

Chapter 26 Communications

Telecommunications

Telecommunications is a critical part of infrastructure and one that is becoming increasingly important, given the trend of globalisation and the shift to a knowledge-based economy. Until 1994 telecommunication services were a Government monopoly. Although telecommunications expanded fairly rapidly under this arrangement, it was recognised that capacities must expand much more rapidly and competition also be introduced to improve the quality of service and encourage induction of new technology. Telecommunications has become especially important in recent years because of the enormous growth of information technology (IT) and its potential impact on rest of the economy. India is perceived to have a special comparative advantage in information technology or in IT-enabled services, both of which depend critically on high quality telecommunications infrastructure. Telecommunications policy must, therefore, be formulated keeping in view the need to provide the IT and related sectors with world class telecommunications at reasonable rates. Formulating a policy for the sector faces an additional challenge because technological change in telecommunication has been especially fast and is expected to lead to major changes in the structure of the telecommunication industry worldwide. Convergence of data, voice and image transmission and use of wide bandwidth and high speed Internet connectivity have added new dimensions which need to be taken into account in making mid-course corrections in policy.

I. Policy Developments In Telecommunications

2. The Government had announced a National Telecom Policy (NTP) in 1994 allowing private sector participation in basic services. The policy sought to achieve the basic objectives of telephone on demand, provision of world class services at affordable prices, ensuring India's emergence as major manufacturing base / export base of telecom equipment and universal availability of telecom services to all villages. Within this framework, the Ninth Plan envisaged a much greater role for the private sector.

3. As it happened, private sector participation failed to take off as desired due to several constraints, the more important being artificially high licence fee liabilities for the operators resulting from competitive bidding process and the actual demand being much lower than the projections assumed by the private operators. While there was a rapid roll-out of value added services like cellular phones, radio paging etc., their growth and quality of services suffered heavily. For basic services just six licences were issued after three rounds of bidding and till recently only three operators had commenced operations in a limited way. As a result most of targets of NTP 1994 could not be achieved. In addition, there have been far reaching developments on a global scale in the recent past in telecom, IT, consumer electronics and media industries. . Convergence of both markets and technologies is a reality that is forcing realignment of the industry. This necessitated a re-look into the existing policy frame work. A summary of the reforms

undertaken thus far is in the following Box. However, there are a few issues left which need to be addressed further.

Reforms in Telecom Sector

- Telecom equipment manufacturing was completely deregulated in 1991.
- Value added services including cellular phone services thrown open to private sector in 1992.
- National Telecom Policy (NTP) was announced in 1994 providing the basic framework for future development of the sector. An important measure was allowing private sector participation in basic services.
- An independent regulatory authority called Telecom Regulatory Authority of India (TRAI) was set up in 1997.
- A new policy for Internet Service Providers (ISPs) was announced in 1998 opening the area to private sector providers. The policy was promotional in nature. No licence fee is to be paid by the ISPs for the first five years and then it is Re 1 per annum. .
- A new policy called New Telecom Policy (NTP), 1999 was announced replacing the 1994 policy.
- Migration of the existing licencees from the regime of fixed licence fee to a new regime of revenue share was permitted in October, 1999.
- The regulatory mechanism has been further strengthened through the TRAI (Amendment) Act, 2000 in which the role, functions and powers of TRAI vis-a-vis Government have been clearly defined. The Act provides for establishment of a separate dispute settlement mechanism called Telecom Dispute Settlement and Appellate Tribunal.
- ISPs permitted to set up sub-marine cable landing stations for international gateways for Internet.
- National Long Distance Service was opened for competition in Aug. 2000.
- Corporatization of DOT into public company called Bharat Sanchar Nigam Limited from 1st October 2000 approved.
- International Long Distance Services to be opened for competition from 1st April 2002 ending monopoly of Videsh Sanchar Nigam Limited.

New Telecom Policy, 1999

4. The New Telecom Policy (NTP) announced in 1999 has modified the 1994 policy to take into account 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 sought to solve the implementation problem arising out of the outgoing policy.. The objectives of 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 rural areas and the provision of high-level services capable of meeting needs of the country's economy.
- Encourage 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 thus propel India into becoming an IT superpower.
- Convert PCOs (public call offices), wherever justified, into Public Teleinfo Centres having multimedia capability like Integrated Service Data Network (ISDN) services, remote database access, government and community information systems etc.
- Transform -- in a time bound manner -- the telecommunications sector into a greater competitive environment in both urban and rural areas providing equal opportunities and level playing field for all players.
- Strengthen research and development efforts in the country and provide an impetus to build world-class manufacturing capabilities.
- Achieve efficiency and transparency in spectrum management.
- Protect defence and security interests of the country.
- Enable Indian telecom companies to become truly global players.

Some of the major features of the new policy are as follows:

- **Fixed Service Providers (FSPs):** Multiple service operators have been permitted in this segment against only two operators - one private and one Government - permitted by the earlier policy. The FSPs will be eligible to obtain licences for any number of service areas against the cap of three circles imposed while implementing the 1994 policy. Licences under the new policy would be for 20 years extendable by another 10 years. As against this, licences were issued for a 15-year period implementing the earlier policy of 1994. Fixed licence fee based on competitive bidding under the earlier policy has been replaced by one-time entry fee and revenue share. TRAI is to recommend the one-time entry fee, revenue share and basis of selection of operators under the new policy. The new policy also provides freedom to the operators to establish 'last mile' linkages and carry long distance traffic within the service area.
- **Cellular Mobile Service Providers (CMSPs):** Under the new policy, CMSP would be eligible to obtain licence for any number of areas. This is against a cap of three circles under categories A and B put together imposed in the licences issued under the 1994 policy. As per the new policy, DOT (Department of Telecommunications) /

MTNL (Mahanagar Telephone Nigam Ltd) would be licensed as a third operator against the earlier policy of allowing two private operators in each circle. The new policy allows more operators in a service area based on the recommendations of TRAI who will review this as required and no later than every two years. Licences under the new policy would be for 20 years extendable by another 10 years. As against this, licences were issued for a 10-year period implementing the earlier policy of 1994. Fixed licence fee based on competitive bidding under the earlier policy has been replaced by one-time entry fee and revenue share. TRAI is to recommend the one-time entry fee, revenue share and basis of selection of new operators under NTP, 1999. With a view to ensuring a level playing field, licence fee would be paid by DOT also; however, the Government would reimburse it DOT as it is the National Service Provider having immense rural and social obligations.

- **Internet Telephony** : Not permitted at this stage. To be reviewed at an appropriate time.
- **National Long Distance Connectivity**: It was to be opened for competition from 1st Jan, 2000. TRAI to work out terms and conditions including number of operators, licence conditions and other related issues.
- **International Long Distance Connectivity**: Opening of the service to competition to be reviewed by 2004.
- **Restructuring of DOT** : DOT to be corporatized by 2001 keeping in view the interests of all stake-holders.
- **Universal Service Obligation (USO)** : The Government seeks to achieve the following universal service objectives :
 - (i) Providing voice and low speed data services to the balance 2.9 lakh villages by 2002.
 - (ii) Achieve Internet access to all District HQs by 2000.
 - (iii) Achieve telephone on demand by 2002.

The resources for meeting the USO would be raised through a 'universal access levy' which would be a percentage of the revenue earned by all the operators under various licences. The percentage of revenue share towards universal access levy would be decided by the Government in consultation with TRAI. Implementation of the USO obligation for rural / remote areas would be undertaken by all fixed service providers who will be reimbursed from the funds from the universal access levy.

- **Change in Legislation**: Indian Telegraph Act 1885 needs to be replaced with a more forward - looking Act

II. Performance In Ninth Plan (1997-2002)

5. The Ninth Plan has envisaged rapid expansion of network, modernising it with the state of art technology and improving efficiency. The specific objectives envisaged for the Ninth Plan are :

- (i) Universal coverage or telephone on demand;
- (ii) Universal and easy accessibility;

- (iii) World standard services to the consumers at affordable prices;
- (iv) Demand-based provision of existing value-added services and introduction of new services;
- (v) Exports of telecom equipment and services as a major thrust area.

To achieve the above objectives, the following major targets were fixed for the telecom services :

- i) Provision of 237 lakh additional Direct Exchange Lines (DEL) including 52 lakh by the private sector;
- ii) Provision of additional 18 lakh lines of trunk capacity (TAX);
- iii) Laying of 1.4 lakh rkms (route kilometers) of optical fibre (OFC);
- iv) Provision of 2.39 lakh Village Public Telephones (VPTs);
- v) One Public Call Office (PCO) for every 500 population in urban areas; and
- vi) STD facility to all the exchanges by the year 2000.

6. An outlay of Rs.46,442.04 crore was approved for the telecom sector to be financed basically by internal and extra budgetary resources. Budget support of Rs.44.04 crore provided to the sector was meant for financing the Plan expenditure on monitoring and regulatory mechanisms i.e. Wireless and Planning Coordination (WPC) Wing of the Ministry of Communications. The financing pattern and the organization-wise breakup was not worked out due to difference in perception on the size of the approved Plan.

Review of Physical Performance

7. The performance of Government sector i.e. Department of Telecom Services (DTS) and Mahanagar Telephone Nigam Ltd. (MTNL) during the first three years has been generally satisfactory in relation to targets except in the area of rural connectivity. The following tables give the details in respect of major targets..

Physical Performance-Govt. Sector

Scheme*	Ninth Plan Target	1997-2000		% Achv. w.r.t.	
		Target	Achvmt.	1997-2000	9th Plan
DELs (lac)	185.00	110.50	119.69	108.32	64.69
DTS	160.00	96.70	109.50	113.24	68.43
MTNL	25.00	13.80	10.19	73.84	40.76
TAX('000)	18.00	12.28	10.00	81.14	55.55
DTS	15.24	10.62	8.86	83.43	58.14
MTNL	2.76	1.66	1.14	68.67	41.30
OFC('000)	140.00	97.00	118.86	122.53	84.90
VPT('000)	239.16	208.50	113.89	54.62	47.62

* : Units of DELs and TAX are in lines, OFC in route kms and VPT in numbers

The shortfall in VPT targets is reportedly on account of non-availability of appropriate technology. The performance of the old technology based on Multi Access Rural Radio (MARR) was unsatisfactory and the Department has stopped using equipment based on that technology since 1997. The new equipment based on C-DOT and WILL technology are being field-tried. However, the lower-than targeted expansion of the basic MTNL network is a matter of concern and probably reflects inadequacies in marketing.

8. Ninth Plan envisaged that a project for providing various value added and other telecom services would be taken up by the Department on a pilot basis in rural areas in an integrated manner. Such a project was to be taken up in two districts each – one developed and the other backward – of Punjab, Orissa, Kerala and Maharashtra. The Department is yet to initiate action in this regard. The project is expected to be very useful to gain experience for developing the teleinfo centres on a larger scale as envisaged in NTP, 1999.

9. Though private sector participation was permitted in basic services following the announcement of NTP 1994, the move failed to take off as desired. After three rounds of competitive bidding only six licenses were issued. As per their roll-out Plan, the six operators were expected to provide 20.18 lakh DELs over a three-year period. The following table gives the details in this regard.

Roll out Plan of Private Basic Service Operators

Name of the licensee	Name of Circle	Total DELs	Three Year Period
Tata Teleservices	A.P.	3,00,000	Sep.97 – Sep.2000
Reliance Telecom	Gujarat	2,88,000	Sep.97 – Sep.2000
Essar Commvision	Punjab	5,25,000	Sep.97 – Sep.2000
Bharti Telenet	M.P.	1,50,000	Sep.97 – Sep.2000
Hughes Ispat	Maharashtra	6,07,900	Sep.97 – Sep.2000
Shyam Telelink	Rajasthan	1,46,909	March 98 – March 2001

As on date only three operators i.e. M/s Bharati Telenet in MP, M/s Hughes Ispat in Maharastra and M/s Tata Teleservices in Andhra Pradesh have launched the services. Against the Ninth Plan target of 52 lakh DELs, the actual achievement was estimated to be only 1.42 lakh DELs till March 2000. This is against the roll-out plan of 20.18 lakh DELs agreed to by the six operators for a three year period. As per the licence agreements, 10% of the connections provided were to be in rural areas. The performance in this regard has been very poor. Keeping in view the present trend, a major shortfall is likely in the achievement of the Ninth Plan target of providing new connections and VPTs by the private sector. .

10. To offset the shortfall in the performance of the private sector in the expansion of basic networks including VPTs and to further strengthen the transmission capacity, the Department of Telecom Services has proposed an upward revision in the physical targets approved for the Ninth Plan. The target for DELs is proposed to be increased from 185.00 lakh to 222.70 lakh for the Government sector. Taking into account the proposed

reduction in the target for MTNL – from 25 lakh to 22 lakh DELs -- the target for DTS is proposed to be increased from 160.00 lakh to 200.70 lakh DELs. The target for VPTs is proposed to be increased from 2.39 lakh to 2.79 lakh new connections. The details may be seen in the **Annexure-I**.

11. Keeping in view the Department.'s past performance and its capacity to mobilise additional resources and logistics support required to achieve higher targets, the proposed increase in target seems feasible. But the Department needs to put in special efforts to achieve the enhanced targets for VPTs as its performance in this area in first three years has not been encouraging.

Review of Financial Performance

12. For various programmes of the telecom sector, an outlay of Rs.46,442.04 crore including a budget support of Rs.44.04 crore was approved for the Ninth Plan. The Department had proposed a much higher Plan outlay (Rs.85,523 crore) and it did not agree with the outlay approved. Due to difference of perception on the size of the outlay, it was agreed that the approved outlay would be only indicative in nature and the outlay for the Annual Plans would be determined on the basis of realistic assessment of resources that could be mobilized. Keeping this in view, the organization-wise breakup and financing pattern was not finalized at the time of Ninth Plan. Such a break-up has now been provided by the Department along with its proposals for the Mid-Term review and may be seen in **Annexure-II & III**.

13. During the first three years, an outlay of Rs.39,884.13 crore including budget support of Rs.23.42 crore was approved for the telecom sector (at 1996-97 prices). The utilization is expected to be about 80% of the approved outlay. The organization-wise details and financing pattern may be seen in Annexure. The shortfall in utilization of outlay is basically on account of low utilization by MTNL and VSNL (Videsh Sanchar Nigam Ltd) . Some of the major projects could not be taken up as envisaged due to several reasons including delay in clearances etc. The utilization by DOT has been about 89%. The following table gives the details of the financing pattern of the approved outlay and utilization of DOT and MTNL during the first three years.

Financial Performance-Govt.Sector

(Rupees in crore – at 1996-97 prices)

	Ninth Plan Aprvd. Outlay	1997-2000		% Achv. w.r.t.	
		Aprvd. outlay	Antc. Exp.	1997-2000	9th Pln
IR	35031.00	29522.67	27150.73	91.96	77.50
DoT	30965.00	25216.75	24375.47	96.66	78.72
MTNL	4066.00	4305.92	2775.26	43.62	68.25
Bonds	8410.00	7499.46	2959.14	54.37	35.18
DoT	7030.00	5442.57	2959.14	54.37	42.09
MTNL	1380.00	2056.89	0.00	0.00	0.00
Total	43441.00	37022.13	30109.87	81.32	42.03

The performance of DOT in respect of generation of internal resources has been very encouraging during the first two years and the target was exceeded by 6.8% and 9.73% during 1996-97 and 1997-98 respectively. However, in the third year i.e. 1999-2000, a shortfall of about 22% was likely to occur. The tariff revision effected in May, 1999 -- by which the long distance rates were cut by about 21% -- is stated to be the main reason for lower resource generation. It is planned to be compensated by an equal increase in market borrowings so that the physical targets fixed could be achieved.

14. An upward revision in the Ninth Plan outlay (about 71%) has been proposed by the Department in its Mid-term proposals – from Rs 46,442.04 crore to Rs 79,414.61 crore (at constant prices). This includes a budget support of Rs 268.73 crore for Wireless Planning and Coordination (WPC)/Wireless Monitoring Organisation (WMO)/ TRAI and Rs. 24.50 crore for HTL Ltd. This is against the provision of Rs 44.04 crore approved for financing the Plan Outlay of Regulatory bodies in the telecom sector. The increased budget support is required to fund World Bank assisted project of modernisation of radio spectrum management etc. Bulk of the proposed increase in the outlay is accounted for by DTS and VSNL. Except for regulatory bodies and HTL Ltd., the increase in outlay is to be funded entirely through increased IEBR (Internal and Extra Budgetary Resources). Details of the organisation-wise outlay and the financing pattern proposed may be seen in **Annexure-II and Annexure III.**

15. While the Department may be in a position to mobilise increased market borrowing as proposed due to its good market rating and credit worthiness, the enhanced target for IR (internal resources) seems ambitious. In order to achieve the proposed target, the Department would need to mobilise IR of the order of Rs.13,757 crore in each of the remaining two years against the present IR mobilisation effort of Rs. 7,605.25 crore (Revised Estimates for 1999-2000) and Rs 8,469.48 crore in 1998-99. The Department's ability to mobilise such resources has to be seen in the context of the need to reduce the present high tariffs on long distance communication. It is well known that long distance and international telephone tariffs are very high in India reflecting a long standing practice of cross-subsidization. Reform in the telecom sector requires rebalancing of these tariffs to ensure that domestic users of telecom services are not overburdened. This is especially important in the context of the objective of making India an IT superpower. Increasingly DOT and MTNL will have to rely upon greater efficiency to realise resources rather than charging monopoly tariffs.

North Eastern Region

16. North Eastern Region is one of the special focus areas for development. The growth of the basic telecom network in the region has been much higher than the rest of the country in the last five years. During 1995-96 to 1998-99, the growth rate in provision of new connections was about 26% in the North East against the national average of about 22%. Some of the value added services like cellular phones and paging are available in Guwahati through private operators. Cellular service is also available at Shillong.

17. The tele-density in the region was 1.67 as compared to the national average of 2.85 (31.03.2000). But low tele-density is not unique about the North East; it is also quite low for other States like Bihar (0.65), Orissa (1.21), J&K (1.31) and M.P. (1.54). Tele-density is not only a function of growth of the network but equally dependent on the growth in demand which in turn depends upon the overall economic development.

18. The performance of the Government sector in relation to achievement of Plan targets fixed for the North East has been on the same pattern as for the rest of the country. While the provision of new connections exceeded the target, a major shortfall is likely in the provision of VPTs. The following table gives the details :

Targets and Achievements (1997-200)

Item	Target	Achievement	% achievement
Sw. Capacity	303000	314814	103.90
DELS	230500	244998	106.29
VPTs	17800	11288	63.41

Private Sector Participation

19. Value added services were opened for competition to private sector participation in 1992. With the announcement of National Telecom Policy, 1994, the basic telecom services were also thrown open for competition. However, the private sector participation failed to take off as desired both in basic as well as value added services except for cellular mobile services in metro areas. The main stated reasons for the poor performance in the private sector under the old policy were :

- (i) Artificially high and non-sustainable incidence of licence fees based on competitive bidding.
- (ii) Non-availability of adequate finance at affordable cost.
- (iii) Less than expected demand leading to lower revenues.
- (iv) Implementation problems like Right of the Way for laying telecom network

20. A Group on Telecom headed by the Finance Minister has been set up. The Group will look into various problems faced by the value added services and in implementing the Telecom Policy.

21. Following three rounds of competitive bidding, six licences were issued to private companies for providing basic telecom services. Out of these, only three companies have commenced the services. Against the roll-out Plan of providing 20.18 lakh connections in a three year period, only 1.42 lakh connections have been provided by the private sector (upto March, 2000). The status of growth of telecom sector in the private sector is given in the table below :

**Status of Basic Services in Private Sector
(As on 31.03.2000)**

Name of Company	State	Date of launching Service	Telephones provided		
			1998-99	1999-00	Total
Bharati Telenet	Madhya Pradesh	4.6.98	13980	77987	91967
Hughes Ispat	Maharashtra	30.10.98	5217	17196	22913
Tata Teleservices	Andhra Pradesh	31.3.99	-	26713	26713
Total			19697	121896	141593

22. Following the principle of competitive bidding, 22 operators were selected for providing cellular services in four metros and 18 circles. Cellular services are available in all areas of the country except Jammu & Kashmir and Andaman & Nicobar Islands. The status of cellular services as on 31.03.2000 may be seen in the table below. The circle-wise details of the operators and the customer base (as on December, 1999) may be seen in the **Annexure-IV**.

**Status of Cellular Services
(As on 31.03.2000)**

No. of operators	22
No. of Subscribers (All India)	18.84 lakh
Metros (Total)	7.96 „
Delhi	3.32 „
Mumbai	3.20 „
Chennai	0.54 „
Calcutta	0.90 „
Other Circles	10.88 „
Total investment*	11160 crore

* : As on Feb., 1999

23. Except for metropolitan areas, the cellular operators are reported to be facing financial problems. Ambitious demand projections (subscriber base), low time utilization and high licence fees are stated to be the main reasons for the financial problems. With the migration to the new regime of revenue share as per NTP, 1999 (in which the operators are required to pay a fixed percentage of gross revenue earned as licence fee), the situation is expected to improve substantially. Till the TRAI recommendations on the revenue share and terms and licence conditions etc. are received and implemented, the Government is charging an interim revenue share at the rate of 15%.

24. Internet is one of the fastest growing value added services. As on 31st March, 2000, 270 licences have been issued out of which 62 ISPs have started providing services. VSNL, MTNL and Department of Telecom Services are the three major operators in the public sector. VSNL is providing Internet Services at six locations viz. Delhi, Mumbai, Chennai, Calcutta, Pune and Bangalore. DTS offers Internet Services at 89 locations. The private sector accounts for about 50% of the present customer base of 9.43 lakh. New operators are entering the field by the day. The private sector is expected to be a dominant player in the field in the future.

**Customers Base- Internet
(31.3.2000)**

Organisation	No of Subscribers (in lakh)
DTS	0.96
MTNL	0.36
VSNL	3.43
Others	4.68
Total	9.43

25. Since the opening of the Indian economy till March 2000, FDI (Foreign Direct Investment) of Rs. 4,231.62 crore has actually flowed into the telecom sector. Cellular services were the single largest recipient accounting for about 49% of the FDI received. The bulk of FDI (Rs.3,785.69) was received during the three year period of 1996-1998 constituting about 89% of FDI received so far. The actual inflow of FDI during the Ninth Plan is given in the table below: The service-wise break up may be seen in the **Annexure- V**. The potential inflow of FDI in this area is much larger and can be realized once some of the subsisting problems with the Telecom Policy are resolved.

**FDI-Ninth Plan
(Rs in crore)**

Year	Amount
1997	1245.19
1998	1775.64
1999	212.67
2000 (upto March)	10.46

Telephone on Demand

26. The 90's -- and especially the years since 1995 -- have witnessed a phenomenal growth of telecom network. The growth has been further accelerated during the Ninth Plan. In first three years of the Plan, 119.69 lakh new connections were provided by the Government sector recording a growth rate of more than 20% per annum. But equally impressive has been the growth in demand as reflected through its surrogates of new

registrations and the waiting list. Taking into account the latent demand, the actual demand may be much higher. The following table gives the details in this regard :

Growth of Network & Telephone Demand (1991-2000)
(in lakh)

Year	Net DELs Added	Total existing lines*	New applicatons	Waiting list
1990-91	4.86	50.75	7.34	19.61
1991-92	7.35	58.1	10.63	22.89
1992-93	9.87	67.97	15.44	28.46
1993-94	12.28	80.25	8.79	24.97
1994-95	17.70	97.97	14.28	21.53
1995-96	21.83	119.78	23.05	22.77
1996-97	25.65	145.43	31.82	28.94
1997-98	32.59	178.02	30.71	27.06
1998-99	37.92	215.94	30.69	19.83
1999-00#	33.81	249.75	58.45	44.47

* : As on 31st of March of the ending financial year.

: Figures are up to February, 2000

27. One of the major Plan objectives is to provide telephones on demand. In spite of provision of DELs at an increased rate during the first three years and a substantial upward revision in the target, the Ninth Plan objective of providing telephones on demand may not be achieved. The two main reasons responsible for the situation are a substantial shortfall in the performance of the private sector and a sudden spurt in demand for new telephone connections. Against the average number of registrations of about 30 lakh per year during the last three years, the new registrations (new application receipts) during 1999-2000 are expected to touch a new record level of about 60 lakh. The increased demand is fuelled by a substantial reduction in initial deposit rates and a cut in the telecom tariffs effected since May, 1999. The trend is expected to continue in last two years of the Plan.

28. International comparison indicating India's position vis-a-vis other countries in respect of major parameters of telecom services may be seen in **Annexure – VI**.

Universal Accessibility

Village Public Telephones (VPTs)

29. Provision of Village Public Telephone (VPTs) is a very important component of the policy of ensuring universal accessibility to basic telecom services. One of the major objectives and thrust areas of the Plan and NTP, 1999 is to provide connectivity to every village through VPTs by 2002. As on 31.3.2000, about 61.66% of the

villages have been covered under the scheme (**Annexure-VII**). The table below explains the roll-out Plan of VPTs during the Plan. State-wise details of roll-out plan may be seen in **Annexure-VIII**.

Total Villages in the country	607491
Villages having VPTs – on 29.02.2000	374566
VPTS on MARR	211313
VPTS on Over Head wire	163253
Target for Govt. sector - 1999-2002	177038
Target for private sector - 1999-2002	55848

MARR = Multiple Access Rural Radio

30. As per existing licence conditions of the basic service operators, 10% of total connections are to be provided in the rural areas. Keeping in view the very low pace of expansion of the network by private operators, a major shortfall is expected in the contribution of private sector.

31. Providing connectivity to the un-covered villages by 2002 is one of the three targets envisaged under the universal service obligation set in NTP, 1999. This is to be financed by funds raised through universal access levy which would be a fixed percentage of the revenue earned by all operators. However, the policy is silent about the mechanism of providing funds for the maintenance of VPTs as it is not a self-financing activity. The element of subsidy is quite high. The following table gives the economics in this regard :

Average cost of providing a VPT	Rs.80,000- – 1,00,000
Total recurring expenditure per VPT per annum	Rs.32,000
Annual recurring expenditure @ 24% per annum	Rs.24,000
Maintenance cost @ 8% per annum	Rs.8,000
Average revenue earned per annum	Rs.960
Subsidy per annum	Rs.31140
Total VPTs serviced by DTS (by 2002)	550876
Total Annual subsidy for DTS (by 2002)	Rs.1715 crore

Technology and low traffic are major reasons for subsidy. It has been observed that the traffic and revenue have shown a substantial increase as STD (Subscriber Trunk Dialling) facility is provided to the VPT. At present only about 1.40 per cent of the VPTs have STD facility. To make the operations viable STD facility should be provided on all VPTs and gradually these should be converted into multi-service centres where other services like postal, multi-media etc. are provided. These centres need not be run by the Government and could be operated on a franchise basis.

Public Call Offices (PCOs)

32. Public Call Office (PCO) is an important means of providing connectivity to the population not having telephone connections of their own. The Plan target of providing one PCO for every 500 urban population has already been achieved. The table below gives the progress in this regard:

Growth of PCOs- Ninth Plan

	31.3.1997	31.3.2000
Local PCOs	184291	287994
STD PCOs	157333	355390
NHPTs	0	5567
Total	345178	648951
Projected population (Million)	949.88	996.94
Urban population (Million)	261.55	283.71
Urban Population per PCO	755	437

To ensure quick and easy accessibility from public places and places of emergency, Ninth Plan had envisaged provision of adequate number of PCOs in hospitals, railway platforms, educational institutions etc. As per the information available, this programme has failed to take off. Besides providing public facilities, the programme is expected to generate gainful income and employment to many on a substantial scale. The Department needs to take necessary steps to implement the programme on an accelerated basis in remaining two years of the Plan.

Internet Policy & National Internet Backbone (NIB)

33. The Government has embarked on a very liberal policy to promote Internet in the country at a fast pace. As per the Internet Policy, no licence fee is payable by the ISP licensee for first five years and a nominal fee of rupee one per annum is payable thereafter. The Internet Policy provides for interconnection of networks and setting up of international gateways by the ISPs, independent of VSNL. As such bandwidth is not likely to be a constraint and ISPs are free to expand the capacity.

34. The Department of Telecom Services is strengthening the domestic infrastructure in the country for Internet connectivity by building National Internet Backbone (NIB). Under the project, Internet nodes would be set up / strengthened at various places in the country in a phased manner.

Quality of Services

35. Three major areas key to the quality of services are frequency of fault and their rectification, convenience of interaction with the service provider including payment and

an efficient and customer- friendly dispute settlement mechanism. Targets were fixed for some of the technical parameters of quality for the Government sector in the Plan. Judging by the performance during first three years, the targets fixed for the Plan may not be achieved except for trunk efficiency. A very slow reduction in the fault rate is an area of concern underlining the need to give attention to outdoor plants. Switching room faults are stated to be negligible as all exchanges in the country have become electronic. The following table gives details in this regard.

Quality Improvement-Govt. Sector

Parameter	Target 2001-02	Achievement			
		1996-97	1997-98	1998-99	1999-00
Fault/100 stns/month	9.50	17.20	17.40	16.90	15.90
Trunk Efficiency %	85.00	80.60	81.50	82.70	84.00
Local Call completion rate (Live)	65.00	55.70	57.40	NA	NA
STD Call completion rate % (Live)	50.00	39.20	40.50	NA	NA

36. The call completion rate indicates the ratio of calls successfully completed to total calls attempted in a live or real situation obtaining any day. Low completion rates both in local as well as STD calls does not mean in-efficiency of the system; the low success rate may be due to factors extraneous to the network like the contact number being busy, out of order etc. STD call completion rate even in the developed countries is 55-60%. Besides higher fault rate, the other important factor for lower completion rate in India is substantially higher holding time. The average holding time in India is three to three-and-a-half minutes as compared to half-a-minute in USA.

III. Major Policy Issues

Tariff Rebalancing and Loss of Revenue to DOT / MTNL

37. Telecom tariffs especially the basic services tariffs were highly imbalanced, guided as they were by the basic principle of revenue generation and cross-subsidization. The Telecom Regulatory Authority (TRAI) through its tariff order 1999 sought to restructure the tariffs in order to achieve, among other things:

- (i) cost based prices through regulation and / or competition,
- (ii) ensure transparency of subsidies and better targeting of social objectives and
- (iii) to help operational and technical efficiency of the operator thus providing a basis for enhanced competition in the near future.

Tariffs were sought to be aligned to costs. The tariff rebalancing for basic services was envisaged to be implemented in stages in order to ultimately reach cost- based tariff. The first phase of TRAI's recommendations was meant to be implemented from 1st

April, 1999 to 1st April, 2001. Of the revisions proposed, two-thirds were to be implemented in the first year and equal changes at the beginning of two subsequent years. For fixing the tariffs for basic services, the universal service obligations and accessibility were kept in view while fixing the rates for the interim period. The rentals were fixed lower than the costs in order to ensure higher accessibility. Call charges were fixed on cost-plus basis without margins. The long distance charges were fixed above costs in order to cross-subsidize rentals which would continue to be less than costs. TRAI in its order observed that even after the first phase of rebalancing the long distance rates would continue to be much above costs. For effective and meaningful competition in the long distance segment which will benefit the consumers, further rebalancing will be necessary. Rentals would also have to be increased to make them cost-based.

38. The tariff rebalancing assumed that the incumbent operator i.e. DTS and MTNL would have some loss of revenue. However, it was presumed that the revenues would be such that it would still leave considerable operating surplus for the operator to keep the business profitable. The Government issued a revised order on tariff revision effective 1st May, 1999 in which the rural tariff and call charges for the lowest-end category remained unchanged. As per estimates of DTS, the revenue loss of about Rs.2,000 crore is estimated for the year 1999- 2000. The cumulative loss during the Ninth Plan is estimated to be about Rs.6,700 crore. However, this loss must be balanced against the gain to consumers and to the economy from the provision of telecom services at reasonable charges. Some of the loss can also be made up through increased efficiency.

Rural Connectivity / Village Public Telephones (VPTs)

39. The pace of implementation of the programme has been quite slow. Major areas of concern are :

- (i) High cost of providing VPTs.
- (ii) Low revenue returns and high subsidy.
- (iii) Maintenance.
- (iv) Use of newer and cost effective technologies.

Opening of National Long Distance Operations

40. In line with the New Telecom Policy (NTP), 1999 the National Long Distance Operations (NLDO) have been opened for competition from Aug. 2000. Free and full competition has been ensured removing all undue restrictions on entry. As per the guidelines issued, the NLDO licensee can carry intra circle traffic only with mutual agreement with the fixed service provider in accordance with their mutually agreed terms. With existence of multiple fixed service operators (FSP) becoming a reality in a circle, securing mutual agreement from each of the FSP may become a major constraint for the new NLDO licensee/licensees. It needs to be ensured that this provision is not used by the fixed service operators to restrict competition.

Opening of Internet Telephony

41. Internet telephony is bound to revolutionize the long distance communications as it will provide services at a fraction of the present cost. The existing policy should not be allowed to hold back the benefits accruing from technological innovations if it is not against the interest of the nation and the consumers. Opening of Internet telephony like the data services may not harm the national interest in any way. On the contrary, it may lead to optimum utilization of resources and provision of least-cost services to the consumers thus leading to maximization of welfare. The affected organizations can also be ISPs under the new policy and take their share in the market. VSNL, DTS and MTNL are already leading ISPs and opening of Internet telephony would provide them a greater opportunity to be major players in the new area.

Corporatization of DOT

42. Complete separation of policy making function of the Government from the service provision function has to be ensured to enable free and fair competition and level playing field in the telecom service sector. The Ninth Five Year Plan had emphasized this as one of the major reforms needed to be carried out in a time bound manner. The NTP, 1999 had set the target of corporatization of DOT by 2001. However, the Govt. has decided to prepone the corporatization to 1st October, 2000. Setting up of 'Bharat Sanchar Nigam Ltd. (BSNL)' has been approved in principle as a public sector company to look after the telecom services of DOT. To ensure least cost service provision, the best value for money to the consumer and earn optimum profits from the investments, the Corporation has to function as a normal commercial organization. To achieve the above objectives, the following needs to be ensured :

- (i) The CEO and Board of Directors should have full autonomy of functioning. Government's position should be reflected only through its Director/Directors and should be confined mainly to the protection of value of its investment and profits.
- (ii) Full freedom in respect of financial and investment policies including approaching the capital market both domestic and international, freedom to have joint ventures with Indian and international players.
- (iii) Full freedom to rationalize or re-align manpower with the objective of increasing efficiency and productivity.
- (iv) Government not to provide any budget support to subsidize the operations and will not provide any tax or other concessions different from the private sector.

Convergence of Services and Single Licence Regime

43. Convergence of services is leading to a paradigm shift in the service composition, the structure of the industry and the way markets are organized. Market based on convergence of services would lead to the optimum utilization of resources and least cost of various services. Service segmentations and separate licence for each service become redundant and work only as artificial barriers. These need to be removed by issuing a common or single licence for all telecom services and evolving common revenue share formula. Hence, the present system of multiple licences will have to give way to a single licence regime. This would mean having perfect competition across the country in services and among operators.

Annexure-I

Ninth Plan 1997-2002

Scheme Wise Targets and Achievements - Telecommunications Services

Name of Scheme	Original Target	Revised Targets	1997-98		1998-99		1999-2000		
			Target	Actuals	Target	Actual	Target	RE	Actual
Switching Capacity (lakh lines)	230.00	298.00	36.00	35.18	49.30	47.89	54.70	58.70	67.17
DOT	200.60	273.00	30.80	32.30	44.00	43.75	49.00	53.00	63.02
MTNL	29.40	25.00	5.20	2.88	5.30	4.14	5.70	5.70	4.15
Direct Exchange lines (-do-)	185.00	222.70	29.00	32.59	36.00	37.92	45.50	44.85	49.18
DOT	160.00	200.70	24.60	28.65	31.50	35.45	40.60	40.60	45.40
MTNL	25.00	22.00	4.40	3.94	4.50	2.47	4.90	4.25	3.78
TAX ('-do-)	18.00	23.06	3.25	3.14	4.50	2.06	4.53	5.23	4.80
DOT	15.24	18.87	2.75	2.77	3.87	2.06	4.00	4.00	4.03
MTNL	2.76	4.19	0.50	0.37	0.63	-	0.53	1.23	0.77
Microwave Systems ('000kms)	90.00	70.00	18.00	17.99	19.50	14.00	15.00	15.00	19.88
Optical Fibre System (-do-)	140.00	270.00	22.00	23.82	35.00	31.77	40.00	60.00	63.27
VPT ('000 Nos.)	239.16	278.87	83.00	42.86	80.50	37.06	45.00	45.00	33.97

NINTH PLAN 1997-2002
Financing Pattern of Telecom Sector

ANNEXURE-II

(Rs in crore)

Organisations	Approved Outlay	Mid-term Proposal	1997-98		1998-99		1999-00	
			BE	Actual	BE	Actual	BE	RE
DOT	37995.00	66193.00	10916.00	8733.58	11000.00	9556.11	12650.00	12635.01
IR	30965.00	51889.00	8175.00	8733.58	8709.00	9556.11	11672.37	9095.88
Bonds	7030.00	14304.00	2741.00	0.00	2291.00	0.00	977.63	3539.13
MTNL	5446.00	5445.92	1518.00	912.54	2772.00	977.44	2953.00	1250.00
IR	4066.00	5445.92	1070.85	912.54	2042.00	977.44	1773.00	1250.00
Bonds	1380.00	0.00	447.15	0.00	730.00	0.00	1180.00	0.00
DOT+MTNL	43441.00	71638.92	12434.00	9646.12	13772.00	10533.55	15603.00	13885.01
IR	35031.00	57334.92	9245.85	9646.12	10751.00	10533.55	13445.37	10345.88
Bonds	8410.00	14304.00	3188.15	0.00	3021.00	0.00	2157.63	3539.13
WMO/WPC#	44.04	268.73	7.00	4.37	6.10	5.75	8.10	7.60
VSNL	2737	7319.03	825.00	407.71	1004.65	761.62	1100.05	911.77
IR	2737	7319.03	825.00	407.71	1004.65	761.62	1100.05	911.77
ITI	175.00	106.64	72.00	15.00	94.00	42.00	74.00	80.00
IR	0.00	106.64	71.00	-148.00	0.00	-52.00	0.00	80.00
Bonds	150.00	0.00	0.00	150.00	0.00	94.00	74.00	0.00
Others	25.00	0.00	0.00	13.00	94.00	0.00	0.00	0.00
B. support	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
HTL	45.00	81.29	16.29	7.73	11.08	9.42	16.12	11.78
IR	27.00	49.59	5.29	5.73	9.08	9.42	6.51	11.78
Bonds	0.00	7.20	0.00	0.00	0.00	0.00	0.00	0.00
Others	18.00	0.00	9.00	0.00	0.00	0.00	9.61	0.00
B. support	0.00	24.50	2.00	2.00	2.00	0.00	0.00	0.00
Total	46442.04	79414.61	13354.29	10080.93	14887.83	11352.34	16801.27	14896.16
IR	37795.00	64810.18	10076.14	9911.56	11764.73	11252.59	14551.93	11349.43
Bonds	8560.00	14311.20	3188.15	150.00	3021.00	94.00	2231.63	3539.13
Others	43.00	0.00	80.00	13.00	94.00	0.00	9.61	0.00
B. support	44.04	293.23	10.00	6.37	8.10	5.75	8.10	7.60

: Includes Rs 10 cr for WMO; Rs 5 cr for WPC; Rs 2 cr for TRAI for 2000-01

NINTH PLAN 1997-2002

ANNEXURE-III

Financing Pattern of Telecom Sector

(Rs in crore '97 prices)

Organisations	Approved Outlay	Mid-term Proposal	1997-98		1998-99		1999-00	
			BE	Actual	BE	Actual	BE	RE
DOT	37995.00	66193.00	10333.21	8267.30	9749.18	8469.48	10576.92	10564.39
IR	30965.00	51889.00	7738.55	8267.30	7718.69	8469.48	9759.51	7605.25
Bonds	7030.00	14304.00	2594.66	0.00	2030.49	0.00	817.42	2959.14
MTNL	5446.00	5445.92	1436.96	863.82	2456.79	866.29	2469.06	1045.15
IR	4066.00	5445.92	1013.68	863.82	1809.80	866.29	1482.44	1045.15
Bonds	1380.00	0.00	423.28	0.00	646.99	0.00	986.62	0.00
DOT+MTNL	43441.00	71638.92	11770.16	9131.12	12205.97	9335.77	13045.99	11609.54
IR	35031.00	57334.92	8752.22	9131.12	9528.49	9335.77	11241.95	8650.40
Bonds	8410.00	14304.00	3017.94	0.00	2677.48	0.00	1804.04	2959.14
WMO	44.04	268.73	6.63	4.14	5.41	5.10	6.77	6.35
VSNL	2737.00	7319.03	780.95	385.94	890.41	675.02	919.77	762.35
IR	2737.00	7319.03	780.95	385.94	890.41	675.02	919.77	762.35
ITI	175.00	106.64	68.16	14.20	83.31	37.22	61.87	66.89
IR	0.00	106.64	67.21	-140.10	0.00	-46.09	0.00	66.89
Bonds	150.00	0.00	0.00	141.99	0.00	83.31	61.87	0.00
Others	25.00	0.00	0.00	12.31	83.31	0.00	0.00	0.00
B. support	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.00
HTL	45.00	81.29	15.42	7.32	9.82	8.35	13.48	9.85
IR	27.00	49.59	5.01	5.42	8.05	8.35	5.44	9.85
Bonds	0.00	7.20	0.00	0.00	0.00	0.00	0.00	0.00
Others	18.00	0.00	8.52	0.00	0.00	0.00	8.04	0.00
B. support	0.00	24.50	1.89	1.89	1.77	0.00	0.00	0.00
Total	46442.04	79414.61	12641.32	9542.72	13194.92	10061.46	14047.88	12454.98
IR	37795.00	64810.18	9538.19	9382.39	10426.95	9973.05	12167.17	9489.49
Bonds	8560.00	14311.20	3017.94	141.99	2677.48	83.31	1865.91	2959.14
Others	43.00	0.00	75.73	12.31	83.31	0.00	8.04	0.00
B. support	44.04	293.23	9.47	6.03	7.18	5.10	6.77	6.35

Annexure-IV

**Status of Cellular Network
(As on 31st Dec., 1999)**

State/UT	Operator-I		Operator-II		Total Customer Base
	Name	Customer Base	Name	Customer Base	
AP	JT Mobile	33211	Tata	54738	87949
Assam	Reliance	5590	-	-	5590
Bihar	Koshika	N.A.	Reliance	17419	17419
Gujarat	Birla AT & T	79752	FASCEL	27776	107528
Haryana	Aircell	NA	Escotel	20172	20172
HP	Reliance	473	Bharti Tel.	4288	4761
Karnataka	JT Mobile	35887	Spicecom	68900	104787
Kerala	Escotel	41229	BPL	39552	80781
MP	RPG	12031	Reliance	18136	30167
Maharastra	Birla AT & T	57260	BPL	45107	102367
North East	Hexacom	NIL	Reliance	803	803
Orissa	Koshika	N.A.	Reliance	8403	8403
Punjab	JT Mobile	N.A.	Spicecom	79672	79672
Rajasthan	Aircell	NA	Hexacom,	15462	15462
Tamil Nadu	BPL	42292	Aircel	28861	71153
UP(E)	Aircell	21643	Koshika	78053	99696
U.P. (W)	Escotel	48897	Koshika	NA	48897
West Bengal	Reliance	4674	-	-	4674
J&K	-	-	-	-	-
A & N Islands	-	-	-	-	-
Delhi	Bharti	153498	Sterling	126054	279552
Calcutta	Usha	34904	Modi Telstra	33126	68030
Chennai	Skycell	22963	RPG	24041	47004
Mumbai	Hutchinson	143371	BPL	155373	298744
All India					1583611

Annexure-V

Service/Item-wise FDI inflow(Aug 91-March 2000)

(Rs in crore)

Sevice/Item	FDI	% of Total
Basic services	266.59	6.30
Cellular	2086.21	49.30
Radio Paging	90.99	2.15
E-mail	68.75	1.62
VSAT	13.77	0.33
Cable TV	55.77	1.32
Satellite Telephone	48.12	1.14
Radio Trunking	6.16	0.15
Manufacturing	668.85	15.81
Holding Companies	926.47	21.89
Total	4231.61	100.00

Annexure-VA

Inflow of FDI – Year wise (Aug'91-Mar' 2000)

(Rs. in crore)

Year	FDI Inflow
1993	2.06
1994	14.02
1995	206.74
1996	764.83
1997	1245.19
1998	1775.64
1999	212.67
2000	10.46
Total	4231.61

Source: Dept. of Telecom

Annexure-VB
Inflow of FDI - Country wise
(Aug'91-Mar' 2000) (Rs. in crore)

Sl.No.	Country	FDI	Percentage
1.	Argentina	0.001	0.00
2.	Australia	34.250	0.81
3.	Austria	0.950	0.02
4.	Bahrain	0.800	0.02
5.	Canada	11.160	0.97
6.	Denmark	7.250	0.17
7.	Finland	35.580	0.84
8.	France	83.490	1.97
9.	Germany	1.270	0.03
10.	Hong Kong	68.370	1.62
11.	Israel	56.000	1.32
12.	Japan	53.980	1.28
13.	Kuwait	0.050	0.00
14.	Luxembourg	10.160	0.24
15.	Malaysia	59.990	1.42
16.	Mauritius	2832.441	66.94
17.	Netherlands	214.390	5.07
18.	NRI	75.670	1.79
19.	Philippines	7.350	0.17
20.	Singapore	5.420	0.13
21.	South Korea	19.670	0.46
22.	Sweden	88.190	2.08
23.	Switzerland	0.230	0.01
24.	Thailand	171.660	4.06
25.	UK	74.940	1.77
26.	USA	288.357	6.81
Total:		4231.619	100

Telecom Services **Annexure-VI**
International Comparison (1998)

Parameter	Unit	USA	UK	China	Japan	Korea	India	LIC	World
Tel.lines	M	178.80	32.80	80.42	63.58	20.09	21.59	33.94	844.03
Digital	%	89.3	100	99.8	100	68.7	99	86.3	87.4
Growth rate	%	3.8	3.7	29	1.3	2.6	21.7	17.1	6.9
Tele density	Per 100	66.13	55.64	6.96	50.26	43.27	2.2	1.64	14.26
Public phones	M	1.75	0.336	2.062	0.777	0.607	0.732	0.430	10.79
Cell phones	M	69.209	14.874	23.863	47.285	14.019	1.195	2.349	318.893
Revnue/line	US\$	1378	1128	235	1322	533	284	391	871
Lines / empl.		175	212	197	370	332	51	44	155
Total Invst.	US\$ (M)	24218	7454	18127	35403	8096.5	2405	4591	175655
Invst./line	US\$	135	232	207	558	396	135	166	215
Internet	M lines	60.00	8.000	2.100	16.740	3.103	0.500	0.776	144.801

LIC: low Income Countries. Source: ITU
M: Million

Annexure - VII

**STATUS OF VPTS
As on 31.03.2000**

State/UT	No. of Villages	With VPTs			Without VPTs
		MARR	OH	Total	
A & N Is.	282	146	128	274	8
Andhra Pradesh	29460	12399	10980	23379	6081
Assam	22224	9293	4888	14181	8043
Bihar	79208	14281	10642	24923	54285
Gujarat	18125	7413	6510	13923	4202
Haryana	6850	3624	3173	6807	43
Himachal Pradesh	16997	2842	7522	10364	6633
Jammu & Kashmir	6764	2601	1192	3793	2971
Karnataka	27066	14692	11109	25801	1265
Kerala	1530	32	1498	1530	0
Madhya Pradesh	71526	25553	20945	46498	25028
Maharashtra	42467	18848	12693	31541	10926
North East	14446	3622	714	4336	10110
Orissa	46989	11542	11386	22928	24061
Punjab	12687	6195	5889	12084	564
Rajasthan	38634	17703	6024	23727	14907
Tamil Nadu	17991	7229	10616	17845	146
Uttar Pradesh	115249	41103	28920	70023	45226
West Bengal	38805	12185	8233	20418	18387
Delhi	191	0	191	191	0
Total	607491	211313	163253	374566	232886

Annexure-VIII

Roll Out Plan For VPTS - 2000-2002

State/UT	No. of Villages	Villages yet to be covered	Dept. of Telecom Services		Pvt. operators (2000-02)
			2000-01	2001-02	
A & N Is.	282	8	8	0	0
Andhra Pradesh	29460	6081	0	0	6081
Assam	22224	8043	5000	3043	0
Bihar	79208	54285	24651	29634	0
Gujarat	18125	4202	0	0	4202
Haryana	6850	43	4	39	0
Himachal Pradesh	16997	6633	4000	2633	0
Jammu & Kashmir	6764	2971	2000	971	0
Karnataka	27066	1265	1265	0	0
Kerala	1530	0	0	0	0
Madhya Pradesh	71526	25028	5860	0	19168
Maharastra	42467	10926	0	0	10926
North East	14446	10110	5110	5000	0
Orissa	46989	24061	14000	10061	0
Punjab	12687	564	0	0	564
Rajasthan	38634	14907	0	0	14907
Tamil Nadu	17991	146	55	91	0
Uttar Pradesh	115249	45226	27000	18226	0
West Bengal	38805	18387	11047	7340	0
Delhi	191	0	0	0	0
Total	607491	232886	100000	77038	55848

Annexure-IX

Status of Telecom Network (31.03.2000)

State/UT	DELs		Cell Phones	Total	Tele-density
	DTS	Pv.Opt			
Andhra Pradesh	2227487	26713	140110	2358310	3.12
Assam	273068	0	5428	278496	1.06
Bihar	627400	0	19847	647247	0.65
Gujarat	1904575	0	132068	2036643	4.22
Haryana	642001	0	22449	664450	3.35
Karnataka	1829400	0	119563	1948963	3.74
Kerala	1697406	0	94573	1791979	5.55
Madhya Pr	1095952	91967	37895	1225814	1.54
Maharashtra	4415833	22913	419209	4857955	5.33
Orissa	423309	0	9268	432577	1.21
Punjab	1128202	0	89761	1217963	5.18
Rajasthan	1109400	0	18488	1127888	2.11
Tamil Nadu	2632254	0	159621	2791875	4.52
Uttar Pradesh	2100578	0	161623	2262201	1.33
West Bengal	1550515	0	80122	1630637	2.06
Delhi	1818236	0	314520	2132756	15.27
J & Kashmir	130021	0	0	130021	1.31
Himachal Pr	285130	0	4519	289649	4.32
Tripura	44834	0	0	44834	1.19
Manipur	25000	0	0	25000	0.99
Meghalaya	38146	0	708	38854	1.60
Nagaland	26044	0	0	26044	1.55
Goa	129348	0	NA	129348	8.11
Arunachal Pr	30757	0		30757	2.58
Pondicherry	62576	0	NA	62576	5.63
Mizoram	30615	0	0	30615	3.22
Chandigarh	164050	0	NA	164050	18.47
Sikkim	19737	0	0	19737	3.53
A&N Islands	24463	0	0	24463	6.34
D&NH	7071	0	NA	7071	3.72
Daman & Diu	10204	0	NA	10204	7.29
Lakshadweep	7733	0	NA	7733	10.89
Total:	26511345	141593	1793772	28446710	2.85

**Status of Telecom Network
31.03.2000**

State/UT	Net Switching Capacity	DELS	Waiting list
A & N Islands	33558	24463	2002
Andhra Pradesh	2585516	2227487	377058
Assam	352189	273068	5475
Bihar	820726	627400	106196
Gujarat	2299754	1921850	232624
Haryana	825150	642001	73262
Himachal Pradesh	369906	285130	24708
Jammu & Kashmir	197003	130021	31882
Karnataka	2236732	1829400	332189
Kerala	2203954	1705139	647165
Madhya Pradesh	1472515	1095952	405344
Maharashtra	2889295	2331793	263434
North East	296364	195396	26023
Orissa	526061	423309	42527
Punjab	1662656	1292252	176732
Rajasthan	1413740	1109400	95172
Tamil Nadu	2300536	1926967	598505
Uttar Pradesh	2827689	2100578	325048
West Bengal	705027	541131	157561
Calcutta	1141242	1029121	313
Chennai	968243	767863	16591
Delhi	2124679	1818236	81871
Mumbai	2515188	2213388	23843
TOTAL	32767723	26511345	3680715

Postal Sector

The Ninth Five Year Plan seeks to expand the scope and coverage of postal services in a competitive era through programmes of technology upgradation initiated during the Eighth Plan. The main thrust areas are :

- Providing basic postal facilities in remote areas.
- Development and marketing of new services especially for business and professional sectors.
- Modernization of specific functions in priority areas identified with the objective of increasing revenue generation.
- Human resource development aiming at greater customer satisfaction and facing the challenges of a competitive world.

Box-1	
Status of Postal Network	
(as on 31.3.2000)	
Number of Post Offices	154551
Rural Post offices	138149
Urban Post Offices	16402
Sub Post Offices	25166
Head Post Offices	840
Extra Dept. Sub Post Offices	2746
Extra Dept Branch Post Offices	125799
Area covered by a Post Office	21.26 sq. km.
Population Served by a Post Office	5462
Average distance traveled for access to Postal Service *	17.71 km

* :Represents mean maximum distance a person has to travel to avail the counter services

2. An outlay of Rs.507.25 crore was approved for the postal sector for the Ninth Plan (as against Rs.550 crore proposed by the Department of Posts). The likely expenditure in the first three years is Rs.217.33 crore at constant prices. The utilization is expected to be 42.84% of the approved Plan outlay . The reason for the slow pace of expenditure is mainly due to less budgetary allocation and pruning of Plan allocation at the Revised Estimate stage. The scheme-wise details of the outlay and expenditure may be seen in the Annexure.

3. A target of opening 2500 Extra Departmental Branch Offices (EDBOs) and 250 Departmental Sub-Post Offices (DSOs) was fixed for the Plan. In the first two years, 1000

EDBOs and 102 DSOs were opened. In third year, 500 EDBOs and 50 DSOs were envisaged to be opened thereby achieving 60% and 61% of the Ninth Plan target. While this level of performance is impressive, magnitude of the problem coverage dwarfs it.

4. As per the two norms of distance and population, at present there are 5428 villages including Gram Panchayat Village without a post office. Covering these villages could take more than a decade at the present rate of expansion. The scheme of opening new rural post offices suffers from following weaknesses:-

- i) The pace of expansion is limited by availability of funds ;
- ii) Operational subsidy to the extent of 67% in normal areas and 85% in hilly and tribal areas contributes to the revenue deficit of the department;
- iii) Extra Departmental Agents operating the EDBOs stake claim for becoming permanent government employees, thus adding to Government liabilities.

5. This scheme, therefore, neither fulfils the objective of expansion of services at required pace due to limited public sector funding nor is it financially sustainable over time due to the large amount of subsidy involved. As per the existing norm, an EDBO can be opened in normal areas if the anticipated revenue is 33% of the cost. In hilly , tribal, desert or inaccessible areas it needs to cover just 15% of the cost.

6. The minimal norms set years ago for opening post offices need to be reviewed; the offices not satisfying such norms will have to be closed or be replaced with alternative postal services. A new approach is called for which would ensure achieving the twin objective of keeping the government expenditure to the minimum but accelerating the increased access to the services especially for people in remote and far-flung areas. A change of strategy is envisaged in the Plan by reviving (from 1998-99) Panchayat Sanchar Sewa Yojana with similar objectives i.e. utilising the existing Panchayat Raj infrastructure for the organization and operation of these services on commission basis. The Gram Panchayat is to provide suitable accommodation and appoint a suitable person to decide on the functions of Panchayat Dak Kendras and ensuring financial discipline and propriety. Unlike the EDBOs under Government control, Panchayats would have freedom to determine the working hours of the Kendras. As per the initial estimates proposed, one Panchayat Sanchar Sewa Kendra is likely to cost Rs.600 per month. An outlay of Rs.3.02 crore has been provided for this scheme for opening 2700 such Kendras during the Ninth Plan. Two hundred such Kendras were opened in 1998-99; a target of opening 500 Kendras was fixed for 1999-2000. It is proposed to get an evaluation study done in the last year of the Ninth Plan on the performance of the scheme.

7. Mechanization of operations and modernization through technology is central to attainment of the basic objective of transforming the postal network into a modern and efficient organization. Keeping this in view, the first priority has been accorded to technological upgradation by allotting it 58% of the Ninth Plan outlay of the Department. Central to this are :

- Counter computerization
- Electronic Mail Transfer System
- Mechanization of Mail Handling
- Speed Post
- Track and Trace System

8. Major targets for the Ninth Plan include 5000 multi-purpose counter machines, introduction of mechanized sorting system in three metros; setting up of 2000 satellite based money-order transfer system (ESMO) in the country, 170 V-SATs and modernization of philately. The pace of modernization of post offices is very slow. The number of post offices computerized or using modern equipment is much less compared to the vast network. It may take decades at this pace to cover the major / all post offices in the country. Keeping this in view, an innovative project of hiring the computers on lease-finance basis has been suggested. By end of 1998-99, 318 ESMOs were installed, 21 VSATs upgraded and about 2247 multipurpose counter machines (MPCMs) supplied. A target of installing 60 VSATs, 210 ESMOs and providing 1000 MPCMs was envisaged for 1999-2000. Sixty post offices were to be modernized in 1999-2000 in addition to the 406 post offices modernized in first two years.

9. Human resource development has been accorded high priority alongside the strategy of technology upgradation and modernization of operations. A comprehensive programme has been drawn up with emphasis on developing necessary skill on computers and handling other modern equipment. But the achievement both in physical and financial spheres has been mixed. Only 52% of the funds i.e. Rs.7.35 crore out of Rs.14 crore earmarked for the purpose could be utilised by the end of the third year and the training imparted to staff etc. varied between 35.29% to about 100% in physical targets earmarked for various training programmes.

10. Modernization of mail processing is a priority area accounting for about 28% of the Plan outlay. The objective is to deal expeditiously with rising volume of business mail. The activities include upgrading operational equipment for sorting, fabrication and upgradation of RMS vans, computerization of transit mail offices etc. The progress in this sphere has been slow as less than 25% funds was expected to be utilised by the end of third year. So are the physical achievements.

11. Ninth Plan envisaged computerization of postal life insurance etc. to be taken up in 32 regions and upgradation of computer system in 20 circles. The performance is quite satisfactory. With opening up of the insurance sector, Postal Life Insurance deserves more attention as the concept of insurance will undergo a drastic change. The traditional strategy of marketing of Postal Life Insurance has to be replaced by a new approach to make its reach as wide spread as the infrastructure. The Department will be wise to have an expert agency to reform the existing policy structure for leveraging its strength in the insurance area. The Planning Commission can assist the Department in getting a study done in the area. Policy changes including creation of a separate organisation with greater autonomy require to be addressed.

12. The Department considers appropriate office accommodation an essential element for providing efficient and responsive postal service. As suitable accommodation for post offices is becoming more and more difficult to obtain on rent in urban areas, the need for departmental buildings in such areas has increased enormously. About 22,000 post offices i.e. 88% of Departmental Sub-Post Offices (DSO) are housed in rented accommodation and accounted for rent of about Rs.218 crore in 1997-98. This necessitated setting aside an outlay of Rs.119.62 crore for postal buildings and staff quarters. During the first two years, 79 post/mail offices, 6 administrative offices and 471 staff quarters were readied. About 59% of the outlay i.e. about Rs.71 crore was expected to be utilized in first three years. Given the cost of real estate in major cities and elsewhere, in addition to the needs of upkeep, there is need for a re-look at the approach to securing accommodation for new post offices and quarters for staff.

Accommodation for single service project such as postal services may prove to be capital intensive and the Department may consider promoting joint services with government and private sector telecom and info-tech service providers

13. Business development, streamlining administration and financial management have been important areas initiated since the Eighth Plan. The activity includes market survey, promotion of premium products, mechanization of pick up and delivery for business development and development of maintenance of information systems and intensive use of information technology. Both the physical targets and outlay utilization is satisfactory as about 70% of financial outlay were expected to be utilized by 1999-2000.

14. Business Development Directorate provides the focus for promoting activities to optimise revenue generation. It would be appropriate to develop this Directorate fully with a business orientation and free from bureaucratic rigidity. The Department undertook creation of Customer Care Centres as per Government directives at 228 places to make services more open, transparent and responsive and to rationalize and customize public grievances handling and processing in the Department. About 182 Sub-centres could be opened in first three years thereby achieving 80% of the Plan targets. Certain innovative non-conventional services like advertisement needs to be introduced.

Policy Issues

15. In the international scenario, the Indian postal network presents a mixed picture viewed from various parameters. It does not seem to be over-staffed as the number of employees per thousand population is among the lowest. However, with respect to the area serviced per employee, India is among the lowest. The following table gives the international comparison of the postal network in select countries.

Postal Network – International Scenario

Country	Full-time Staff	Permanent Post Offices	Population served	Average Area served (sq km)	Employee #	Area serviced **
USA	792041	38159	7090	246	2.93	12.87
Great Britain	174692	18760	3126	13	2.48	1.40
France	227680	17038	3454	32	3.87	2.39
Malaysia	13095	1382	7489	239	1.27	25.22
Brazil	79367	11713	13913	727	0.49	107.29
Indonesia	26460	20139	10150	95	0.13	72.30
Sri Lanka	22462	4282	4383	15	1.20	2.86
China	1140000	129455	9608	74	0.92	8.40
India	603400	154149	5477	21	0.62	5.39

* : Per post office. # : per thousand population. ** : by an employee

Source: Dept. of Post

16. In most of these countries, the postal operations are fully self-financing with respect to the operational costs. Even a major chunk of investments required for modernization etc. (equivalent to India's Plan expenditure) is financed out of the revenues generated by the system. Only a part of the Plan expenditure is financed through subsidy from the Government. As against this, about 37% of operating expenses of the postal system in India is financed from the subsidy. The following table gives details in this regard :

Financing of Postal Operations - International Scenario (1998)

(Figures in million SDR)

Country	Operative Expenses	Investment	Total Expenses	Receipts	OE as % Recept.	TE as % Recept.
USA	41035.51	2627.84	43663.35	42617.19	96.29	102.45
Britain	7816.36	577.72	8394.08	8281.84	94.38	101.36
France	12148.15	543.07	12691.22	12220.92	99.40	103.85
Malaysia	98.43	11.87	110.30	103.62	94.99	106.44
Brazil	1859.99	65.43	1925.42	1936.59	96.04	99.42
Indonesia	95.52	11.93	107.46	106.82	89.43	100.60
S. Lanka	21.08	2.56	23.64	17.12	123.41	138.06
China	2966.82	0.00	2966.82	2444.21	121.38	-
India*	737.51	12.49	750.00	467.85	157.64	160.31

Source : Postal Statistics, 1998; International Bureau of Universal Postal Union
Deptt. of Posts

* : Relates to the year 1998-99.

17. Postal finance position in India has deteriorated quite sharply over the last decade. The deficit has shot up almost 20 times over the last nine years – increasing from Rs.91.81 crore in 1992-93 to Rs.1,982.47 crore in 2000-01 (Budget Estimates). The increase has been especially steep since 1997-98. This is due to a marked imbalance in the growth of establishment expenditure which grew at the rate of 22-25 % per annum and of revenues which recorded a much lower average annual growth of less than 10% . Interestingly the manpower employed in the Department has remained almost constant over this period. The implementation of the recommendations of Fifth Pay Commission and the Talwar Committee on extra departmental employees are basically responsible for escalation in the establishment expenditure. Regularisation of three lakh ED (extra departmental) employees as Government servants, if implemented, may lead to further deterioration. The following table gives details in this regard.

Revenue-Expenditure- Deptt. of Post

(Rs. in crore)

Year	Total Manpower	Expnd.On Estbl.	Total Expnd.	Total Revenue	Deficit
1992-93	596062	1246.83	1649.18	1557.37	91.81
1993-94	597663	1439.41	1866.79	1659.7	207.09
1994-95	597175	1657.55	2130.7	1778.89	351.81
1995-96	598323	1904.85	2472.14	1812.73	659.41
1996-97	594685	2220.69	2982.32	2279.06	703.26
1997-98	604257	2777.83	3597.92	2604.49	993.43
1998-99	602987	3396.53	4351.29	2760.32	1590.97
1999-00	603435	3779.24	4835.53	3095.00	1740.53
2000-01	603430	4044.98	5242.47	3260.00	1982.47

18. The Postal deficit is an open-ended subsidy and forms part of the General budget. This is an explosive situation which cannot be sustained for long except at a very high cost and could slow down flow of funds to more needy sectors like infrastructure and social development.

19. A large subsidy is provided on majority of the postal services. At present, only six services i.e. Speed post, Insurance, Foreign mail, Letter, Book post and parcel yield surplus per unit activity / services. Registration (27.83%), money order (14.82%), savings bank (14.83%), post card (13.66%), newspaper (7.41%) and letter card (11%) are the major items of subsidy (1999-2000 projections). The following table gives the details of per unit subsidy and the total amount involved for the major services.

Subsidy on Postal Services

Services	1997-98		1998-99		1999-2000	
	Per Unit (in paise)	Total (in Rs. crore)	Per Unit (in paise)	Total (in Rs. crore)	Per Unit (in paise)	Total (in Rs.crore)
Post Card	347.37	106.61	310.97	149.73	427.81	181.90
Letter Card	272.58	121.11	200.38	135.46	257.17	146.56
Regd. S	455.55	62.26	362.84	76.84	562.03	98.59
Newspaper B	855.22		725.40		1073.00	
Registration	1269.85	369.50	948.35	258.80	1324.45	370.45
Money Order	1124.85	121.03	1247.89	135.40	1795.93	197.37
Parcel	149.93	10.09	870.64	53.89	-	-
Savings Bank	269.93	148.49	181.90	85.80	403.34	194.69
IPO	1144.61	29.30	1299.42	32.36	1340.17	34.58
NSC+KVP	1221.53	78.30	1070.63	71.84	1554.92	98.58
MSY	2707.91	23.29	2497.19	30.72	3220.38	40.25

20. There seems little justification for subsidizing services like registration, savings bank, registered newspapers and money orders. The subsidy given for money order services has

increased by almost 50% in one year. There is a strong case for undertaking a serious review of the rates and reduce subsidy in those sectors or services which are mostly used for commercial purposes or which are used only once in a while even by people of low income. The subsidy element in Post Card is Rs.4.27 per card. This is a queer situation. Traditionally, post card has been considered a medium used by the poorest sections of the society specially in the rural areas for sending messages to relatives and family members at distant places. There has been a changing pattern of life even in the rural areas. How much, then, is the benefit for the poor from the post card is a matter for study. From the economic point of view, there appears to be absolutely no justification for having a separate, low capacity medium of letter writing, subsidized so heavily; a serious review of the pricing of the post card and the subsidy quantum is called for. A review of the need for special services like VPP is also necessary in the wake of the growth of courier services.

21. With the long term aim of making the postal services self-financing at the sectoral level, the general principle of pricing of postal services has to be on a 'cost plus' basis. Cross-subsidization for a few most essential services like post card etc. could be built into the system to take care of the interest of the poorest sections of the society. Reducing the operational cost on all services is relatively more important aspect of a two-pronged strategy of reducing subsidy. A comprehensive cost reduction plan needs to be worked out by the Department. . The establishment cost has to be kept at the minimum. Identification, re-training and re-deployment of the surplus staff would have to be an integral part of the cost-cutting effort. The other aspect of strategy to minimize subsidy and reduce deficit is the revision of postal rates appropriately. Necessary changes in the institutional mechanism for tariff revision may be effected if required to ensure timely and adequate revisions.

22. Revision of postal tariff is not keeping pace with the increase in operational cost. The revision is less frequent and inadequate in relation to the increase in the operational cost. The following Table gives the details about tariff revision..

Revision of Postal Tariff

(Figures in %)

Services	1.1.87	1.4.88	11.6.90	1.10.96	1.6.97	31.8.98	26.5.99
Post Card		No revision			67	-	-
Printed post card	60		50	66	50	-	33
Letter card	-	43	50	-	33	50	33
Registration	64	11	20	33	25	20	17
Insurance	No revision		100	No revision	100	38	-
Newspaper							
Single	200			No revision			
Bundle	66						
Money Order	-	33	25	-	-	-	-
VPP			No revision since 1983				100

23. The Indian Post Office Act 1898 (IPO Act) invests the Department of Post with the monopoly in handling articles of letter mail. Considerable competition has emerged in non-

letter carriage services. The Department is providing universal postal services specially in the large rural sector as a social service but without the advantage of a remunerative pricing even for the services in business/ professional sector where customers are willing to pay higher prices. This necessitates opening up of letter carriage services to the private sector. Suitable amendment of the IPO Act is needed to keep pace with the changes over a century. The review of the Act should not be an in-house exercise but an open and transparent exercise undertaken jointly by an Inter-Ministerial Group with the help of an outside expert organization.

24. To ensure efficiency and improve quality of service, it may be desirable to open up select postal services run by the Department of Posts to the private entrepreneurs. This will help bring flow of required funds into this sector and also enable the Department to pay greater attention to its main activity i.e. carrying of mail. In these days of instant communication a 10 AM to 5 PM postal service through fixed outlets is anachronistic. There is an urgent need to work out a comprehensive policy for gradual opening up of the sector. Some of the areas suggested for immediate consideration are :-

- Opening of new post offices in urban areas through licensed postal agents as private commercial enterprise;
- Printing of postal stationery;
- Sale of stationery through licensed agents;

25. To sum up, the time has come for the postal services to undergo a process of rationalization both in terms of the mix of services offered and the pricing. The existence and continuing growth of the vast network of courier services should serve as an opportunity to readjust priorities and rationalise the pricing structure. Dependence on Budgetary support should be drastically reduced and should be visibly linked to providing services in those areas which are not covered by commercial reach. This should be the guiding principle for the remaining period of the Ninth Plan and beyond.

NINTH PLAN 1997-2002**Financing Pattern of Postal Sector**

(Rs in crore)

Scheme-wise Break-up	Approved Outlay	Mid-term Proposal	1997-98		1998-99		1999-00	
			BE	Actual	BE	Actual	BE	RE
I. Expansion of Postal Network	42.7	42.7	3.55	3.92	3.55	3.96	4.97	5.53
II. Upgradation of Technology	133.17	141.48	31.12	28.30	31.12	22.76	29.63	33.98
III. Human Resource Development	14.08	14.08	2.79	2.35	2.79	2.84	2.74	3.45
IV. Modernisation of Mail Processing	141.3	177.5	8.79	3.37	8.79	7.28	38.22	19.06
V. Business Development & Marketing	18.02	18.05	3.85	2.29	3.85	3.66	7.20	7.20
VI. Material Management	0	0	0.00	0.00	0.00	0.00	0.00	0.21
VII. Postal Life Insurance	14.42	14.42	4.00	2.96	4.00	2.28	1.52	1.49
VIII. Philately	5.12	5.12	0.50	0.50	0.50	0.69	0.57	0.58
IX. Postal Buildings & Staff Quarters	119.62	119.62	35.00	24.13	35.00	27.53	10.88	21.83
X. Streamlining of Adm. & Financial Management	9.63	9.63	5.40	2.73	5.40	1.69	2.73	1.14
XI. Public Grievances	7.4	7.4		1.72		1.00	1.54	1.54
X. North East								3.99
Total	507.25	550	95.00	72.27	95.00	73.69	100.00	100.00

NINTH PLAN 1997-2002**Financing Pattern of Postal Sector**

(Rs in crore '97 prices)

Organisations	Approved	Mid-term	1997-98		1998-99		1999-00	
	Outlay	Proposal	BE	Actual	BE	Actual	BE	RE
I. Expansion of Postal Network	42.7	42.7	3.36	3.71	3.15	3.51	4.16	4.62
II. Upgradation of Technology	133.08	140.58	29.46	26.79	27.58	20.17	24.77	28.41
III. Human Resource Development	14.08	14.08	2.64	2.22	2.47	2.52	2.29	2.88
IV. Modernisation of Mail Processing	141.3	177.5	8.32	3.19	7.79	6.45	31.96	15.94
V. Business Development & Marketing	18.02	18.05	3.64	2.17	3.41	3.24	6.02	6.02
VI. Computerisation of Savings in Pos	0.9	0.9	0.00	0.00	0.00	0.00		0.18
VII. Postal Life Insurance	14.42	14.42	3.79	2.80	3.55	2.02	1.27	1.25
VIII. Philately	5.12	5.12	0.47	0.47	0.44	0.61	0.48	0.48
IX. Postal Buildings & Staff Quarters	119.62	119.62	33.13	22.84	31.02	24.40	9.10	18.25
X. Streamlining of Adm. & Financial Management.	9.63	9.63	5.11	2.58	4.79	1.50	2.28	0.95
XI. Public Grievances	7.4	7.4	0.00	1.63	0.00	0.89	1.29	1.29
X. North East								3.34
Total	507.25	550.00	89.93	68.41	84.20	65.31	83.61	83.61

NINTH PLAN 1997-2002(Review)

Physical Targets & Achievements

Schemes	Ninth Plan	1997-98		1998-99		1999-2000	
		Target	Actual	BE	Actual	Target	RE
Expansion of Postal Network							
a.Opening of Pos.							
EDPOs	2500	500	402	598	598	500	500
Dsos	250	50	52	50	50	50	50
Infrastr. Equip. to EDBOs	2400	4800	7746	2700	3395	500	500
Panchayat Sanchar Sewa					200	500	500
Upgradation of Technology							
Counter Computerisation							
a)Supply of MPCMs including SB Lans	5000	1000	918	500	1429	1000	1250
b)Modernisation of Pos	505	205	308	60	98	60	100
Mechanical Equipment							
Hand Cancellors	10000	2000	0	10000	3285		
Stamp Cancelling Machines	100	20	20	20	20	100	20
Electronic Franking Machines	500	100	250	150	150	100	141
Tying and bunding Machines	30			30	30		
Installation of VSATs	170			20	0	60	62
Installation of ESMOs	2000	350	318	250	10	210	266
Upgradation of VSATs	75			30	21		
Material Management							15PSDs
Printing & Paper cutting	1						
Diesel fork lift trolleys	4						
Human ResourceDevelopment							
In service training Gr "A"	180	50	30	25	30	30	30
Refresher training	16051	4000	4551	4000	4315	2500	2500
Computer training	12000	1500	2775	2100	4062	1225	3200
Training for EDBPMs	51000					18000	18000
Training to Gr. C and Postman	15750	6000	7107	3000	7148	1800	1800
Customer care centre	All Div.			59	60	100	0
Modernisation of Mail Processing							
Setting up of AMPCs	3					2	0
Mail office Modernisation	120	20	20	35	43	15	40
RMS Vans	28				24	10	2+7
Purchase of MMS Vehicles	50	7	8	14	12	4	4
Registration Delivery					22+6		
HRO/DO Comp.	20	4	1			5	12
TMO computerisation	25	3	6	7	6	4	5
Mopeds	500			75	147	34	
Business Development Marketing							
Computerisation of PPCs	40	8	8	10	10	22	122
Business off. for Speed Post	40 Centres			7	7	10	30
Computerisation of SPCCs	50	10	7	20	20	30	
Postal Life Insurance							

Annexure-III (Contd.)

Schemes	Ninth Plan	1997-98		1998-99		1999-2000	
		Target	Actual	BE	Actual	Target	RE
RPLI Computerisation	32R	6R	19 regions	12R+120 HO	11R+120 HO	6	66
Upgradation of Computers	20R	4R	5 circles	4C+1PLI	4C+1PLI	10	10
Philately (Computerisation)	52E+200N	5E+10N	5	25	21	10	
Postal Buildings	400	84	72	22	25	16	15
Staff Quarters	950	260	275	185	196	30	144
Streamlining of Adm. & Finl. Management							
CC in PAO				6	4	7	4
MO in PAO						4	