CHAPTER 8
BASIC SERVICES OF INTERNET

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Editor

PART THREE

NETWORKS, SERVICES AND

APPLICATIONS OF

THE INFORMATION

SUPER-HIGHWAY

Periodic Checks:

- Periodic checks are necessary to discover any damage or errors in the operations.

Responsibility Difficulties:

The difficulties which are based on responsibility are as follows:

- Communication system responsibility.

- Software responsibility.

- Hardware responsibility.

- Firmware responsibility.

- Operation responsibility.

- Reports responsibility.

- Information security.

B- Using integrated systems.

G- Using unique DBs.

D- Saving and retrieving information through networks (Local-National-International) import & Export (information, knowledges).

Then, the previous points need the following requirements:

** Budget

** Time

** Effort

** Responsible entity

** Co-ordination

** H / W, S / W procurement

** Applications

** Follow-up & Feed Back operations

** Egyptian DBs (In English & Arabic).

The maintainance requirements for the Egyptian computer networks are:

Maintenance achieves the continuity of computer networks and their reliability.

Documentation requirement:

Documentation for computer networks in the fields of cables pathes, components, protocols, user software, user applications, DBs files items, kinds of data / information reports and other outputs are useful to be maintained and developed through the computer networks.

How to pave the Egyptian Information Super-Highway?

The following points are suggested to pave the Egyptian Information Super-Highway:

- Setting up the communication network structure based on digital and computerized equipment.

- Setting up a plan containing all Egyptian ministeries, agencies and organizations.

- Identify a responsible entity to set up a calssification model for capturing the specialized data and information according to the needs of each entity.

- Determining the needed data / information by each entity.

- Setting up DB / information base structures.

- Refining the national information bases.

- Linking the national data bases with the internal ones.

- Determining the needed applications for each entity.

- Procurement computer terminals and other equipment needed by each entity.

- Maintaining the responsibility for the Egyptian computer networks, the communication system and the data / information bases.

- Determining the head lines of administrative protocol.

What are the Requirements for the Egyptian Information Super-Highway?

A- Developed Communication System:

  By replacement.
  By addition.
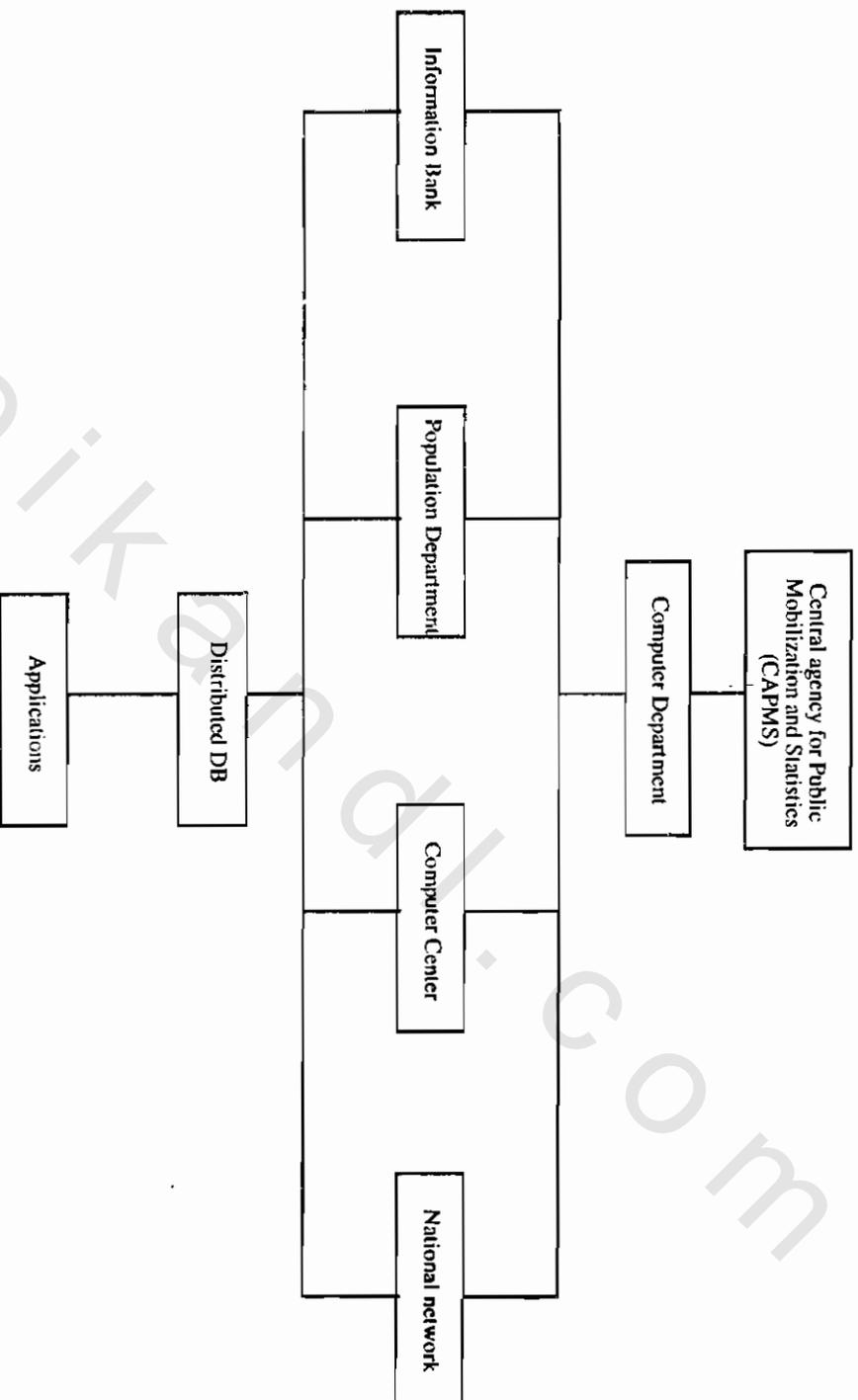 Using optical fibers
  Using Satellites.

Fig. No. 4 CAPMAS Network of activities

The diagram contains the following labeled boxes: Information Bank, Population Department, Computer Department, Central agency for Public Mobilization and Statistics (CAPMS), Computer Center, National network, Distributed DB, Applications.
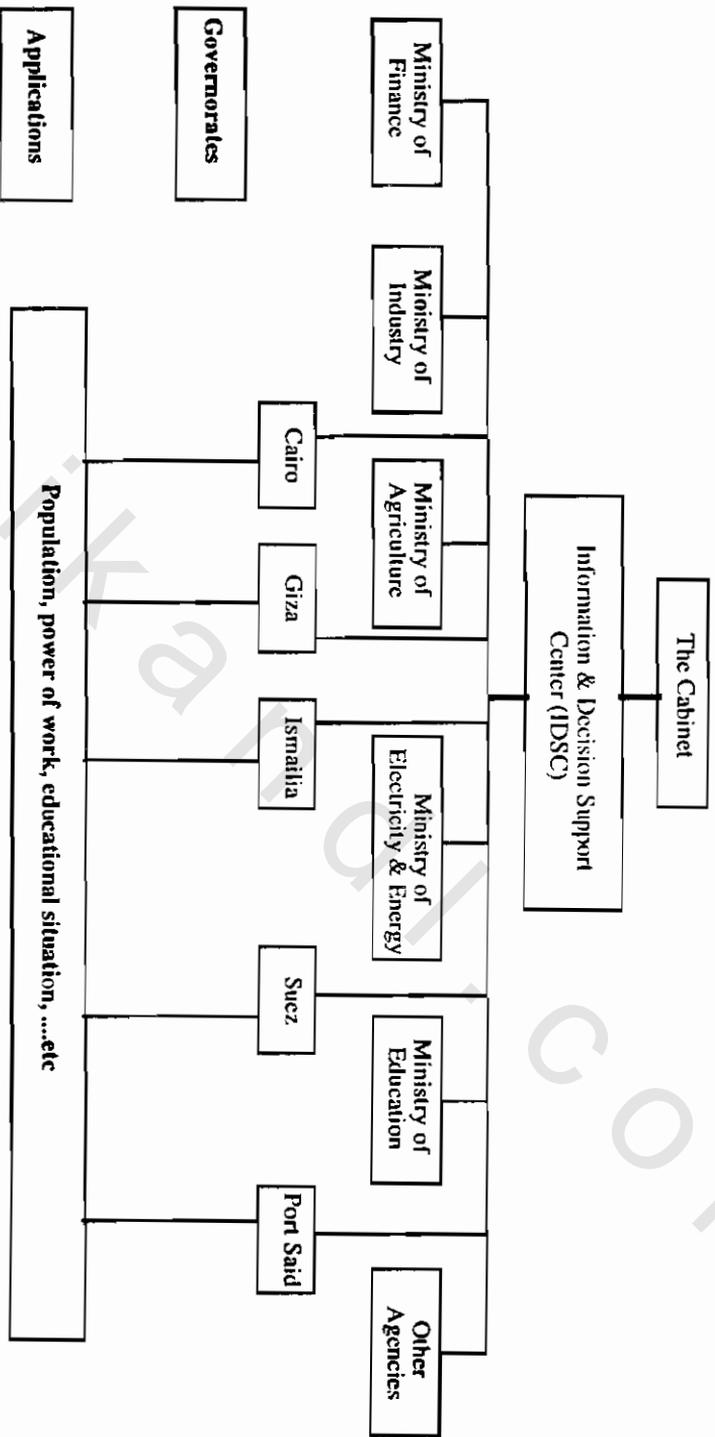
Fig. No. 3 X. 25 Computer network
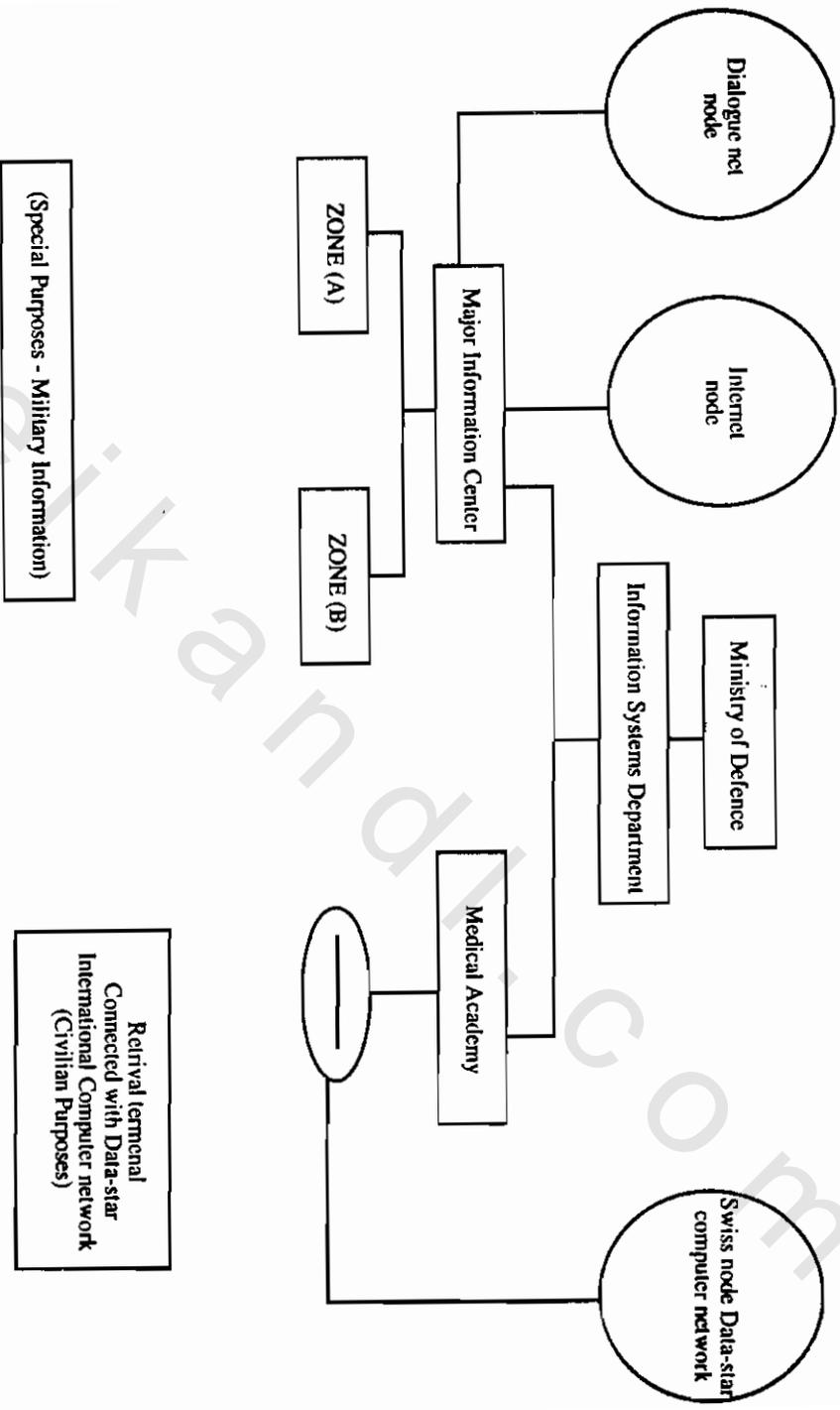
Fig. No. 2 Information Systems Orgaization

(Special Purposes - Military Information)

Retrieval terminal
Connected with Data-star
International Computer network
(Civilian Purposes)

Dialogue net node

ZONE (A)

Major Information Center

Internet node

ZONE (B)

Information Systems Department

Ministry of Defence

Medical Academy

Swiss node Data-star computer network
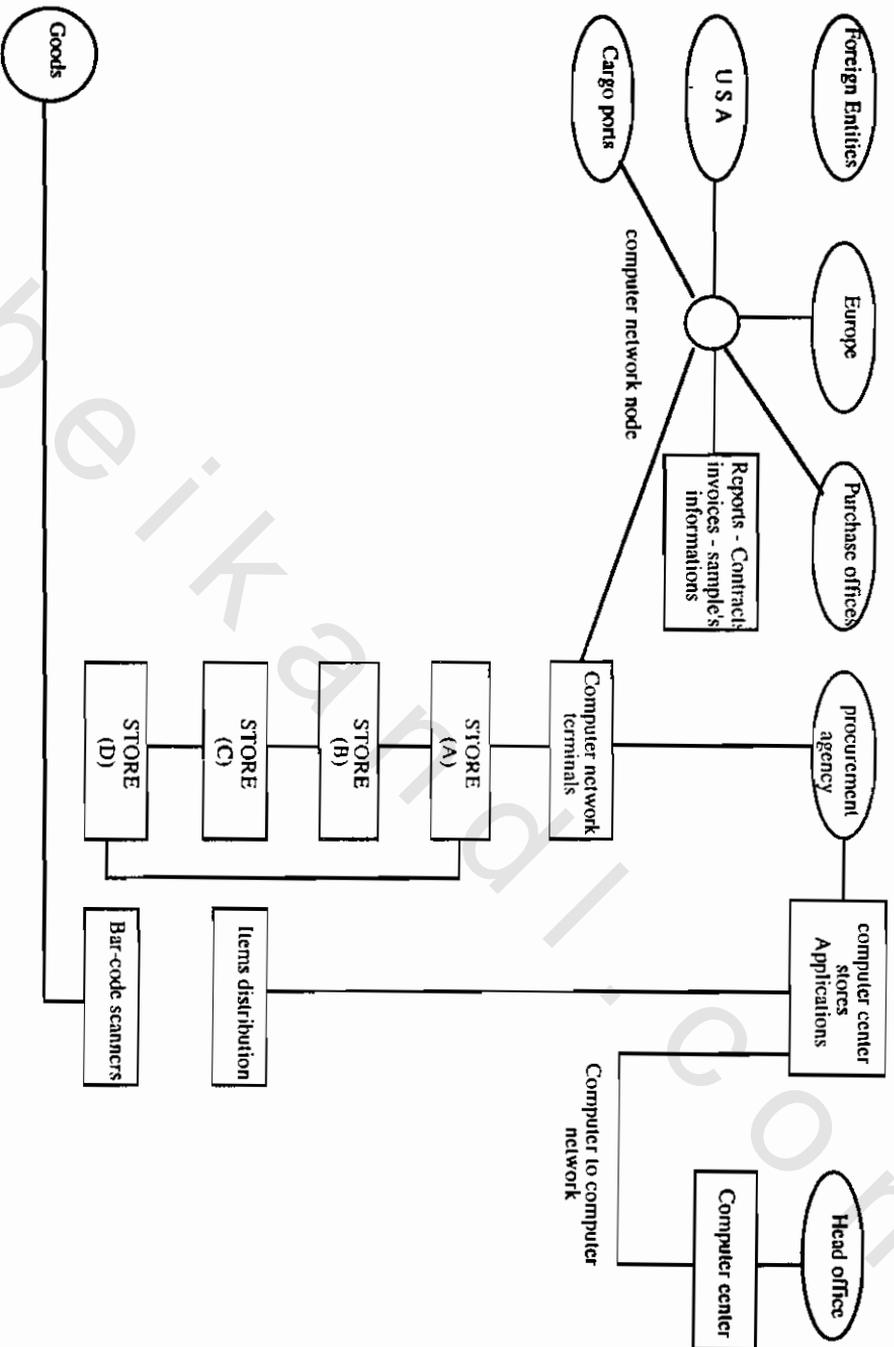
Fig. No. 1 Spare parts procurement For the existing systems

Foreign Entities

USA

Cargo ports

computer network node

Europe

Purchase offices

Reports - Contracts - invoices - sample's informations

Goods

STORE (A)

STORE (B)

STORE (C)

STORE (D)

Computer network terminals

procurement agency

Bar-code scanners

Items distribution

computer center stores Applications

Computer to computer network

Computer center

Head office

The Methodology of the Study

This study uses operational research analysis as a development technique to analize the existing situation of the Egyptian computer networks. The study utilizes:

- Fact finding, and fact analysis techniques.

The fact finding technique is focusing on the existing Egyptian information and computer networks, while the fact analysis stresses the needs for the procurement of computer networks.

The following are some diagrams exhibit this situation: