

11th Five Year Plan

1. Introduction

Telecommunications is one of the prime support services needed for rapid growth and modernization of various sectors of the economy. It has become especially important in recent years because of enormous growth of Information Technology (IT) and its significant impact on the rest of the economy. India is perceived to have a special comparative advantage in IT and in IT-enabled services. However, sustaining this advantage depends critically on high quality telecommunication infrastructure. Keeping this in view, the focus of Tenth Plan has to be on the provision of world class telecommunication facilities at reasonable rates. Provision of telecom services in rural areas would be another thrust area to attain the goal of accelerated economic development and social change. Although the telecom network has grown rapidly in recent years, its growth needs to be accelerated further in the Tenth Plan. It is equally important to speed up structural changes in this sector in line with trends in other countries to ensure that telecommunication services are not only made available on the scale needed to sustain rapid growth in the economy as a whole but also that their cost are in tune with the expectations of a modernising economy. For a dynamic sector, reforms is a continuous process necessitated by dynamics of change including technological innovations. The telecom sector in India has been witnessing a continuous process of reforms since 1991. With the opening of international long distance services and internet telephony from April, 2002, the process of liberalisation and opening up the sector for competition is complete. Convergence of services is a major new emerging area and the telecom sector will have to address this in the Tenth Plan.

The New Telecom Policy (NTP) announced in 1999 modified the NTP, 1994 to take into account the far-reaching technological developments taking place in the telecom sector globally and to implement the Government's resolve to make India a global IT superpower. NTP, 1999 also seeks to solve problems arising out of the implementation of NTP, 1994. The objectives of the NTP 1999 are to:

- Make available affordable and effective communications for the citizens.
- Strive to provide a balance between the provision of universal service to all uncovered areas, including the rural areas and the provision of high-level services capable of meeting the needs of the country's economy.
- Encourage the development of telecommunication facilities in remote, hilly and tribal areas of the country.
- Create a modern and efficient telecommunications infrastructure taking into account the convergence of IT, media, telecom and consumer electronics and thereby propel India into becoming an IT superpower.
- Convert Public Call Offices (PCOs), wherever justified, into Public Teleinfo centres offering multimedia services like Intergrated Service Digital Network (ISDN) services, remote database access, government and community information systems etc.
- Transform in a time bound manner, the telecommunications sector to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing field for all players.
- Strengthen research and development (R&D) efforts in the country and provide an impetus to build world-class manufacturing capabilities.
- Achieve efficiency and transparency in spectrum management. • Protect the defence and security interests of the country.
- Enable Indian telecom companies to become truly global players.

2. Ninth Plan Review

2.1. During the Ninth Plan period, a record growth rate of telecom services was achieved in the country. The network (equipped capacity) grew at an average rate of about 22 per cent. Growth of both cellular mobile phones and fixed

line phones has been equally impressive. While private sector concentrated in cellular mobile phones segment, the growth in the Government sector was primarily due to fixed line connections. Against the target of providing 237 lakh Direct Exchange Lines (DELs), about 240.55 lakh additional DELs have been provided during the Ninth Plan. The cellular network has grown from a small base of 3.40 lakh connections to 64.31 lakh connections by the Plan end. As a result of this growth, the tele-density has nearly tripled from 1.57 at the beginning of the Ninth Plan to 4.4 as on March 31, 2002. Details in this regard are given in the Table below:

Network Expansion - Ninth Plan (Lines in lakh)						
As on 31.3.1997	Net Addition-Ninth Plan			As on 31.3.2002	CAGR	
	Public	Private	Total		%	
Fixed	145.40	234.68	5.87	240.55	385.95	21.56
Cellular	3.40	2.14	58.77	60.91	64.31	80.00
Total	148.80	236.82	64.64	301.46	450.26	24.79
Tele-density	1.57	-----	-----	-----	4.4	-----
VPTs	2.61	2.061	0.00846	2.07	4.68	12.39

The performance of the Public sector units, i.e. Bharat Sanchar Nigam Ltd. (BSNL) and Mahanagar Telephone Nigam Ltd. (MTNL), has been impressive. Against the target of installing 185 lakh new connections in the original Plan (which was revised to 222.7 lakh in Mid-Term appraisal for BSNL and MTNL) and 237 lakh for the whole sector including private sector the achievement during the Ninth Plan is 240.55 lakh connections including contribution of private sector i.e. more than the target envisaged in the Ninth Plan Document. Ninth Plan also witnessed the beginning of cellular services by the public sector. MTNL launched its mobile services in Delhi and Mumbai as the third operator. Details of targets and achievements of the public sector during the Ninth Plan are given as under.

Ninth Plan (1997-02) Physical Targets and Achievements - Telecommunications												
Name of Scheme	Original Target	Revised Targets	1997-98		1998-99		1999-2000		2000-01		2001-02	
			Target	Actuals	Target	Actuals	Target	Actuals	Target	Actuals	Target	Actuals
Switching Capacity (lakh lines)	230	298	36	35.18	49.3	47.89	54.7	67.17	72.35	71.3	82.46	75.83
DOT	200.6	273	30.8	32.3	44	43.75	49	63.02	67	67	77.76	70.33
MTNL	29.4	25	5.2	2.88	5.3	4.14	5.7	4.15	5.35	4.3	4.7	5.5
Direct	185	222.7	29	32.59	36	37.92	45.5	49.18	52.4	59.25	72.3	57.88

Ninth Plan (1997-02) Physical Targets and Achievements - Telecommunications

Name of	Original	Revised	1997-98		1998-99		1999-2000		2000-01		2001-02	
Exchange												
(Lakh lines)												
DOT	160	200.7	24.6	28.65	31.5	35.45	40.6	45.4	48	56.29	68.3	53.07
MTNL	25	22	4.4	3.94	4.5	2.47	4.9	3.78	4.4	2.96	4	4.18
TAX (Lakh_lines)	18	23.06	3.25	3.14	4.5	2.06	4.53	4.8	5.15	5.12	9	9.07
DOT	15.24	18.87	2.75	2.77	3.87	2.06	4	4.03	4	5.12	9	9.07
MTNL	2.76	4.19	0.5	0.37	0.63	--	0.53	0.77	1.15	--	1.1	0.9
Microwave Systems (000kms)	90	70	18	17.99	19.5	14	15	19.88	10	21.03	7.5	14.45
Optical Fibre System (000 km)	140	270	22	23.82	35	31.77	40	63.27	100	53.35	126	99.02
VPT (000 Nos.)	239.1 6	278.8 7	83	42.86	80.5	37.06	45	33.97	70	34.22	144	70.75

2.2. The performance of the private sector during the Ninth Plan has been a mixed one. While it did very well in the expansion of cellular network, the performance was not encouraging in the fixed line segment. Only about 5.9 lakh DELs have been installed against the target of 52 lakhs(original) and the revised target of 14.3 lakh. Constraints like licensing agreements, unrealistically higher licence fees, revenue share, right of way etc. have been basically responsible for the slow progress for the private sector.

2.3. For the Government sector, an outlay of Rs.46,442.04 crore was approved for the Ninth Plan to be financed basically from internal and extra budgetary resources (IEBR). This included a small budget support component of Rs.44.04 crore meant for financing the Plan outlay of regulatory bodies like TRAI and Wireless Monitoring Organization (WMO) etc. The approved outlay for the Ninth Plan was only indicative in nature and the Annual Plan outlays were to be fixed on the basis of resources that might become available during the year. The operational outlay for the Ninth Plan on the basis of the Annual Plan outlays approved on a year to year basis works out to Rs.84,783.90 crore including a budget support of Rs.208.20 crore. As against this, plan expenditure is expected to be Rs.69,407.62 crore. This gives a utilisation of 163 per cent of the originally approved outlay and 89 per cent of the approved operational outlay. The shortfall in expenditure in comparison to the operational outlay was basically on account of lower expenditure by MTNL and BSNL due to delays in taking up some new projects and reduction in cost of equipment. On the financing side, the IEBR generation was lower than targeted (compared to operational outlay)

basically on account of reduced requirement for market borrowings. The shortfall in internal resources generation by BSNL and MTNL could partly be attributed to tariff re-balancing.

3. Present Status of Telecom Network

3.1. The basic telecom services network has expanded from about 84 thousand connections at the time of independence to about 385.95 lakh working connections as on March 31 2002. Basic services network constitutes the bulk of the phones accounting for about 86 per cent of the total telecom network. The main features of the present telecom network are given in the table given below:

Status of Telephone Network As on 31.03.2002:-

- Total number of exchanges - 35,023
- Number of rural exchanges 26,953
- Total Fixed Telephone connections 385.95 lakh
- Number of Cellular mobile phones 64.31 lakh
- Trunk Auto Exchange Lines (TAX) 34.27 lakh
- Tele Density - All India - 4.4
- Number of Village Public Telephones 4.68 lakh
- Internet Connections 38 lakh (as on January 31, 2002)

4. Challenges for the Tenth Plan

4.1. With the introduction of competition in the market, the focus of planning needs to shift from the overall expansion of DELs and network to providing requisite policy framework for the sector/ market to grow as required and consistent with the overall policy objectives. In determining the appropriate policy initiatives and the relevant regulatory framework for this purpose, we need to bear certain factors in mind. The major factors/trends that merit consideration in this regard are given below:

Factors and Trends Relevant for Future Policy Initiatives:-

- Based on global trends and Indian experience, the rate of growth of cellular mobile services would continue to be higher for a number of years. Its two important implications are further lowering of average cost per line and cellular mobile/WLL-M becoming a major tool of expansion in rural areas.
- The capital requirement for investments in the next five years are expected to be lower than the present cost due to continuing decline in equipment cost as well as lower network costs due to competition resulting from entry of infrastructure providers Railways, Power Grid Corporation, etc. and huge capacity addition by other players.
- A small portion of the subscriber base provides a large share of call revenue. High revenue subscriber category would form the core of competition among operators which may lead to a fall in the tariffs applicable to this type i.e. long distance calls. As a result, long distance tariffs may be even lower than those specified by the regulator.
- Margin of surplus will decline over time due to competition. However, the break-even revenue per subscriber will also be lower due to decline in costs.
- Data services are expected to grow much faster than voice telephony. This underlines the need in due course to focus on broad-band linkages to enable the provision of these services at the required rate.
- Due to large uncovered areas in rural and remote regions of the country which are also expected to be low paying as well, the commitments on account of USO are likely to be large.
- The trend towards convergence of services may lead to major changes in the structure of industry and markets.
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4.2. Telecommunications is one of the fastest growing sectors in India. However, viewed in the context of global growth patterns and indicators, the sector is still in the early stages of development. Our tele-density was only 4.01 as compared to the global average of 32.78 (December, 2001) and 24.98 achieved by China. The comparative position of teledensity in a cross section of countries both developed and developing is given below.

Telecom Development - International Comparision (As on December, 2001)						
Country	Population	GDP per capita	DELS (Fixed)	Cellphones	Total Phones	Tele-Density
(In crore)	(US\$)*	(In lakh lines)	(In lakh lines)	(In lakh lines)	(In lakh lines)	(In lakh lines)
USA	28.59	36211	1900	1270	3170	110.88
UK	6.01	23694	353.26	470.26	823.52	137.02
Australia	1.93	19897	100.6	111.69	212.29	109.99
Brazil	17.18	3500	374.31	287.46	661.77	38.52
Mexico	10.04	5807	137.73	217.57	355.3	35.39
S. Africa	4.38	2882	49.69	91.97	141.66	32.36
Egypt	6.46	1424	66.5	27.94	94.44	14.63
Japan	12.73	34337	760	748.19	1508.19	118.45
Malaysia	2.38	3838	47.38	71.28	118.66	49.86
China	129.61	834	1790.34	1448.12	3238.46	24.98
Pakistan	14.5	425	34	8	42	2.9
India	102.7	455	347.32	64.31	411.63	4.01
Asia	360.67	2354	3911.79	3366.14	7277.93	20.17
World	607.91	5274	10460.88	9462.97	19923.85	32.78

Source: World Telecom Development Report, 2002

* Figures of per capita income relate to the year 2000

Tele-Density International Comparision (31.12.2001)						
Country	Main Telephone Lines (in lakh)			Tele-density		
	2001	CAGR %	1995	2001	CAGR %	
USA	1597.35	1900	2.9	60.73	66.45	1.5

Tele-Density International Comparision (31.12.2001)

Country	Main Telephone Lines (in lakh)			Tele-density		
UK	294.11	353.26	3.1	50.18	58.8	2.7
Australia	89	100.6	2.1	49.25	52.02	0.9
Brazil	132.63	374.3	18.9	8.51	21.78	17
Mexico	88.01	137.73	7.7	9.39	13.72	6.5
S.Africa	40.02	49.69	3.7	10.14	11.35	1.9
Egypt	27.16	66.5	16.1	4.67	10.3	14.1
Japan	622.92	760	3.4	49.61	59.69	3.1
Malaysia	33.32	47.38	6	16.57	19.91	3.1
China	407.05	1790.34	28	3.3	13.81	26.9
Pakistan	21.27	34	8.1	1.67	2.35	5.8
India#	119.78	347.32	19.4	1.29	3.38	17.4
Asia	1816.88	3911.79	13.6	5.46	10.85	12.1
World	6892.51	10460.9	7.2	12.29	17.21	5.8

Source: World Telecom Development Report 2002.

#: Tele-Density works out to 4.4 on the basis of total tephone connections of 450.26 lakh including 64.31 lakh collector connections (31.03.2002)

The status of teledensity along with other indicators like per capita income, number of PCs, Internet users etc. for these countries may be seen in as under:

Telecom Development International Comparision(As on Dec. 2001)

Country	Population	GDP per	DEls (Fixed)	Tele-density	No. of PCs	Internet Users
(In crore)	capita (US\$)*	(In lakh lines)	per 100 persons	per 10,000 persons		
USA	28.59	36211	1900	66.45	62.25	4995.1
UK	6.01	23694	353.26	58.8	36.62	3995.01
Australia	1.93	19897	100.6	52.02	51.71	3723.05
Brazil	17.18	3500	374.3	21.78	6.29	465.58
Mexico	10.03	5807	137.73	13.72	6.87	362.23

Telecom Development International Comparison(As on Dec. 2001)

Country	Population	GDP per	DELS (Fixed)	Tele-density	No. of PCs	Internet Users
S. Africa	4.38	2882	49.69	11.35	6.85	700.58
Egypt	6.45	1424	66.5	10.3	1.55	92.95
Japan	12.73	34337	760	59.69	34.87	4547.1
Malaysia	2.38	3838	47.38	19.91	12.61	2394.96
China	129.61	834	1790.34	13.81	1.93	260
Pakistan	14.5	425	34	2.35	0.41	34.49
India#	102.71	455	347.32	3.38	0.58	68.16
Asia	360.67	2354	3911.79	10.85	3.31	437.49
World	607.91	5274	10460.9	17.21	8.42	823.24

Source: World Telecom Development Report 2002.

#: Tele-Density works out to 4.4 on the basis of total telephone connections of 450.26 lakh including 64.31 lakh Collector connections (31.03.2002)

*: Figures of population and income (GDP) relate to year 2000.

4.3. The sector also needs, especially in terms of broad-band, to expand at substantially higher rates to meet the needs of related sectors like IT, I & B and other sectors of the economy. Keeping this perspective in view, the sector needs to be treated essentially as an infrastructure sector for the next decade or so. Once the required tele-density is achieved and the necessary support network has been created, the sector could be treated as service sector.

4.4. With a view to ensuring optimum growth in the coming years, Government's broad policy of taxes and regulation for the telecom sector is a promotional one. Mopping up of resources or revenue generation by the Government should not be a determinant of the policy governing the sector. The incidence of licence fees in the form revenue share and spectrum charges has to be guided by this principle.

4.5. The presence of multiple operators in various sectors implies a need to focus on the conditions that will enable these operators to function smoothly. Specific planning would be required to prepare the grounds for a multi-operator system to develop and the subscriber base to expand without impediments.

4.6. The Radio Frequency (RF) spectrum is a scarce natural resource. In accordance with international treaties, it has to be shared among a very large number of radio communication services and users defence, civil, Government and private based on the principles of co-existence and most efficient use. The increasing share of cellular mobile in total number of telephones points to a need for greater focus on the policy for allocating frequency spectrum. In addition to cellular mobile phones, which will have a large number of lines by the end of the Tenth Plan, frequency spectrum will be required also for the WLL used for providing basic services. The advent of new technology will also pose a significant challenge for the planners of radio spectrum. The increasing adoption of wireless technologies and the need to align with international standards would mean that there will be a need to address the shortage of wireless spectrum and to reconcile competing demands in certain frequency bands. The policy governing spectrum allocation

and licencing has to be so designed that this scarce resource is used optimally and does not become a constraint for growth.

4.7. Though about 70 per cent of India lives in the villages and rural areas account for about 30 per cent of the GDP, the development of telecom facilities in these areas is far from satisfactory. The tele-density in rural areas is only 1.14 against 10.16 in the urban areas. Viewed from the general accessibility point of view also, about one-third of the total villages in the country are yet to be connected by basic telecom facility. As per the NTP-1999, the Government is committed to provide voice and low speed data services to all the remaining villages by 2002. With the corporatisation of DoT's network by creating BSNL, rural telephony is no more primary responsibility of the public sector.

4.8. The public sector will have to continue to play a significant role in the provision of basic telecom services during the Tenth Plan. Out of about 828 lakh new connections envisaged to be provided during the Tenth Plan, the public sector units i.e. BSNL and MTNL are expected to provide 395.23 lakh additional connections. This assumes no budgetary support from the Government to BSNL for expansion of network in the rural areas. However, depending upon the availability of additional resources through USO support and other sources, public sector may be in a position to achieve much higher targets for major services during the Tenth Plan period. Cellular services are also expected to be the corner-stone of the public sector expansion plans in the Tenth Plan. As per the plans drawn by the company, BSNL is expected to be a major national player in cellular services.

4.9. Private investment is also expected to play a leading role in the expansion of telecom services during the Tenth Plan. In the area of value added services, the private sector would continue to play the dominant role. The quantum of investment by the private operators would basically get determined by the rate of return on such investments both basic as well as value added services. Foreign Direct Investment (FDI) has also a major role to play in supplementing the resources of the domestic private sector as the scale of investment envisaged is large.

5. Objectives and Targets of the Tenth Plan

5.1. The Tenth plan policies and programmes are guided by the basic goal of creating a worldclass telecom infrastructure in order to meet the requirements of IT based sector and needs of a modernising economy on the least cost basis. Ensuring value for money to the consumers and easy and affordable access to basic telecom services to everyone and everywhere would be the other goal of policies to be pursued in Tenth Plan. The major objectives envisaged for the Tenth Plan are:

- Affordable and effective communication facilities to all citizens.
- Provision of universal service to all uncovered areas, including rural areas.
- Building a modern and efficient telecommunications infrastructure to meet the convergence of telecom, IT and the media.
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- Transformation of the telecommunications sector to a greater competitive environment providing equal opportunities and level playing field for all the players.
- Strengthening R&D efforts in the country.
- Achieving efficiency and transparency in spectrum management
- Protecting the defence and security interests of the country.
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- Enabling Indian telecom companies to become truly global players.
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5.2. The basic thrust of the Tenth Plan would be to provide world level services at affordable prices. With corporatisation of DOT's network, the network expansion/roll-out plans of both Government and private sector would be guided by the demand of various services. In line with the broad objectives of the NTP, 1999 and the objectives envisaged for the Tenth Plan, the following specific targets are envisaged for the telecom sector for the Tenth Plan:

- To endeavour to make available telephones by and large on demand by end of 2002-03 and sustain it thereafter.
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- To achieve an overall teledensity of 9.91 by 31st March 2007.
- Achieve telecom coverage of all villages in the country by December 2002 and provide reliable transmission media in all rural areas.
- Provide reliable media to all exchanges by the end of March, 2003.
- Provide high-speed data and multimedia capability using technologies including ISDN to all towns with a population greater than two lakhs by the end of March, 2003.

6. Expansion of Network During the Tenth Plan

6.1. The NTP, 1999 provides the basic framework for the future development and growth of the telecom sector in the country. One of the major objectives of the Policy is to make telephones on demand by the year 2002 and sustain it thereafter so as to achieve a teledensity of 7 by the year 2005 and 15 by the year 2010. Keeping in line with the above goals of teledensity, the country need to achieve an overall teledensity of 9.91 by the Tenth Plan end i.e. March, 2007. To achieve the above target of teledensity, about 650 lakh additional connections may have to be provided during the Tenth Plan. Working on a different assumption of achieving a tele-density target of 11.5 by March, 2007, the Working Group on Telecom Sector for the Tenth Five Year Plan had recommended that 817.10 lakh new connections needed to be provided during the Tenth Plan. Keeping in view the present trend of growth, the Plans drawn up by the public sector and the availability of funds, the projections of the Working Group seem to be on the higher side. Taking the above factors into account, the goal of achieving teledensity target of 9.91 by March, 2007 seems more realistic. The distribution among cellular, fixed and WLL based limited mobility lines out of the net addition during the Plan period would depend upon the emerging behaviour of the market, availability of technological innovations and options and relative prices of equipment. As per the initial Plans drawn by Bharat Sanchar Nigam Ltd. (BSNL) and Mahanagar Telephone Nigam Ltd. (MTNL), the public sector is envisaged to provide about 395 lakh additional connections. This implies that remaining connections i.e. about 255 lakh would have to be provided by the private sector of the performance of the private sector is more encouraging higher target of tele density could be achieved.

6.2. Bharat Sanchar Nigam Ltd. (BSNL)

Bharat Sanchar Nigam Ltd. (BSNL) came in to existence on 1.10.2000 as a result of the reorganisation of the erstwhile Department of Telecom. With this, the reforms process of separation of policy formulation from service provision and regulation has been completed. This reorganisation had two important implications for BSNL i.e.

- BSNL has to act henceforth as a commercial entity; its investment policies among other things to be guided by profits/ purely by commercial consideration.
- BSNL would be subjected to additional financial liabilities like corporate tax, licence fees, payment of dividend etc. which were not applicable to erstwhile DOT

Based on the resources availability of the company, it plans to provide 367.67 lakh new connections during the Tenth Plan. Keeping in line with the projected demand for mobile services, the main focus of the company is envisaged to

be on expansion of cellular mobile services as the third operator in various circles. The following table gives the broad details of expansion programme envisaged by the Company during the Tenth Plan:

Expansion of Network - BSNL(In lakh lines)			
Types of Phones	Urban	Rural	Total
Fixed	80	0.9	80.9
WLL	51	11.93	62.93
Mobile	222	1.84	223.84
Total	353	14.67	367.67

6.3. Mahanagar Telephone Nigam Ltd (MTNL)

MTNL had enjoyed monopoly till 2000 in the two metro cities of Delhi and Mumbai, where it operates. Since then the private operators have started providing basic services in Mumbai and are expected to do the same soon in Delhi. Increased competition from private operators is expected during the Tenth Plan. To maintain its position as a major player in Mumbai and Delhi, MTNL envisages to expand its cellular network in a big way during the Tenth Plan. Expansion of internet services and introduction of IT related services is another major element of company's overall strategy of growth and competition. As per the plans drawn up by the company, 27.56 lakh additional telephone connections are expected to be provided during the Tenth Plan including 11.57 lakh cellular phones. The entire plan outlay of the company is envisaged to be financed out of internal and extra budgetary resources.

6.4. Centre for Development of Telematics (C-DoT)

C-DoT is the main public sector agency engaged in R&D activity in the Telecom sector. It has been a leader in the development of rural exchanges which have performed exceedingly well under tough conditions. C-DoT technology constitutes more than 40per cent of the total lines operative in Indian telecommunications network. C-Dot licence manufacturers are exporting the technology switches to other countries having conditions similar to those in Indian rural areas.

During the Tenth Plan, the thrust of CDoT's research plan would be the development of cost effective technologies providing services and features at par with those being offered by other global players. Development of products to cater to the needs to broad-band fixed and mobile subscribers access system, as well as high band with backbone systems would be an important part of the strategy for the Tenth Plan. Some of the major areas of thrust are:

- Intelligent Network Services
- GSM Personal Communication Services
- Third Generation Mobile Communication System
- Ka Band Satellite Communications
- Cell and Packet Switching Technologies for Voice and Data Convergence
- Ultra High Bit Rate Network Backbone
- Expansion Planning of Existing Wireline Network 8.5.67

Till September, 2000, the plan outlay of CdoT was financed out of I R generated by DoT. With the carving out of BSNL as a separate corporate entity, this mode of financing is no more available and the plan outlay is required to be funded through budgetary support.

R&D activity in any sector is very vital for ensuring future growth and hence needs to be supported fully. However it may be mentioned that as one of the major beneficiaries of the R&D of CDoT, the industry needs to be fully associated in financing its activities. Besides, C-DoT needs to focus more on generating internal resources through royalty, consultancy etc. to reduce its dependence on Government support.

7. The Path Ahead

7.1. The Tenth Plan would endeavour to build a modern and efficient telecom infrastructure with a view to provide world class telecommunications facilities at affordable rates, meet the needs of convergence of telecom, IT and media and universal service to all uncovered areas. To achieve the above goals, the major initiatives/action points envisaged for the Tenth Plan are :

- To achieve a target of tele-density of 9.91 by March, 2007, about 650 lakh new telephone connections need to be provided during the Plan Period.
- The telecom sector needs to be treated as an infrastructure sector for the next decade or so in order to achieve the targets of teledensity in line with the objectives laid out in the NTP, 1999. This is envisaged also to help achieving substantially higher rate of growth of broadband to meet the requirements of other sectors of the economy especially Information Technology and Entertainment.
- Government's broad policy of taxes and regulation for the telecom sector has to be promotional in nature with a view to ensuring optimum growth in the coming years.
- Ensuring fair and timely interconnection in the multi-operator scenario is one of the major inputs for sustaining high growth.
- The policy governing spectrum allocation and licencing has to be so designed that this scarce resource is used optimally and does not become a constraint for growth. Spectrum pricing need to be based on relative demand and supply over space and time in a dynamic manner and should promote introduction of spectrum efficient technology. A significant chunk of available spectrum is being used by defence, police and para military forces.
- Adequacy of funds has to be ensured for effective implementation of the USO.
- The policy governing development of rural telecom services need to be promotional in nature with a view to boost teledensity in these areas in line with the objectives of NTP, 1999.
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7.2. An outlay of Rs. 86984.00 crore including the budgetary support of Rs. 1500 crore has been approved for the Telecommunications sector for the Tenth Plan.