

III. TELECOMMUNICATIONS

The Ethiopian Telecommunications Corporation (ETC), is a state-owned enterprise that provides national and international telecommunications services using Satellite, microwave Digital Radio Multi-Access System (DRMAS), VSAT, UHF, VHF, Long Line and HF Radio. Currently, ETC is serving the public through its 966 public stations and exchanges.

Accordingly, the number of fixed telephone subscription (residential, business, government organizations and others) increased from 880,088 in 2006/07 to 897,287 in 2007/08 revealing a two percent annual increase. The number of waiting list for fixed telephone subscribers grew by 40 percent from 13,579 in 2006/07 to 19,013 in the review year (Table 3.1).

Similarly the number of mobile-telephone subscribers increased from 1208,498 to 1,954,327 showing a 61.7 percent growth.

Besides, the number of Internet subscribers went up from 31,400 in 2006/07 to 34,110 in the reported period registering a 8.6 percent increase.

Despite the increased performance in fixed telephone, mobile and Internet subscription, the country's telecommunications penetration rate (tele-density excluding mobile or the number of telephone subscribers per 100 inhabitants) declined from 1.16 in 2006/07 to 1.15 in 2007/08. However, the penetration rate was higher (3.6 per 100 inhabitants) when mobile subscriptions are included.

With respect to telephone traffic, the registered domestic traffic picked up by 0.03 percent from 2,714.31 million pulses in 2006/07 to 2,715.07 million pulses in 2007/08. Similarly, the outgoing international telephone traffic calls increased from 12.7 million in 2006/07 to 19.3 million in 2007/08.

The country's five-year development plan (PASDEP) envisages increasing the number of fixed line subscribers from 830,000 in 2005/06 to 3.2 million by the end of 2009/10.

The number of mobile-telephone subscribers and Internet users is also expected to pick up to a respective 6.76 million and 193,100 by the end of the plan period from 1.465 million and 48,970 in 2005/06.

Table 3.1: SUMMARY OF BASIC TELECOM STATISTICS

[1985 - 2000 E.F.Y (1992/93 - 2007/2008 G.C.)]

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | Average Annual Growth | Annual Growth | |
|-------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|------------------|------------------|-----------------------|---------------|--------|
| No. | ITEMS | 1992/93 | 1993/94 | 1994/95 | 1995/96 | 1996/97 | 1997/98 | (1998/99) | (1999/00) | 2000/01 | (2001/02) | (2002/03) | (2003/04) | (2004/05) | (2005/06) | (2006/07) | (2007/08) | | |
| 1 | PUBLIC STATIONS & EXCHANGES(1.2+1.3+1.5) | 475 | 486 | 512 | 536 | 548 | 563 | 573 | 606 | 649 | 700 | 770 | 784 | 865 | 904 | 919 | 966 | 4.8 | 5.1 |
| 1.1 | Automatic Exchanges | 36 | 37 | 40 | 44 | 47 | 53 | 82 | 112 | 129 | 150 | 156 | 171 | 273 | 423 | 511 | 540 | 19.8 | 5.7 |
| 1.2 | Automatic Stations | 22 | 23 | 26 | 30 | 32 | 37 | 58 | 79 | 93 | 105 | 122 | 142 | 242 | 391 | 475 | 510 | 23.3 | 7.4 |
| 1.3 | Manual Exchanges(Stations) | 375 | 388 | 403 | 403 | 403 | 403 | 390 | 382 | 356 | 347 | 341 | 335 | 256 | 136 | 92 | 86 | (9.4) | (6.5) |
| 1.4 | Manual Stations with Semi- Auto. facility | 55 | 74 | 113 | 153 | 155 | 175 | 181 | 331 | 259 | 306 | 313 | 310 | 239 | 131 | 90 | 78 | 2.4 | (13.3) |
| 1.5 | Pay Stations & R.R.C | 78 | 75 | 83 | 103 | 113 | 123 | 125 | 145 | 200 | 248 | 307 | 307 | 368 | 378 | 352 | 370 | 10.9 | 5.1 |
| 1.6 | Total Exchange Capacity | 169622 | 172742 | 179094 | 190177 | 196322 | 211108 | 372885 | 458247 | 511474 | 600337 | 649593 | 722548 | 872,228 | 1,022,399 | 1,123,281 | 1,146,555 | 13.6 | 2.1 |
| 1.7 | Automatic Exchange Capacity | 142756 | 143756 | 150556 | 161180 | 167252 | 182911 | 348644 | 433299 | 490724 | 579,589 | 629,477 | 703,160 | 857,374 | 1,016,111 | 1,120,071 | 1,143,525 | 14.9 | 2.1 |
| 1.8 | Manual Exchange Capacity | 26866 | 28986 | 28538 | 28997 | 29070 | 28197 | 24241 | 24948 | 20750 | 20,748 | 20,116 | 19,388 | 14,854 | 6,288 | 3,210 | 3,030 | (13.5) | (5.6) |
| 1.9 | % Digital by Capacity | - | 37.20 | 35.88 | 34.33 | 34.82 | 40.51 | 67.49 | 73.60 | 80.30 | 83.22 | 89.64 | 97.18 | 98.30 | 99.38 | 99.71 | 99.74 | 7.3 | 0.0 |
| 1.10 | % Digital by Total Connected Lines / DEL / | - | 39.34 | 38.87 | 38.15 | 37.95 | 39.88 | 51.98 | 61.90 | 74.02 | 80.9 | 89.9 | 97.80 | 93.84 | 98.24 | 99.82 | 99.82 | 6.9 | (0.0) |
| 2 | SUBSCRIPTION | | | | | | | | | | | | | | | | | | |
| 2.01 | Telephone Subscriber Lines | 132478 | 137731 | 142452 | 148739 | 156538 | 164140 | 194494 | 231945 | 283683 | 353,816 | 404790 | 484368 | 610,347 | 725,046 | 880,088 | 897,287 | 13.6 | 2.0 |
| 2.02 | Waiting List for Telephone | 141035 | 160939 | 178992 | 193499 | 206562 | 230225 | 224788 | 196883 | 155208 | 139,095 | 146,062 | 156,963 | 58,755 | 56,053 | 13,579 | 19,013 | (12.5) | 40.0 |
| 2.03 | DEL's | 136102 | 141650 | 146566 | 153001 | 160861 | 168639 | 199474 | 238495 | 290887 | 361,688 | 413,186 | 494,008 | 620,661 | 738,805 | 894,337 | 912,695 | 13.5 | 2.1 |
| 2.04 | PBX's | 1251 | 1271 | 1317 | 1338 | 1476 | 1544 | 1615 | 1241 | 1419 | 1386 | 1322 | 1348 | - | - | - | - | 0.5 | |
| 2.05 | Coin Boxes | 988 | 997 | 1005 | 1010 | 1008 | 1014 | 1016 | 957 | 935 | 1,610 | 1,759 | 1,813 | 2,585 | 4,294 | 4,718 | 4,944 | 11.3 | 4.8 |
| 2.06 | Number of subscriber's Facsimile | 745 | 1039 | 1424 | 1604 | 2012 | 2476 | 3010 | 3555 | 3858 | 4231 | 4601 | 4925 | - | - | - | - | 18.3 | |
| 2.07 | Number of Facsimile Machines | 762 | 1057 | 1445 | 1624 | 2038 | 2502 | 3034 | 3594 | 3890 | 4271 | 4649 | 4978 | - | - | - | - | 18.6 | |
| 2.08 | Number of Internet Subscribers | - | - | - | - | 1042 | 2068 | 2163 | 2461 | 4073 | 6740 | 9534 | 12155 | 17,710 | 25,724 | 31,400 | 34,110 | 37.3 | 8.6 |
| 2.09 | Mobile Telephone Subscription | - | - | - | - | - | - | 6740 | 17757 | 27532 | 42910 | 51234 | 155,534 | 410,630 | 866,700 | 1,208,498 | 1,954,327 | 87.8 | 61.7 |

Table 3.1: SUMMARY OF BASIC TELECOM STATISTICS

[1985 - 2000 E.F.Y (1992/93 - 2007/2008 G.C)]

| No. | ITEMS | 1985 1992/93) | 1986 1993/94) | 1987 (1994/95 1995/96) | 1988 1995/96) | 1989 1996/97) | 1990 1997/98) | 1991 (1998/99) | 1992 (1999/00) | 1993 (2000/01) | 1994 (2001/02) | 1995 (2002/03) | 1996 (2003/04) | 1997 (2004/05) | 1998 (2005/06) | 1999 (2006/07) | 2000 (2007/08) | Average Annual Growth | Annual Growth |
|----------|--|------------------|------------------|------------------------------|------------------|------------------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------|-----------------------------|------------------|
| 2.10 | Percentage of lines residential/business | 62.4/19.6 | 63.4/17.7 | 62/18 | 62/19 | 62/20 | 61/20 | 62/19 | 63/20 | 67/19 | 70/17.7 | 70.5/16.5 | 72.5/16.€ | 74/16.5 | 74.8/16.5 | 73.2/14.9 | 75.6/15.5 | - | |
| 2.11 | Number of Digital Data Circuits | - | - | - | - | - | - | - | - | - | - | 129 | 178 | - | - | - | - | 38.0 | |
| 2.12 | Number of Digital Data Customers | - | - | - | - | - | - | - | - | - | - | 65 | 91 | - | - | - | - | 40.0 | |
| 2.13 | Number of Rural Kebeles | - | - | - | - | - | - | - | - | - | - | - | - | 60 | 4,837 | 7,389 | 8,676 | 424.9 | 17.4 |
| 3 | TELEPHONE TRAFFIC (millions) | | | | | | | | | | | | | | | | | | |
| 3.1 | Metered - Pulses | 470.8 | 523.6 | 540 | 568.3 | 619.45 | 704.4 | 786.42 | 1010.21 | 1253.41 | 1573.99 | 1890.37 | 2,225.14 | 2,341.99 | 2,475.56 | 2,714.31 | 2,715.07 | 12.4 | 0.03 |
| 3.2 | Metered - CDR * | | | | | | | | | | | | | | | 344.60 | 346.11 | 0.4 | 0.4 |
| 3.3 | Interurban calls (via operator) | 3.7 | 4.4 | 5.4 | 6.08 | 6.65 | 7.22 | 6.78 | 7.72 | 10.37 | 12.73 | 14.18 | 15.57 | - | - | - | - | 14.0 | |
| 3.4 | International calls (OG) | 2.8 | 3.1 | 3.1 | 3.41 | 3.56 | 3.94 | 4.08 | 4.36 | 4.62 | 4.62 | 4.93 | 6.67 | 8.57 | 11.48 | 5.73 | - | 11.4 | |
| 3.5 | International minutes (OG) | 10.9 | 11.5 | 10.5 | 10.35 | 10.69 | 11.84 | 12.45 | 13.42 | 13.42 | 12.88 | 14.31 | 17.70 | 20.59 | 28.68 | 15.95 | 27.10 | 6.3 | 13.0 |
| 3.6 | International calls (IC) | 4.09 | 4.49 | 5.45 | 6.47 | 6.76 | 7.11 | 8.15 | 7.68 | 8.63 | 8.71 | - | - | - | - | - | - | 8.8 | |
| 3.7 | International minutes (IC) | 22.88 | 23.17 | 26.15 | 32.5 | 38.14 | 38.8 | 38.59 | 36.73 | 42.71 | 35.56 | 54.81 | 133.68 | 199.12 | 240.01 | 289.09 | 504.90 | 22.9 | 60.0 |
| 4 | Mobile Telephone and Internet Traffic | | | | | | | | | | | | | | | | | | |
| 4.1 | Mobile - Local (million mins.) | - | - | - | - | - | - | - | 26.76 | 60.80 | 77.01 | 120.75 | 165.76 | N.A. | N.A. | N.A. | - | 57.8 | |
| 4.2 | Mobile - International (million mins.) | - | - | - | - | - | - | - | 1.41 | 2.43 | 2.45 | 3.34 | 3.83 | N.A. | N.A. | N.A. | - | 28.4 | |
| 4.3 | Internet Traffic (' 000 hours) | - | - | - | - | - | - | - | 334.60 | 577.11 | 622.05 | 2,325.33 | 3,285.74 | N.A. | N.A. | N.A. | - | 77.0 | |
| 5 | TELEGRAPH MESSAGES (Thousands) | | | | | | | | | | | | | | | | | | |
| 5.1 | National | 152.4 | 153.5 | 165.9 | 183.3 | 158.2 | 124.3 | 126 | 107.2 | 102.6 | 85.9 | 80.3 | 64.34 | 55.04 | - | - | - | (8.1) | |
| 5.2 | International (OG) | 5 | 3 | 3 | 2.7 | 2.3 | 1.6 | 1.2 | 1.4 | 0.66 | 0.41 | 0.95 | 0.36 | 0.11 | - | - | - | (27.3) | |
| 6 | INTERNATIONAL CIRCUITS | | | | | | | | | | | | | | | | | | |
| 6.1 | Satellite Telephone Circuits | 247 | 346 | 345 | 369 | 350 | 386 | 386 | 380 | 427 | 430 | 514 | 802 | 1,816 | 1,749 | 1,756 | - | 15.0 | |
| 6.2 | Microwave Telephone Circuits | 49 | 91 | 91 | 186 | 193 | 25 | 25 | 26 | 53 | 53 | 109 | 109 | 137 | 167 | 167 | - | 9.2 | |
| 6.3 | Submarine Cable | 18 | 18 | 24 | 24 | 24 | - | - | - | 25 | 73 | 102 | 101 | 250 | 578 | 1,018 | - | 33.4 | |

Table 3.1: SUMMARY OF BASIC TELECOM STATISTICS

[1985 - 2000 E.F.Y (1992/93 - 2007/2008 G.C.)]

| No. | ITEMS | 1985 (1992/93) | 1986 1993/94) | 1987 (1994/95) | 1988 1995/96) | 1989 1996/97) | 1990 1997/98) | 1991 (1998/99) | 1992 (1999/00) | 1993 (2000/01) | 1994 (2001/02) | 1995 (2002/03) | 1996 (2003/04) | 1997 (2004/05) | 1998 (2005/06) | 1999 (2006/07) | 2000 (2007/08) | Average Annual Growth | Annual Growth |
|-----|---------------------------------|-------------------|------------------|-------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------------------|------------------|
| 7 | PERSONNEL | | | | | | | | | | | | | | | | | | |
| | Male | 3434 | 3352 | 3514 | 3470 | 3582 | 3861 | 4267 | 4607 | 4868 | 5058 | 5416 | 5987 | 6,763 | 7,764 | 8,087 | 8,712 | 6.4 | 7.7 |
| | Female | 1862 | 1870 | 1982 | 1993 | 2037 | 2225 | 2306 | 2476 | 2502 | 2522 | 2497 | 2632 | 3,015 | 3,470 | 3,557 | 3,548 | 4.4 | (0.3) |
| | Total | 5296 | 5222 | 5496 | 5463 | 5619 | 6086 | 6573 | 7083 | 7370 | 7580 | 7913 | 8619 | 9,778 | 11,234 | 11,644 | 12,260 | 5.8 | 5.3 |
| 8 | FINANCE | | | | | | | | | | | | | | | | | | |
| 8.1 | Income (Millions Birr) | 253.40 | 292.10 | 445.80 | 496.73 | 551.80 | 624.34 | 624.09 | 720.37 | 932.19 | 914.82 | 1042.66 | 1241.76 | 1,813.80 | 2,155.04 | N.A. | 3,292.25 | 18.6 | 20.0 |
| 8.2 | Expense (Millions Birr) | 154.30 | 179.20 | 194.46 | 199.98 | 222.30 | 280.86 | 285.64 | 371.12 | 718.74 | 468.40 | 487.43 | 638.42 | 820.26 | 1,499.60 | N.A. | 951.74 | 12.9 | 13.4 |
| 8.3 | Gross Profit (Millions Birr) | 99.10 | 112.90 | 251.34 | 296.75 | 329.50 | 343.48 | 338.45 | 349.25 | 213.45 | 446.42 | 555.23 | 603.34 | 993.54 | 655.44 | N.A. | 2,340.51 | 23.5 | 22.9 |
| 8.4 | ASSETS (Millions Birr) | | | | | | | | | | | | | | | | | | |
| 8.5 | Fixed Gross (Millions Birr) | 536.80 | 573.20 | 603.49 | 695.34 | 731.35 | 837.47 | 911.46 | 1218.92 | 1611.42 | 1818.60 | 2340.06 | 2596.34 | 2,806.21 | 2,843.80 | N.A. | 4,667.90 | 15.5 | 24.7 |
| 8.6 | Depreciation (Millions Birr) | 302.10 | 326.10 | 348.65 | 376.35 | 408.26 | 442.62 | 483.4 | 544.72 | 630.09 | 748.28 | 918.89 | 1084.14 | 1,256.37 | 1,430.73 | N.A. | 1,595.66 | 11.7 | 2.0 |
| 8.7 | Net Asset (Millions Birr) | 234.70 | 247.10 | 254.84 | 318.99 | 323.09 | 394.85 | 428.08 | 674.20 | 981.33 | 1070.32 | 1421.17 | 1512.20 | 1,549.84 | 1,413.07 | N.A. | 3,072.25 | 18.7 | 41.1 |
| 9 | Population /in millions/ | 51.43 | 53.02 | 54.65 | 56.37 | 58.12 | 59.88 | 61.67 | 63.49 | 65.3947 | 67.22 | 69.13 | 71.10 | 73.2 | 75.2 | 77.1 | 79.4 | 2.9 | 3.0 |
| 10 | Teledensity | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.32 | 0.37 | 0.43 | 0.53 | 0.59 | 0.68 | 0.83 | 0.98 | 1.16 | 1.15 | 10.5 | (0.9) |
| 11 | Teledensity (Fixed + Mobile) | - | - | - | - | - | - | 0.33 | 0.39 | 0.48 | 0.59 | 0.66 | 0.90 | 1.39 | 2.14 | 2.73 | 3.61 | 30.6 | 32.4 |

Source: Ethiopian Telecommunications Corporation, Annual Statistical Bulletin, (2007/08)

Note:- Average annual growth rate is computed for the years 1992/93-2007/08 E.F.Y.

* Traffic of CDR-10 and AXE-10 exchanges measured in pulses; but for the remaining exchanges in CDR

-Figures in brackets under annual growth column show declines