Ethiopian Telecommunications Corporation

# A Background Paper on Telecom & Telecom Statistics in Ethiopia

Worku Bogale,
B&MIS

February, 2005

# I Historical Overview

**The introduction of telecommunication in Ethiopia dates back to 1894. Ethiopian Telecommunications Corporation is the oldest public telecommunications operator in Africa. In those years, the technological scheme contributed to the integration of the Ethiopian society when the extensive open wire line system was laid out linking the capital with all the important administrative cities of the country.**

**After the end of the war against Italy, during which telecommunication network was destroyed, Ethiopia re-organized the Telephone, Telegraph and Postal services in 1941. In 1952 the the Imperial Board of Telecommunications (IBTE) was established by proclamation No. 131/52 in 1952. The Board had full financial and administrative autonomy and was in charge of the provision and expansion of telecommunications services in Ethiopia.**

**The Imperial Board of Telecommunications of Ethiopia, which became the Ethiopian Telecommunications Authority in 1981, was placed in charge of both the operation and regulation of telecommunication services in the wake of the market reforms.**

**In 1996, the Government established a separate regulatory body, the Ethiopian Telecommunication Agency (ETA) by Proclamation 49/1996, and during the same year, by regulation 10/1996, the Council of Ministers set up the Ethiopian Telecommunications Corporation (ETC).**

**Under the supervision of the ETA, the principal duty of ETC is maintaining and expanding telecommunication services in the country and providing domestic and international telephone, telex, and other communicat on services. In this respect, currently ETC is the only operator of any telecommunication related service.**

# Present status

**Exchange capacity: At present, the total number of exchanges are 306 with a total exchange capacity of 780,000 lines; out of this 171 are automatic Digital exchange with 760,368 capacity of lines. The remaining lines are connected to manual exchanges.**

**Local Network : By the end of June 2004, 91 Microwave, 43 UHF, 242 DRMASS, 281 VSAT, 78 VHF and 8 HF stations have been operational.**

**Fixed Telephone Subscription & Traffic: The total number of fixed telephone subscribers has reached 484,368. These subscribers had generated 2,225.14 million urban metered calls and 17.7 million outgoing minutes.**

**Internet Services: The corporation has been providing internet services since 1997. The number of subscribers has reached 12,155 by the end of June 2004 . The current server capacity is about 20 Mb . Ethio internet renders Domain name, web designing and web hosting service .Metro Ethernet, Wireless internet, ADSL and GPRS services are planned to be provisioned.**

**The broadband internet project /40,000/ is also under way and expected to be commissioned soon.**

**DDN (Digital Data Networking) : ETC established the service in 2001. By the end of June 2004 the number of customers reached 91 with a circuit of 178.**

**DDN best supports the applications dedicated access to internet, point-of-sale applications, online transactions, Audio/video Conferencing, telecommuting, Telemedicine, Distance learning, wireless internet, ATM service, Virtual private Network (VPN) and Internetworking (connection among Local Area Network-**

**LANs).**

**The Broad Band Multimedia network connects the capital with a high capacity metropolitan optical network. Moreover, 13 other provisional towns are served by using radio digital system by the end of June 2004.**

**Mobile service: The provision of the service has begun in 1999 with a capacity of 36,000 lines in Addis Ababa. By the end of December 2004, the number of subscribers reached about 207,000. ETC's mobile service includes prepaid services, satellite mobile phone services, International mobile roaming services, short message services and Voice mail services. Call diverting, call barring and call waiting services are also obtainable from Ethio mobile.**

International Links**:**

**For its international traffic services, ETC mainly uses its earth station at Sululta which transmits and receives to and from both the Indian and the Atlantic Oceans satellites. Currently, there are more than 2000 international circuits for all purpose.**

**Human Resource : At June, 2004 the company's manpower totals 8,628.**

**Institute of Telecommunication & Information Technology /ITIT/**

**ETC's Institute of Telecommunication and Information technology (ITIT), which is one of the oldest telecom specialty training facilities in Africa.**

**Recently, it started to provide post- graduate program training in various fields.**

**Finance**

**The investment fund required for the implementations of ETC's short term and lomg term plans come mainly from revenues generated by rendering various services.**

**Ongoing Major Projects:**

- **Rural connectivity that covers more than 3000 rural centers**
- **Optical Fiber highway in all directions of the country**
- **Mobile 950,000 lines expansion to reach all regions**
- **Fixed Switch more than 270,000 lines**

**In addition, all administrative centers of the federal structure /WeredaNet/, Schools/ SchoolNet/, Research centers and Institutes are the major areas to be reached by installing VSATs for integrated services of Voice, data and image**

# II - Data Collection, Processing and Dissemination

**Data Collection: Data collection is done by the corporate MIS office of ETC as a monthly statistical and performance report from 8 regions and 6 zones manually using formats. The corporation's Regional & Zonal MIS & Planning offices are responsible for statistical duties.**

**Content of data:**

**Subscription data:**

- **Number of Fixed lines by city and town**
- **Exchange capacity and waiting by city or town**
- **Categorical distribution: Residential, Business, Government & Others.**
- **PBX, Telefax, Public Phones by region as convinient**
- **Mobile, Internet, DDN subscription**
- **Traffic data**
- **Quality /Faults and speed of clearance, Availability, Call Completion, Connection days for new customers, /.**

**For Mobile network, quality measurements are done separately /Ericsson and ZTE/.**

## Data Processing:

**Excel is the major software for data processing. No special software applied. SPSS used seldom for case studies.**

## Dissemination of Reports:

**ETC issues two regular statistical reports**

- **Quarterly Statistical Reports**
- **Annual Statistical Report**
  **/The electronic version of the latest annual statistical report is available/**
- **Adhoc**

## Relationship with the Central Statistics Authority /CSA/:

**CSA is the legal body for collection, processing and dissemination of the country's statistical information. For it's annual statistical abstract publications, ETC is the source of telecom data.**

**The Ethiopian Telecommunication Agency /ETA/ also get the report and any data as required from ETC.**

## Problems :

- **In line with the country's civil service reform, the corporation is under a continuous structural change and system reengineering. Changes in structure, offices and staff affected reporting.**
- **Consequences with manual reporting and less attention for statistics:**

- **Reliability**
- **Timeliness**

Ethiopian Telecommunications Corporation

P.O.BOX 1047

Addis Ababa, Ethiopia

Telephone: 251-1-510500

Fax; 251-1-515777

Email:etc.commun@telecom.net.et

Website: http://www.telecom.net.et