creative youth, and selecting projects to adopt (via either the state or the companies available in the technological areas)

BENEFICIARY

- Young Graduates: job openings at the technological companies and the international companies in the outstanding fields

- Young owners of the outstanding projects: they will be embraced by the large companies

- Production companies: they will achieve investment advantages in an outstanding environment and close to the promising markets

TIME PERIOD
- Establishing the first area during 2000/2001
- Planning for the establishment of 2-3 areas annually, thereafter

EXECUTION RESPONSIBILITY
- Ministry of Telecommunications and Information, in coordination with Ministry of Construction and Housing, will take the responsibility of specifying the areas. Then the Ministry of Telecommunications and Information will tender the project to the companies that will be responsible for developing these areas.
- Ministry of Telecommunications and Information will coordinate with the international companies the adoption of establishing the incubators in the new areas

3. Project [Plan] for Encouraging Partnership with International [Multinational] corporations [firms]

OBJECTIVES
- Encouraging international companies to invest in Egypt and to partner with Egyptian companies working in the fields of communications and information
- Establishing common projects between [linking] international and Egyptian companies to be targeted towards the Egyptian and international markets. [Such projects would aim] to produce software, computer and communications systems, as well as industry-related activities such as training, design, applied research, consulting and technical support.
- Deepen [Extend] [the] local manufacturing [component] in international contractual agreements that are targeted towards investment in Egypt and especially in the field communications and information infrastructure.

COMPONENTS
- Contacting [international] companies to present to them the plan [program] for developing the communications and information industry and offer them the opportunity to participate with Egyptian companies in implementation of the plan.
- Establishing technology transfer as an essential component of all contracts that are [established] to implement Egyptian communications and information infrastructure projects.
- Attracting [convincing] international corporations to setup training and production centers in Egypt by establishing relative merit systems and in return for [granting them] access to the Egyptian marketplace.
- Agreeing with international corporations to partner with Egyptian companies to create new markets in the Arab region, and Africa; considering that Egypt is the [natural] entrance to those regions.
- Encouraging partnerships between Egyptian and South East Asian companies to enter into [invade] the European markets using the system of export quotas.

BENEFICIARIES
- Egyptian companies working in the field of commutations and information technology.

DURATION [TIMEFRAME]
- Establishing successful partnership agreements with a rate not less than 5 agreements per year

EXECUTION/IMPLEMENTATION [RESPONSIBILITY]
- Ministry of communications and information in coordination with specialized businessmen associations.

4. Project [Plan] for the creation of the suitable legal framework for the growth of the communications and information industry.

OBJECTIVES
- Developing the legal framework so that it is inline the great progress in communications and information technology and what is occurring in service liberalization to meet the challenges of globalization.
- Developing and empowering intellectual property laws as a main motivation for the development of industries that depend on creativity, such as software systems and databases.
- The creation of [establishing] merit systems for the commutation and information industry to help attract investments and increase [national/local] competitive power in internatioanl markets

COMPONENTS
- Surveying the laws and legislations concerned with communications and information.
- Studying [researching] the required legislative modifications and additions.
- Preparing laws and legislations projects [proposals]
- Issuing a unified commutations law (Telecom Act)
- Issuing a unified information [informatics?] law.

BENEFICIARIES
- Companies working in the field of commutations and information.
- Governmental agencies that deal with commutations and information sector.

DURATION [TIMEFRAME]
- It is expected to issue the modifications that are associated with ministerial decrees within the first six months.
- Minor modifications in the laws during the current Peoples Assembly session
- Issuing New Telecommunications and Information laws during next year's sessions of the peoples' assembly..

Execution Responsibility
- Ministry of Telecommunications and Information in coordination with the legal consulting offices and specialized businessmen associations

- Investment Environment Development Project

OBJECTIVES
- •1 Increasing the volume of Egyptian and international investment in communication and information industry to reach L.E. 2 billion within five years.
- •2 Increasing the competitiveness of the Egyptian industry in the international markets by encouraging the investments that target exporting to international markets.

COMPONENTS
- •1 Proposing the necessary legislation and regulations that wold encourage the Egyptian and foreign investors in the field of IT.
- •2 Providing the necessary information about the Egyptian market as far as the availability of the skilled labor and the compatibility between the domestic needs and the needs of the Arab markets.
- •3 Establishing the executive framework for the cooperation between the investors, the Egyptian banks, and the financing funds to facilitate financing the technology industries.

THE RECIPIENTS
The Egyptian companies working in the field of IT.

TIMEFRAME
Preparing the set of proposed incentives and implementing them by June 2000.

RESPONSIBILITY OF EXECUTION
The Ministry of Communication and information in coordination with the concerned ministries after obtaining the approval of the Cabinet for the proposed incentive program.

Developing the applied research for communication and information project

OBJECTIVES

•1 Activating the role of the national research institutions in supporting technological advancement through applied research with concrete results.

•2 Linking between the research institutions and the companies working in the field of communication and information through contract that would lead to developing applied research and solving the problems of the industry.

•3 Deepening the concept of applied scientific research to serve the industry and to urge the researchers to market their research capabilities to obtain good contracts as an economic basis for growth and continuity.

COMPONENTS

•1 Making a list of the research entities that could conduct applied research to serve the communication and information sector.

•2 Determining the most important research projects needed by the sector in coordination with the concerned entities and the private sector.

•3 Precise description of the research projects and inviting the concerned companies to foster these projects through contracts between each company and one of the specialized research institutions.

•4 Following up the execution of the projects and evaluating the experience with a view of applying it at a large scale and the establishment of mechanisms to market the activities of the applied research.

RECIPIENTS

•1 Research institutions specialized in information and communications.

•2 Companies working in the field of information and communication technology.

TIMEFRAME

•1 Planning for implementing the projects by July 1st 2000 with an implementation period ranging between 6 months and a year.

RESPONSIBILITY

•1 The Ministry of Communication and Information in coordination with the Ministry of State for Scientific Research.

II : HUMAN RESOURCE DEVELOPMENT PROJECTS

- Professional Development Program

OBJECTIVES

•1 Providing good employment opportunities for the youth outside the government sector through developing and upgrading the new graduates' skills and qualifications in the field of computers and IT.

•2 Providing the specialized skilled labor to satisfy the needs of the private sector companies in support of the commination and information industry.

•3 Encouraging the private sector to invest in the field of training and establishing specialized institutes to participate in increasing the human resources for this sector.

COMPONENTS

•1 Establishing the National Institute for Information Technology.

•2 Determining the specialized training programs needed by the Information Technology.

•3 Agreeing with the international companies to support this program financially and technically.

•4 Tendering the training programs for implementation by the private sector.

RECIPIENTS

•1 New graduates

•2 IT companies

TIMEFRAME

•1 The project aims at training 5000 specialists annually in the field of IT.

RESPONSIBILITY

•1 The Ministry of Communication and Information shall supervise the implementation of the training programs through the specialized national institutes, universities, and training centers of the private sector companies.

- ***- Youth IT Centers***

OBJECTIVES

•1 Preparing youth cadres and polishing their skills in using IT.

•2 Using the potentialities of the youth in using IT in youth projects to develop their community and their regional environment.

•3 Preparing youth technical cadres at the highest level as a basis for the national project for technological development.

•4 Linking the Egyptian youth to the international information resources to raise the standard of learning and education.

•5 Increasing the Egyptian youth awareness of the IT importance.

•6 Linking the Egyptian youth with their international counterparts to exchange experience and culture.

COMPONENTS

•1 Equipping the Egyptian youth centers with the modern technology in IT.

•2 Establishing specialized centers to train the youth and increase their skills in IT while acquiring and providing the necessary systems and equipment to operate the youth centers.

•3 Developing the courses and regulatory operating procedures for these centers and also the economic operation basis to guarantee their continuous development.

•4 Developing the training material and programs for these centers according to the international standards.

•5 Preparing and qualifying those responsible for operating these centers through the trainers' training programs.

RECIPIENTS

•1 Egyptian youth using the youth centers all over the country.

TIMEFRAME

•1 Three years as of 1999/2000.

RESPONSIBILITY

•1 Communication and Information Ministry in cooperation with the Ministry of Youth, the Social find and the business community.

- Century 21 Kid Clubs Projects

OBJECTIVES

- 1 Participating in using computer and communication technology to achieve a quantum leap in the quality of preparing the Egyptian kids for the 21st century.
- 2 Developing the innovation aspects for possessed by the kids and the youth and giving the gifted and talented the opportunity to polish and nurture their skills.
- 3 Encouraging the self-initiatives of the private sector and the Egyptian community at large to take part in preparing a highly skilled new generation.
- 4 Opening the Egyptian kids to the world cultures to make friends and exchange experience
- 5 Providing the Egyptian kids with the sources of information through linkage with the international information resources to become a basis for learning and education.

COMPONENTS

- 1 Establishing The 21st century kid clubs and equipping them with the modern IT technology.
- 2 Providing the technological and information infrastructure through building the 21st century kid centers and clubs.
- 3 Providing training courses and programs in cooperation with international institutions.
- 4 Linking these clubs and centers with the Internet and increasing the number of the Egyptian kids web pages.
- 5 Fostering local and international competitions to encourage the kids to excel in using IT.

RECIPIENTS

- 1 The Egyptian kids.

TIMEFRAME

- 1 Three years as of 1999/2000.

RESPONSIBILITY

- 1 Ministry of Communication and Information in coordination with the Ministry of Education, IDSC, NGO's, and the private sector.

- Establishing High tech Community Centers

OBJECTIVES

• 1 Urging and encouraging the community to use the internet and information superhighways in the various fields for economic, social and cultural development (tourism, industry, commerce, education, health, environment, legislation …)

• 2 Providing Internet services and linking the remote areas with the Internet and linking the users with the international information sources.

• 3 Spreading awareness among the specialists and the medium and large-scale industries about the importance of using IT.

• 4 Supporting and developing e-trade, remote education in all the community sectors.

• 5 Providing quality employment opportunities for the youth through new aspects in IT.

• 6 Developing and spreading the use of IT.

COMPONENTS

• 1 Field surveys to determine the community needs in many governorates and also determining the necessary training programs.

• 2 Studying and analyzing international and local models for high tech community centers to benefit from previous experience.

• 3 Establishing community centers and equipping them with the state of the art IT.

• 4 Establishing specialized High tech community centers in the fields of e-trade, and remote education and medical care.

• 5 Organizing meetings and workshops to encourage the community use of IT.

RECIPIENTS

• 6 The people at large.

• 7 The specialists in various sectorial fields such as education, medicine and trade.

• 8

TIMEFRAME

• 1 Three years as of 1999/2000.

RESPONSIBILITY

• 1 Ministry of Communication and Information in cooperation with the Ministry of Local Development and the private sector companies working in the field of providing communication and information services.

Training the youth abroad for using high technology.

OBJECTIVES

•1 Preparing a generation of specialized youth fully aware of the technological state of the art.

•2 Introducing the Egyptian youth to the modern management and operation systems at the international institutions.

•3 Transferring Knowledge and technology as a result of the return of the internationally trained youth and their training of other youth in Egypt.

•4 Developing youth leaderships to represent the second and the third tiers and managing the future projects in the government and private sector.

COMPONENTS

•1 Agreements with international companies to provide training opportunities at the production and service locations.

•2 Choosing the candidates.

•3 Implementing training programs for a period ranging between 6 months and a year.

•4 Following up the trainees after their return and employing them at the national projects or the private sector companies.

•5 Developing programs to use the trained youth in training other youth in Egypt.

TIMEFRAME

•1 Three years as of 1999/2000.

RESPONSIBILITY

•1 Ministry of Communication and Information in coordination with the international companies operating in Egypt.

Developing the university education content for IT

OBJECTIVES
- 1 Raising the standard of the university graduates specialized in IT up to the international level.
- 2 Amending the university curricula to keep pace with the on going development in IT.
- 3 Linking between the curricula and the labor market needs as specified by the companies working in the production of IT.

COMPONENTS
- 1 Choosing a group of specialized colleges including the colleges of engineering, science, and computer science to implement the first phase of the project.
- 2 Analyzing the curricula in the colleges and comparing them with those at the technologically advanced countries.
- 3 Determining the labor needs for developing and producing IT
- 4 Cooperation with the international companies producing technology to revise the required developments in the university curricula.
- 5 Developing proposals for curricula amendments and submitting them to the Supreme Council for Universities for study and approval.
- 6 Gradual use of the new curricula, evaluating the results and wide application in the similar colleges at all the Egyptian universities.

RECIPIENTS
- 1 University IT colleges
- 2 The labor market represented in the companies that will employ the graduates.

TIMEFRAME
- 1 The curricula shall be developed gradually starting from the first years till the final years over a period of four years.

RESPONSIBILITY
- 1 The Ministry of Communication and Information in cooperation with the Ministry of Higher Education, The Supreme Council for Universities as well s the Egyptian and Foreign companies.

Government employees training project

OBJECTIVES

•1 Providing the trained and skilled labor on using computers and IT to the government to keep pace with the development of the administrative and technical developments.

•2 Raising the ability of the government employees in dealing with the modern information systems and databases.

•3 Raising the performance level of the government services through giving the government employees the chance to deal wit the modern systems.

COMPONENTS

•1 Planning training programs for the government employees including the necessary programs for administrative and technical support, accounting, and information systems.

•2 Listing the employees and nominating the trainees from each department.

•3 Developing the implementation plans.

•4 Determining the training centers.

•5 Tendering the project for implementation by the private sector.

RECIPIENTS

•1 All government departments and Ministries.

TIMEFRAME

•1 Three years as of 1999/2000.

RESPONSIBILITY

•1 Ministry of Communication and Information in coordination with the Ministry of Local development

THREE: DEVELOPING COMMUNICATION INFRASTRUCTURE

- ### *Integrated project for developing communication network.*

OBJECTIVES

•1 Developing the communication infrastructure in Egypt through an integrated network.

•2 Establishing a network capable of absorbing the modern technological changes most important of which is the information superhighway.

COMPONENTS

•1 Developing a strategically and technical plan for the integrated communication network in Egypt.

•2 Developing the technical specifications for the integrated communication network in Egypt according to the latest international specifications.

•3 Determining the implementation framework to offer the integrated network projects for implementation by the private sector.

•4 Developing an integrated framework for the technology transfer in the field of IT.

RECIPIENTS

- Business sector both private and public.
- Government departments
- Education and scientific research sector
- Regional and international institutions.
- People at large.

15. Project for the development of the performance of telecommunications regulatory authority

OBJECTIVES
- The development and liberalization of the telecommunications sector in Egypt through increasing and enabling the role of the Egyptian private sector by increasing competition
- Maintaining an outstanding service performance level for telecommunications services in accordance with international standards
- Establishing the necessary controls to preserve the rights of the end user in receiving an outstanding service with reasonable prices
- Opening new fields through new technologies in the fields of telecommunications and networks

COMPONENTS
- Establishing the organizational framework for the development of the telecommunications regulatory authority and enabling its role in the various work areas
- Studying and setting the standards fir performance evaluation and quality control in accordance with international levels
- Acquiring and operating the necessary systems for quality monitoring and performance assessment
- The preparation and development of the technical human resources for systems operations and quality control
- Implementing experimental high-tech projects in preparation for tendering them to beneficiaries
- Enabling the role of telecommunications regulatory authority is considered as the basis for establishing a new national industry for network operations by the Egyptian private sector and to protect end users' rights in obtaining outstanding services in accordance with international standards and with reasonable prices

BENEFICIARIES
- Citizens who use telecommunications service
- Egyptian private sector telecommunications companies
- Egypt telecom

DURATION
- 3 years as off 1999/2000

IMPLEMENTATION RESPONSIBILITY
- The Ministry of telecommunications and information in coordination with workgroups formed from businessmen, local and foreign expertise

16 - Project for the Establishment of the General Integrated Framework for Telecommunication Services and Tariffs

OBJECTIVES
- Initiate and support new national industries in the field of operation and
- management of Telecommunications and Information Networks
- Open new opportunities in Egyptian Private Sector in the field of local and
- regional telecommunication services.
- Create an Egyptian competitive edge on both the local and regional scale in
- the fields of telecommunication.
- Global Technology initiative to keep pace with latest Telecommunications
- services.
- Maintain social aspects in necessary telecommunication services and make it
- available to large sectors and segments of the society.
- Guarantee conformation with universal and international agreements, and
- maintain the pioneering role of Egypt in this field.

COMPONENTS
- Provide a complete framework for communication tariff, both locally and internationally taking into account social factors.
- Plan and execute a plan to open new market and create competitive advantages for Egyptian private sector companies in telecommunication services field both locally and regionally.
- Provide a complete framework for new services in the telecommunications domain and create a new industry for operating and managing telecommunication networks.
- Provide and take necessary procedures to conform to international agreements in the telecommunications and commerce fields.

BENEFICIARY
- Egyptian Citizens as end-users of telecommunication services.
- Egyptian Private Sector
- Egyptian Telecommunications Company

DURATION
- 3 years

EXECUTION RESPONSIBILITY
- Ministry of Telecommunications and Information in coordination with business groups consisting of businessmen, local and foreign experts.

17 - National ID Project

OBJECTIVES
- Protect investments and progress that has been achieved in the project by using latest automation techniques for operations, technical and management support.
- Drive the implementation of the project such that all citizens would have a national ID within the next 3 years.
- Maximize benefit from the National ID project by implementing developmental projects at the ministries and institutions that benefited from the project.

COMPONENTS
- Establish a company with contributions from the national organizations that manage the technical aspects of the National ID project
- Plan and implement developmental projects for beneficiaries.
- Interconnect all organizations that benefit by using the National ID system.
- Invite the private sector to benefit from the National ID project and the new ID technology.

BENEFICIARY
- Egyptian Citizens
- Ministries and Organizations (Interior, social security, justice, health, Finance, Education, Planning, Labor Force, Administration Development
- Private Sector (Companies, Banks, Clubs …)

DURATION
- 3 years starting from 1999/2000

EXECUTION RESPONSIBILITY
- Ministry of Telecommunication and Information in coordination with Ministry of Interior and the rest of the involved ministries to propose and plan the projects. Implementation will be carried out by private sector companies, and, after completion of the project, operation will be handled by a company created for this purpose.

18 – Project for Vital Records

OBJECTIVES
- Present a clear picture of private ownership by citizens and state owned property
- Protect the rights of government to real estate taxes
- Ensure accuracy and security of information
- Protect information from loss
- Simplify and speed up the registration and land ownership procedures in Egypt.
- Coordination between organizations that deal with land ownership information in Egypt.

COMPONENTS
- Increase the ability of the Egyptian Survey Authority to automate map records that show land ownership boundaries.
- Build an integrated Information System for agricultural lands coupled with ownership records.
- Enhance Land Registries, enabling them to provide high-quality services to the public
- Establish links between real estate taxation registries and a land ownership database to improve efficiency of tax collection.

BENEFICIARY
- Business Investment sector (land usage)
- Local Authorities (State properties)
- Citizens dealing with governmental institutions concerned with ownership registration.

DURATION
- 6 years starting from 1999/2000.

EXECUTION RESPONSIBILITY
- Ministry of Justice (Deeds Registry and Notary Authority), Ministry of Public Works and Water Resources (Survey Authority), Ministry of Finance (Real Estate Taxes Authority), in coordination with Ministry of Telecommunications and Information to supervise the technical aspects of the project, on condition that the implementation is carried out by the private sector.

19 - Project for Governmental Information Services Network

OBJECTIVES
- Facilitate communication and cooperation between the various governmental sectors, in addition to all parties that interact with these sectors including private citizens, private organizations and civil associations.
- Expand usage of Information and Telecommunications networks in various governmental institutions, while improving the level and efficiency of such usage.
- Increase transparency in dealing with governmental institutions, and provide information and data for the public in general, and the private sectors specifically, in order to facilitate dealings with those institutions.
- Simplify procedures, especially those that involve several governmental institutions, such as licensing procedures, the establishment and operation of companies, private projects, and others.
- Reduce effort, time and money costs by expanding the domain in which technological means are applied for the interchange and storage of files and forms in governmental institutions.

COMPONENTS
- Plan and execute a governmental project that implements electronic data interchange and storage using telecommunications and information networks (Intranets).
- Plan and execute a governmental project to expand the application of electronic forms and their interchange between the different governmental institutions, in addition to dealings with the private sector, or the typical citizen.
- Plan and execute a project to develop a complete Internet site that accesses different governmental institutions and enables interaction with them. (One-Stop or Single Window Government).

BENEFICAIRY
- Governmental Organizations and Agencies
- The Private Sector
- Individuals

DURATION
- 3 years starting from 1999/2000.

EXECUTION RESPONSIBILITY
- Ministry of Telecommunications and Information in coordination with all other ministries.

20 - Electronic Commerce Project

OBJECTIVES
- Expand the application of e-commerce in the governmental sectors and in private and public businesses.
- Increase awareness on the importance of electronic commerce among the various end-users.
- Increase national income through providing the necessary subsidies to the business sector in the electronic business field.
- Position Egypt as a pioneer on the local, regional and international levels in the electronic business field.

COMPONENTS
- Establish an organization to organize and authorize electronic interchange (Certificate Authority) responsible for enrollment, reform of users (individuals and institutions), supervision and reform of security, confidentiality and privacy measures, copyright protection in information and telecommunication networks, and finally the reform of quality aspects concerning electronic operations, systems and services involving information networks and electronic commerce systems.
- Plan and execute a governmental project to expand the application of electronic commerce systems in custom and tax dealings.
- Plan and execute a governmental project that uses electronic commerce in governmental purchasing, tenders, and any financial issues related to both.
- Plan and execute a joint public / private project that implements the application of electronic commerce in the banking and financial dealings sector.
- Plan and execute a joint project with the Ministry of Economy and Foreign Commerce, investor associations and other organizations involved in Foreign Trade to construct an Egyptian network for electronic commerce.
- Organize several workshops on Electronic Commerce.

BENEFICIARIES
- Business owners in the trade, industry, agriculture, tourism and especially those working in the domain of foreign commerce.
- Banking Sector and Banks
- Individuals
- Ministries of Economy, Foreign Commerce, Finance, and Commerce.

DURATION
- 3 years starting from 1999/2000

EXECUTION RESPONSIBILITY
- Ministry of Telecommunications and Information in coordination with state institutions involved in local and foreign business, tourism, and industrial, business and bank sectors.

21 - Project for the establishment of a Technical Support/ Project Supervision Unit at the Ministry of Telecommunications and Information

OBJECTIVES

- Supervise the execution of the national program to promote information and telecommunications industry.
- Coordinate between participating institutions in the program to ensure integration between output of the projects, especially projects with participating institutions from different ministries.
- Provide technical support and consultation services when the project documentation, execution plans, and specifications that are sent to private sector are prepared, and upon the delivery of the information system, database and network at the end of each project.
- Track the latest state-of-the-art technologies worldwide in the information and telecommunication field, and establish a framework for customizing and transferring these technologies to Egypt.

COMPONENTS

- Establish a unit of local experts specializing in the telecommunications and information technologies, attached to the secretariat of the Ministry of Telecommunications and Information, providing technical, administrative and financial capabilities to fulfill the role of the unit in realizing the goals of the national plan for telecommunications and information.
- Build communication channels between the unit and the participating ministries in the national plan for the revision of project documents, schedules and required financing.
- Coordination between financing institutions (Ministry of Planning – Ministry of Finance – Ministry of International Cooperation – Banks – Public and Private funds – International and National Business Sector) to ensure the required financing for all projects included in the plan.
- Preparation of periodic reports for follow-up on project implementation in coordination with the implementing companies for the projects, and the beneficiaries.
- Continuous enhancement of the plan, to include new projects and to modify it according current implementation status and milestones.

DURATION

The unit will be operational during the period of implementation of the National Plan for Telecommunications and Information.

BENEFICIARIES

- Telecommunications and Information Sector in Egypt, including government and business sectors.

EXECUTION RESPONSIBILITY

Ministry of Telecommunications and Information.

22 - Project for the Enhancement of National Postal Authority

OBJECTIVES
- Develop and improve the quality of services of the national mail system.
- Simplify the procedures required in dealing with the National Postal Authority Offices.
- Increase the income of the National Postal Authority by introducing new services.

COMPONENTS
- Establish a general framework to automate and enhance post offices at the rate of 200 offices yearly
- Introduce new services based on telecommunications and information technology
- Develop an electronic network that interconnects the post offices.
- Connect the Egyptian postal services network to other international postal networks.
- Set a general framework to simplify post office services in dealings with the public.

BENEFICIARY
- Citizens who deal with Post Offices

DURATION
- Develop and Enhance 200 Post Offices yearly starting from 1999/2000

EXECUTION RESPONSIBILITY
- National Postal Authority by requesting proposals from companies that are specialized in this domain.

23 - *Establish a National Center to Document Cultural and Natural Heritage*

OBJECTIVES
- Document the Egyptian Cultural Heritage with its materialistic and moral aspects, as well as document natural reserves and environmental areas to ensure an accurate scientific tally for them.
- Establish a national plan to execute this project using state of the art technologies (in coordination with international and local scientific organizations specialized in this domain).
- Increase public awareness of this heritage through media coverage and electronic publishing on different components of this heritage, both geographically and historically.
- Train a workforce in the specialty of Culture and Natural Heritage documentation.

COMPONENTS
- Establish a specialized center on an international scale in the documentation of the Egyptian Culture and Natural Heritage.
- Plan and execute a national plan to tally and document the Egyptian culture to the highest level of accuracy.
- Implement the Map of Ancient Egypt project, with its different levels, on a Geographic Information System (GIS).
- Implement the Map of Egypt's Natural Heritage project on GIS.
- Continue documentation of Museum holdings of all types, including ancient, fine and ethnic arts.
- Establish a media center for increasing awareness of Egypt's Cultural Heritage
- Establish a training center that delivers training on how to use technology in documenting and preserving heritage.

BENEFICIARY
- Governmental Institutions, and Ministries of Culture, Tourism, and Environment.
- Scientific research institutions both local and international (High Council of Antiquities, Scholarships, both Egyptian and foreign, International Antiquities Organization, Environmental Organizations)
- Private Sector (encourage investment in environmental and cultural sectors)

DURATION

3 years starting from 1999/2000

EXECUTION RESPONSIBILITY

- Ministry of Telecommunications and Information in coordination with Ministry of Culture, Supreme Council for Antiquities, and Ministries concerned with natural heritage such as the Ministry of Environment, Ministry of Industry and Petroleum and Ministry of Tourism.