(1) Demand survey through interview (1st site study)

1. Samples

- 1) Interviews for the business customer are made on 12 customers mainly of Dire Dawa City (2nd Big City in Ethiopia) and other 5 cities. 7 samples are from Dire Dawa and each 1 sample from Havar (Hospital), Alemaya (University), Wallaita Sodo (Pharmacy), Awassa (Tech. College) and Sodelle (Hotel).
- 2) Interviews in Business / Residence mixed areas are made on 40 persons in 11 cities. Ambo 9, Bahir Dar 9, Dibre Braham 7, Gondar 4, Chacha / Dodolla / Nazare / Dabit 2 each, and Assawa / Dangla / Gedenge 1 each.

2. Survey results of Business area

2.1 Current situation of the telecommunications services

1) Fixed Phones

Total employees of 12 enterprises are around 5400 persons, and the current fixed-phone circuits provided are 130 lines (41.5 persons / line). In case excluding the manufacture (3) and University, one fixed phone circuit is used by 11 persons, however.

2) Mobile phones

Mobile phone services are not operating in all objective areas except Addis Ababa and Nazareth.

3) Internet services

Number of Internet service users is 6 only out of 12 samples. University and College have 10 lines of Internet connections. The other 4 users have only 5 lines.

Numbers of computers are as follows.

User	No of computer	Internet
University	100	4
College	200	6
Other 10 enterprises	62	5
Total	362	15
	(1.1	0/ - 6

(4.1% of computer)

Considering the number of computers, the Internet service connection will be very small. This will be caused by the low grade of the Internet services.

While, all Internet service customers use the services of more them 40 hours paying the additional service fees.

2.2 Demands

1) Fixed Phone

Almost all enterprises (11 out of 12) request the provision of additional lines.

2) Mobile Phone

All enterprises request the provision of plural lines of mobile phones upon the commencement of the service operation in the area.

3) Internet

All enterprises request the provision of the Internet services subject to the improvement of the grade of services.

2.3 Comments of the customers

1) Fault recovery time is too long.

Normally 3~5 days Rainy season 10~50 days

- 2) Internet access time takes too long. The capacity-up and increase of POPs are requested.
- 3) New services so far available in the world shall be provided in Ethiopia.
- 4) Detailed billing shall be provided as the evidence of the high telephone fees.
- 5) Demand for mobile phone will increase shortly.
- 6) ETC is requested to expand the telecommunications facilities.

3. Survey result of Business / Residence mixed area (Urban)

3.1 Current situation of the telecommunications services.

1) Fixed-phone service

Out of 40 samples, 22 persons do not have telephone lines.

Only 2 customers pay the monthly telephone bills of more than 100 Birr, but other 20 customers pay less than 100 Birr.

2) Mobile-phone and internet services

No data is available.

3.2 Knowledge of Mobile-phone and Internet services

Almost all people know the mobile-phone services, but around 60% of the people do not know the Internet services.

3.3 Demands

The people who want the telecommunication services are as follows;

Fixed phone	Mobile phone	Internet
27(67.5%)	31(77.6%)	13(32.5%)

Only 6 persons, who have no telephone, do not want the fixed-phone service, but 3 of them want mobile-phone services.

3.4 Pay-phone demands

All of 40 samples have pay-phone access within 5Km (average 1Km), and 75% people are using pay phone (average 1~2 times / week).

3.5 Comments of Customers

- 1) Telephone lines are in poor conditions due to the poor workman-ship. (noise, frequent cut, cross-talk, etc).
- 2) Telephone fee is high without the evidence of the detailed bill.
- 3) Telephone line is installed only along the main street, but no facilities along the narrow lane.

Note: ETC asks for the additional fee for the installation of poles and wires.

- 4) QoS of mobile phone is very low, i.e., frequent busy condition.
- 5) QoS of Internet is also very low. Access to POP need very long time, and the processing is very slow. More POP will be required.
- 6) Telephone applications within the current service area are only accepted, but ETC does not accept the applications from the outside of the current service area, and does not filed in the list.

(2) Demand survey through Interview (2nd site study: F/S)

1. Mekele Area

1.1 Number of samples

149 interviews were taken place for

- 40 Business area
- 40 Business / Residence mixed area
- 50 Residence area
- 19 Rural area

1.2 Existing customers

- 1) Telephone facilities are available except in the rural area. (43.1% penetration except rural area)
 - In the residence area, the facilities are provided only to Mekele University. No telephone subscriber exists in the rural area.
- 2) Mobile-phone service is not available in the area. 4 mobile subscribers will be those of Addis Ababa area.
- 3) A little Internet subscribers are in the business area. The other subscribers are of Mekele University.

1.3 Demands

1) Many people including those in rural areas want the telecommunications facilities.

Fixed-phone 85.2% Mobile-phone 47.0% Internet 45.6%

These people will become the real demands when in-come level will be improved.

2) Demand for public pay phones.

All people (both in urban and rural areas) request the increase of the public pay phone (98%).

1.4 Tele-access

85% people can access to the public pay phone within 5Km walk.

The public pay phone is frequently used, i.e. around 70% people use the public pay phone more than 3~4 times per week.

1.5 Request for other infrastructure

Post (83.2%) New road (63.8%) Clinic (55.0%)

1.6 Findings

- 1) Fixed phone demands are still in the high level (85.2%) in comparison with the demands for mobile phone (47%) and for Internet (46%).
- 2) Public pay phones are to be supplied more for satisfying the local demands.

2. Bahir Dar area

2.1 Number of samples

214 interviews are taken place for

- Business area
- 50 Business / Residence mixed area
- 50 Residence area
- 54 Rural area

2.2 Existing customers

- 1) Telephone facilities are available except in the rural area. (65.6% penetration except rural area).
- 2) No mobile phone services are available in this area.
- 3) The Internet subscribers exist in the city core area (9.4%).

2.3 Demands

1) Fixed phone

More than 50% of the area people want to have the fixed phones including those in rural areas.

2) Mobile phone

Around 40% of the urban habitants want to have mobile phones. (Rural area; 7% only)

3) Internet services

The request on the Internet services is of the quite low level.

Urban area: 17% Rural area: 2%

The knowledge on the Internet services is also of the quite low level (43.5%). The advertisement of the Internet services will be required to promote the application.

4) Demand for public pay phone

Almost all people (93%) request the increase of public pay phone.

However, only 30% people uses the pay phone frequently (more than 1~2 times /

week).

2.4 Tele access

More than 90% people living in rural area cannot access to the pay phone, which is located at the far site of more than 5Km from the rural community.

2.5 Request for other infrastructure

Water supply 48.6% Clinic 31.3% Electric Power 25.7%

The requests on "Post office" and "New Road" are not so high in comparison with the case of Mekele.

2.6 Findings

- 1) The fixed phone services have been well developed in the urban area (65.6%), but are further required (50.6%).
- 2) The Internet services are less appreciated in this area, which may be due to the lack of the information about "Internet service".
- 3) Operation of Mobile phone and Internet services in the rural area will be too early because of the very small demands.
- 4) Public pay phone services are still under strong demands, and are to be provided more.