

## 6. 質問表

### エチオピア全国電気通信網開発計画事前調査(S/W 協議)

#### Questionnaire

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To MEDaC:

## QUESTIONNAIRE

This questionnaire shows a list of information that will be required for the Preparatory Study for the Study on Telecommunications Development Plan in the Federal Democratic Republic of Ethiopia. Please prepare answers as much as possible in written form together with the supporting data and documents to the questions shown below.

Please note the following:

- Items marked with "\*", which are very important for initial discussions in the Preparatory Study, shall be prepared by the arrival of the JICA Team.
- The other items need to be prepared by the end of the Preparatory Study as much as possible.
- Data/documents collected during the Preparatory Study will be transferred to the Master Plan Study Team.

### Questions:

1 Population and geography: refer to Tables B.1 and B.2 (\*)

Please also provide with a Table of population, surface area and features/industries/major establishments for local cities/towns.

2 Information on national economy: refer to Tables B.3 and B.4 (\*)

3 National Development Plan including all economic sectors and regional units (\*)

4 Information on major land use plans for the future

Questionnaire Tables: B. Demography and Economics

Please review/rectify the entered data and add updated/latest data.

Table B.1 Basic Indicators of Ethiopia

Year	1997	1999
Population(millions)	60.12	62.78
Population growth(%)	2.20	2.3
Urban population(% of total)	16.00	
Surface area (1,000 sq km)	1,104.00	1,000
Populations density (per sq. km)	58.00	62.8

Source: World Bank, 1997

World Bank 2001

Table B.2 Population in each State as of July 1, 1999

State	Capital City	Population (x1000)	Surface Area	Features/Industrie s Establishments
Tigray	Mekele	3,593		
Afar	Semera	1,188		
Amhara	Bahir Dar	15,850		
Oromia	Addis Ababa	21,694		
Somali	Jijiga	3,602		
Benishangul-Gumuz	Assosa	532		
S.N.N.P*	Awasa	12,132		
Gambella	Gambela	206		
Harar	Harar	154		
Dire Dawa		306		
Addis Ababa		2,424		
TOTAL		61,627		

Source: Ethiopia Statistical Abstract. Central Statistical Authority. 1998

S.N.N.P\*: Southern Nations. Nationalities and Peoples

Please prepare a similar Table for local cities and towns.

Table B.3 Key Macro-Economic Indicators

Year	1991/92	1992/9	1993/9	1994/9	1995/9		
		3	4	5	6*		
1. Gross Domestic Product (GDP) at current prices (Billion Birr)	20.3	26.0	27.9	33.3	36.5		
2. Annual Growth Rate of GDP(in percent)	-3.2	12.0	1.7	4.9	7.7		
3. Gross Fixed Investment(percent of GDP)	9.4	12.7	15.1	15.6	16.5		
4. Gross Domestic Saving(percent of GDP)	3.0	3.5	4.7	8.4	6.3		
5. Balance of Trade(million Birr)							
- Exports	318.9	949.2	1619.7	3094.0	2723.8		
- Imports	1810.9	3618.7	5011.6	6695.1	8429.0		
- Balance	-1492.0	-2669.5	-3391.9	-3601.1	-5705.2		
6. Inflation rate	21.0	10.0	1.2	13.4	1.2		

Source: Ministry of Economic Development and Cooperation

\* Preliminary estimate

Table B.4 Economic Index by World Bank

	1997	1999	
GDP(\$ millions)	6,381.00	7,045	\$ millions
GDP growth	5.60	4.10	annual %
GDP implicit price deflator	3.50		annual % growth
GNP per capita(\$)	110.00	100.00	\$
GDP per capita(\$)	106.14		\$
Value added in agriculture	3,257.00	3,084	\$ millions
Value added in industry	391.00	726	\$ millions
Value added in service	2,223.00	2,693	\$ millions
exports of goods and services	1,017.00	894	\$ millions
Imports of goods and services	1,682.00	1,883	\$ millions
Gross domestic Investment	1,219.00		\$ millions
Foreign direct investment	5.00		millions
Present value of debt	8,277.00		\$ millions
total debt service	99.00		\$ millions
short term debt	565.00		\$ millions
Aid per capita	11.00		\$

SOURCE: WORLD BANK as of 1997

WORLD BANK issued in 2001

To MTC:

## QUESTIONNAIRE

This questionnaire shows a list of information that will be required for the Preparatory Study for the Study on Telecommunications Development Plan in the Federal Democratic Republic of Ethiopia. Please prepare answers as much as possible in written form together with the supporting data and documents to the questions shown below.

Please note the following:

- Items marked with “\*”, which are very important for initial discussions in the Preparatory Study, shall be prepared by the arrival of the JICA Team.
- The other items need to be prepared by the end of the Preparatory Study as much as possible.
- Data/documents collected during the Preparatory Study will be transferred to the Master Plan Study Team.

### Questions:

1. Responsibilities of MTC (Ministry of Transports and Communications), ETA (Ethiopian Telecommunications Administration) and ETC (Ethiopian Telecommunications Corporation)(\*)

Please describe individual responsibilities and organizational structures as well as their inter-relationship.

2. Laws and Regulations for telecommunications as well as for radio spectrum control. (\*)
3. Information on Telecommunications Sector Privatization (\*)  
Please provide with the Government Policy if any, and any relevant information and documents available.
4. Any information on private sector activities and on competition in the telecommunications sector; e.g., cellular phones and internet provider services. (\*)
5. National/regional tax system for the telecommunications sector (\*)

To ETA:

## QUESTIONNAIRE

This questionnaire shows a list of information that will be required for the Preparatory Study for the Study on Telecommunications Development Plan in the Federal Democratic Republic of Ethiopia. Please prepare answers as much as possible in written form together with the supporting data and documents to the questions shown below.

Please note the following:

- Items marked with “\*”, which are very important for initial discussions in the Preparatory Study, shall be prepared by the arrival of the JICA Team.
- The other items need to be prepared by the end of the Preparatory Study as much as possible.
- Data/documents collected during the Preparatory Study will be transferred to the Master Plan Study Team.

### Questions:

1. Responsibilities of MTC (Ministry of Transport and Communications), ETA (Ethiopian Telecommunications Administration) and ETC (Ethiopian Telecommunications Corporation)(\*)  
Please describe individual responsibilities and organizational structures as well as their inter-relationship.
2. Laws and Regulations for telecommunications as well as for radio spectrum control.(\*)
3. Information on Telecommunications Sector Privatization (\*)  
Please provide with the Government Policy if any, and any relevant information and documents available.
4. Any information on private sector activities and on competition in the telecommunications sector: e.g., cellular phones and internet provider services. (\*)
5. National/regional tax system for the telecommunications sector (\*)

To Ethiopian Privatization Agency

## QUESTIONNAIRE

This questionnaire shows a list of information that will be required for the Preparatory Study for the Study on Telecommunications Development Plan in the Federal Democratic Republic of Ethiopia. Please prepare answers as much as possible in written form together with the supporting data and documents to the questions/requests shown below.

Please note the following:

- Items marked with "\*", which are very important for initial discussions in the Preparatory Study, shall be prepared by the arrival of the JICA Team.
- The other items need to be prepared by the end of the Preparatory Study as much as possible.
- Data/documents collected during the Preparatory Study will be transferred to the Master Plan Study Team.

### Questions/Requests:

Request for Information on Telecommunications Sector Privatization (\*)

1. Please provide with the following documents:
  - a) Report prepared by Pricewaterhouse-cooper on ETC privatization
  - b) Comments made by Ethiopian Privatization Agency on the Report above
2. Please provide with the Government Policy on telecommunications sector privatization in Ethiopia, if any, and, in addition, any relevant information and/or documents available.

End

To ETC:

## QUESTIONNAIRE

This questionnaire shows a list of information that will be required for the Preparatory Study for the Study on Telecommunications Development Plan in the Federal Democratic Republic of Ethiopia. Please prepare answers as much as possible in written form together with the supporting data and documents to the questions shown below.

Please note the following:

- Items marked with "\*", which are very important for initial discussions in the Preparatory Study, shall be prepared by the arrival of the JICA Team.
- The other items need to be prepared by the end of the Preparatory Study as much as possible.
- Data/documents collected during the Preparatory Study will be transferred to the Master Plan Study Team.

### Questions:

#### 0. Basic information on the telecommunications sector (\*)

##### 0.1 Responsibilities of MTC (Ministry of Transport and Communications), ETA (Ethiopian Telecommunications Administration) and ETC (Ethiopian Telecommunications Corporation)

Please describe individual responsibilities and organizational structures as well as their inter-relationship.

##### 0.2 Laws and Regulations for telecommunications as well as for radio spectrum control.

##### 0.3 Information on Telecommunications Sector Privatization

Please provide with the Government Policy if any, and any relevant information and documents available.

##### 0.4 Any information on private sector activities and on competition in the telecommunications sector; e.g., cellular phones and internet provider services.

##### 0.5 National/regional tax system for the telecommunications sector

##### 0.6 Official status of the 8<sup>th</sup> Telecommunications Development Plan (Ethiopian Telecommunication Corporation, 1993-97 Years Plan (Class-3), Oct.-Nov.2000, Addis Ababa)

Has the Plan been duly approved and/or authorized? Or, is it in the process of

authorization or else?

Please describe the official status of the Plan.

0.7 Position of ETC Letter dated March 29, 2001 (Ref: 2.1/21/23/01)

Please describe the official status of the Letter. In addition, how does the Letter relate to the Application of the Technical Cooperation for the Telecommunications Development Study by the Government of Japan (For Telecom Master Plan Preparation) of September, 1999? Is the Letter an update, revision, supplement or else of the Application? This Question is being asked since the Letter could be interpreted as implying a substantial shift/amplification/enlargement of the scope of the Application.

1. General information in telecommunications (\*)

1.3 Basic telecommunications statistics: refer to Table A.1

1.4 Seventh Development Plan: refer to Table A.2

1.5 Eighth Development Plan: refer to Table A.3

1.6 Telecommunications development projects/assistance: refer to Table A.4

Please add paper if necessary.

1.7 Priority projects and issues on telecommunications development: refer to Table A.5

Please add paper if necessary.

2. Demographic, economic and social information (\*)

2.1 Population and geography: refer to Tables B.1 and B.2

Please also provide with a Table of population, surface area and features/industries/major establishments for local cities/towns.

2.2 Information on national economy: refer to Tables B.3 and B.4

2.3 National Development Plan including all economic sectors and regional units

2.4 Information on major land use plans for the future

3. Specific information in telecommunications

3.1 Telecommunications statistics: refer to Table C.1

3.2 Waiting applicants: refer to Table C.2

3.3 National numbering plan and special service codes: refer to Tables C.3 and C.4

Please correct/update the entered data.

3.4 Existing exchanges: refer to Tables C.5, C.6 and C.7.

Please correct/update the entered data and add any relevant information, e.g., international exchanges)

3.5 Number of inter-exchange circuits at each exchange: refer to Table C.8.

Please correct/update the entered data and add any relevant information.

3.6 International telecommunications: refer to Table C.9.

Please correct/update the entered data and add any relevant information,

3.7 Outside plant: refer to Table C.10

Please enter relevant data and information.

3.8 Long distance transmission lines: refer to Table C.11

Please enter relevant data and information.

Please provide with a map illustrating transmission routes.

3.8 Regional distributions of telephone subscribers, telephone sets, facsimiles, public telephone booths, PABXs and leased circuit customers(numbers also).

3.9 Outgoing and incoming traffic data at each exchange

3.10 Quality of service: refer to Table C.12

Please enter relevant data and information.

#### 4. Tariff information

4.1 Describe your tariff system/structure in general.

4.2 Correct/update the entries in Tables D.2, D.2, D.3, D.4, D.5 and D.6.

#### 5. ETC information on human resources

##### 5.1 Organizational structure

Please provide with internal structure diagram of ETC including those of local offices.

5.2 Number of employees: refer to Table E.1.

##### 5.3 Staff qualifications

Please provide with information on staff qualifications and skills.

##### 5.4 Staff training

Please provide with information on staff training strategies/system as well as training facilities.

#### 6. ETC financial status and plans

- 6.1 Revenues and expenditures: refer to Table F.1 (\*)
  - 6.2 Analysis of expenditures and revenues: refer to Table F.2
  - 6.3 Describe external assistance provided, if any. (\*)
  - 6.4 Describe origins and interest as well as other relevant information of existing loans. (\*)
  - 6.5 Collection ratio in terms of years and regions/cities/towns. (\*)
  - 6.6 Provide with ETC balance sheets for the recent 5 years.
  - 6.7 Describe any financial problems in ETC (\*)
- 
7. Additional technical and operation/maintenance information
- 7.1 Technical standards (used/planned)
    - Signalling system
    - Transmission system
    - Routing
    - Subscriber equipment
    - Others
  - 7.2 Inventory control and availability of spare parts and consumables
  - 7.3 Repair capability and availability
  - 7.4 Additional information on organization and staffing for operation and maintenance
  - 7.5 Describe any major technical problems in ETC (\*)
  - 7.6 Describe any major operational/maintenance problems of ETC (\*)

Questionnaire Tables: A. General

Please review/rectify the entered data and add updated/latest data.

Table A.1 Basic Telecommunications Statistics

Items	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
<b>SUBSCRIPTION</b>							
Telephone Main Lines	137,731	142,452	148,739	156,538	164,140		231,945
NO. of Telephone Apparatus	165,335	170,239	176,726	184,711	189,871		261,461
Waiting List for Telephone	160,939	178,992	193,499	206,562	230,225		196,883
Number of Internet Subscribers				1,164	2,025		2,461
No. of mobile telephones							17,727
% of Residential / Business	63 / 18	62 / 18	62 / 19	62 / 20	61 / 20		
<b>TELEPHONE TRAFFIC(millions)</b>							
Metered(pulses)	523.60	540.00	568.26	619.45	704.40		
Interurban calls(via operator)	4.40	5.40	6.08	6.65	7.22		
International calls(Out Going)	3.10	3.10	3.41	3.56	3.91		
International Minutes (Out Going)	11.50	10.50	10.35	10.69	11.84		

Source: Annual Statistical Bulletin 1990 E.F.Y (1997/98 G.C)

Table A.2 Outline of 7<sup>th</sup> Development Plan

Items	GC1996/97	GC1999/2000	GC2001/2	Remarks
	ETY1989	ETY 1992	ETY 1994	
Population(million)	58.2		65.6	
Capacity of exchanges	196,322		752,913	Ignoring replacement
% of capacity to pop.	0.34%		1.15%	
No. of telephone sets	184,711		-	
Waiting applicants	206,562		-	
Increase of exchange lines		*550,000		
Increase of access lines		*505,000		

Table A.3 Outline of 8<sup>th</sup> Development Plan

Items	GC2000/01	GC2004/05	Remarks
	ETY1993	ETY 1997	
Population(million)			
Capacity of exchanges			Ignoring replacement
% of capacity to pop.			
No. of telephone sets			
Waiting applicants			
Increase of exchange lines			
Increase of access lines			

Please describe details of the on-going and planned projects.

Table A.4 Telecommunications Development Project/Assistance  
(in Progress/ Planned)

Name of Project or assistance		
Objectives		
Scope of work		
Implementation schedule and current progress status		
Cost and financial resources (Self/Grant/Loan/BOT.etc)		
Kind of external assistance or Investment (Technical/Financial)		
External assistance or Investor name (AfDB/EIB/SIDA/ Foreign government)		
Outline of assistant's work And contract condition		

Please describe details of the priority projects.

Table A.5 Priority Projects and Issues on Telecommunications Development

Title of Project		
Target field		
Project location		
Outline of the Project		
Expected Implementation year		
Expected cost and Financial resources		
Project Implementation Agency		
Order of priority		

Questionnaire Tables: B. Demography and Economics

Please review/rectify the entered data and add updated/latest data.

Table B.1 Basic Indicators of Ethiopia

Year	1997	1999
Population(millions)	60.12	62.78
Population growth(%)	2.20	2.3
Urban population(% of total)	16.00	
Surface area (1,000 sq km)	1,104.00	1,000
Populations density (per sq. km)	58.00	62.8

Source: World Bank, 1997  
World Bank 2001

Table B.2 Population in each State as of July 1, 1999

State	Capital City	Population (x1000)	Surface Area	Features/Industries Establishments
Tigray	Mekele	3,593		
Afar	Semera	1,188		
Amhara	Bahir Dar	15,850		
Oromia	Addis Ababa	21,694		
Somali	Jijiga	3,602		
Benishangul-Gumuz	Assosa	532		
S.N.N.P*	Awasa	12,132		
Gambella	Gambela	206		
Harar	Harar	154		
Dire Dawa		306		
Addis Ababa		2,424		
TOTAL		61,627		

Source: Ethiopia Statistical Abstract, Central Statistical Authority, 1998  
S.N.N.P.\*: Southern Nations, Nationalities and Peoples

Please prepare a similar Table for local cities and towns.

Table B.3 Key Macro-Economic Indicators

Year	1991/92	1992/93	1993/94	1994/95	1995/96 *
1. Gross Domestic Product (GDP) at current prices (Billion Birr)	20.3	26.0	27.9	33.3	36.5
2. Annual Growth Rate of GDP(in percent)	-3.2	12.0	1.7	4.9	7.7
3. Gross Fixed Investment(percent of GDP)	9.4	12.7	15.1	15.6	16.5
4. Gross Domestic Saving(percent of GDP)	3.0	3.5	4.7	8.4	6.3
5. Balance of Trade(million Birr)					
- Exports	318.9	949.2	1619.7	3094.0	2723.8
- Imports	1810.9	3618.7	5011.6	6695.1	8429.0
- Balance	-1492.0	-2669.5	-3391.9	-3601.1	-5705.2
6. Inflation rate	21.0	10.0	1.2	13.4	1.2

Source: Ministry of Economic Development and Cooperation

\* Preliminary estimate

Table B.4 Economic Index by World Bank

	1997	1999	
GDP(\$ millions)	6,381.00	7,045	\$ millions
GDP growth	5.60	4.10	annual %
GDP implicit price deflator	3.50		annual % growth
GNP per capita(\$)	110.00	100.00	\$
GDP per capita(\$)	106.14		\$
Value added in agriculture	3,257.00	3,084	\$ millions
Value added in industry	391.00	726	\$ millions
Value added in service	2,223.00	2,693	\$ millions
exports of goods and services	1,017.00	894	\$ millions
Imports of goods and services	1,682.00	1,883	\$ millions
Gross domestic Investment	1,219.00		\$ millions
Foreign direct investment	5.00		millions
Present value of debt	8,277.00		\$ millions
total debt service	99.00		\$ millions
short term debt	565.00		\$ millions
Aid per capita	11.00		\$

SOURCE: WORLD BANK as of 1997  
WORLD BANK issued in 2001

Questionnaire Tables: C. Telecommunications Services

Please review/rectify the entered data and add update data.

Table C.1 Telecommunications Statistics

N0.	Items	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
1	Public Stations	486	512	536	548	563		
1.1	Automatic exchanges	37	40	44	47	53		
1.2	Manual exchanges	388	403	403	403	403		
1.3	Manual station with semi-auto	74	113	153	155	175		
1.4	Pay station and R.R.C.	75	83	103	113	123		
1.5	Automatic exch. capacity	143,756	150,556	162,280	167,252	182,911		
1.6	Manual exch. capacity	28,986	28,538	28,997	29,070	28,197		
2	Subscription							
2.1	Telephone main lines	137,731	142,452	148,739	156,538	164,140		231,945
2.2	No. of telephone apparatus	165,335	170,239	176,726	184,711	189,871		261,461
2.3	Waiting list for telephone	160,939	178,992	193,499	206,562	230,225		196,883
2.4	DELS	141,650	146,566	153,001	160,861	168,639		
2.5	PBXs	1,271	1,317	1,338	1,476	1,544		
2.6	Coin boxes	997	1,005	1,010	1,008	1,014		
2.7	No. of subscriber's facsimile	1,039	1,424	1,604	2,012	2,476		
2.8	No. of FAX machines	1,057	1,445	1,624	2,038	2,502		
2.9	Telex subscribers	865	793	718	581	487		
2.10	Installed telex terminals	949	878	806	677	578		
2.11	No. of internet subscribers	-	-	-	1,164	2,025		2,461
2.12	% of residential/business	63/18	62/18	62/19	62/20	61/20		
2.13	No. of mobile telephones							17,727
3	Telephone traffic (million)							
3.1	Metered (pulses)	523.60	540.00	568.26	619.45	704.40		
3.2	Interurban calls (via operator)	4.40	5.40	6.08	6.65	7.22		
3.3	International calls (OG)	3.10	3.10	3.41	3.56	3.91		
3.4	International minutes (OG)	11.50	10.50	10.35	10.69	11.84		
4	Telegraph messages (millions)							
4.1	National	0.15	0.16	0.18	0.16	0.12		
4.2	International (OG)	0.006	0.003	0.003	0.002	0.002		
5	Telex traffic (millions)							
5.1	National calls	0.07	0.05	0.04	0.26	0.17		
5.2	National minutes	0.23	0.15	0.14	0.10	0.07		
5.3	International calls (OG)	0.12	0.10	0.10	0.09	0.08		
5.4	International minutes (OG)	0.46	0.27	0.43	0.45	0.41		
6	International circuits							
6.1	Satellite telephone circuits	346	345	369	350	386		
6.2	Microwave telephone circuits	91	91	186	193	25		
6.3	Submarine cable	18	24	24	24	-		
6.4	Telex circuits	110	95	95	95	89		

Source: Annual Statistical Bulletin 1990 E.F.Y. (1997/98 G.C.)

Table C.2 Increase of Waiting Applications

Fiscal Year	Waiting Applications	Switching capacity		
		Automatic	Manual	Total
1994/95	178,992	150,556	28,538	179,094
1995/96	193,499	161,180	28,997	190,177
1996/97	206,562	167,252	29,070	196,322
1997/98	230,225	182,911	28,197	211,108
1998/99				
1999/00				
Average growth rate	%	%	%	%

Source: Annual Statistic Bulletin 1997/1998

Please provide with regional distribution data also.

Table C.3 Special Service Code in Addis Ababa

Service item	Dialling code	Remarks
Inter-urban call booking	99	
International call booking	98	
Telephone directory	97	
Wake-up call	99	
Phonogram	94	
Time in Amharic	901	
Time in English	902	
Fire brigades	93	General, Ordinary numbers are also assigned
Red cross ambulance	92	
Police	91	
Fault reporting	96x	
EEL PA	905	Ordinary telephone numbers are also assigned

Table C.4 National Numbering Plan as of 1999 (1/3)

No.	Area code	Station name	Exchange code	No.	Area code	Station name	Exchange code
1	01	Addis Ketema I	13	51	01	Yeka RSS II	48*
2	01	Addis Ketema II	75	52	02	Abomsa	41*
3	01	Addis Ketema III	76,77,78,70	53	02	Arerti	23*
4	01	Akaki	34	54	02	Assasa	36*
5	01	Arada I	11	55	02	Assela	31
6	01	Arada II	12	56	02	Awash	24*
7	01	Arada III	55	57	02	Bekoji	32*
8	01	Arada IV	56,57,58	58	02	Dera	33*
9	01	Ayer Tena	89*	59	02	Eteya	35*
10	01	Bole I	18	60	02	Hurruta	34*
11	01	Bole II	61	61	02	Kersa	37*
12	01	Bole III	62,63,64,69	62	02	Melkassa	25*
13	01	Bole Michael	26	63	02	Meraro	42*
14	01	Debre Berhan	81	64	02	Metehara	26
15	01	Debre Sina	80*	65	02	Modjo	16*
16	01	Debre Zeit	33	66	02	Nazareth	11,12
17	01	Dukem	32*	67	02	Robe	43*
18	01	Filwoha II	15	68	02	Shoa	21
19	01	Filwoha III	51	69	02	Sire	30*
20	01	Filwoha IV	52,53,54,50	70	02	Ticho	44*
21	01	Fitche	35	71	02	Wonji	20
22	01	French Legasion	14*	72	03	Akesta	14*
23	01	Gerji	29	73	03	Assaita	55
24	01	Ghion	41	74	03	Batti	53*
25	01	Hagere Hiwot	36	75	03	Combolcha	51
26	01	Hana Mariam	19	76	03	Decheotto	67*
27	01	Holeta Genet	37	77	03	Dessie	11
28	01	Keira I	16	78	03	Dupti	56
29	01	Keira II	65	79	03	Epheson	61*
30	01	Keira III	66,67,68	80	03	Haik	22*
31	01	Keranio	49	81	03	Kabe	10*
32	01	Kolfe	79	82	03	Kara-Kore	63*
33	01	Kotebe	60	83	03	Kemisse	54*
34	01	Nefas Silk	42,43,44*	84	03	Kobo	34*
35	01	Nefas Silk RSS I	28*	85	03	Lalibela	36
36	01	Nefas Silk RSS II	29*	86	03	Logia	50*
37	01	Old Airport I	20	87	03	Majete	60*
38	01	Old Airport II	71	88	03	Mersa	33*
39	01	Old Airport III	72,73,74*	89	03	Mille	23*
40	01	Old Airport (DMS 10)	21	90	03	Semera	56*
41	01	Sebeta	38	91	03	Shoa Robit	64*
42	01	Sheraton	17	92	03	Tenta	17*
43	01	Shegole	59*	93	03	Urgessa	32*
44	01	Sidist Kilo	22,23,24*	94	03	Harbu	52*
45	01	Sidist Kilo RSS I	25*	95	03	Wogel Tena	35*
46	01	Sidist Kilo RSS II	26*	96	03	Woldia	31
47	01	Sidist Kilo RSS III	27*	97	03	Woreilu	16*
48	01	Wolkite	30*	98	03	Wuchale	24*
49	01	Yeka	45,46*	99	04	Abiy Adi	46*
50	01	Yeka RSS I	47*	100	04	Adegrat	45

Note: Exchange codes with \* are the exchanges to be installed in the future.

Table C.4 National Numbering Plan as of 1999 (2/3)

No.	Area code	Station name	Exchange code	No.	Area code	Station name	Exchange code
101	04	Adwa	71	151	06	Adaba	63*
102	04	Alamata	42*	152	06	Alaba Kulito	56
103	04	Amba Mariam	15*	153	06	Alem Tena	19*
104	04	Axum	75	154	06	Aleta Wondo	24
105	04	Edaga Arbi	78*	155	06	Areka	52*
106	04	Edaga Hamus	73*	156	06	Arba Minch	81
107	04	Eliwoha	57*	157	06	Arrsi Negele	16*
108	04	Ende Selasse	44	158	06	Awassa	20
109	04	Inticho	72*	159	06	Boditti	59*
110	04	Korem	41*	160	06	Bore	42*
111	04	Maichew	77	161	06	Bulbula	13*
112	04	Mekele	40	162	06	Butajirra	15*
113	04	Quiha	79	163	06	Cheleklektu	36*
114	04	Seleklaka	76*	164	06	Chencha	76*
115	04	Wukro	43*	165	06	Chuko	27*
116	05	Afdem	42*	166	06	Dilla	31
117	05	Alamaya	61*	167	06	Dodolla	66
118	05	Assebe Teferi	51*	168	06	Durame	54
119	05	Assebot	54*	169	06	Gassera	62*
120	05	Aweday	62*	170	06	Gassupa	50*
121	05	Babile	65*	171	06	Ghidole	74*
122	05	Bedeno	32*	172	06	Ghinir	64
123	05	Bedessa	55*	173	06	Goba	61
124	05	Borodda	43*	174	06	Hagare Mariam	43*
125	05	Chelenko	35*	175	06	Hagere Selam	23
126	05	Kombolcha	68*	176	06	Hossana	55
127	05	Deder	33*	177	06	Humbo	57*
128	05	Deghabour	71*	178	06	Jinka	75
129	05	Dire Dawa	11	179	06	Kibre Mengist	35
130	05	Fik	73*	180	06	Kofele	12*
131	05	Gelemso	52*	181	06	Konso	73*
132	05	Gode	76*	182	06	Kuyera	18*
133	05	Grawa	34*	183	06	Leku	26*
134	05	Gursum	72*	184	06	Mega	48*
135	05	Harar	66	185	06	Meki	14*
136	05	Hirna	41*	186	06	Meno	68*
137	05	Jijiga	75	187	06	Moyale	44
138	05	Kebri Dehar	74*	188	06	Negele Borena	45
139	05	Kersa	36*	189	06	Robie	65*
140	05	Kobo	37*	190	06	Sawla	77
141	05	Kulbi	39*	191	06	Shakiso	34
142	05	Langie	38*	192	06	Shashemene	10
143	05	Mechara	57*	193	06	Shone	53*
144	05	Micheata	58*	194	06	Teferi Kela	28*
145	05	Miesso	44*	195	06	Wolaita	51
146	05	Melka Jeldu	16*	196	06	Wonago	33*
147	05	Shinile	14*	197	06	Yabello	46*
148	05	Warder	78*	198	06	Yirga Chefe	32*
149	05	Watter	31*	199	06	Yirga Alem	25
150	06	Adami Tulu	17*	200	06	Ziway	41

Note: Exchange codes with \* are the exchanges to be installed in the future.

Table C.4 National Numbering Plan as of 1999 (3/3)

No.	Area code	Station name	Exchange code	No.	Area code	Station name	Exchange code
201	07	Abebo	59*	251	08	Bichena	65
202	07	Agaro	21	252	08	Bure	74
203	07	Arejo	67*	253	08	Chagni	25*
204	07	Assendabo	14*	254	08	Chewahit	34*
205	07	Assosa	75	255	08	Chilga	33*
206	07	Atuago	28*	256	08	Dabat	13*
207	07	Bako	65	257	08	Dangla	21*
208	07	Bedele	45*	258	08	Debark	17*
209	07	Bonga	31	259	08	Debre Markos	71
210	07	Kombolcha	63*	260	08	Debre Tabor	41*
211	07	Dembi	43*	261	08	Debre Work	63*
212	07	Dembi Dolo	55*	262	08	Dejen	76
213	07	Fincha	64	263	08	Delgi	36*
214	07	Gambella	51	264	08	Dembecha	73*
215	07	Ghachi	47*	265	08	Dur Bettie	23*
216	07	Ghedio	62*	266	08	Ebinat	40*
217	07	Ghembo	22*	267	08	Enfrazz	48*
218	07	Ghimbi	71	268	08	Enjibaraa	24
219	07	Ghore	54*	269	08	Finote Selam	75
220	07	Harro	25*	270	08	Gimja bet Mariam	27
221	07	Hurmu	46*	271	08	Gondar	11
222	07	Itang	52*	272	08	Ende Woin	64*
223	07	Jikawo	53*	273	08	Hamussit	43*
224	07	Jimma	11	274	08	Jiga	79*
225	07	Kamashi	72*	275	08	Keranio	62*
226	07	Limmu Genet	24*	276	08	Kola Deba	35*
227	07	Macha	58*	277	08	Lumamme	72*
228	07	Majji	34*	278	08	Maksegnit	32*
229	07	Mandi	76*	279	08	Mankusaa	70*
230	07	Mettu	41	280	08	Mekane Evesus	47*
231	07	Mizzan Teferi	35*	281	08	Motta	61*
232	07	Mughi	79*	282	08	Nifas Mewcha	45*
233	07	Nedjo	74*	283	08	Tilkil Dingay	16*
234	07	Nekempt	61	284	08	Tilili	29*
235	07	Omonada	15*	285	08	Woreta	46*
236	07	Seka	16*				
237	07	Sekoru	17*				
238	07	Serbo	13*				
239	07	Shambu	66				
240	07	Shebe	18*				
241	07	Sire	68*				
242	07	Tepi	56*				
243	08	Yebu	26*				
244	08	Addis Zemen	44*				
245	08	Addet	28*				
246	08	Amanuel	77*				
247	08	Anba Ghiorgis	18*				
248	08	Anba Samae	42*				
249	08	Azezo	14*				
250	08	Bahir Dar	20				

Note: Exchange codes with \* are the exchanges to be installed in the future.