CHAPTER-8

INFRASTRUCTURE DEVELOPMENT

8.1 ENERGY

8.1.1 POWER

The Ninth Plan envisages energy generation target of 606.70 BKwh (Billion Kilowatt hours) in utilities by the end of terminal year 2001-02, as against the energy generation of 394.5 Bkwh at the end of Eighth plan.

2. A capacity addition of 40245 MW is envisaged during the Ninth Plan period comprising 11909 MW in the Central Sector, 10748 MW in the State Sector and the balance 17588 MW in the Private Sector. The proposed capacity addition from the Private Sector constitutes about 43.7% of the total capacity addition during the Ninth Plan.

3. At the beginning of Ninth Five Year Plan (1997-2002), the energy deficit was 11.5% and peak deficit was 18%. With the targeted capacity addition of 40245 MW during the Ninth Plan period, the power supply position at the end of Ninth Plan, as assessed by CEA, indicates energy deficit of 1.4% and peak deficit of 11.6%. However, with the capacity addition of 16037 MW during first four years i.e. 1997-2001, the energy deficit was 7.8% and peak deficit 13.0%. The improvement in the power supply position was partly due to the marked improvement in PLF, which was 64.4% at the beginning of Ninth Plan and increased to 69.0% at the end of 2000-2001.

Review for 2000-2001
Generation of Electricity (Utilities)

4. Against a target of 500.7 Bkwh, actual generation during the year was 499.45 Bkwh, representing a marginal shortfall of 0.2 %. In the case of the hydel generation the achievement was 92.2%. However, the nuclear and thermal generation exceeded the target by 27.4% and 5.5% respectively. The total generation during 2000-2001 was higher than that in 1999-2000 by 3.9 %.

5. In addition to the above, about 1.4 Bkwh of electricity also became available from Chukha Hydel project in Bhutan.

6. The source-wise generation targets and achievements for 2000-2001 with actual for 1999-2000 and projections for 2001-2002 in respect of utilities are given in Table 8.1.1

TABLE 8.1.1
Source-wise Electricity Generation
(Million Units)

	1999-2000	2000-2001		2001-2002
	Actual	Target	Actual	Target
Hydro	80628	83907	74346	82800
Thermal	386787	403200	408208	430284
Nuclear	13267	13593	16896	16916
Total	480682	500700	499450	530000

7. The region-wise break-up of actual generation in 2000-2001 is given in Annexure 8.1.1

8. During 2000-2001, the target for All India Plant Load Factor (PLF) was 66.7 % for thermal stations. The actual PLF achieved was 69.0%. Table 8.1.2 gives the sectorwise break-up of PLFs for the year 1999-2000 (Actual), 2000-2001 Target and (Actual) and 2001-2002(Target). The target and achievement in regard to PLF for all State Electricity Boards, Central Power Organisations and Private Sector are indicated in Annexure 8.1.2

TABLE 8.1.2
Sector-wise Plant Load Factor (%)

	1999-2000	2000-2001		2001-2002
	Actual	Target	Achievement	Target
Central Sector	72.5	68.4	74.3	71.6
State Sector	64.3	65.8	65.6	67.4
Private Sector	68.9	67.0	73.0	69.6
All India	67.3	66.7	69.0	69.0

Addition in capacity

9. The target for addition to generating capacity during 2000-2001 was 4000.30 MW against which the achievement was 3775.66 MW (94.4%) as given in the Table 8.1.3. Installed Capacity of 226.4 MW (Wind 102.35 MW, Diesel 54.05 MW and Hydro 70 MW) was also commissioned outside the programme during the year 2000-01.

TABLE 8.1.3
Addition in Capacity (MW)

	1999-2000	2000-2001		2001-2002
	Actual	Target	Achievement	Target
Hydel	1371.50	1297.00	1215.00	1536.20
Thermal	2696.00	2263.30	2120.60	3228.50
Nuclear	440.00	440.00	440.00	—
Total	4507.50	4000.30	3775.60	4764.70

10. The project-wise details of achievements are given in Annexure 8.1.3. There were 14 generating units totaling 223.5 MW which have slipped from 2000-2001 generating capacity addition programme. This comprised 82 MW of hydro (7 generating units) and 141.5 MW of thermal(7 generating units). The complete list is at Annexure 8.1.4. The slippages were mainly due to delay in equipment supply and delay in construction work.

Transmission & Distribution

11. The programme and achievement in respect of construction/ energisation of 800 KV/400 KV/ 220 KV transmission lines is given in Table 8.1.4.

TABLE 8.1.4
Transmission Lines additions

(Ckt. kms)

	1999-2000 Actual	2000-2001		2001-2002 Target
		Target	Achievement	
+/-500KV HVDC				680
800 KV	416	285	375	224
400 KV	3336	1973	2091	1780
220KV	3932	5058	3674	4240

Renovation & Modernisation (R&M)

12. In order to improve the performance of existing thermal power plants, the R & M (Phase I) Programme was started in 1984 for completion during the Seventh Plan period. The programme was anticipated to give an additional generation of 7000 MU/Year by improving the overall PLF of units. All the schemes under Phase-I have been completed during Seventh Plan. On an average, additional generation of about 10,000 MU/ Year has been achieved which is equivalent to 1900 MW of additional capacity at 60 % PLF.

13. In view of the encouraging results achieved from the implementation of Phase-I of R&M Programme during Seventh Plan, Phase-II Programme for R&M of Thermal Power Plants was taken up in the year 1990-91 by the Government of India for implementation during Eighth Plan. Under the programme 44 Nos. of thermal power plants consisting of 198 Nos. thermal units aggregating to a total capacity of 20,869 MW were covered. The total sanctioned cost of the scheme was Rs. 2383 crore. An additional generation of 7864 MU/ year was anticipated after the completion of programme. By the end of 8th Plan i.e. March 1997, about 50 % works were completed. After partial completion of these works an additional generation of 5000 MU/year has been achieved. Also life extension works on 4 units (300 MW) of Neyveli TPS were completed. The balance works alongwith the additional activities subsequently identified by CEA still required to be carried out during 9th Plan. During the 9th Plan Programme, 191 units (25856 MW) at 54 power plants are covered under R&M and 42 units (3091 MW) are planned for life extension. An investment of about Rs. 2300 crore for R&M works and Rs. 2700 crore for Life Extension works is involved. Out of 42 units, the Life Extension works on 11 units (680 MW) have been completed during first three years of the 9th Plan and works on 8 units (690 MW) is under progress.

14. The CEA has also identified 55 hydro power stations with an aggregate capacity of 9653 MW (210 Nos. generating units) for coverage under renovation, moderanisation

and uprating (RM&U) of Hydro Power Stations. The total estimated cost of these schemes is Rs.1493 crore and expected benefit is 2531 MW/7181 MU. Out of 55 schemes, work on 25 schemes having an aggregate capacity of 5791 MW at an estimated cost of Rs.465 crore and an expected benefit of 1313 MW/3263 MU have been completed till 31.3.2000. At present, there are 21 ongoing schemes with an aggregate installed capacity of 3113 MW where RM&U works at an estimated cost of Rs.792 crores with an expected benefit of 911 MW/2517 MU are under different stages of implementation. It is expected that out of these 21 schemes, 11 schemes would be completed during the Ninth Plan.

Financial Performance of SEBs

15. The internal resources of the SEBs continued to be negative. As per the latest information available based on the resources discussion for the Annual Plan 2001-2002, the net internal resources of the SEBs which were Rs.(-) 2090.7 crore in 1996-97 increased to Rs (-) 11531.60 crore in 1999-2000 (RE). In the year 2000-2001, it was expected to be Rs.(-) 13092.50 crore. The commercial losses of the SEBs without subsidy increased from Rs. (-)11305 crore during 1996-97 to Rs(-) 23028 crore at the end of the Annual Plan 1999-2000 (RE).The Rate of Return (ROR) without subsidy on the net fixed assets of the SEBs was at the level of (-)19.57% in 1996-97. It was expected to be (-) 33.78 % in 1999-2000 (RE).

16. In case the SEBs are to achieve break-even i.e. 0% ROR in 2000-2001, they would have to raise average tariff on an All-India basis by 91.3 paise/unit over the current average tariff. This would yield additional revenue of as much as Rs.26013 crore. For achieving 3% ROR, the average tariff on All-India basis has to be increased by 97.9 paise/unit and it would yield additional revenue of Rs.28238.7 crore. If the minimum rate of 50 paise/ unit of agriculture tariff is levied by the SEBs, they could mobilise additional revenue of the order of Rs. 2260.20 crore in the year 2000-2001.

Power Sector Reforms

17. The steps in regard to power sector reform were continued by unbundling the SEBs and separating generation, transmission & distribution into separate corporations to make it possible to monitor efficiency levels on each activity as a profit centre and also to create appropriate incentives for efficiency in each area. In this context six States viz. Orissa, Haryana, Andhra Pradesh, Karnataka, Uttar Pradesh and Rajasthan have initiated power sector reforms along these lines. Further, the Madhya Pradesh State and NCT of Delhi have passed the Reform Bill in the State Assembly. Gujarat has also drafted its Reform Bill.

18. The following States have made substantial progress on the above lines:-

Orissa

19. Orissa was the first State to initiate reform of the Power Sector w.e.f April 1,1996. Orissa SEB has been split into three entities viz. *Orissa Power Generation Corporation* (OPGC- for thermal power), *Orissa Hydro Power Corporation* (OHPC - for hydel power) and *Grid Corporation of Orissa* (GRIDCO - for transmission and distribution network). Subsequently distribution has been privatized. The State has been divided into four zones

for distribution by four subsidiaries of GRIDCO (in the joint sector); namely North-Eastern (NESCO) , Western (WESCO), Central (CESCO) and Southern (SOUTHCO). BSES has taken over three zones viz. Western, North-Eastern and Southern with 51% equity. The Central zone has been offered to AES Corporation of USA.

20. A Separate Regulatory Commission OERC has been constituted and OERC has issued so far four tariff orders. The overall increase in the last tariff order of February 2001, was by 10.20%.

Haryana

21. The Reforms Act was notified in March, 1998. The erstwhile Haryana State Electricity Board (HSEB) was unbundled into two separate entities, namely, Haryana Power Generation Corporation (HPGC) for generation and Haryana Vidyut Prasaran Nigam (HVPNL) for transmission of power in August, 1998. HVPNL has been further re-structured and distribution has been entrusted to two distribution companies viz. Uttar Haryana Bijili Vitaran Nigam Ltd. (UHBVNL) and Dakshin Haryana Bijili Vitaran Nigam Ltd. (DHBVNL). The State has also constituted a Regulatory Commission and it has already given its first tariff order in December, 2000, increasing the tariff in almost all the categories. The hike in the case of agriculture sector has been made from 50 paise to 62 paise on an average for metered connection and 65-100 paise on an average for un-metered connection.

Andhra Pradesh

22. The Andhra Pradesh Electricity Reform Act, 1998 has been notified on 29th October, 1998. APSEB has been unbundled into two separate companies namely, *Andhra Pradesh Power Generation Corporation* (APGENCO) for generation and *Andhra Pradesh Transmission Corporation* (APTRANSCO) for transmission of power. The APTRANSCO has been further unbundled with distribution function entrusted to four distribution companies. These distribution companies are at present subsidiaries of APTRANSCO and are proposed to be privatized by the end of next year. Under the APERC Act, 1998, the State has set up its own SERC. APERC has issued so far two tariff orders, the first in June 2000 and the second in April 2001. There has been marginal increase of 0.1% in the 2nd tariff revision over the 1st tariff. The average increase in 1st tariff as implemented from 4th June, 2000 was by 15%.

Karnataka

23. The Karnataka Electricity Reforms Act , 1999 has been passed and brought into force w.e.f. 1st June, 1999. The erstwhile Karnataka Electricity Board (KEB) has been unbundled/corporatised into *Karnataka Power Transmission Corporation Ltd.* (KPTCL) for handling transmission and distribution functions, and *Visvesvaraya Vidyut Nigam Limited* (VVNL) for handling generating stations. As per the MOU signed by the State with the Ministry of Power, the State proposes to further restructure the KPTCL and form separate distribution companies by December, 2001. Under the reform Act, the State has also set up its SERC, which has already issued first tariff order on 18th December, 2000. The tariff order issued by KERC has been made effective from 1st metering date on or after 29th December, 2000. The average increase in tariff is 17% (across the Board).

Uttar Pradesh

24. The Uttar Pradesh Reforms Bill has been passed and SERC constituted in September, 1998. The erstwhile Uttar Pradesh State Electricity Board has been split into *UP Thermal Generation Corporation, UP Hydro Generation Corporation* and *UP Power Corporation Ltd*. for transmission and distribution of power. The State Government proposes to privatize distribution initially in Kanpur. The State Electricity Regulatory Commission has already issued the first tariff order which has become effective from 9-08-2000. Average increase in tariff was 15%.

Rajasthan

25. The State Reforms Bill has been passed in January, 2000 and SERC constituted. The erstwhile Rajasthan State Electricity Board (RSEB) has been unbundled w.e.f. July, 2000. Five separate companies have been formed viz. Rajasthan Vidyut Utpadan Niagam Ltd. for Generation, Rajasthan Vidyut Prasaran Nigam Ltd. for Transmission and three distributing companies Jaipur Vidyut Vitaran Nigam Ltd. , Ajmer Vidyut Vitaran Nigam Ltd. and Jodhpur Vidyut Vitaran Nigam Ltd. The Rajasthan State Electricity Regulatory Commission has issued its first tariff order on 24th March, 2001. The increase has been made in all categories of consumers. Average increase in tariff in all the three distributing companies in the State is 16.76%.

26. As part of reforms, fifteen States have already set up their respective State Electricity Regulatory Commission (SERCs) and other States are also in the process of setting it up.

27. A scheme on Accelerated Power Development Programme (APDP) has been approved by the Govt. of India. The following activities are covered under the scheme :

(a) Renovation & Modernisation (R&M)/ Life Extension/Uprating of old power plants (thermal & hydel).

(b) Upgradation / Improvement of sub-transmission network (below 66 KV) including Energy Accounting and Metering.

28. The APDP scheme is expected to improve the operational and financial health of the SEB's of the remaining States taking steps for power sector reforms.

29. During the year 2000-01, against the approved allocation of APDP fund for an amount of Rs.1000 crore , an amount of Rs.794.82 crore has been sanctioned by APDP Monitoring Committee, which comprises Rs.397.41 crore as grant (50%) and another amount of Rs.397.41 crore (50%) as loan. For the Annual Plan 2001-02, the budget allocation is Rs. 1500 crore under APDP scheme.

Annual Plan 2001-2002

Generation of Electricity (Utilities)

30. The total electricity generation in utilities in 2001-2002 is estimated at 530 Bkwh (Table 8.1.1). Region-wise details are given in Annexure 8.1.1.

31. The total generation envisaged for 2001-2002 is 5.85 % higher than the target for the preceding year. The overall Plant Load Factor envisaged is 69.0 %. Additional Energy of about 1.4 Bkwh is also expected to become available from the Chukha Hydel Project in Bhutan.

Addition in Capacity

32. The target for addition to installed capacity during 2001-2002 is 4764.70 MW (Table 8.1.3). This includes the projects aggregating to 144.5 MW capacity slipped over from 2000-2001.

33. Of the total additional generating capacity targeted for 2001-2002, a capacity of 1365 MW in the Central Sector, 1988.20 MW in the State Sector and 2338.30 MW in the Private Sector is expected to be commissioned. The scheme-wise details of additions to installed capacity during 2001-2002 are indicated in Annexure 8.1.5.

Plan Outlay

34. The total expenditure in the power sector (including Rural Electrification) during 2000-2001 is estimated around Rs. 24200 crore against the Approved Outlay of Rs.26554 crore, as shown in Table 8.1.5.

TABLE 8.1.5
Annual Plan Outlays

(Rs. crore)

	1999-2000	2000-2001		2001-2002
	Revised Estimates	Approved Outlay	Revised Estimates	Approved Outlay
States & U.Ts @	12479.18	14943.53	14134.88	Yet to be finalized
Central Sector @	8789.04	11610.83	10064.81	12846.37
Total (All India)	21268.22	26554.36	24199.69	

@ The details are given in Annexure 8.1.6.

35. The utilization of other provisions excluding Rural Electrification (RE) component, available for development programme in the power sector, is given in Table 8.1.6.

TABLE 8.1.6
Utilization of other provisions

(Rs. crore)

	1999-2000	2000-2001		2001-2002
	Revised Estimates	Approved Outlay	Revised Estimates	Approved Outlay
Power component of Special Area Programme of North Eastern Council (NEC)	209.50	175.39	N.A.	154.31

Captive Power

36. The addition to installed capacity in respect of Non-Utilities during 1998-99 was about 934 MW. With this addition, the total installed capacity of such plants is estimated to have gone upto 14100 MW (including Railways) by the end of March, 1999. The generation from Non-Utilities in 1998-99 was placed at 45.58 BU approximately.

Externally Aided Power Projects

37. The year-wise allocation and actual utilization of external assistance during the first four years of the Ninth Plan for power projects under Ministry of Power through bilateral and multilateral arrangements are indicated in Table 8.1.7.

Table 8.1.7
Year-wise Allocation and Actual Utilization during 1997-98 to 2000-01

(Rs. crore)

Year	Allocation	Utilization	(%) utilization
1997-98			
Central Sector	2704.00	2309.14	85.40
State Sector	1363.58	1559.07	114.34
Total	4067.58	3868.21	95.10
1998-99			
Central Sector	2538.00	2179.64	85.88
State Sector	1859.06	1832.45	98.57
Total	4397.06	4012.09	91.24
1999-2000			
Central Sector	1724.69	1491.92	86.50
State Sector	1948.82	1751.05	89.85
Total	3673.51	3242.94	88.28
2000-2001			
Central Sector	1284.64	1694.42	131.90
State Sector	2220.36	1855.84	83.58
Total	3505.00	3550.26	101.29

38. Some of the factors contributing to non-utilisation of external aid in the case of power projects are deficiency in project management and delay in construction work.

Private Participation in Power Sector

39. The policy for Private Sector participation in Power was announced in October, 1991 in order to bring in additionality of resources for the capacity addition programme. The Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1948 have been amended to bring about a new legal and financial environment for private enterprises in the electricity sector. The Electricity Laws (Amendment) Act, 1998 was also enacted to treat transmission as a distinct activity and to facilitate private sector investment in transmission sector.

40. So far, projects having capacity of around 29,375 MW have been given techno-economic clearance (TEC) by the Central Electricity Authority (CEA). Out of these, 10 projects having a total capacity of around 3500 MW have been fully commissioned. Seven projects with a total capacity of around 2500 MW have achieved financial closure and are presently under construction. Five more projects having TEC have also started construction though they are yet to achieve financial closure. Since 1991, in all, 25 projects with capacity of around 5400 MW have been fully commissioned (including 10 TEC projects mentioned above) and 17 projects with around 5200 MW are in various stages of construction (including 12 TEC projects).

Rural Electification Programme:

41. There are 5.87 lakh villages in the country as per 1991 Census. By the end of March, 2000, 5.0 lakh villages have been electrified achieving a national average of 86.3%. As a part of the Village Electrification Programme, pumpsets are also energized in the States having the potential for ground water, which help in meeting the minor irrigation requirements. As on 31.3.2000 a total of 125.14 lakh pumpsets have been energized in the country against the total estimated potential of 195.94 lakhs which amounts to 63.9% of the potential exploited. Out of the balance around 80,000 villages to be electrified, it has been assessed that around 62,000 villages could be electrified by extending the conventional grid whereas the balance around 18,000 villages which are located in remote and difficult areas like hilly terrains, deserts and islands may have to be electrified by decentralized non-conventional energy sources like solar, small hydro and biomass. Govt. of India has already initiated action with the concerned Central Ministries so as to electrify all the balance villages in the country by the end of the 11th (2007-2012) Plan. In order to enable the States to electrify these villages by getting funds from Govt. of India in suitable proportion of grants and loans, the Rural Electrification Programme has been included as one of the components of the Prime Minister's Gramodaya Yojana (PMGY) from 2001-02 onwards. While the funds from the Govt. of India for village electrification would flow directly to the concerned State Govts., the funds for load intensification and system improvement in villages already electrified would be given by Rural Electrification Corporation (REC) in the form of loan.

New and Renewable Sources of Energy

42. The programme of New and Renewable Sources of Energy is being implemented by the Ministry of Non-Conventional Energy Sources (MNES). These programmes include the rural energy, power generation from renewables, promotion of new technologies and also the programmes promoted through the Indian Renewable Energy Development Agency (IREDA) which is the only public sector financial institution under the administrative control of MNES. The Rural Energy Programme mainly consists of the National Project on Biogas Development (NPBD), the National Programme on Improved Chulhas (NPIC), Integrated Rural Energy Programme (IREP), Solar Energy Programme and Biomass Gasifiers etc. These programmes help in meeting the energy requirements of the rural people for their basic needs like cooking, lighting and heating. The programmes for power generation from renewables include the wind energy, small hydro, biomass power and cogeneration, solar thermal and photovoltaic power and energy from urban and industrial wastes. As on December 31, 2000, the contribution of power generation from renewables has reached 3000 MW representing 3% of total grid capacity.

Review of Annual Plan 2000-2001

43. Under the National Project on Biogas Development (NPBD), a target to install 1.80 lakh family size biogas plants was set for 2000-2001 with a budget estimate of Rs. 61.70 crores. Upto December 2000, 98,000 plants had already been installed and target is expected to be achieved. An amount of Rs.33.94 crores has been incurred as expenditure upto 31st December, 2000. During 2000-2001 against the target of 20 lakh improved chulhas, 6.73 lakh chulhas have been installed upto the end of December, 2000 and the balance target is expected to be achieved during the year. Against a budget estimate of Rs.21.00 crores, an amount of Rs.10.49 crores has been incurred as expenditure (upto Nov.) under this programme. Under Biomass Gasifier Programme, 6.5 MW capacity has been installed during the year. Under the Solar Photovoltaic Lighting Programme, 20,437 home lights, 40,978 SPV lanterns and 1,848 street lighting systems have been installed during 2000-2001 (upto 31st Dec., 2000). Under power generation programme, 55 MW of wind power and 50.80 MW of biomass power have been installed during the year. In the case of small hydro power during 2000-01 MNES has supported 6 projects aggregating to 39.75 MW. The physical and financial progress of the programmes were regularly reviewed in the quarterly review meetings held in the Ministry with the participation of Planning Commission, Ministry of Programme Implementation and other concerned Ministries.

Annual Plan 2001-2002

44. The total outlay of MNES for 2001-2002 is approved for an amount of Rs. 1039.71crores (Rs.583.00 crores of Gross Budgetary Support and Rs.456.71 crores of IEBR). The financial provision indicated above will cover the programmes of Rural Energy, Solar Energy, Power Generation from Renewable Sources of Energy, Energy from Urban and Industrial Wastes and the equity support to IREDA. The GBS of Rs.583.00 crores includes the amount of 10% which is earmarked for being utilized in North East and Sikkim under various programmes of MNES. It has been proposed to install 1.80 lakh family size biogas plants, 20 lakh improved chulhas to cover 10,000 villages, 85,000 solar lanterns, 35,000 home lighting systems, 3,000 street lighting systems, 800 SPV pumps, 200 MW of wind power, 80 MW of biomass power, 7 MW equivalent biomass gasifier systems, 50 MW small hydro power and 11 MW equivalent capacity of energy from urban and industrial wastes. Approximate renewable energy potential vis-a-vis achievements are indicated in Table 8.1.8.

TABLE 8.1.8

Renewable Energy Potential & Achievements :

Source/System	Approximate Potential	Cumulative Achievements (Upto 31.12.2000)
Biogas Plants (No.)	120 lakh	31.28 lakh
Improved Chulha (No.)	1200 lakh	328.9 lakh
Biomass	19,500 MW	273 MW
Solar Photovoltaic	20 MW/sq.km.	47 MWp
Solar Thermal Systems	1400 lakh sq.m.	5.5 lakh sq.m
Solar Water Heating	collector area	collector area
Wind power	45,000 MW	1267 MW
Small Hydro Power	15,000 MW	1341 MW
Urban and Municipal Wastes	1700 MWe	15.15 MWe

8.1.2 COAL & LIGNITE

Review

45. The Ninth Plan envisaged augmentation of domestic coal production capacity to meet the increasing demand for the power sector during the Ninth Plan period and beyond. For this purpose, the Plan laid special emphasis on intensification of exploration, improvement of capacity utilization and overall productivity through adaptation of appropriate mining technology, conservation and demand management etc. Facilitating private sector participation in commercial coal mining by means of necessary legislative amendments was another important area contemplated for supplementing the efforts of the public sector coal companies.

46. However, non-materialisation of targeted new coal based thermal power generating capacity projected earlier in the first two years of the Ninth Plan has adversely affected materialisation of coal demand (Table-1). Coal consumption registered a negative growth of 0.8% during this period against the initially envisaged coal demand growth of 6.85% in the Ninth Plan. As a result of this, the original Ninth Plan target for coal demand was revised from 412.20 mt (excluding 7.70 mt of middling) to 370.80 mt (excluding 7.70 mt of middling) and that for coal production was revised from 370.60 mt to 328.86 mt. The non-materialization of the envisaged new coal based thermal power generating capacity continued during the third and fourth year of the Plan as well, which adversely affected the coal consumption, especially for power generation. There has been a marginal increase of 4 per cent in coal consumption in 1999-2000. In 2000-01, as against a target of 333.85 mt, the anticipated coal consumption is 333.45 mt. This is about 2.6% more than the consumption/offtake of 324.72 mt in 1999-2000. The anticipated average annual compounded growth of coal consumption/offtake in the first four years of the Plan, including the anticipated offtake in Annual Plan 2000-01, is 3.03% against the revised targeted growth of 4.6% for the Ninth Plan.

47. In the first three years of the Plan, there has been a shortfall in actual coal production when compared with the respective targets, though in 2000-01, the target of coal production is likely to be achieved (Table-2). This was caused mainly due to lower demand/offtake by the major consumers like power and cement and consequent regulation of production by the coal companies.. However, the targeted production in 2000-01 is likely to be achieved. The anticipated average annual compounded growth in the first four years of the Plan is 2.08% as against the revised targeted growth of 2.86% for the Ninth Plan. In view of the reduced coal consumption/offtake by the major consuming sectors, coal companies resorted to regulation of coal production to avoid piling up of pithead stocks in the initial three years of the Plan and new investments for capacity creation has been slow in materializing. This may result in shortfall in coal availability in medium and long-term.

48. The proposed private sector participation in commercial coal mining is getting delayed. Further, the longer gestation periods of coal projects vis-à-vis power projects highlights the need for taking up of Ninth Plan identified projects to meet the requirements of power sector during the early Tenth Plan period. Though the present trend in coal based thermal generation capacity addition is not as was anticipated earlier, advance planning for coal production capacity is essential for meeting the increased demand in the Tenth Plan and beyond, where a significant capacity addition in power sector is being envisaged. The ongoing reforms in the power sector will facilitate increased capacity addition in the future.

49. As against the target of 6.71 mt, the anticipated washed coking coal production during 2000-01 is 6.43 mt. The quantity of imported coal has been increasing due to non-availability of required quantity of domestic coking coal of appropriate quality.

50. There is a need to improve the availability of washed non-coking coal to comply with the directive of MOEF to utilise non-coking coal of not more than 34% ash for power generation in thermal power stations located 1000 kms away from pitheads, by June 1, 2001.

51. The financial health of the coal companies is getting adversely affected due to the huge outstanding coal and power sale dues.

52. The domestic coal is becoming costlier and uncompetitive vis-à-vis imported coal due to high rail freights, especially in the coastal areas of the country.

Annual Plan 2001-02

Coal Demand

53. As against the anticipated consumption/offtake of 333.45 mt of raw coal excluding 4.39 mt of washery middling in 2000-01, the target of coal demand for Annual Plan 2001-02 has been fixed at 354.29 mt excluding 4.83 mt of washery middlings, This is mainly due to increase in demand by the power sector. The sectoral details of actual coal consumption in 1997-98, 1998-99 and 1999-2000, the target and anticipated coal demand/offtake during 2000-01 and the coal demand target as revised at the time of Mid Term Appraisal (MTA) of the Ninth Plan, as well as, the target finalized at the time of Annual Plan (2001-02) discussions are given in Table 8.2.1.

TABLE – 8.2.1: Coal Demand/Offtake **(in million tonnes)**

S. No	Sector	1997-98 Actual	1998-99 Actual	1999-00 Actual	2000-01		2001-02 Target	2001-02 Projections As per MTA
					Target	Anticipated		
	Coking Coal							
1	Steel !	**33.06**	**31.86**	**28.92**	**36.76**	**29.15**	**32.21**	**44.60**
2	Coke Ovens !		0.90	0.96	0.74	1.37	1.91	2.00
	Sub-Total Coking:	33.06	32.76	29.88	37.50	30.52	34.12	46.60
	Non-Coking							
3	Power Utilities	212.92	205.38	222.85	223.63	228.55	241.54	**235.00**
		(3.62)	(3.02)	(2.11)	(3.37)	(2.39)	(2.78)	(5.00)
4	Cement	10.13	13.23	15.50	15.42	15.93	17.00	21.40
5	Steel DR	2.62	2.42	2.21	3.26	2.41	3.48	4.20
6	Railways	0.05	0.03	0.01	-	0.01	0.01	-
7	Fertilisers	4.64	4.10	3.37 (0.02)	3.70	3.02	3.50	3.80
8	LTC/Soft Coke	0.04	-	0.04	-	-	-	3.00
9	Export	0.06	0.04	0.06	0.07	0.07	0.07	1.00
10	Captive Power	16.19	16.21	17.71	18.51	19.07	21.11	25.80
		(1.58)	(1.40)	(1.30)	(1.56)	(1.30)	(1.35)	(2.70)
11	BRK & Others	23.64	31.32	30.59	27.85	31.36	30.96	26.00
		(0.60)	(0.59)	(0.82)	(0.09)	(0.70)	(0.70)	(-)
12	Colly. Consumption.	3.06	2.90	2.50	3.91	2.51	2.50	4.00
	Sub-Total NonCoking:	273.35	275.63	294.84	296.35	302.93	320.17	324.20
		(5.80)	(5.01)	(4.25)	(5.02)	(4.39)	(4.83)	(7.70)
	Grand Total:	306.41	308.39	324.72	333.85	333.45	354.29	370.80
		(5.80)	(5.01)	(4.25)	(5.02)	(4.39)	(4.83)	(7.70)

Note: 1. Figures in brackets are washery middlings and are not included in totals.
2. Steel demand includes imported coking coal of 9.77 mt in 1997-98; 8.63 mt in 1998-99; 9.01 mt in 1999-2000 and 11.79 mt anticipated in 2000-01 & 15.97 mt projected in 2001-02.

54. Coal demand is derived demand. While steel sector is the major consumer of coking coal, power sector is the major consumer of non-coking coal. Captive power generation and cement sector are the other major consumers of coal. The growth in coal demand is directly dependent on the growth of these end-use sectors. Therefore, it would be necessary to determine a more realistic rate of growth for these sectors, especially for incremental coal-based thermal power generation capacity in order to arrive at a more realistic coal demand during the Tenth Plan.

Coal Production

55. As against the anticipated production of 310.60 mt in 2000-01, the target of coal production for the year 2001-02 has been fixed at 322.73 mt, which is 3.9% more than the anticipated production in 2000-01. The company- wise coal production details are given in Table- 8.2.2

TABLE – 8.2.2: Coal Production

(in million tonnes)

Company	1997-98 Actual	1998-99 Actual	1999-00 Actual	2000-01		2001-02 Target	2001-02 Proj. as per MTA
				Target	Anticip		
ECL	27.42	27.16	25.12	28.00	27.50	28.50	29.50
BCCL	30.92	27.17	27.90	29.50	29.30	30.00	30.00
CCL	33.08	32.18	32.40	34.00	34.00	36.00	36.00
NCL	37.12	36.52	38.43	39.00	39.50	41.50	41.00
WCL	32.52	31.75	33.86	33.00	34.50	35.00	34.60
SECL	56.63	57.56	58.75	60.00	60.00	63.00	66.00
MCL	42.17	43.51	43.55	43.00	43.60	44.50	47.40
NEC	0.69	0.64	0.57	0.50	0.50	0.50	0.50
CIL:	**260.55**	**256.49**	**260.58**	**267.00**	**268.90**	**279.00**	**285.00**
SCCL	**28.94**	**27.33**	**29.56**	**31.67**	**31.05**	**32.38**	**34.00**
TISCO/ISCO/DVC	**6.31**	**6.34**	**9.53**	**7.40**	**8.65**	**7.60**	**7.60**
Captive		**2.00**	**0.31**	**2.00**	**2.00**	**3.75**	**2.26**
Total:	**295.80**	**292.16**	**299.98**	**308.07**	**310.60**	**322.73**	**328.86**

56. Due to lower coal demand/offtake, the coal companies are reluctant to make investment in new coal projects and have resorted to regulation of coal production. This is not a healthy trend. The proposed private sector participation in commercial coal mining is getting delayed as the necessary legislative amendment has not come through. The coal demand is expected to increase rapidly during the Tenth Plan period and beyond, leaving a huge gap between demand and domestic availability of coal. Considering the longer gestation periods of coal projects vis-à-vis that of power projects, there is an urgent need for taking up implementation of Ninth Plan identified projects to meet the coal demand, especially the requirements of power sector during the Tenth Plan period and beyond.

Washed Coking Coal Production

57. The target for washed coking coal production in 2001-02 has been set at 6.26 mt including 0.70 mt of direct feed from CIL sources, as against the anticipated production of 6.43 mt including 0.70 mt of direct feed, in 2000-01. The overall yield of the washeries is getting adversely affected due to the deteriorating quality of raw coal feed and is at about 45%. This area needs immediate attention as the domestic supplies of washed coking coal are decreasing year after year leading to increased imports. The coking coal import by the steel sector is expected to be about 11.79 mt in 2000-01. In 2001-02, the targeted coking coal requirement for steel sector is 34.12 mt, which includes 15.97 mt of imported coking coal.

Washed Non-Coking Coal Production

58. There is a need to improve the availability of washed non-coking coal to comply with the directive of MOEF to utilise non-coking coal of not more than 34% ash for power generation in thermal power stations located at a distance of 1000 km or more from the pitheads. The requirement of washed non-coking coal for such existing power plants is estimated as 90 mt. However, as against this, the supply of non-coking coal is limited to only around 8.4 mt. The target for availability of non-coking coal for power generation in 2001-02 is fixed at 10.32 mt. Presently there are 7 washeries for washing of non-coking coal. The capacity for washing non-coking coal would need to be augmented to meet the demand for washed non-coking coal to comply with the MOEF directive.

Supply Plan

59. The targeted raw coal demand of 354.29 mt in 2001-02 is proposed to be met from domestic coal production of 322.73 mt, a stock draw down of 1.5 mt from CIL and an import of 15.97 mt of coking coal for steel. This would still leave a gap of 14.09 mt, which would be met from CIL & SCCL sources. The planned domestic coal movement by rail in 2001-02 from CIL and SCCL is 181.97 mt against the anticipated rail movement of 174 mt of coal in 2000-01.

Productivity

60. The target of OMS in 2001-02 for CIL has been set at 2.32 tonne (underground 0.63 tonne, opencast 6.67 tonne) and 1.56 tonne for SCCL (underground 0.85 tonne and opencast 6.19 tonne) against the anticipated OMS of 2.25 tonne for CIL (underground 0.62 tonne and opencast 6.23 tonne) and 1.49 tonne (underground 0.80 tonne and opencast 4.85 tonne) for SCCL. The overall improvement in OMS has so far been mainly due to opencast mines. There is an urgent need to improve the productivity of underground mines through appropriate mechanization.

Rail freight rationalization

61. Rail freight for coal needs to be rationalized. Coal is being over-charged and made uncompetitive vis-à-vis imported coal. This is because of cross-subsidy by Railways.

Lignite

62. The target of lignite production for Neyveli Lignite Corporation (NLC) for 2001-02 is fixed at 17.50 mt against the anticipated production of 17.50 mt in 2000-01. This is based on the requirements of its downstream units and 0.80 mt for open sale for meeting the demand for industries, particularly cement sector in the Southern Region.

Project implementation

63. The constraints of land acquisition and related rehabilitation, environmental and forestry clearances, adverse geo-mining conditions, contract management problems etc. continue to affect the implementation of the projects in coal sector. Regular monitoring of implementation of projects is being carried out at different levels. The implementation of major projects costing Rs.100 crore and above is reviewed regularly in the Quarterly Performance Review Meetings conducted by the Ministry of Coal. Out of the 63 ongoing coal projects, each costing Rs. 20 crore and above, 36 (57%) are on schedule and 27 (43%) are delayed.

64. The cooperation of the concerned State Governments in the matters of acquisition of land, forestland clearance etc. is essential. Further, it has been observed that scarce resources are allocated very thinly for a number of projects by the coal companies, which leads to delays in their implementation later due to resource problems. Therefore, there is a need for prioritisation of investments in projects on a selective basis. Further streamlining of the various procedures for clearances needed for timely implementation of coal projects would be imperative

65. During the period April 2000 to December 2000, 4 new projects (CIL-3; SCCL-1) for a total capacity of 2.46 mtpa (CIL-1.46 mtpa; SCCL-1.00 mtpa) have been sanctioned by the coal companies under delegated power for a total capital cost of Rs. 198.92 crore (CIL-Rs.159.78 crore; SCCL- Rs. 39.14 crore). Including these, the total capacity of new projects sanctioned in the first four years of the Ninth Plan is 20.12 mt (CIL 17.86 mt; SCCL 2.26 mt) only against the envisaged new coal production of 60.04 mt (CIL-55.71 mt; SCCL-4.33 mt). This slow rate of capacity addition may affect the domestic coal availability in the Tenth Plan Period and beyond.

Exploration

66. As on 1.1. 2001 the estimated geological reserves of coal stood at around 214 billion tonnes. Out of this, the reserves under ‘Proved’ category are 84.41 billion tonnes (39.4%), ‘Indicated’ category 90.24 billion tonnes (42.2%) and the reserves under ‘Inferred’ category are 39.25 billion tonnes (18.4%). The lignite reserves stood at 34.17 billion tonnes.

67. The target of drilling for promotional exploration for coal and lignite has been set at 1,55,000 metres (m) in 2001-02, against the anticipated achievement of 88,295 m in 2000-01. The anticipated cumulative drilling meterage in the first four years of the Ninth Plan is 5,29,074 metres. Taking into account, the proposed target for the next year, the total anticipated drilling in the Ninth Plan is 6,84,074 metres against a revised Ninth Plan target of 7,20,000 metres for promotional drilling which indicates an achievement of 95% of the target. As against an approved outlay of Rs.30.37 crore, the anticipated expenditure during 2000-01 is of the same order. An outlay of Rs.32.26 crore has been provided for Regional Exploration in 2001-02.

68. The target of detailed drilling for coal & lignite by the coal companies in 2001-02 is 2,56,000 m (CIL-1,85,000 m, SCCL- 69,000 m & NLC-2000 m), against an anticipated achievement of 2,63,450 m in 2000-01 (CIL-1,87,500 m, SCCL- 68,000 m & NLC-7950 m). The detailed drilling figures of CIL are exclusive of the targets under Non-CIL blocks, which are discussed below.

Private Sector Participation

69. The Ninth Plan has laid emphasis on private sector participation in commercial coal mining. However, proposed amendment of the Coal Mines (Nationalisation) Act, 1973, in this regard is yet to come through. Private coal mining for commercial supply is essential to supplement the efforts of Public Sector Companies in making available required quantity of coal from domestic sources.

Financial restructuring and revival of ECL, BCCL and CCL

70. Eastern Coalfields Ltd. (ECL), Bharat Coking Coal Ltd. (BCCL) and Central Coalfields Ltd. (CCL), three subsidiary companies of Coal India Ltd. have been making losses. While ECL and BCCL are sick companies which have already been referred to BIFR, CCL is also soon likely to follow the suite. The total accumulated losses of ECL have already exceeded its networth and increased from Rs.1728.60 crore in 1997-98 to Rs. 2201.07 crore in 1998-99 and further to Rs.2929.31 crore in 1999-2000. BCCL's accumulated losses have exceeded its networth and increased from Rs. 1654.49 crore in 1997-98 to Rs.2096.83 crore in 1998-99 and further to Rs.2789.15 crore in 1999-2000. CCL has suffered an accumulated loss of Rs.95.62 crore in 1998-99 which increased to Rs.198.19 crore in 1999-2000. CCL's accumulated losses are less than its networth. All these three companies have inherited old underground mines along with huge manpower and have been suffering from poor productivity, although they have very good quality of high grade coals. These companies were earlier funded from CPRA. However, the Government stopped budgetary support to Coal India since 1996-97. As a result of this, these companies fell sick. Since 1997-98, Voluntary Retirement Scheme (VRS) is being implemented for manpower rationalisation in all the three companies. CIL has engaged the consultancy services of ICICI to examine the status of financial health of ECL and BCCL and suggest measures for its revival. IDBI has been engaged to prepare revival package for restoration of financial health of CCL. The reports of the consultants is awaited. Necessary measures for revival of financial health of ECL, BCCL and CCL would need to be implemented expeditiously on a time bound basis.

Setting up of Regulatory Authority

71. Setting up of Regulatory Authority for resolving any price disputes etc., allocation of coal blocks both for exploration and exploitation, by framing separate rules under MMDR Act, for grant of prospecting licence/mining lease etc. needs to be expedited.

Amendments to Contract Labour Act

72. There is a need for amending the provisions of the Contract Labour Act for permitting offloading of certain activities in coal sector.

Reforms

73. Reforms in the Coal Sector would need to be continued. Since the growth of the Coal Sector is directly connected with the growth in the Power Sector, reforms in the Power Sector comprising restructuring of the State Electricity Boards (SEB's) with an objective to make them financially viable, Establishment of National Tariff Structure and Tariff Rationalisation, further opening up of the sector to private sector participation in generation and distribution of power, etc. would need to be expedited.

Other Programmes

Science &Technology

74. In the Ninth Plan, the emphasis has been laid on development of in-house R&D in coal companies. There are two major ongoing projects under coal S&T programme, namely, Coal Bed Methane (CBM) extraction under UNDP/GEF collaboration and washing of Low Volatile Medium Coking (LVMC) coal at Golukdih. As against the approved outlay of Rs.13.50 crore, the anticipated expenditure during 2000-01 is Rs.0.21 crore. An outlay of Rs.11.92 crore has been provided to the schemes of S&T in 2001-02.

Environmental Measures & Subsidence Control (EMSC)

75. Under this scheme emphasis is laid on (i) control of mine fires in Jharia coalfields; and (ii) control of subsidence in old abandoned areas of Raniganj coalfields. As against an approved outlay of Rs.13.52 crore, the anticipated expenditure in 2000-01 is Rs.10 crore. An outlay of Rs.12.17 crore has been provided toward schemes of EMSC in 2001-02.

Rehabilitation, Control of Fire & Subsidence in Jharia and Raniganj Coalfields

76. The scheme envisages mitigating the problems of fire and subsidence and related rehabilitation of the affected people based on the recommendations of the High Level Committee on Control of Fire & Subsidence in Jharia and Raniganj Coalfields. This scheme is formulated by MOC under the Master Plan for all the unsafe areas in Jharia and Raniganj coalfields. The Schemes under this are proposed to be taken up for implementation after partial implementation of the two interim schemes sanctioned, one each for Jharia and Raniganj coalfields. As against an approved outlay of Rs.6.69 crore, the anticipated expenditure in 2000-01 is Rs 0.50 crore. An outlay of Rs.7.24 crore has been provided for this scheme in 2001-02.

Detailed Exploration in Non-CIL Blocks

77. Though the scheme was taken up as a one time measure, based on the MTA discussions, it was, however felt necessary to extend the detailed drilling programme in Non-CIL blocks to upgrade the available reserves to 'proved' category by extending the budgetary support as national coal companies are not in a position to divert their resources for this activity in non-CIL blocks since the private sector participation is not forthcoming. The

programme envisages undertaking detailed drilling in Non-CIL blocks with an overall outlay of Rs. 91.18 crore for a total drilling programme of 3,63,900 metres. The implementation of the scheme started from 1998-99 onwards. As on 31.3.2001, the anticipated cumulative drilling is 1,18,381 m. The anticipated cumulative expenditure as on 31.3.2001 is Rs.19.38 crore. The target of drilling for AP 2001-02 has been fixed at 1,49,000 metres, with an outlay of Rs.37.27 crore as against an anticipated achievement of 80,720 metres in 2000-01 with an anticipated expenditure of Rs.10.00 crore.

Information Technology

78. This is a scheme under the head of IT for defining MOC's systems information needs in order to achieve its objectives and administer its responsibilities using IT as an enabler. The IT plan envisages procurement and maintenance of hardware/software, connectivity within the department and among constituent units of MOC. The estimated cost of the scheme is Rs. 1.94 crore spread over five years.

Voluntary Retirement Scheme (VRS*)*

79. In view of the urgent need to rationalise manpower in Eastern Coalfields Ltd. (ECL), Bharat Coking Coal Ltd. (BCCL) and Central Coalfields Ltd. (CCL) to improve their financial health, the VRS scheme is under implementation. Initially an amount of Rs.240 crore was provided through NRF in 1997-98 and 1998-99 and 12621 persons were retired against an outlay of Rs.400 crore for retiring 19,000 persons. However, funding through NRF was discontinued and an additional amount of Rs.459.19 crore for retiring 25,400 additional persons was provided through the overall budgetary support available to the MOC for the Ninth Plan period from 1999-2000 onwards. An amount of Rs.258.42 crore was provided during the period 1999-2001 for retiring 15654 persons. For 2001-02 an amount of Rs.156.99 crore has been provided for retiring 11,500 persons. Along with VRS, appropriate revival packages for rehabilitation of the companies are required to be formulated and implemented on priority basis. One such revival package for ECL prepared by ICICI is under consideration of MOC.

Safety & Welfare

80. The safety and welfare of coal mine workers continues to be a thrust area in the Ninth Plan. Taking up of safety audits, environmental monitoring of underground mines in particular, measures against inundation, scientific methods of roof support, training and retraining of workers etc. are some of the important areas in this regard. Similarly, thrust on improving the basic necessities like housing, water supply, educational and medical care continues in the Plan.

Plan Outlay

81. The company-wise/scheme-wise approved outlays and anticipated expenditure for the Annual Plan 2000-01, (BE & RE) and approved outlays for AP 2001-02 are given in Table-8.2.3 below.

TABLE-8.2.3 : Companywise/Schemewise Financial Outlays

(Rs. Crore)

Company/Scheme	2000-01		2001-02
	BE	RE	BE
Coal India Ltd.	2790.32	1767.00	2309.90
Singareni Coll. Co. Ltd.	327.82	235.00	355.00
Neyveli Lignite Corp.(Mines) (Mines)	609.80	542.80	449.97
Science & Tech.	13.50	0.21	11.92
Regl./Proml.Expl.	30.37	30.37	32.26
EMSC	13.52	10.00	12.17
Detailed drilling	29.51	10.00	37.27
Rehab.Proj.	6.69	0.50	7.24
Information Tech.	0.33	0.33	0.39
Total: Coal & Lignite	**3821.86**	**2596.21**	**3216.12**
Neyveli Lignite Corp. (Power)	558.65	520.93	538.84
VRS	180.00	100.00	156.99
NEC	87.30	57.14	65.20
Total : MOC :	**4647.81**	**3274.28**	**3977.15**

82. As compared with the anticipated expenditure of Rs.3274.28 crore in 2000-01, the approved outlay of Rs. 3977.15 crore provided for the Annual Plan 2001-02 is 21.5% more. For the purpose of NEC, 10% of the budgetary support of MOC has been earmarked in Annual Plan 2001-02. The outlay for 2001-02 comprises an IEBR of Rs. 3325.15 crore and a GBS of Rs. 652.00 crore including EAP of Rs.45.87 crore. DBS is Rs.606.13 crore. There has been a decrease of Rs.3.10 crore in the GBS over 2000-01 (RE). The DBS requirement is mainly meant for implementation of Mine –1 A Project of NLC which is linked to an IPP, implementation of VRS in ECL, BCCL and CCL and other schemes under MOC. There is no DBS for CIL and SCCL.

83. The huge outstanding coal sale and power sale dues are adversely affecting the financial health of the coal companies. Suitable mechanism would need to be evolved for liquidation of outstanding coal/power sale dues.

Externally Aided Projects (EAP)

84. There are two components of External Aid. One is direct and the other is indirect. The direct component is made available to the beneficiary mostly in the form of Suppliers' Credit, a component reflected under IEBR of PSUs. The indirect component is routed through Budget, which gets reflected under GBS.

85. There are different projects being implemented under Bilateral Credit. The EAP component in 2000-01 (BE) for the coal and lignite sector was Rs.96.44 crore which stands revised to Rs.95.41 crore in 2000-01 (RE). The major project under this is Coal Sector Environment and Social Mitigation Project (CSESMP) of CIL and some spill over amount towards the Ramagundam OC-II project of SCCL. As against this, the BE provision for AP 2001-02 is Rs.45.87 crore for CSESMP of CIL under IDA credit. The details of these projects are given in Annexure-8.1.7.

86. The direct component is the World Bank loan for Coal Sector Rehabilitation Project of CIL. The BE provision in 2000-01 was Rs.1379.24 crore, against which the RE is Rs.267.76 crore. This reduction was caused due to the decision of MOC/CIL to discontinue with the World Bank Loan for implementation of Stage-II of CSRP under CIL for which resources are proposed to be raised from domestic markets. An outlay of Rs.126.91 crore has been provided in 2001-02 to meet the committed expenditure of the project.

8.1.3 PETROLEUM AND NATURAL GAS SECTOR

Policy Initiatives.

87. The exploration & production and refining sectors have been opened for private participation. The response of private sector has picked up in the recent past.

88. Under the first round of New Exploration Licencing Policy (NELP), 48 blocks were offered and 25 blocks were awarded. Production sharing contracts have since been signed for 24, out of 25 blocks by Govt. of India with national and private oil companies. The second round of bidding for NELP has been announced wherein 25 blocks (8 offshore deep water in the west coast, 8 shallow water and 9 onland Blocks) have been offered for private participation.

89. Government has decided on the integration of stand-alone refineries in public sector to face the challenge of deregulation and improve the supply of petroleum products in different parts of the country. Kochi Refineries Ltd. and Numaligarh Refinery Ltd. have become subsidiaries of Bharat Petroleum Corporation Ltd. while Bongaigaon Refinery & Petro-chemicals Ltd. and Chennai Petroleum Corporation Limited subsidiaries of Indian Oil Corporation Limited.

90. Foreign Direct Investment (FDI) in refining sector has been enhanced to 100% under automatic route in June, 2000. FDI upto 100% allowed in E&P and natural gas including LNG, upto 74% is allowed in infrastructure relating to marketing and upto 51% allowed in petroleum products pipelines,

91. The waiting list for LPG connections has been liquidated and LPG connections are now available across the counter. The target for the calendar year 2001 is to release 130 lakh LPG connections.

92. The use of eco-friendly transportation fuels is being promoted.

Demand and Supply

93. The demand for petroleum products in 2001-02 is estimated to be 99.13 Million tonnes (MMT) against the consumption of 100.08 MMT during 2000-01. Thus, the demand of petroleum products will be lower than the projected demand of 110 million tonnes set for the terminal year of the Ninth Plan.

94. The production of crude oil for 2000-01, including production from joint venture and private sector companies, was 32.43 MMT against the target of 31.99 MMT (including PVT/JVC productions). The production from ONGC, both onshore as well as offshore fields, was marginally lower due to less than adequate response from thermal Enhanced Oil Recovery (EOR) schemes, moderation of production through closure of high Gas Oil Ratio (GOR) wells in Bombay High, increase in water cut in Gandhar oil field and due to socio-economic problems in Assam. The crude oil production target for 2001-02 is 32.5 MMT. The trend indicates that the crude oil production may fall short by about 17 MMT of Ninth Plan target of 180.82 MMT. The details of crude oil production are at Annexure-8.1.8.

95. The Natural Gas production for 2000-01 was 29.48 billion cubic meters (BCM) against the target of 28.81 BCM. The target for 2001-02 has been fixed at 29.76 BCM. The anticipated production is 141.49 BCM against the Ninth Plan target of natural gas production of 144.53 BCM. The details of natural gas production are at Annexure-8.1.9.

96. The refining capacity as on 1.4.2001 is 112.54 million tonnes per annum (MMTPA). Refining capacity of 0.1 MMTPA is expected to be added during the year. The refinery crude throughput in 2000-01 was 103.48 MMT against the target of 112.82 MMT. The crude throughput target for 2001-02 is 113.46 MMT. The capacity utilisation in the refining sector has been around 90% during 2000-01. The details of refining capacity are at Annexure-8.1.10.

Seismic Surveys, Exploratory and Development Drilling

97. The actual achievement during 1999-00, targets and anticipated achievements 2000-01, targets for 2001-02 and total anticipated 9th Plan seismic surveys and drilling are given in Annexure-8.1.11 & 8.1.12. The achievement in exploratory drilling for 2000-01 is about 94% the achievement in 1999-00. The achievement for development drilling is 363.52 thousand metres in 2000-01. The targets for exploratory and development drilling for 2001-02 have been kept at 562.66 and 358.05 thousand metres respectively.

Environment Management

98. Supply of Motor Spirit (MS) with low lead content (0.15) gm/lt.) was introduced in the whole country from January 1997 and effective from 1.2.2000, only unleaded MS is being sold all over the country. Diesel with 0.25% sulphur is being supplied throughout the country since 1.1.2000. From, 1.4.2000 onwards ultra-low sulphur petrol and with diesel sulphur content of 0.05% (max) is being supplied in National Capital Teritory (NCT) and in Mumbai from 1.10.2000. In addition, low benezene (1% vol. Max) in petrol has been introduced in NCT and Mumbai in last quarter of 2000. Further, supply of ultra Low Sulphur Petrol containing sulphur of 0.05% max. has also been introduced in Chennai and Kolkatta.

Greening of Fuels

- Diesel Hydro-delsulphurisation (DHDS) plants have been commissioned in nine refineries to produce low sulphur eco-friendly Diesel.
- Low sulphur diesel and unleaded petrol are being supplied throughout the country with effect from 1.1.2000 and 1.2.2000 respectively.
- From 1.4.2000 onwards, ultra low sulphur diesel with sulphur content of 0.05% (max.) is being supplied in NCR.
- Low benzene petrol (with 1% vol. max.) has been introduced in NCT and Mumbai in the last quarter of 2000.
- Waiting list for LPG connections have been liquidated and LPG connections are available across the counter.

Dismantling of Administered Price Mechanism (APM)

99. The Government approved the timetable for phased dismantling of APM over a period of 4 years in November, 1997. A number of steps have already been taken such as phasing of subsidies, price adjustments, rationalisation of tariffs etc. However, there have been some deviations in respect of reduction in subsidies for kerosene and LPG and tariff rationalisation. As per the approved programme, the following steps are required to be taken in 2001-02.

- Rationalisation of customs duties on crude oil and Petroleum products is to be completed as per Government decision of November 1997, wherein the customs duty needs to be fixed at 0-5% on crude oil and 15% on transportation fuels.
- Price of Kerosene for public distribution is to be adjusted so as to have subsidy of 33.3% of import parity.
- Regulatory mechanism is to be put in place.
- Scheme for administering subsidies outside oil companies is to be worked out before transfer of subsidy on Kerosene for public distribution, domestic LPG and freight for supplies to far-flung areas, to the fiscal budget.
- Accumulated pool deficit is to be liquidated or to be transferred to budget on the date of dismantling.

Outlay:-

100. An outlay of Rs. 16935.69 crore has been provided for 2001-02 in the Petroleum Sector (Rs. 8013.61 crore for Exploration and Production, and Rs. 8922.08 crore for Refining and Marketing). The company-wise outlays are given at Annexure-8.1.13. The 9th Plan anticipated expenditure is Rs. 60204.04 crore against the target of Rs. 74014.18 crore. The main reason for shortfall is that some of the refinery projects that were slated for completion during 9th Plan are now expected to be completed during 10th Plan. The entire Plan outlay of the sector is proposed to be met from the internal and extra budgetary resources of Public Sector Undertakings.

Annexure 8.1.1

Energy Generation in 1999-2000 , 2000-01 and 2001-02 (Utilities)

Year	Type		Northern	Western	Southern	Eastern	N-Eastern	ALL INDIA
			R E G I O N					
1999-2000	Hydro	Actual	31761	8923	32352	5624	1968	80628
	Thermal		101719	144437	87873	50125	2633	386787
	Nuclear		5340	5566	2361	-	-	13267
	TOTAL		**138820**	**158926**	**122586**	**55749**	**4601**	**480682**
2000-2001	Hydro	Target	32634	9361	32386	6989	2537	83907
	Thermal		103258	154605	94050	48072	3215	403200
	Nuclear		5768	4730	3095	-	-	13593
	TOTAL		**141660**	**168696**	**129531**	**55061**	**5752**	**500700**
2000-2001	Hydro	Actual	29094	7093	30170	5798	2191	74346
	Thermal		108517	149407	93801	53524	2959	408208
	uclear		6624	5883	4389	-	-	16896
	TOTAL		**144235**	**162383**	**128360**	**59322**	**5150**	**499450**
2001-2002	Hydro	Target	31598	9326	32990	6703	2183	82800
	Thermal		109525	161648	102144	53400	3567	430284
	Nuclear		7323	4842	4751	-	-	16916
	TOTAL		**148446**	**175816**	**139885**	**60103**	**5750**	**530000**

Annexure 8.1.2

Plant Load Factor of Thermal Power Plants during the year 2000-2001

Sl.No	SEB/Organisation	Target	Achievement
	State Sector		
1	D.V.B.	52.80	49.50
2	H.P.G.C.	54.60	49.90
3	R.S.E.B.	80.90	85.20
4	P.S.E.B.	75.40	77.90
5	UPRVUNL	58.10	56.70
6	G.E.B.	65.10	66.90
7	GSECL	73.40	78.30
8	M.S.E.B.	73.50	72.70
9	M.P.E.B.	71.40	66.30
10	APGENCO	82.60	85.20
11	T.N.E.B.	74.60	74.90
12	K.P.C	81.50	81.30
13	B.S.E.B.	17.60	19.00
14	TENUGHAT V	32.60	36.10
15	O.P.G.C.	78.80	81.90
16	W.B.S.E.B.	40.50	36.20
17	WB.P.DEV.CORP	50.40	55.90
18	D.P.L.	23.40	17.30
19	A.S.E.B.	25.60	18.60
	Average : SEB's	**65.80**	**65.60**
	Central Sector		
1	Badarpur	74.50	84.10
2	NTPC	72.80	79.50
3	Neyveli	73.30	80.10
4	D.V.C.	37.00	36.20
	Average : CentralSector	**68.40**	**74.30**
	Private Sector (Utilities)		
1.	A.E.Co/Sabarmati	79.00	82.50
2.	Trombay (TATA)	56.40	70.30
3.	CESC / Titagarh	66.80	68.20
4.	BSES Co.	82.20	81.70
	Average: Private (Utilities)	**67.00**	**73.00**
	Average All India	**66.70**	**69.00**

Annexure 8.1.3

Generating Units Commissioned/Rolled during the Year 2000-2001

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implem-enting Agency	Units Rolled/Commd.	
							Capac-ity MW)	Date
	NORTHERN REGION							
1.	Ghanvi	1	Hydro	State	H.P.	HPESEB	11.25	07.12.2000 R
2.	Ghanvi	2	Hydro	State	H.P.	HPESEB	11.25	30.07.2000
3	Chenani-III	1 to 3	Hydro	State	J&K	JKPDC	7.50	02.2001
4	Ranjit Sagar	1	Hydro	State	Punjab	PSEB	150.00	12.08.2000
5	Ranjit Sagar	2	Hydro	State	Punjab	PSEB	150.00	11.10.2000
6	Ranjit Sagar	3	Hydro	State	Punjab	PSEB	150.00	20.08.2000
7	Ranjit Sagar	4	Hydro	State	Punjab	PSEB	150.00	16.09.2000
8	Faridabad CCGT-ST	1	Thermal	Central	Haryana	NTPC	144.00	31.07.2000
9	Panipat TPS St-IV	6	Thermal	State	Haryana	HPGCL	210.00	31.03.2001
10	RAPP	4	Nuclear	Central	Raj.	NPC	220.00	.12.2000
		Central	**State**	**Private**	**Total**			
	Hydro	0.00	630.00	0.00	630.00			
	Thermal	144.00	210.00	0.00	354.00			
	Nuclear	220.00	0.00	0.00	220.00			
	TOTAL(NR)	364.00	840.00	0.00	1204.00			
	WESTERN REGION							
1.	Khaperkhda TPS	3	Thermal	State	Mah.	MSEB	210.00	31.05.2000
2.	Khaperkhda TPS	4	Thermal	State	Mah.	MSEB	210.00	07.01.2001
		Central	**State**	**Private**	**Total**			
	Hydro	0.00	0.00	0.00	0.00			
	Thermal	0.00	420.00	0.00	420.00			
	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(WR)	0.00	420.00	0.00	420.00			
	SOUTHERN REGION							
1	Srisailam LBC	1	Hydro	State	A.P.	APGENCO	150.00	30.03.2001 R
2	Sharavathy Tail Race	1	Hydro	State	Kar.	KPCL	60.00	14.07.2000 R
3	Kovilkalappal GT	1	Thermal	State	T.N.	TNEB	69.00	05.02.2001
4	Kovilkalappal ST	1	Thermal	State	T.N.	TNEB	38.00	30.03.2001
5	Kondapalli CCGT (GT)	1	Thermal	Private	A.P.	L.K.Power	112.00	19.09.2000
6	Kondapalli CCGT (GT)	2	Thermal	Private	A.P.	L.K.Power	112.00	22.06.2000
7	Kondapalli CCGT (ST)	1	Thermal	Private	A.P.	L.K.Power	126.00	18.10.2000
8	Pillaiperumalanallur	1	Thermal	Private	T.N.	PPN Power	225.00	22.02.2001
	CCGT (GT)							
9	Samalpatti DG	1 to 2	Thermal	Private	T.N.	S. Power	30.19	01.03.2001
10	Samalpatti DG	3 to 4	Thermal	Private	T.N.	S. Power	30.19	01.03.2001
11	Cochin CCGT (ST)	1	Thermal	Private	Kerala	BSES	39.00	20.11.2000

Annexure-8.1.3(Contd.)

Sl. No.	Name of the	Unit	Type	Sector	State	Implem-enting Agency	Units Rolled/Commd. Capacity MW)	Date
12	Bellary DG	1 to 2	Thermal	Private	Kar.	SRAAC Ltd	25.20	22.09.2000
13	Kaiga	1	Nuclear	Central	Kar.	NPC	220.00	26.09.2000
		Central	**State**	**Private**	**Total**			
	Hydro	0.00	210.00	0.00	210.00			
	Thermal	0.00	107.00	699.60	806.60			
	Nuclear	220.00	0.00	0.00	220.00			
	TOTAL(SR)	220.00	317.00	699.60	1236.60			
	EASTERN REGION							
1	Upper Indravati	3	Hydro	State	Orissa	OHPC	150.00	30.09.2000
2	Upper Indravati	4	Hydro	State	Orissa	OHPC	150.00	30.03.2001 R
3	Bakreswar TPP	2	Thermal	State	W.B.	WBPDCL	210.00	20.05.2000
4	Bakreswar TPP	3	Thermal	State	W.B.	WBPDCL	210.00	21.03.2001
5	Jojobera TPS	1	Thermal	Private	Bihar	Jam.Power	120.00	09.10.2000
		Central	**State**	**Private**	**Total**			
	Hydro	0.00	300.00	0.00	300.00			
	Thermal	0.00	420.00	120.00	540.00			
	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(ER)	0.00	720.00	120.00	840.00			
	NORTH EASTERN REGION							
1	Doyang	1	Hydro	Central	Nagaland	NEEPCO	25.00	08.07.2000
2	Doyang	2	Hydro	Central	Nagaland	NEEPCO	25.00	05.07.2000
3	Doyang	3	Hydro	Central	Nagaland	NEEPCO	25.00	29.06.2000
		Central	**State**	**Private**	**Total**			
	Hydro	75.00	0.00	0.00	75.00			
	Thermal	0.00	0.00	0.00	0.00			
	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(NER)	75.00	0.00	0.00	75.00			
	Total All India	**(All India)**						
		Central	**State**	**Private**	**Total**			
	Hydro	75.00	1140.00	0.00	1215.00			
	Thermal	144.00	1157.00	819.60	2120.60			
	Nuclear	440.00	0.00	0.00	440.00			
	TOTAL(All India)	659.00	2297.00	819.60	3775.60			
		R - Rolled						
	Outside the Programme							
		Wind	102.35 MW					
		Diesel	54.052 MW					
		Hydro	70.00 MW					
		Total	226.402 MW					

Annexure 8.1.4

Generating Units Slipped from the Programme of 2000-01

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implementing Agency	Capacity (MW)
1	Upper Sindh-II	2	Hydro	State	J&K	JKPDC	35.00
2	Upper Sindh Ext.	1	Hydro	State	J&K	JKPDC	35.00
3	Sewa-III	1	Hydro	State	J&K	JKPDC	3.00
4	Sewa-III	2	Hydro	State	J&K	JKPDC	3.00
5	Sewa-III	3	Hydro	State	J&K	JKPDC	3.00
6	Pahalgam	1	Hydro	State	J&K	JKPDC	1.50
7	Pahalgam	2	Hydro	State	J&K	JKPDC	1.50
8	Leimakhong DG	1 to 6	Thermal	State	Manipur	BHEL/MPD	36.00
9	Pillaiperumalana-llur CCGT, (ST)	1	Thermal	Private	T.N.	PPN Power	105.50
	Total	**14 units**					**223.50**

Annexure 8.1.5

Generating Capacity Addition Programme for the Year 2001-02.

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Imple-menting Agency	Unit Capacity MW)	Likely Comm.Sch. (Mon/Yr)
	NORTHERN REGION							
1	Tehri St-I	1	Hydro	Central	Utaranchl	THDC	250.00	Marh,2002
2	Malana	1	Hydro	Private	H.P.	IPP	43.00	June,2001
3	Malana	2	Hydro	Private	H.P.	IPP	43.00	July,2001
4	Pragati CCGT	GT-1	Thermal	State	Delhi	DVB	104.60	Jan.,2002
5	Pragati CCGT	GT-2	Thermal	State	Delhi	DVB	104.60	Marh,2002
6	Pahalgan	1 to 2	Hydro	State	J&K	JKPDC	3.00	
7	Upper Sindh-II	2	Hydro	State	J&K	JKPDC	35.00	Sept,2001
8	Upper Sindh Extn.	1	Hydro	State	J&K	JKPDC	35.00	Marh,2002
9	Sewa-III	1 to 3	Hydro	State	J&K	JKPDC	9.00	Dec.,2001
			Central	**State**	**Private**	**Total**		
		Hydro	250.00	82.00	86.00	418.00		
		Thermal	0.00	209.20	0.00	209.20		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (NR)	250.00	291.20	86.00	627.20		
	WESTERN REGION							
1	Bansagar Tons	2 to 3	Hydro	State	M.P	MPEB	40.00	Aug.,2001
2	Dabhol CCGT Ph-II	Block-1	Thermal	Private	Mah.	DabholPCO	722.00	Jan.,2001
3	Dabhol CCGT Ph-II	Block-2	Thermal	Private	Mah.	DabholPCO	722.00	Oct.,2001
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	40.00	0.00	40.00		
		Thermal	0.00	0.00	1444.00	1444.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (WR)	0.00	40.00	1444.00	1484.00		
	SOUTHERN REGION							
1	Srisailam LBPH	2	Hydro	State	A.P.	APGENCO	150.00	Feb.,2002
2	Srisailam LBPH	3	Hydro	State	A.P.	APGENCO	150.00	Feb.,2002
3	Srisailam LBPH	4	Hydro	State	A.P.	APGENCO	150.00	Marh,2002
4	SharavathyTail R	2	Hydro	State	Kar.	KPCL	60.00	June,2001
5	SharavathyTail R	3	Hydro	State	Kar.	KPCL	60.00	Nov.,2001
6	SharavathyTail R	4	Hydro	State	Kar.	KPCL	60.00	Marh,2002
7	Simhadri TPS	1	Thermal	Central	A.P.	NTPC	500.00	Marh,2002
8	Neyveli FST Extn	1	Thermal	Central	T.N.	NLC	210.00	Nov.,2001
9	LVSDGPP	1	Thermal	Private	A.P.	LVS Power	18.40	Jan.,2002
10	LVSDGPP	2	Thermal	Private	A.P.	LVS Power	18.40	Jan.,2002
11	Pddapuram CCGT	GT	Thermal	Private	A.P.	BSCSPower	142.00	Jan.,2002
12	Pddapuram CCGT	ST	Thermal	Private	A.P.	BSCSPower	78.00	Nov.,2001
13	Tanir Bavi CCGT	GT ST	Thermal	Private	Kar.	T.B.Power	200.00	Sept,2001
14	Pillaiperumanallur PPN CCGT	ST	Thermal	Private	T.N.	PPN Power	105.50	Aprl,2001
15	Samayanullur DGPP	DG 1-2	Thermal	Private	T.N.	B.PowerCO	30.29	Jan.,2002

Annexure 8.1.5 Contd.

Generating Capacity Addition Programme for the Year 2001-02.

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Imple-menting Agency	Unit Capacity MW)	Likely Comm.Sch. (Mon/Yr)
16	Samayanullur DGPP	DG 3-4	Thermal	Private	T.N.	B.PowerCO	30.29	July,2001
17	Samayanullur DGPP	DG 5-6	Thermal	Private	T.N.	B.PowerCO	30.29	Aug.,2001
18	Samayanullur DGPP	DG 7	Thermal	Private	T.N.	B.PowerCO	15.14	Sept,2001
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	630.00	0.00	630.00		
		Thermal	710.00	0.00	668.30	1378.30		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (SR)	710.00	630.00	668.30	2008.30		
	EASTERN REGION							
1	Chandil LBC	1 to 2	Hydro	State	Bihar	BHEPC	8.00	Feb.,2002
2	Potteru	1	Hydro	State	Orissa	OHPC	3.00	Dec.,2001
3	Potteru	2	Hydro	State	Orissa	OHPC	3.00	Dec.,2001
4	Bambooflat DG	1 to 4	Thermal	Private	A&N	SuryaPower	20.00	Marh,2002
5	Jojobera TPS	2	Thermal	Private	Jharkhand	JamPowerCo	120.00	Oct.,2001
6	Kalpong	1 to 3	Hydro	State	A&N		5.20	June,2001
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	19.20	0.00	19.20		
		Thermal	0.00	0.00	140.00	140.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (ER)	0.00	19.20	140.00	159.20		
	NORTH EASTERN REGION							
1	Ranganadi	1	Hydro	Central	Ar Pradesh	NEEPCO	135.00	Sept,2001
2	Ranganadi	2	Hydro	Central	Ar Pradesh	NEEPCO	135.00	Dec.,2001
3	Ranganadi	3	Hydro	Central	Ar Pradesh	NEEPCO	135.00	Feb.,2002
4	Likim-ro	1 to 3	Hydro	State	Nagaland	E.Deptt.	24.00	Feb.,2002
5	Leimakhong DG	1 to 6	Thermal	State	Manipur	E.Deptt.	36.00	June,2001
6	RokhiaGT Ext Ph-II	7	Thermal	State	Tripura	E.Deptt.	21.00	Marh,2002
			Central	**State**	**Private**	**Total**		
		Hydro	405.00	24.00	0.00	429.00		
		Thermal	0.00	57.00	0.00	57.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (NER)	405.00	81.00	0.00	486.00		
	ALL INDIA							
			Central	**State**	**Private**	**Total**		
		Hydro	655.00	795.20	86.00	1536.20		
		Thermal	710.00	266.20	2252.30	3228.50		
		Nuclear	0.00	0.00	0.00	0.00		
		Total	1365.00	1061.40	2338.30	4764.70		

Annexure-8.1.6

Outlays/Ependiture - Power Sector

(Rs. Crore)

Sl. No.	STATE / UTs	1997-98 (Actual)	1998-99 (Actual)	1999-2000 (Appd.)	99-2000 (R.E.)	2000-01 (Appd.)	2000-01 (R.E.)	2001-02 (Appd.)
A	**States**							
1.	Andhra Pradesh	858.25	797.06	867.91	867.91	2670.75	2657.50	
2.	Arunachal Pradesh	84.04	71.43	72.01	78.41	81.83	85.28	
3.	Assam	113.12	83.81	175.54	107.45	92.84	92.84	
4.	Bihar	49.10	122.96	106.00	90.55	102.38	39.95	
5.	Goa	18.16	24.01	30.33	31.59	30.00	30.00	
6.	Gujarat	660.39	660.39	806.00	806.00	830.00	750.00	
7.	Haryana	287.40	430.00	500.00	485.08	484.00	374.00	
8.	Himachal Pradesh	233.60	255.99	245.69	191.01	140.37	260.92	
9.	Jammu & Kashmir	251.59	220.20	309.05	316.05	307.57	307.57	
10.	Karnataka	557.43	1080.52	988.99	828.03	754.00	924.94	
11.	Kerala	523.20	645.00	635.00	559.00	602.50	504.64	
12.	Madhya Pradesh	738.99	700.85	890.69	583.09	262.71	262.71	
13.	Maharashtra	1909.16	1738.19	1684.13	1684.13	1767.35	1767.35	
14.	Manipur	50.18	36.00	30.00	30.00	33.60	34.50	
15.	Meghalaya	7.10	20.64	77.11	12.50	18.20	30.43	
16.	Mizoram	28.41	25.65	48.32	48.32	45.32	48.52	
17.	Nagaland	15.54	15.00	8.80	9.50	15.57	15.57	
18.	Orissa	153.20	424.35	1034.47	576.12	742.65	538.86	
19.	Punjab	1132.13	1036.18	620.00	673.95	622.37	592.37	
20.	Rajasthan	1494.43	792.23	841.94	890.00	993.66	1085.60	
21.	Sikkim	31.76	32.55	42.10	42.10	31.76	31.76	
22.	Tamil Nadu	795.49	816.74	1033.98	970.79	1034.21	1117.85	
23.	Tripura	25.99	24.48	29.84	21.18	15.81	17.23	
24.	Uttar Pradesh	1114.55	1095.15	1941.67	890.35	1474.50	775.38	
25.	West Bengal	1026.99	1310.55	2009.60	1108.97	879.33	879.33	
	Sub Total States)	**12160.20**	**12459.93**	**15029.17**	**11902.08**	**14033.28**	**13225.10**	
B.	**Union Territories**							
1.	A & N Islands	23.98	26.41	30.00	30.00	36.00	36.00	
2.	Chandigarh	10.32	11.00	13.18	13.36	11.03	11.03	
3.	Dadra & Nagar Haveli	7.19	9.17	10.02	10.02	13.15	13.15	
4.	Daman & Diu	4.76	8.29	13.09	13.09	13.90	13.90	
5.	Delhi	297.97	438.25	475.00	487.00	812.55	812.55	
6.	Lakshadweep	2.92	2.22	2.30	2.30	2.30	2.27	
7.	Pondicherry	44.95	46.66	21.33	21.33	21.33	20.88	
	Sub Total (U.T.s)	**392.09**	**542.00**	**564.92**	**577.10**	**910.25**	**909.78**	
	Total (States & UTs)	**12552.29**	**13001.93**	**15594.09**	**12479.18**	**14943.53**	**14134.88**	

Annexure-8.1.6 Contd.

Outlays/Ependiture - Power Sector

(Rs. Crore)

Sl. No.	STATE / UTs	1997-98 (Actual)	1998-99 (Actual)	1999-2000 (Appd.)	99-2000 (R.E.)	2000-01 (Appd.)	2000-01 (R.E.)	2001-02 (Appd.)
C.	**Ministry of Power**							
1.	NTPC	1685.69	2111.15	2513.26	1844.41	2539.40	2467.00	3006.00
2.	NHPC	506.47	506.45	835.00	1006.03	1264.16	1143.36	1909.79
3.	POWERGRID	1583.50	1301.09	2220.00	1500.52	2775.00	2161.14	2869.00
4.	DVC	166.97	99.73	176.00	97.59	459.90	100.00	284.00
5.	THDC	321.91	203.73	368.00	337.68	748.57	646.34	1228.17
6.	NJPC	770.60	878.45	942.00	753.76	952.00	857.00	894.00
7.	NEEPCO	167.18	191.57	260.20	231.23	255.26	182.00	211.72
8.	PFC	716.77	1322.36	1560.81	1333.00	11.00	11.00	0.00
9.	REC	30.00	75.00	214.00	184.83	189.00	189.00	37.00
10.	PTC	0.00	0.00	0.00	0.00	0.00	0.00	50.00
11.	MOP (Misc.)	110.63	488.09	511.00	410.29	525.89	588.54	575.85
	Sub Total(MOP)	**6059.72**	**7177.62**	**9600.27**	**7699.34**	**9720.18**	**8345.38**	**11065.53**
	DAE (Power)	747.27	854.66	1334.00	958.54	1332.00	1198.50	1242.00
	NLC (Power)	37.00	124.80	296.64	131.16	558.65	520.93	538.84
	Total Central Sector	**6843.99**	**8157.08**	**11230.91**	**8789.04 (Actual)**	**11610.83**	**10064.81**	**12846.37***
	ALL INDIA	**19396.28**	**21159.01**	**26825.00**	**21268.22**	**26554.36**	**24199.69**	
	N.E.C.		163.00	198.01	209.50	175.39		154.31

*Includes outlays for the development of North Eastern Region and Sikkim.

Annexure 8.1.7

Annual Plan 2001-02 - DETAILS OF EXTERNALLY AIDED PROJECTS

Sl. No.	Name of the Project/ Company	Capa-city mty	Collabo-ratting country & nature of assistance	Total Credit/ Loan in Donor Currency Millions/ Rs.cr	Cumm. Expend. Upto 91-92		Cumm. Expenditure Eighth Plan 1992-97		1997-98 Actual Rs.Crs.	1998-99 Actual Rs.Crs.	1999-2000 Actual Rs.Crs.	2000-01 BE RE	Cumula-tive 1997-01 Rs.Crs.	2001-2002 Outlay		Date of Commissioning	
					DCM	Rs.Crs	DCM	Rs.Crs						DCM	Rs.Crs	Schedule	Anti.
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	COAL INDIA LTD. INDIRECT																
1.	Jharia Mine Fire Control		IDA Credit	12 US$	-	-	7.29	26.04	-	-	31.19	0.00 0.00		-	-	6/94	
2.	Coal Sector Environ. & Social Mitigation Project (ESMT)		IDA Credit	63 US$	-	-	-	-	0	0.00	99-78	87.17 92.29	192.07	11.13	45.87	7/96	
	Sub Total INDIRECT:					**0.00**	**7.29**	**26.04**	**0**	**0.00**	**130.97**	**87.17 92.29**	**223.26**		**45.87**		
	DIRECT																
3.	Coal Sector Rehabili-tation Project (CSRP)		IBRD JEXIM	1060 US$	-	-	-	-	0	288.95	1548.32	1379.24 267.76	2105.03	27.71	126.91	6/98	
	Sub Total DIRECT:					0		0	0	288.95	1548.32	1379.24 267.76	**2105.03**		126.91		
	Total CIL:					**0.00**		**26.04**	**0**	**288.95**	**1679.29**	**1466.41 360.05**	**2328.29**		**172.78**		
	SINGARENI COLLIERIES COMPANY LTD.																
	INDIRECT																
4.	Ramagundam OC-II	2	Germany Loan	172.387 DM	0.63	0.56	144.64	295.64	40.12	2.40	0.00	9.27 3.12	45.64		0	3/95	3/96
5.	V.K.-7 B.G. Method	0.25	French Credit	24.75 FF	-	-	21.36	14.44	0.90	1.40	0.00	0.00 0.00	2.30	-	0	3/98	3/98
6.	GDK-8 BGM II (To be formulated)	0.25	French Credit	5 FF	-	-	-	-	0	0		0.00 0.00	0	-	0		
	Total SCCL:					**0.56**	**166.00**	**310.08**	**41.02**	**3.80**	**0.00**	**9.27**	**47.94**		**0.00**		
	(INDIRECT)											**3.12**					

Annexure 8.1.7Contd.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	NEYVELI LIGNITE CORPORATION LTD. (NLC) (MINES):																
	INDIRECT																
7.	Neyveli Mine-II Stage-II	5.8	Germany Loan	299.716 DM 253.23 Cr	286.05	225.83	13.44	26.92	0.27	0.03	0.00	0.00 0.00	0.3	-	-	Completed	
8.	Float Machine	1	Germany Loan	37.728 DM 82.77 Cr	-	-	32.73	71.36	7.54	8.80	23.75	0.00 0.00	40.09	-	-	3/92	6/97
9.	Preparation of Master Plan		Germany Loan	1.868 DM 4.05 Cr	-	-	1.54	3.29	0	0.00	0.76	0.00 0.00	0.76	-	-		
10.	Spares etc.		Germany Loan	17.877 Dm 40.43 Cr	-	-	-	39.73	0	0	0	0.00 0.00	0	-	-		
	Total NLC (Mines): (INDIRECT)					**225.83**		**101.57**	**7.81**	**8.83**	**24.51**	**0.00 0.00**	**41.15**		**0.00**		
	REGULATORY FRAME- WORK REVIEW PROJ. (INDIRECT)		1.5 M SDR 8.05 Cr.					0	1.22	5.06	0.00 0.00	6.28	0.00	0.00			
	TOTAL DIRECT :					**0.00**		**0.00**	**0.00**	**288.95**	**1548.32**	**1379.24 267.76**	**2105.03**		**126.91**		
	TOTAL INDIRECT:					**226.39**		**437.69**	**48.83**	**13.85**	**160.54**	**96.44 95.41**	**318.63**		**45.87**		
	TOTAL Coal & Lignite:					**226.39**		**437.69**	**48.83**	**302.8**	**1708.86**	**1475.68 363.17**	**2423.66**		**172.78**		
	NLC (Power) (INDIRECT)					**0.00**		**41.85**	**2.44**	**0.00**	**0.00**	**0.00 0.00**	**2.44**	**0.00**	**0.00**		
	TOTAL MOC:																
(i)	**INDIRECT**					**226.39**		**479.54**	**51.27**	**13.85**	**160.54**	**96.44 95.41**	**321.07**		**45.87**		
(ii)	**DIRECT**					**0.00**		**0.00**	**0.00**	**288.95**	**1548.32**	**1379.24 267.76**	**2105.03**		**126.91**		
	GRAND TOTAL DIRECT & INDIRECT					**226.39**		**479.54**	**51.27**	**302.80**	**1708.86**	**1475.68 363.17**	**2426.10**		**172.78**		

Annexure-8.1.8

Petroleum and Natural Gas - Crude Oil Production (MMT)

Region	9th Plan Targets	1997-98 Actuals	1998-99 Actuals	1999-2000 Actuals	2000-01 Actuals	2001-02 Targets	9th Plan Antici-pated Achieve-ment
1	2	3	4	5	6	7	8
a) ONGC							
i) Onshore	50.31	8.38	8.10	7.92	8.43	8.70	41.53
ii) Offshore	94.58	19.86	18.28	16.73	16.63	16.50	88.00
Sub Total (a)	144.89	28.24	26.38	24.65	25.06	25.20	129.53
b) OIL							
i) Onshore	16.47	3.09	3.29	3.28	3.29	3.45	16.40
ii) Offshore	0	0	0.00	0.00	0.00	0.00	0.00
Sub Total (b)	16.47	3.09	3.29	3.28	3.29	3.45	16.40
Total (ONGC+OIL)	**161.36**	**31.33**	**29.67**	**27.93**	**28.35**	**28.65**	145.93
JVC/Pvt	**19.46**	**2.51**	**3.04**	**4.01**	**4.08**	**3.85**	**17.49**
Total	**180.82**	**33.84**	**32.71**	**31.94**	**32.43**	**32.50**	**163.42**

Annexure-8.1.9

Petroleum and Natural Gas - Natural Gas Production (BCM)

Region	9th Plan Targets	1997-98 Actuals	1998-99 Actuals	1999-2000 Actuals	2000-01 Actuals#	2001-02 Targets	9th Plan Antici-pated Achieve-ment
1	2	3	4	5	6	7	8
a) ONGC							
i) Onshore	27.395	4.948	5.32	5.48	5.56	5.38	26.69
ii) Offshore	91.645	18.102	17.51	17.77	18.47	18.62	90.47
Sub Total (a)	119.04	23.05	22.83	23.25	24.03	24.00	117.16
b) OIL							
i) Onshore	12.86	1.67	1.71	1.73	1.86	1.74	8.71
ii) Offshore	0	0	0.00	0.00	0.00	0.00	0.00
Sub Total (b)	12.86	1.67	1.71	1.73	1.86	1.74	8.71
Total (ONGC+OIL)	**131.90**	**24.72**	**24.54**	**24.98**	**25.89**	**25.74**	**125.87**
JVC/Pvt	12.63	1.681	**2.87**	**3.46**	**3.59**	**4.02**	**15.62**
Total	**144.53**	**26.40**	**27.41**	**28.44**	**29.48**	**29.76**	**141.49**

#provisional

Annexure-8.1.10

Petroleum and Natural Gas - Refining Capacity as on

Name of the Refinery	1.4.1998	1.4.1999	1.4.2000	1.4.2001	1.4.2002
1	2	3	4	5	6
1. IOC, Guwahati	1.00	0.90	1.00	1.00	1.00
2. IOC, Barauni	3.30	3.30	4.20	4.20	4.20
3. IOC, Gujarat	9.50	10.70	12.50	12.50	12.50
4. IOC, Haldia	3.75	4.80	3.75	3.75	3.75
5. IOC, Mathura	7.50	8.00	8.00	8.00	8.00
6. IOC, Digboi	0.65	0.60	0.65	0.65	0.65
7. IOC, Panipat	0.00	3.70	6.00	6.00	6.00
8. HPCL, Bombay	5.50	5.85	5.50	5.50	5.50
9. HPCL, Visakh	4.50	5.00	7.50	7.50	7.50
10. BPCL, Bombay	6.00	8.00	6.90	6.90	6.90
11. MRL, Madras	6.50	6.55	6.50	6.50	6.50
12. MRL, Narimanam	0.50	0.60	0.50	0.50	0.50
13. CRL, Cochin	7.50	7.40	7.50	7.50	7.50
14. BRPL, Bongaigaon	2.35	1.90	2.35	2.35	2.35
15. MRPL, Mangalore	3.69	6.39	9.69	9.69	9.69
16. NRL, Assam	0.00	0.00	3.00	3.00	3.00
17. Reliance Petroleum	0.00	21.91	27.00	27.00	27.00
18. Tatipaka Refinery (ONGC)	–	–	–	–	0.10
TOTAL	**62.24**	**95.60**	**112.54**	**112.54**	**112.64**

Annexure-8.1.11

Petroleum and Natural Gas - Seismic Surveys

Programmes	9th Plan Targets	1997-98 Actuals	1998-99 Actuals	1999-2000 Actuals	2000-01 Actuals	2001-02 Targets	9th Plan Anticiptd.
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
I. ONGC							
Onland:							
2D Seismic Survey (GLKM)	17810	4568	4369	3125.00	3164	4890	20116.0
3D Seismic Survey (GLKM)	19639	11744	15418	12022.00	12675	15035	66894.00
Offshore:							
2D Seismic Survey (LKM)	12925	1910	2539	1134.00	13731	31550	50864.0
3D Seismic Survey (LKM)	167000	84244	92313	132796.00	90708	76570	476631.00
II. OIL							
Onland:							
2D Seismic Survey (SLKM)	5312	1112	1146.17	1685.61	1535	1400	6878.78
3D Seismic Survey (SQKM)	766	166.35	170.32	163.34	155.46	150	805.47
2D Seismic Survey (GLKM)-Cont.	5900	359.6	150.5	0.00	0	1400	1910.10
3D Seismic Survey (SQKM)-Cont.	0	0	0	0.00	0	200	200.00
Offshore:							
2D Seismic Survey (LKM)	1000	0	0	0.00	0	0	0.00
3D Seismic Survey (LKM)	0	0	0	0.00	0	0	0.00
3D Seismic Survey (SQKM)-Cont.	0	0	0	0.00	0	0	0
III. TOTAL							
Onland:							
2D Seismic Survey (SLKM)	5312	1112	1146.17	1685.61	1535	1400	6878.78
2D Seismic Survey (GLKM)	23710	4927.6	4519.5	3125.00	3164	6290	22026.10
3D Seismic Survey (GLKM)	19639	11744	15418	12022.00	12675	15035	66894.00
3D Seismic Survey (SQKM)	766	166.35	170.32	163.34	155.46	350	1005.47
Offshore:							
2D Seismic Survey (LKM)	13925	1910	2539	1134.00	13731	31550	50864.00
3D Seismic Survey (LKM)	167000	84244	92313	132796.00	90708	76570	476631.00
3D Seismic Survey (SQKM)	0	0	0	0.00	0	0	0.0

Annexure-8.1.12

Petroleum and Natural Gas - Exploratory and Development Drilling ('000 M)

Programmes	9th Plan Targets	1997-98 Actuals	1998-99 Actuals	1999-2000 Actuals	2000-01 Actuals	2001-02 Targets	9th Plan Anticiptd.
1	2	3	4	5	6	7	8
1. Exploratory Drilling							
a) ONGC							
i) Onshore	1482.98	247.37	227.9	297.65	291.84	364.56	1429.32
ii) Offshore	424	50.15	60.02	86.93	67.76	137.9	402.76
b) OIL							
i) Onshore	307.355	49.557	44.57	40.21	39.16	60.2	233.70
ii) Offshore	4.5	0	0.00	0.00	0.00	0.00	0.00
Total (Expl.)	**2218.835**	**347.077**	**332.49**	**424.79**	**398.76**	**562.66**	**2065.78**
2. Development Drilling							
a) ONGC							
i) Onshore	1201.95	264.97	214.87	224.58	266.09	243.1	1213.61
ii) Offshore	653.27	82.38	84.64	59.09	47.87	52.65	326.63
b) OIL							
i) Onshore	707.3	60.56	52.42	50.146	49.56	62.30	224.84
ii) Offshore	0	0	0.00	0.00	0.00	0.00	0.00
Total (Dev.)	**2562.52**	**407.91**	**353.93**	**283.67**	**363.52**	**358.05**	**1765.08**

Annexure-8.1.13

Petroleum & Natural Gas Sector - Outlays/ Expenditure (Rs. Crore)

Name of the Companies	9th Plan Outlay	1997-98 Actuals	1998-99 Actuals	1999-2000 Actuals	2000-01 RE	2001-02 BE	9th Plan Antici-pated Expendi-ture
1	2	3	4	5	6	7	8
A. Exploration & Production							
1. ONGC	18927.00	4005.00	4468.00	4068.19	4817.10	6073.75	23432.04
2. OIL	2961.00	354.74	427.77	403.47	600.01	800.01	2586.00
3. GAIL	5715.00	1010.99	363.56	735.23	1129.46	1139.85	4379.09
Sub Total (A)	**27603.00**	**5370.73**	**5259.33**	**5206.89**	**6546.57**	**8013.61**	**30397.13**
B. Refining & Marketing							
1. IOC	24501.23	1712.81	2687.90	2696.59	3815.72	5844.92	16757.94
2. HPCL	7435.13	1085.45	1101.06	704.64	605.07	1300.00	4796.22
3. BPCL	6040.20	502.68	575.41	262.82	879.00	398.70	2618.61
4. CPCL	3352.00	70.51	334.27	116.83	67.80	599.70	1189.11
5. KRL	2200.10	87.35	395.02	346.79	134.85	525.00	1489.01
6. BRPL	317.20	32.94	14.72	19.04	35.66	47.75	150.11
7. LIL	40.40	0.40	3.86	2.61	0.00	0.00	6.87
8. EIL	34.72	5.92	10.36	9.23	6.93	6.93	39.37
9. IBP	772.30	92.87	155.69	185.77	146.26	195.83	776.42
10. NRL	1717.90	721.00	676.00	402.00	181.00	3.25	1983.25
Sub Total (B)	**46411.18**	**4311.93**	**5954.29**	**4746.32**	**5872.29**	**8922.08**	**29806.91**
Total Petroleum	**74014.18**	**9682.66**	**11213.62**	**9953.21**	**12418.86**	**16935.69**	**60204.04**

8.2 TRANSPORT

India's transport system which comprises rail, roads, seaports and airports have witnessed a rapid growth in the last fifty years and contributed to the development process in the country. The Indian Railways are one of the largest railway systems in the world with a vast network of about 63,000 route kilometre and is a principal mode of transportation for long haul freight movement in bulk and long distance passenger traffic and for mass rapid transit in sub-urban areas. The total freight and passenger traffic carried by Railways increased over six fold during 1950-51 – 2000-01. The aggregate road length which was 0.4 million kms. in 1950-51 has increased eight-fold to nearly 3.32 million kms. including road length constructed under JRY in 1996-97. In the Port Sector there has been around fifteen fold increase in sea traffic from 19.38 million tonnes in 1950-51 to 287 million tonnes in 2000-01 (Anticipated). The traffic carried by the Indian Airlines increased from 83 million RTKMS in 1960-61 to 768 million RTKMS in 2000-01 (RE).

8.2.1 RAILWAYS

Financing of Plan

2. At the time of formulation of the Ninth Five Year Plan (1997-2002), it was envisaged that the total outlay of the Railways would be Rs. 45,413 crore. This was to be financed with a Gross Budgetary Support (GBS) of Rs. 11,791 crore and the balance of Rs. 33,622 crore was to be met from Market Borrowings and Internal Resources. Thus, the GBS was expected to be only 26% of the total proposed outlay for the Railways during the Ninth Plan. Internal Resources and Market Borrowing together were to constitute 74% of the total outlay. The pattern of financing during the period 1997-98 to 2001-02 is listed at Annexure 8.2.1.

3. A review of financing of Railways Plan during the period 1997-2002 brings out that the share of GBS may increase from 26% as envisaged in the Ninth Plan to 30%. Internal Resources follow an almost continuous declining trend and Market Borrowings follow an almost continuous increasing pattern. This is a reflection of a financial crisis. Considering that the dividend payable by the Railways to the General Exchequer has been deferred in the year gone by (Rs. 1500 crore) as also in the current year (Rs. 1000 crore), the Railways financial performance is abysmally poor.

4. The financing of Railways is an area of concern. An improvement in the financial health of the Railways would require better operational and commercial management with emphasis on aggressive revenue generation on the one hand and rigorous cost control on the other. This may help to improve the high operating ratio of 98.8%.

In order to improve the physical and financial performance of Indian Railways a number of measures need to be taken. These include the following:-

- Given the policy of cross-subsidisation and several distortions arising from it, it has become imperative to rationalise tariff and align passenger fares more closely with cost. In nominal terms the second class fares may be increased by 12-15% per annum for the next three years. This should be accompanied by distinct improvement in service to the second class passengers.
- Adopt a system of automatically indexing railway tariff to increase in fuel cost and wage cost.
- Create an independent Railway Tariff Regulatory Authority for fixing tariff with a view to prod the railways to greater efficiency and ensuring that the cost of providing services is fully recovered.
- Levy/ increase user charges on certain facilities provided to Railway officials such as medical facilities.
- Reduce substantially the manpower at accelerated pace.
- Focus on the core business i.e. running of transport services and spin off the non-core activities including production units. This will also help reduction in manpower.
- The Railways earn profit from freight. It is necessary that the focus must be on the consumer. The transit time of freight train need to be reduced and the reliability of services improved.
- An expert group in Railways are examining the various issues facing Indian Railways. The final report of the expert group is raw available.

Sectoral Trends

5. During 2000-01 Railways carried 475 mt. of revenue earning originating freight traffic (revised estimates) showing increase of 4.1% over the actual freight carried of 456.42 mt. during 1999-2000. In case of originating passenger traffic, the achievement of 4805 million in 2000-01 (RE) exceeded the target of 4800 million during this period revealing a growth rate of 3.31% in 2000-2001 (RE) over the past year. Passenger kms. also increased from 431.4 billion km. in 1999-2000 to 485.5 billion km. in 2000-01 (RE) showing an increase of more than 6%. The progress in the freight and passenger traffic carried by the Railways over the years is given in Annexures 8.2.2 and 8.2.3 respectively.

6. Wagon productivity during 1999-2000 was higher by about 6.5% compared to 1998-99 as may be seen from Table 8.2.1 below. During 1999-2000, 260 kms. underwent gauge conversions, 3006 kms. track renewals, 405 route kms. were electrified and 167 kms. of new lines added.

TABLE - 8.2.1
Wagon Productivity

Year	NTKM per wagon per day	Improvement over the last year (%)
1995-96	**1792**	**12.6**
1996-97	**1840**	**2.7**
1997-98	**1894**	**2.9**
1998-99	**1904**	**0.5**
1999-2000	**2027**	**6.5**

Targets for 2001-02

7. For the year 2001-02, a target of 500 million tonnes of revenue earning freight traffic has been laid down as against the target of 475 million tones for 2000-01 (RE). As regards passenger traffic also a higher target than the current year has been kept at a level of 4927 million passengers as against 4805 million passengers for 2000-2001 (RE). For 2001-02 the outlays laid down for important Railway Programmes like gauge conversion, track renewals, electrification and addition of new lines are Rs. 511 crore, 2680 crore, Rs. 226 crore and Rs. 804 crore respectively (Annexure 8.2.4). While the targets are higher, the physical progress in respect of acquisition of rolling stock, track renewals and electrification brings out that the achievement in 2000-01 (upto December, 2000) is significantly below the targets (Annexure 8.2.5).

Externally Aided Projects (EAP)

8. In 2001-02, a total amount of Rs. 80 crore is required for EAP, out of which Rs. 32.5 crore would be the external aid component and Rs. 47.5 crore would be the non-aid portion. The project wise budget provision required in 2001-02 for EAPs is listed at Annexure 8.2.6.

8.2.2 ROADS

Background

9. A prerequisite for rapid economic growth is a well-knit transport system with adequate capacity. Roads play a key role in this regard. The policy emphasis on developing roads in India is on providing *accessibility* through improved rural roads network and *mobility* through strengthening high-density corridors. To keep up the momentum of growth in the post liberalization era, National Highway Development Project has been launched. This aims at 4/6-laning of Golden Quadrilateral comprising Delhi, Mumbai, Chennai and Calcutta and North-South and East-West corridors connecting Srinagar with Kanyakumari and Silchar with Porbandar. Similarly, Pradhan Mantri Gram Sadak Yojana (PMGSY) has been launched to provide and strengthen rural connectivity. There is also a significant increase of about 93 per cent in road sector outlay in real terms.

10. The current year is the terminal year of the Ninth Plan. During the Plan, various steps have been taken to strengthen and expand primary road system. 23,439 kilometers of state roads have been declared as National Highways, which works out to over 40 per cent of the existing national highway network.

Thrust Areas:

11. With more than 58,000 kilometers of road length, National Highways constitute an important component of the arterial transport system in India. The Annual Plan 2001-02 would continue its focus on the removal of deficiencies, namely, construction of missing links, improvement of low grade sections, rehabilitation and reconstruction of weak bridges, construction of bypasses, 4-laning and 2-laning of single lane stretches. Emphasis will also be on improving the riding quality of the existing National Highways. Backward and remote areas such as North Eastern region will continue to require greater attention during the next Plan. The improvement of road network in these areas will accelerate growth as well as provide employment opportunities to a large number of people.

12. As regards State Roads, the priority would be to consolidate the existing road network rather than expansion. Maintenance of roads will also receive greater attention.

Rural Roads

13. Rural connectivity is the key component of Rural Development in India. Erstwhile Basic Minimum Services Programme (Rural Roads) envisaged connectivity of all villages and habitants by all-weather roads by 2002 AD. Latest estimates indicate that about 60% villages (1991 Census) were connected as on 1st January, 2000. This programme has since been replaced by Pradhan Mantri GramSadak Yojana (PMGSY). The objective of this Scheme is to undertake time bound programmes to fulfill the critical needs of the rural people. A sum of Rs.2500 crore has been provided during 2000-01 and also 2001-02 for launching a nation-wide programme of constructing rural roads and improving rural connectivity. Ministry of Rural Development is the nodal Ministry for monitoring and implementation of this Scheme.

Review of Programmes in 2000-01

14. The physical progress of work on the National Highway system during first four years of Ninth Plan and targets fixed for Ninth Plan (1997-2002) are given in Annexure. Scheme-wise targets for Ninth Plan were subsequently revised in view of availability of additional funds through the levy of cess on Petrol and HSD. There is a significant achievement in the Ninth Plan target of 4-laning/2-laning of National Highways during the first four years of the Plan. Major shortfall has been in construction of bypasses and bridges. This was primarily due to time-consuming process of land acquisition. In addition, riding quality of 2434 kms of National Highways has been improved during 1999-2000. Target for 2000-01 and 2001-02 are 6500 kms and 2800 kms respectively (Annexure 8.2.7). As against the outlay of Rs.4516 crore in 2000-01, an expenditure of Rs. 4342.99 crore has been incurred during the year (Annexure 8.2.8).

Private Sector Participation

15. With a view to improve private investment in road development, the Cabinet on 6th April, 1995 approved the concept of private sector participation in the development, maintenance and operations of National Highways including expressways. Since then, various measures have been taken to facilitate the involvement of private sector in road construction activity.

16. Despite steps to facilitate participation, it is felt that the potential of private sector has not been fully exploited. This is especially in the case of recently launched NHDP projects, which involves an investment outlay of about Rs.54, 000 crore. The participation of private sector overall, has been restricted mainly to construction of by-passes and bridges. Similarly, the potential of *tolls* as a source of revenue has also not been fully tapped.

17. States, however, have taken a number of initiatives to encourage private sector participation. Notable among the States are Maharastra, Madhya Pradesh, Andhra Pradesh and Gujarat. Many others have also formulated private sector participation policy.

Annual Plan – 2001-02

18. An outlay of Rs.5116 crore has been provided for the development of roads in the Central Sector. Scheme-wise details are indicated in Annexure 8.2.8 Outlay/ expenditure on the Central/State sector roads during each year of the Ninth Plan (1997-2000) is given in table 8.2.2.1

TABLE - 8.2.2.1
Outlay/Expenditure – Road Sector

(Rs. Crore)

Sector	Ninth Plan (1997-2002) Outlay	1997-98 (Exp.)	1998-99 (Exp.)	1999-2000 (Exp)	2000-01 (Exp.)	2001-02 (Outlay)
Central Sector						
Roads	8862.02	1565.31	1461.62	3475.26	4342.99	6078.00
State Sector						
Roads	30469.18	4023.00	5061.00	6362.3 (RE)	8128.00 (RE)	10,000.00(E)

(E) Estimated

Externally Aided Projects

19. Details of externally aided National Highway projects funded by different international donor agencies are shown in Annexure - 8.2.9. At present, there are six on-going projects with likely estimated cost of Rs 3879.39 crore. Against this, an expenditure of Rs 2585.10 crore has been incurred up to 31st March, 2001. A sum of Rs 1220.09 crore has been provided during 2001-02. Most of these projects are likely to be completed by the end of Ninth Plan.

National Highway Development Project

20. National Highway Development Project comprising Golden Quadrilateral (GQ), and North-South, East-West corridors are being executed by the National Highway Authority of India (NHAI). Alignment for Golden Quadrilateral has been finalised with total length measuring 5858 kilometers of which 811 kilometers has already been 4-laned. During 2000-01, out of 12 contracts, only 3 were completed and remaining 9 carried forward for implementation in 2001-02. Another 42 contracts covering 1980 kilometers were approved for award during the current year, out of which 22 are expected to be signed shortly. Target date of completion of the GQ is December, 2003. As for North-South, East-West corridors, 658 kilometers are 4-laned, 338 kilometers under implementation and contracts for 326 kilometers are under finalization. Target for completing the North-South, East-West corridors is 2007.

Road Transport

21. The Road Transport is a dominant mode of transport in the movement of goods and passenger in the country. It has grown significantly during the last fifty years. Being a sole mechanised means of surface transport to serve the hilly, rural and backward areas not connected by railways, it has increased higher share of both passenger and freight traffic as compared to the railways. The number of vehicles registered a compounded growth rate of 12.61% during this period. The share of state road transport undertakings in the national bus fleet as on 31.3.1998 came down to 21.7 per cent from 28.7 per cent in 1992.

Thrust Area :

22. Road Transport programmes are implemented by both Centre and the State. Under Central Sector, the major schemes implemented during the 9th Five Year Plan are Road Safety Programmes, Publicity Measures on Road Safety, Refresher Training of Drivers in Unorganised Sector and Control of Pollution of Motor Vehicles. The major schemes in the State sector relate to operation of passenger services by the State Road Transport Undertakings and regulation of transport services.

Review of 9th Five Year Plan (1997-02) :

23. Against an approved outlay of Rs. 60 crore under Central Sector for the Ninth Five Year Plan, the expenditure is likely to be Rs. 42.78 crore (71%). The shortfall in the achievement is reported to be primarily due to non receipt of adequate proposals.

24. Under State sector, an outlay of Rs. 7355.26 crore has been approved for the 9th Five Year Plan. Against this Rs. 5820 crore (79%) is likely to spent (Annexure 8.2.10).

25. The physical performance of the State Road Transport Undertakings has been satisfactory. The fleet utilisation, vehicle productivity, staff productivity, fuel efficiency etc. have improved considerably. Despite improvement in physical performance , the State Road Transport undertakings continued to incur financial loss. The net loss in the first four years of the 9th Five Year Plan ending 2000-01(LE) was Rs. 6867.46 crore. The main reasons for such loss were increase in the input cost, operation of services on uneconomic routes, free and concessional travel, high motor vehicles tax and uneconomic fare structure.

Annual Plan 2001-02

26. An outlay of Rs. 11.49 crore has been approved by the Planning Commission for the Annual Plan 2001-02 in the Central sector. The major schemes proposed to be taken up are national highway patrolling scheme, publicity measures on road safety, pollution control from motor vehicles and training programmes. Under State Sector, operation of State Road Transport Undertakings will be the major scheme. Despite, improvement in the physical parameters, the undertakings are likely to incur net loss due to over aged fleet, operation on uneconomic routes, concessional travel, uneconomic fare and inadequate financial support from the State Governments.

8.2.3 PORTS

27. There are 11 Major Ports in the country. 12th major port of the country 'Ennore' has been commissioned on 1.2.2001 and the project has been completed in all respects. The share of 11 major ports in the total port traffic is 81%. The contribution of five major ports namely Kandla, Vizag, Chennai, Mumbai, and Calcutta/Haldia is 68 % (185 MT) of the total traffic handled by the major ports.

28. The traffic handled by major ports increased from 227.26 MT in 1996-97 to 271.92 MT in 1999-2000. The traffic growth is likely to be 284 MT in 2000-01. The

details of traffic handled at major ports commodity - wise and Port-wise are in Annexure 8.2.11 and 8.2.12.

29. The aggregate port handling capacity of major ports was 258 MT as on 31.3.2000 and likely to be 314 as on 31.3.2001. It seems that Ninth Plan target of capacity creation of 374 MT is likely to be achieved. Commodity -wise capacity is given in Annexure 8.2.13.

30. Productivity indicators at major ports have shown improvement. For example, average turn - round time of ships has come down from 7.5 days in 1996-97 to 5.1 days in 1999-2000. The port-wise details are given in Annexure 8.2.14.

31. During the Annual Plan 2000-01 the approved outlay is Rs. 2007.17 crore. Against this the likely utilisation of Plan outlay is 67% (Rs.1338.85 crore). The shortfall in the utilisation of Plan outlay is primarily due to not taking up of scheme for river regulatory measures for improvement of draught in Hooghly estuary at Calcutta/ Haldia port. The details of port-wise outlay and expenditure are given in Annexure 8.2.15.

32. During the Annual Plan 2001-02, an outlay of Rs. 1151.93 crore has been approved for the ports sector. Out of this, Rs. 931.43 crore (80.85 %) is expected to be mobilised though internal and extra budgetary resources (IEBR). The funding pattern for the Port sector is given in TABLE 8.2.3.1

TABLE 8.2.3.1

	Source	Amount (Rs. Crore)	% age
(a)	Internal Resources	843.13	73.19
(b)	ICL/ECB	46.30	4.02
(c)	Others (Users)	42.00	3.64
(d)	Gross budgetary Support (of which external aid)	220.50 49.25	19.14 (4.27)
	Total	**1151.93**	**100.00**

33. The detailed financing pattern (Port-wise) is at Annexure 8.2.16. The expenditure on port development by the major ports has fallen short of the outlay. The likely utilisation of the Plan outlay is 48.5 % of the 9th Plan approved outlay. Likely utilisation of GBS is 64.8 % of the total GBS and 43.8 % for IEBR. The low level of expenditure is not an indication of lack of absorption capacity of major ports. In fact lesser growth rate of traffic has warranted scaling down of expenditure on capacity creation.

Private Sector Participation

34. In addition to public investment of Rs. 9428 crore, another sum of Rs.8000 crore was targetted to be raised through private sector for the development of Port infrastructure. So far 16 private sector/captive port projects of 58.05 MT capacity with an investment of

Rs. 4426.5 crore have already been approved and they are at different stages of construction. At present 4 private sector / Captive port projects of 15.4 MT with an investment of Rs.1011.5 crore have been completed.

Corporatisation of Major Ports

35. It has been decided to initiate the process of phased coroporatisation of major ports to provide operational flexibility to major ports and to take up decision quickly. A beginning has been made by registering Ennore Port Company Ltd. for managing Ennore Port being constructed near Chennai as 12^{th} Major Port. It has also been asked to JNPT, Mumbai, Mangalore & Tuticorn to have their assets analysed for the purpose of corporatisation.

Externally Aided Projects

36. Port projects are also being assisted through institutional funding agencies later ADB, Government of Netherlands and OECF (Japan). For Externally aided projects an outlay of Rs. 209.1 crore has been identified during the Annual Plan 2001-02. Out of this, the total external component is Rs. 95.55 crore. Of Rs.95.55 crore, Rs.49.25 crore is to be routed through budget and the remaining amount (Rs.46.30 crore) is direct aid to the ports i.e. not routed through budget. Among the Externally aided projects three important projects are: Construction of New Port at Ennore, Mechanised coal handling facilities at Paradip and Modernization of Jetties at Jawahar Deep. The revised estimated cost of Ennore Port is Rs. 950 crores, the cumulative expenditure is Rs. 741.30 crore (78%). The project has been completed in all respects.

37. The revised estimated cost of the Mechanised coal handling facilities at Paradip is Rs.831.11 crore. The cumulative expenditure is Rs.602.62 crore (75%). The physical progress is 92%. The project is expected to be operational by March, 2001 without Railway Receival System and Railways signalling.

38. The revised estimated cost of modernization of marine oil terminal berths is Rs. 215.34 crore. Although, this project was sanctioned in August, 1997 yet the project is at initial stage of execution. The cumulative expenditure is just Rs.14.69 crore (6.8%) . Scheme-wise details are at Annexure 8.2.17.

Development of Minor Ports

39. The traffic handled by minor ports has increased from 24.93 MT in 1996-97 to 62.46 MT in 1999-2000. At present, Currently, nearly 19% of the total traffic is accounted for by the minor ports. The contribution of Gujarat is 74% to the total traffic handled by minor ports.

8.2.4 SHIPPING

40**.** The total fleet owned by the 122 Indian Shipping Companies is 549 ships with a GRT of 6.93 Million. Shipping Corporation of India (SCI), the largest Shipping company in the country, owns 108 ships with a tonnage of 2.78 million GRT, accounting for 40% of total Indian tonnage Annexure 8.2.18. The share of Indian flag ships in the overseas sea-borne trade of the country has been hovering around 31.5% during 1999-2000.

41. During 2000-01, an amount of Rs. 634 crore is likely to be spent by Shipping Corporation of India. The approved outlay during 2001-02 is Rs. 835.71 crore. During Annual Plan 2001-02, the thrust will be to fulfil the past & existing commitments and the vessels to be ordered / acquired during 2001-02. The likely utilisation of outlay is 39 % of the 9th Plan approved outlay. The low utilisation of outlay is due to a) difficulty in raising external commercial borrowings (ECB) because of non-materialisation of the projects in time; b) prevailing market condition is highly depressed where charter/freight rates have fallen considerably especially in the dry- bulk and liner sector; and c) considerable change in the trade pattern. The outlay and expenditure during the 9th Plan are given in Annexure 8.2.20.

8.2.5 INLAND WATER TRANSPORT

42. An outlay of Rs. 57.41 crore has been approved for the IWT sector, against this likely expenditure would be Rs.55.46 crore. Schemes relating to IWT are being executed by Inland Waterways Authority of India (IWAI) and Central Inland Water Transport Corporation (CIWTC). Important schemes under implementation by IWAI are construction of terminal at Ghaighat, Patna, construction of terminal at Karimganj, Pandu Terminal, fairway development and navigational aids. Similarly, schemes being executed by CWITC are acquisition/ capital repairs of vessels and repair facilities at Rajabagan dock yard. The likely utilisation of outlay is 42 % of the 9th Plan approved outlay Annexure 8.2.19.

8.2.6 CIVIL AVIATION

43. The Civil Aviation sector is broadly structured into three distinct functional entities, namely regulatory-cum-developmental, operational and infrastructural. The regulatory functions are performed by the Directorate General of Civil Aviation (DGCA) and the Bureau of Civil Aviation Security (BCAS). The operational functions are performed by Air India Ltd., Indian Airlines Ltd., Pawan Hans Helicopters Ltd. and other scheduled/non-scheduled airline operators. Air India Ltd. (AI) provides international air services to/from India. Indian Airlines Ltd. (IA) and other scheduled/non-scheduled operators are responsible for providing domestic air services in the country. Indian Airlines Ltd. also provides international air services to some of the neighbouring countries. Pawan Hans Helicopter Ltd. provides helicopter support service primarily to the petroleum sector.

44. The infrastructural facilities are provided by the Airports Authority of India, which is responsible for the management of 94 airports, including the eleven international airports and 28 civil enclaves at the defence airports. The Indira Gandhi Rashtriya Uran Akademi (IGRUA) is the premier flying institute responsible for imparting flying training for award of Commercial Pilots License and Commercial Helicopters Pilots License. Hotel Corporation of India, a subsidiary of Air India Ltd., is responsible for providing in-flight catering and it also operates hotels in the vicinity of airports for catering to the transit passengers.

45. In the Central Sector, an outlay of Rs.1641.31 crore has been provided for Civil Aviation in 2001-02. The organisation-wise break-up of the outlay is given at Annexure 8.2.21.

46. An outlay of Rs.11112.37 crore comprising budgetary support of Rs. 495.37 crore and internal and extra budgetary resources of Rs. 10617.00 crore has been approved for 9th plan of the Ministry of Civil Aviation. The anticipated expenditure (at current prices) during

the 9th plan is Rs.7553.68 crore (67.98%) comprising budgetary support of Rs.205.48 and IEBR of Rs.7348.20 crore. It is observed that the likely expenditure, after including the outlay for the Annual Plan 2001-02, is substantially short of the outlay approved for the 9th plan.

Directorate General of Civil Aviation

47. An outlay of Rs.27.00 crore was approved for DGCA for the 9th plan. The anticipated expenditure of Rs. 18.45 crore during the 9th plan is 68.33% of the approved outlay.

48. The Annual Plan outlay of DGCA for 2001-02 is Rs.5.50 crore. The major part of the outlay (Rs. 3.15 crore) is for meeting the revenue expenditure.

Bureau of Civil Aviation Security

49. The 9th plan outlay for BCAS is Rs.25.00 crore. The anticipated expenditure during the 9th plan is Rs.12.72 crore (50.88%) of the approved outlay

50. An outlay of Rs.5.41 crore has been provided for BCAS during 2001-02. The major schemes are setting up of Civil Aviation Security Academy and construction of office building for the regional offices of BCAS. The entire outlay is to be financed from Budgetary Support.

AIR INDIA LTD.

51. An outlay of Rs.3664.00 crore was approved for Air India for the 9th plan. The anticipated expenditure during the 9th plan is Rs.2595.86 crore which is 70.85% of the approved outlay, mainly because of the deferment of the scheme of purchase of new aircrafts. Air India has incurred net loss of Rs. 591.41 crore in the first four years of the 9th Plan. In the final year of the 9th Plan Air India has projected to earn revenue of Rs. 1725.84 crore.

52. The traffic of Air India Ltd. is estimated to have decreased from 1456.5 million RTKm in 1999-2000 to 1413.5 million RTKm in 2000-2001 (Revised Estimates) and 11587.0 million RPKm in 1999-2000 to 11225.0 million RPKm in 2001-02. The Airlines incurred net loss of Rs. 52.50 crore (Pro. Actual) in 2000-2001. Air India is anticipated to earn net profit of Rs. 21.50 crore during 2001-02. An outlay of Rs.445.44 crore has been provided for the programmes of Air India during 2001-02. The outlay of Air India is to be financed from internal and extra budgetary resources. The physical and financial performance is given at Annexure 8.2.22.

53. It has been decided to disinvest upto 60 per cent of Government equity in Air India of which 40 per cent would be offered to the private sector and the balance 20 per cent being offered to employees, financial institutions and public. However, it has been stipulated that not more than 26 per cent of the total equity would be held by a freight airline.

Indian Airlines Ltd.

54. An outlay of 3640.75 crore including budgetary support of Rs.125.00 crore has been approved for Indian Airlines for the 9th plan. The anticipated expenditure during the 9th plan is Rs.2505.01 crore (68.80%) of the approved outlay.

55. The traffic of Indian Airlines is estimated to have increased from 740 million RTKm in 1999-2000 to 768 million RTKm in 2000-2001 (Revised Estimates) and 6983 million RPKm in 1999-2000 to 7182 million RPKm in 2000-2001 (RE). The Airlines incurred net loss of Rs.177.25 crore (RE) in 2000-2001. Indian Airlines have projected a net loss of Rs.251.50 crore during 2001-02. An outlay of Rs.460.00 crore has been provided for Indian Airlines in 2001-02. The physical and financial performance is given at Annexure 8.2.23.

56. It is proposed to disinvest Govt. of India's shareholding in Indian Airlines within the framework of 'Domestic Air Transport Policy'. Fifty one per cent of equity of Indian Airlines is proposed to be disinvested, of which 26 per cent equity is to be given to a group, company or individual that may be called joint venture (JV)/strategic partner. The remaining 25 per cent is proposed to be offered to employees, financial institutions and the public.

Airports Authority of India

57. An outlay of Rs.3421.87 crore including budgetary support of Rs.283.37 crore was approved for AAI for the 9th plan. The anticipated expenditure of Rs.2120.02 crore during the 9th plan period is 61.96% of the approved outlay. Out of the total anticipated expenditure of Rs.2120.02 crore of the AAI, the anticipated expenditure of the International Airports Division during the 9th plan is 717.90 crore.

58. An outlay of Rs.573.71 crore has been approved for Airports Authority of India in 2001-02. Airports Authority of India earned net profit of Rs. 234.26 crore (RE) in 2000-01 and projected a net profit of Rs. 251.30 crore during 2001-02. The cargo traffic handled at AAI Airports increased from 797.41 thousand tonnes during 1999-2000 to 846.14 tonnes during 2000-01. Similarly, the passenger traffic grew from 390.35 lakhs in 1999-2000 to 420.25 lakhs in 2000-01.

59. It has been decided to restructure the airports located at Delhi, Mumbai, Chennai and Kolkata through long term lease. A consortium led by M/s. KPMG has been appointed to act as financial consultant to advice on various aspects relating to long term leasing of these airports. The work of consultant has been divided into three phases. The first phase report has been received and the same is being examined by the legal consultant. They are also studying various acts / rules / regulations relevant to the exercise of restructuring the airports of Airport Authority of India and advising about regulatory framework.

Pawan Hans Helicopters Ltd.

51. An outlay of Rs.127.00 crore has been provided in 2001-02 for Pawan Hans Helicopters Ltd. The major part of the outlay (Rs. 106.80 crore) is for acquisition of new fleet. Pawan Hans earned net profit of Rs.50.49 crore (RE) in 2000-2001. The Company has projected a net profit of Rs. 21.65 crore during 2001-02.

Indira Gandhi Rashtriya Uran Akademi

52. An outlay of Rs. 1.25 crore has been provided for Indira Gandhi Rashtriya Uran Academy in 2001-02 to be financed from budgetary resources. The major part of the outlay (Rs. 1.00 crore) is for meeting the cost of Airfield Navigation and Landing equipments.

Hotel Corporation of India

53. The Annual Plan 2001-02 outlay of HCI is Rs. 23.00 crore. The major part of the outlay (Rs.20.00 crore) is for renovation/upgradation of hotel rooms and normal departmental capital expenditure. The entire outlay will be financed from internal and extra budgetary resources.

Externally Aided Project

54. The Development of Aurangabad Airport has been taken up in phases with financial assistance of JBIC, Japan. As per agreement, 82% of the expenditure incurred by Airports Authority of India is to be reimbursed to Airports Authority of India by JBIC. The total expenditure on the work done in Phase-I is Rs. 15.13 crore out of which, Rs. 12.37 crore has been reimbursed to Airports Authority of India which represents 82% of the total expenditure incurred.

55. Phase II, projects will cover construction of New Domestic Terminal Building, New Control Tower, Apron and Taxi-Track, Extension of Runway, Staff Quarters, Car Parking, etc. with an estimated cost of Rs. 79.03 crore. This is yet to be approved by the JBIC. But due to devaluation of rupee and resultant saving, JBIC has considered to include some of the phase-II work in phase-I costing Rs.32.16 crore. A provision of Rs. 90.00 lakhs has been made in the Annual Plan 2001-02 for carrying out detailed design and engineering of Passenger Terminal Complex and associated works at the Aurangabad Airport.

Private Sector Initiative in Airport Infrastructure

56. A new Airport Nedumbassery has been constructed and commissioned in May, 1999 by Cochin International Airport Limited. Airport Authority of India (CIAL) has provided CNS equipment as its equity in the share capital of CIAL subject to a maximum of Rs. 11 crore. Government has also approved in principle to set up new airports at Bangalore, Hyderabad and Goa with private sector participation. MOU has been signed between AAI and Government of Andhra Pradesh for development of new Hyderabad International Airport at Shamshabad.

Annexure 8.2.1

Financing of Railway Plan

(Rs. crore)

	9th Plan	1997-98	1998-99	1999-00	2000-01 (RE)	2001-02 (BE)	1997-2002
	1	**2**	**3**	**4**	**5**	**6**	**7**
G.B.S.	11791	1870	1881	2157	3019	2849	11776
		(1992)	(2185)	(2588)	(3840)	(3840)	(14445)
Market Borrowings		2623	2769	2433	2743	2967	13535
	33622	(2795)	(3217)	(2919)	(3488)	(4000)	(16419)
Internal Resources		3240	2974	2959	2103	2411	13687
		(3452)	(3455)	(3550)	(2674)*	(3250)**	(16381)
Total	**45413**	**7733**	**7624**	**7549**	**7865**	**8227**	**38998**
		(8239)	**(8857)**	**(9057)**	**(10002)**	**(11090)**	**(47245)**

Figures in the bracket are at current prices.
* Excludes Rs.1500 crore as deferred dividend.
** Excludes Rs.1000 crore as defered dividend.

Annexure 8.2.2

Freight Traffic Carried by Indian Railways

Year	Originating Traffic (in Million Tonnes)			Net Tonne Km. (in billions)		
	Rev. Earning	Non-Rev. Earning	Total	Rev. Earning	Non-Rev. Earning	Total
1	2	3	4	5	6	7
1991-92	338	22	360	250.2	6.7	256.9
1992-93	350	20.8	370.8	252.4	5.7	258.1
1993-94	358.7	18.8	377.5	252.4	4.7	257.1
1994-95	365	16.6	381.6	249.6	3.4	253
1995-96	390.6	14.3	405	271.1	2.6	273.7
1996-97	409	14.4	423.4	277.6	2.4	280
1997-98	429.4	16.1	445.5	284.3	2.5	286.8
1998-99	420.9	20.7	441.6	281.5	2.8	284.3
1999-2000	456.4	21.8	478.2	305.2	2.8	308.0
2000-2001(RE)	475	27.0*	502	313	@	

***Tentative**
@' Not available

Annexure 8.2.3

Passenger traffic carried by Indian Railways

Year	No. of Passengers (in million)			Passenger Km. (in billions)		
	Sub-urban	Non-Sub-urban	Total	Sub-urban	Non-Sub-urban	Total
1991-92	2411.0	1637.1	4048.1	63.4	251.2	314.6
1992-93	2282.0	1467.0	3749.0	60.5	239.7	300.2
1993-94	2302.0	1406.0	3708.0	63.1	233.2	296.3
1994-95	2430.0	1485.0	3915.0	68.0	251.0	319.0
1995-96	2481.0	1557.0	4038.0	72.6	261.4	334.0
1996-97	2578.0	1575.0	4153.0	76.5	280.5	357.0
1997-98	2657.0	1691.0	4348.0	78.8	301.1	379.9
1998-99	2724.8	1743.7	4468.5	83.5	321.1	404.6
1999-2000	2836.4	1814.3	4650.7	85.8	345.6	431.4
2000-2001(RE)	2908.1	1896.8	4804.9	88.3	370.2	458.5

Annexure – 8.2.4

Plan headwise outlays & expenditure for Indian Railways during 9th plan

(Rs. Crore)

Sl. No.	Plan Head	1997-98		1998-99		1999-2000		2000-01		2001-2002
		BE	Actual	BE	Actual	BE	Actual	BE	(RE)	(BE)
1	2	3	4	5	6	7	8	9	10	11
1	Rolling Stock	4002	3614	4305	4265	3905	3488	3900	3942	3850
2	Workshops & Sheds	120	130	175	144	250	167	220	164	220
3	Machinery & Plant	65	49	80	63	110	90	100	80	100
4	Track Renewals	1250	1367	1425	1392	1500	1589	2000	1633	2050
5	Bridge Works	85	73	100	66	125	88	75	62	75
6	Gauge Conversion	910	1130	650	673	645	543	600	492	665
7	Doublings	195	291	510	447	625	554	655	568	672
8	Other Traffic Facilities	125	128	2210	147	220	171	225	172	225
9	Signalling & Telecom	230	251	350	310	375	369	425	340	425
10	Road Safety ROB/RUB Level Crossing	-	-	-	-	-	-	300	150	300
11	Computerisation	45	31	60	28	70	40	70	69	70
12	Electrification	350	319	340	328	350	319	325	301	225
13	Other Electrical Works	70	66	150	94	130	104	130	108	120
14	New Lines	400	400	500	388	600	521	825	702	1015
15	Staff Quarters	60	45	60	52	55	57	60	58	65
16	Staff Welfare	55	56	55	47	55	54	60	45	65
17	Users' Amenities	80	89	100	91	130	115	200	144	200
18	Other Specified Works	65	40	65	39	55	39	45	38	45
19	Inventories	10	-83	75	91	170	497	337	552	300
20	M.T.P.	170	146	250	184	300	245	400	337	378
21	Railway Research	3	5	10	8	10	7	10	9	10
22	Investment in PSUs	10	92	20	-	20	-	38	36	15
	Total	8300	8239	9500	8857	9700	9057	11000	10002	11090

Annexure 8.2.5

Targets and Achievements – Indian Railways

Item	1999-2000		2000-01		2001-02 Targets
	Target	Achieve-ment	Target	Ach.upto Dec-00	
1. RollingStock (No)					
a) Wagon (4 wheelers)	18000	16463	20705	11888	23000
b) Diesel Locos	138	137	100	83	90
c) Elec. Locos	108	120	120	82	90
d) Coaching Stock (EMU)	165	156	111	52	294
e) Other Coaches	2020	2032	2079	1564	1907
2. Track Renewals (Kms.)	2550	3006	3250	2268	3400
3. Electrifica-tion (Route Kms.)	435	405	460	210	350

Annexure 8.2.6

Budgetary Requirement for EAPs for 2001-02

Sl. No.	Name of the Project	Loan No. Credit No.	Likely Budgetary Provision (2001-02)	IEBR (2001-02)	Total Plan Provision (2001-02)	External Assistance (Disb.) 2001-02	Non-Aided Portion (2001-02)	Remarks, If any
1	2	3	4	5	6	7	8	9
1	Koraput-Rayagada Railway Project	3/188 Saudi Fund	-	-	-	-	-	-
2	Lanjigarh - Titla-garh Doubling	3/188 Saudi Fund	30 cr.	-	30 cr.	10.0 cr.	20.0 cr.	* See note below
3	Supply of 3-Phase A.C Traction drives for Western Railway, Mumbai	French Financial Protocol 1996	50 cr.	-	50 cr.	22.5 cr.	27.5 cr.	
	Total		**80 cr.**	**-**	**80 cr.**	**32.5 cr.**	**47.5 cr.**	

* Though SFD has agreed to include this project for financing out of available loanbalance, the Loan Agreement is yet to be amended. SFD has been requested in this regard.

ANNEXURE 8.2.7

PHYSICAL TARGETS/ACHIEVEMENTS FOR THE NINTH FIVE YEAR PLAN 1997-2002

S. No.	Scheme	Unit	Ninth Plan Target (1997-2002)	1997-98	1998-99	1999-2000	Performance for First Three Years	2000-2001		Performance for first Years (1997-2001) of the Ninth Plan		2001-2002
1	2	3	4	5	6	7	8	9	10	11	12	13
	Normal NH works		**Ach.**	**Ach.**	**Ach.**	**Ach.**	**Ach.**	**Target**	**Ach.**	**Target**	**Ach.**	**Target**
1.	Widening to two lanes	km	1194	162	217	483	862	649	436	1293	1298	452
2.	Widening to four lanes	km	202	49	127	114	290	85	52	215	342	51
3.	Strengthening weak 2 lanes	km	2908	314	471	844	1629	903	1030	2554	2659	370
4.	Bypasses	No.	20	0	1	4	5	13	4	28	9	7
5.	Major bridges	No.	40	4	8	24	36	49	30	84	66	27
6.	Major bridges including ROBs	No.	226	28	49	72	149	98	98	281	247	67

Note: 1. In addition to above, riding quality of 2434km have been improved under plan scheme in the year 1999-2000, targeted for completion of about 6500km in the year 2000-2001 and 2800km planned in the year 2001-2002

2. The above figures excludes the NHAI programme.

Annexure – 8.2.8

Central Road Sector Outlay/Expenditure.

(Rs. Crore)

S. No.	Scheme	Ninth Plan outlay (1997-2002)	(1997-98) Exp.	(1998-99) Exp.	(1999-2000)			(2000-2001)			(2001-02) Outlay
					Outlay	RE	Exp.	Outlay	RE	Exp.	
1.	2.	3	4	5	6	7	8	9	10	11	12
1	i) Externally Aided Projects	1325.57	404.54	286.67	249.00	249.00	260.97	300.00	238.00		88.00
	a) Externally Aided (RW)	331.39	83.76	71.00	123.00	123.00	69.11	74.00	60.00		22.00
	b) Counterpart Funds (RW)	1559.36	150.00	130.54	570.87	570.87	512.60	317.44	381.44		898.00
	c) Externally Aided (NHAI)	389.84	50.00	32.63	123.00	123.00	91.18	79.36	79.36		114.00
	d) Counterpart funds (NHAI)	0.50	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.10
	e) Strengthening of PIC	0.50	0.10	0.10	0.10	0.10	0.10	0.10	0.01	628.27	0.10
	f) Loan to NHAI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.00	0.00	110.72
	Sub Total	**3607.16**	**688.50**	**521.04**	**1066.07**	**1066.07**	**934.06**	**771.00**	**806.91**	**628.27**	**1232.92**
2.	* Other schemes – NH(O)	3983.43	491.24	707.13	772.41	1079.61	868.71	1515.44	1460.20	1321.00	1344.88
3.	Works under BRDB	468.00	60.00	85.00	103.00	112.30	112.30	135.92	135.92	104.00	30.00
4.	Travel Expenses (Domestic)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.40	0.24	0.80
5.	Other charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.20
6.	Development of information Technology (other charges)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
7.	E&I Works	109.00	19.00	20.00	30.00	30.00	15.25	30.00	13.00	11.44	0.00
8.	E&I for States from CRF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	98.00
9.	E&I for UTs from CRF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
10.	Development of Planning	0.30	0.00	0.00	0.10	0.10	0.00	0.10	0.00	0.00	0.10
11.	Strategic Roads under Roads Wing	17.49	3.99	2.50	2.00	2.00	1.94	3.00	4.10	0.00	1.00
12.	Strategic Roads under BRDB	28.60	2.50	3.50	7.60	7.69	7.69	12.64	12.39	8.41	3.00
13.	SBA Roads	0.64	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	Special Repair programme	0.00	0.00	0.00	0.00	547.00	330.70	0.00	210.00	*120,59	0.00
15.	R&D Plg. Studies	28.64	4.14	2.03	10.00	3.69	2.53	10.00	10.00	3.81	3.90
16.	Training under World Bank	4.69	0.29	0.17	1.70	1.20	0.07	1.70	1.50	0.04	1.00
17.	Other Training	0.66	0.10	0.03	0.20	0.05	0.03	0.20	0.02	0.01	0.20
18.	Machinery & Equipment	25.00	5.00	4.89	5.00	5.00	4.98	15.00	11.00	5.76	1.00
19.	NHAI (Investment)	551.00	291.00	101.00	160.00	1192.00	1192.00	2010.00	1800.00	1800.00	2100.00
20.	Charged Expd.	37.41	0.00	14.33	5.00	9.50	5.00	10.00	10.00	10.00	10.00
21.	North Eastern States & Sikkim (Revenue)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00
22.	North Eastern States & Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	269.00
	Total	**8862.02**	**1565.31**	**1461.62**	**2163.08**	**4056.21**	**3475.26**	**4516.00**	**4476.05**	**4013.57**	**5116.00**
23.	Grant in Aid to State out of CRF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	948.79	315.68	923.00
24.	Grant in aid to UTs out of CRF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.21	13.74	39.00
	Grand Total	**8862.02**	**1565.31**	**1461.62**	**2163.08**	**4056.21**	**3475.26**	**4516.00**	**5466.05**	**4342.99**	**6078.00**

* Figure of February, 2001.

Annexure 8.2.9

Finance of Externally Aided Roads / Bridges Projects

(Rs. Crore)

<table>
<tr><th>Sl. No.</th><th>Projects</th><th>Likely Cost of Completion</th><th>Likely Cost of Completion</th><th>Total Expenditure Upto 03/2000</th><th>Expenditure during 2000-01</th><th>Expenditure Upto 03/ 2001</th><th>Balance Amount as on 1.4.2001</th><th>Budget Allocation 2001-02</th></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr>
<tr><td rowspan="2">1.</td><td>Second World Bank on going Contracts: Punjab, Haryana, Orissa tender awarded in 1997,</td><td>888.86</td><td>June, 2001</td><td>721.30</td><td>76.16</td><td>797.46</td><td>91.40</td><td>54.50</td></tr>
<tr><td>MP, MH & WB awarded in 98</td><td>712.94</td><td>June, 2001</td><td>429.63</td><td>176.25</td><td>605.88</td><td>107.06</td><td>42.87</td></tr>
<tr><td>2</td><td>JBIC (IDP-91), Naini Bridge in UP</td><td>393.00</td><td>Oct, 2003</td><td rowspan="5">805.90##</td><td rowspan="5">375.86##</td><td rowspan="5">1181.86##</td><td rowspan="5">1095.83##</td><td rowspan="5">1122.72#</td></tr>
<tr><td>3</td><td>JBIC (IDP-92), Andhra Pradesh</td><td>377.00</td><td>May, 2002</td></tr>
<tr><td>4</td><td>JBIC (IDP-100), Orissa</td><td>173.00</td><td>Feb., 2002</td></tr>
<tr><td>5</td><td>JBIC (IDP-101), UP</td><td>120.00</td><td>April, 2002</td></tr>
<tr><td>6</td><td>ADB-III(AP, HR-RAJ, BR&WB)</td><td>1214.59</td><td>June, 2002</td></tr>
<tr><td></td><td>Total</td><td>3879.39</td><td></td><td>1956.83</td><td>628.27</td><td>2585.10</td><td>1294.29</td><td>1220.09</td></tr>
</table>

: Consolidated Budget Provision for ADB-III and JBIC projects which is being carried out by NHAI.
##: Consolidated figures for ADB-III & JBIC projects

Annexure 8.2.10

Outlay and Expenditure – Road Transport

(Rs. crore)

S. No.	Scheme	9th plan Outlay	1997-98		1998-99		1999-2000		2000-01		2001-02 Outlay
			Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	
1	2	3	4	5	6	7	8	9	10	11	12
A	1. Capital contribution to	8.63	5.63	5.63	3	1.52	1	0	—	—	—
	2. SRTCs										
2.	Rroad Safety Programmes	37.42	2.57	1.89	8.40	4.4	5.66	4.95	9.45	7.95	10.12
3	Road Safety Cell	0.75	0.12	0.10	0.20	0.09	0.15	0.15	0.2	0.17	0.22
	Publicity measures	8.67	1.00	0.79	2.50	1.68	1	1	3	2.7	3
	Grannt in aid	3.00	0.20	0.20	1.00	0.08	0.5	0.4	0.5	0.5	0.5
	Pollution testing equipment	6.00	0.50	0.30	1.50	0.64	1	0.5	0.75	1	1
4	Road Safety equipment	4.00	0.25	0.02	0.70	0	0.01	0.15	4	0.65	0.16
	National Highways/ Patrolling scheme	15.00	0.50	0.50	2.50	1.91	3	2.75	1	2.93	5
5	3. Training & Computer	4.45	0.26	0.50	2.10	0.26	0.68	0.64	0.75	0.97	0.57
	National institute of road	2.00	0.00	0.40	1.50	0.26	0.33	0.3	0.4	0.4	—
6	Training of drivers in unorganized sector	0.75	0.15	—	0.25	0.08	0.15	0.15	0.3	0.32	0.3
	Training programme (HRD)	0.50	0.01	—	0.15	0.05	0.05	0.4	0.05	0.05	0.05
7	Computer system	1.20	0.10	0.10	0.20	0.13	0.15	0.15	0.2	0.2	0.22
	4. Research & Developmnent	1.15	0.20	0.10	0.20	0	0.15	0	0.1	—	—
	5. Strengthening of CIRT, Pune	4.65	0.20	—	1.00	0.4	1	1	40	—	—
	6. Misc. including Studies	**3.70**	**0.36**	**0.33**	**1.30**	0.24	0.51	0.35	65	0.16	0.8
	Transport studies	1.50	0.20	0.20	0.50	0.07	0.25	0.19	0.1	0	0.4
B.	Data collection	0.50	0.05	0.05	0.10	0.06	0.1	0.05	0.2	0.03	0.1
	National data base network	0.95	0.00	0.00	0.50	0	0.01	0	0.1	0	0.1
	Control of pollution of motor $ vehicle	0.75	0.10	0.08	0.20	0.11	0.15	0.11	0.15	0.13	0.2
	Energy Conservation	—	0.01	—	0.00	0	—	0	0.1	0	—
	TOTAL	60	9.22	8.45	16.00	6.82	9.00	6.94	11.35	9.08	11.49
	STATE PLAN	7355.26	1227.10	1442.32	1229.64	968.38	1226.37	934.96	1265.30	1274.32*	1200.00
	GRAND TOTAL	**7415.26**	**1236.3**	**1450.77**	**1245.64**	**975.20**	**1235.37**	**941.900**	**1276.65**	**1283.4**	**1211.49**

* Anticipated

Annexure–8.2.11

Traffic at Major Ports – Commodity -Wise

(Million Tonne)

<table>
<tr><th>Commodity</th><th>9th Plan (2001-02) Target</th><th>1996-97</th><th>1997-98</th><th>1998-99</th><th>1999-2000 Target</th><th>Anti.</th><th>2000-01 Target</th></tr>
<tr><td>POL</td><td>186.7</td><td>98.08</td><td>104</td><td>107.41</td><td>106.05</td><td>116.71</td><td>108.89</td></tr>
<tr><td>Iron ore</td><td>34.4</td><td>33.05</td><td>40.73</td><td>32.54</td><td>32.76</td><td>36.09</td><td>39.10</td></tr>
<tr><td>Coal</td><td>93.7</td><td>34.86</td><td>38.95</td><td>39.02</td><td>38.81</td><td>37.09</td><td>46.98</td></tr>
<tr><td>Fertiliser</td><td>14.2</td><td>7.18</td><td>8.91</td><td>9.00</td><td>10.11</td><td>10.10</td><td>11.13</td></tr>
<tr><td>Container</td><td>38.7</td><td>20.59</td><td>23.30</td><td>23.78</td><td>25.35</td><td rowspan="2">71.93</td><td rowspan="2">77.70</td></tr>
<tr><td>General Cargo</td><td>56.2</td><td>33.5</td><td>35.77</td><td>39.97</td><td>44.92</td></tr>
<tr><td>Total</td><td>423.9</td><td>227.26</td><td>251.66</td><td>251.72</td><td>258</td><td>271.92</td><td>283.80</td></tr>
</table>

Annexure 8.2.12

Traffic Handled at Major Ports – Port wise

(in Million Tonnes)

Ports	1997-98		1998-99		1999-2000		2000-01
	Target	Actual	Target	Actual	Target	Anti.	Target
1	2	3	4	5	6	7	8
Calcutta	6.3	7.95	9.5	9.16	10	10.31	8.00
Haldia	18	20.21	20.5	20.23	20.9	20.71	24.00
Paradip	11.8	13.3	13.35	13.11	13.75	13.64	19.20
Vizag	35.6	36.02	36	35.65	35	39.51	43.00
Chennai	32.5	35.53	36.5	35.20	35.5	71.93 37.44	77.70 42.00
Tuticorin	9.4	9.98	10.2	10.15	10.5	9.99	12.00
Cochin	11.8	12.32	12.25	12.68	12.4	12.80	12.00
New Mangalore	12.8	15.28	15.5	14.21	14.6	17.60	18.40
Mormugao	18	21.18	20.2	18.02	18	18.23	19.70
Mumbai	34.6	32.1	34	30.97	32	30.41	28.50
Kandla	36.6	38.9	40	40.64	42.5	46.30	39.00
JNPT	9.6	8.9	10	11.72	12.85	14.98	18.00
Total	**237**	**251.67**	**258**	**251.74**	**258**	**271.92**	**283.80**

Annexure 8.2.13

TRAFFIC HANDLING CAPACITY AT MAJOR PORTS (COMMODITIY-WISE)

(In Million Tonnes)

COMMODITY	Capacity as on 31.3.97		Capacity as on 31.3.99 (Actual)	Capacity as on 31.3.2000 (Actual)	Capacity as on 31.3.2001 (Anti.)
	(Actual)	Reassessed			
1	2	3	4	5	6
POL	94.9	92.7	105.7	118.50	134.5
Iron Ore	44.5	43.0	43.0	43.0	44
Coal(Thermal)	9	15.60	15.60	16.80	48
Fertilizer	5.65	4.85	4.85	3.45	3.45
Container	13.91	19.30	22.90	24.70	29.35
General Cargo	47.23	44.10	47.45	51.60	54.4
Total	215.2	219.55	239.50	258.05	313.70
Say	215	220	240	258	314

Annexure 8.2.14

Productivity Indicators at Major Ports – Port – wise

Ports	Av. Pre Berthing Waiting Time (Days)			Av. Turn Round Time (days)			Output Per Ship Berth Day (Tonne)		
	1996-97	1999-2000	% age Variation*	1996-97	1999-2000	% age Variation *	1996-97	1999-00	% age Variation*
1	2	3	4	5	6	7	8	9	10
Calcutta	0.2	0.2	0.0	7.7	6.6	16.7	1188	2157	81.6
Haldia	0.7	0.6	16.7	6	5.2	15.4	5855	5599	-4.4
Paradip	0.7	0.3	133.3	4.9	3.90	25.6	6406	7106	10.9
Vizag	1.5	0.7	114.3	5.6	4.80	16.7	6696	7579	13.2
Chennai	1.1	2.1	-47.6	7.8	6.80	14.7	5131	5886	14.7
Tuticorin	0.3	2.6	-88.5	5.1	6.40	-20.3	3026	2891	-4.5
Cochin	0.4	0.2	100.0	3.9	3.20	21.9	5438	5952	9.5
New Mangalore	1.1	0.2	450.0	4.4	3.80	15.8	7172	9000	25.5
Mormugao	0.3	0.4	-25.0	6.3	4.30	46.5	8540	11162	30.7
Mumbai	2.4	0.3	700.0	10.7	5.60	91.1	2605	3876	48.8
JNPT	2.0	0.6	233.3	6.3	1.7	270.6	2987	5905	97.7
Kandla	5.3	1.1	381.8	10.6	6.20	71.0	7066	8740	23.7
All Ports	**1.7**	**0.9**	88.9	**7.5**	**5.10**	47.1	**4497**	**5500**	22.3

% age variation in 1999-2000 over 1996-97.

Annexure 8.2.15

Ninth Five Year Plan -Outlay and Expenditure-Ports

(Rs. Crore)

Ports	9th Plan Outlay (1997-2002)	1997-1998		1998-1999		1999-2000		2000-01		2001-02 Outlay
		Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Anti.	
1	2	3	4	5	6	7	8	9	10	11
Calcutta	50	13.45	6.04	7.99	11.04	7.9	12.08	5.04	6.55	2.88
Haldia	200	26.27	22.07	22	50.32	22	70.2	59.76	43.19	14.3
RR/SBR Scheme	295	5.5		0.11		0.1	0	214.34	0	75
Total	**545**	**45.22**	**28.11**	**30.1**	**61.36**	**30**	**82.28**	**279.14**	**49.74**	**92.18**
Mumbai	1208	156.24	75.61	110.9	52.46	223.1	211.21	217.99	163.78	91.21
JNPT	700	94.86	106.75	70.5	21.16	50	50.51	101.70	38.02	81.3
Chennai	1500	228.38	123.1	170	225.86	379	302.1	228.50	183.76	147.3
Cochin	380	16.21	10.04	10	19.93	20	22.76	26.00	18.73	61.24
Vizag	900	70.5	55.29	50	51.3	51.8	91.25	138.4	97	90.00
Kandla	560	85.08	50.9	65.5	50.19	71.8	63.38	109.93	63.2	101
Mormugao	360	15.42	7.78	15	31.05	30	25.5	50.21	25	59.16
Paradip	1200	224.84	117.62	120	199.73	344	235.96	275.52	153	91.5
New Mangalore	640	31.44	20.58	30	14.81	44	44.55	90	110	74.00
Tuticorin	550	34.18	16.07	55	48.36	170	194.38	72.6	33.08	69.35
Major Ports(A)	**8543**	**1002.37**	**611.85**	**727**	**776.21**	**1413.7**	**1323.88**	**1590**	**935.31**	**958.2**
DCI	695	299.85	75.98	190	96.74	150	115.91	317	309.6	97.5
ALHW	125	27.3	16.66	30	26.04	30	29.59	42.3	43.89	37.00
MPSO	15	1.7	0	1.5	1.11	1.75	1.75	1.23	1.11	1.9
Minor Ports	30	3	0.37	0.5	0	3	0.03	1	0.09	2.00
Misc. Items	20	8	2.34	5	2.98	5.25	4.18	5.65	3.85	8.35
Others(B)	**885**	**339.85**	**95.35**	**227**	**126.87**	**190**	**151.46**	**367.18**	**358.54**	**146.8**
Total (A+B)	**9428**	**1342.22**	**707.2**	**954**	**903.08**	**1603.7**	**1475.34**	**1957.2**	**1293.9**	**1105**
Ennore Port Ltd.										2.00
Survey Vessels	262	30	30	30	84.77	20	20	50	45	45
Grand Total	**9690**	**1372.22**	**737.2**	**984**	**987.85**	**1623.7**	**1495.34**	**2007.17**	**1338.84**	**1151.93**

Annexure 8.2.16

Annual Plan 2001-02 - Approved Outlays and Funding Pattern - Port Sector

	Total Outlay	Of which		ICL/ECB	Others	Budgetary Support
		EA	IR			
1	2	3	4	5	6	7
Calcutta	2.88		2.88			
HALDIA	14.30		14.30			
RR/SBR Schm.	75.00					75.00
Total	**92.18**		**17.18**			**75.00**
Mumbai	91.21	37.5	53.71	37.5		
JNPT	81.3		81.3			
Chennai	147.26	18.8	128.46	8.8		10
Cochin	61.24		61.24			
Vizag	90		90			
Kandla	100.98		100.98			
Mormugao	59.16		59.16			
Paradip	91.5		52.25			
New Mangalore	74	39.25	32			39.25
Tuticorin	69.35		69.35		42.00	
Major Ports(A)	**958.18**	**95.55**	**745.63**	**46.3**	**42.00**	**124.25**
DCI	97.5		97.5			
ALHW	37					37
MPSO	1.9					1.9
Minor Ports	2					2
Misc. Items	8.35					8.35
Others(B)	**146.75**	**0**	**97.5**	**0**	**0.00**	**49.25**
Total (A+B)	**1104.93**	**95.55**	**843.13**	**46.3**	**42**	**173.5**
Ennore Port Ltd.	2					2
Survey Vessels	45					45
Grand Total	**1151.93**	**95.55**	**843.13**	**46.3**	**42**	**220.50**

Note: Rs. 49.25 crore out of Rs. 95.55 crore only is to be routed through budget and remaining amount is direct aid to the Ports

Annexure 8.2.17

Externally Aided Projects - Annual Plan 2001-02 - Ports

Name of the Scheme	Estimated Cost	Sour-ces	EA Compo.	Exp. incurred upto 31.3.97	9th Plan Outlay		A. Plan 1997-2001		A. Plan 2001-02	
					Total	of which EAP	Total	of which EAP	Total	of which EAP
1	2	3	4	5	6	7	8	9	10	11
Through Budget (A)										
Replacement of Lock Gate at Indira Dock	9.21	ADB	5.97	9.21	0.5		0.01	0.01	0.01	0
Construction of New Port at Ennore	950	ADB	450.45	131.52	870	476	680.67	455.50	60	10
ParadipMechanised Coal Handling Facilities	831.11	ADB	404.85	79.73	811	443.6	570.37	415.45	51.5	39.25
Tariff Authority									0.10	0.00
Sub Total (A)	**1790.32**		**861.27**	**220.46**	**1681.5**	**919.6**	**1251.10**	**870.96**	**111.50**	**49.25**
Not Through Budget (B)										
Replacement of sub-marine pipeline	286.6	ADB	187.6	0.54	399.44		280.33	203.00	0.10	0.00
Modernisation of Jetty-1,2 & 3 at JD	190	ADB	92.4	0	231		28.94	14.30	70.00	35.00
Replaclement of common user pipeline	120	ADB	62.3	0	70	40	0.50	0.25	5.00	2.50
Extension of South/ NQuay and Modern.	93.6	ADB	64.18		92.93	57.84	28.45	10.54	22.00	8.80
Capital dredging for approach channel	202.16	OECF	54.97		232	232	250.25	196.38	0.5	0.00
Sub Total (B)	**892.36**		**461.45**	**0.54**	**1025.37**	**329.84**	**588.47**	**424.47**	**97.6**	**46.3**
Total (A+B)	**2682.68**		**1322.72**	**221**	**2706.87**	**1249.44**	**1839.50**	**1295.40**	**209.1**	**95.55**

Annexure 8.2.18

Progress of Tonnage Acquisition Programme

Item	9th Plan	1996 (Dec.)	1997 (Dec.)	1998 (Dec.)	1999 (Dec.)	2000 (Dec.)
1	2	3	4	5	6	7
Total Tonnage (Million GRT)	9.00	7.052	6.878	6.785	7.052	6.932
Of which SCI		3.123	3.013	3.074	3.056	2.781
No.of ships Total		484	476	484	510	549
Of whichSCI		121	117	120	117	108

Annexure – 8.2.19

Outlay and Expenditure-Inland Water Transport (Central Sector)

(Rs. Crore)

Year	IWAI	CIWTC	TOTAL
1	2	3	4
1997-98 (Outlay)	40	10	50
1997-98 (Actual)	22.9	10	32.9
1998-99 (Outlay)	45	15.04	60.04
1998-99 (Actual)	32.45	7.3	39.75
1999-2000 (Outlay)	20	6.04	26.04
1999-2000 (Actual)	31.8	6.04	37.84
2000-01 (Outlay)	48.15	9.26	57.41
2000-01 (RE)	42.2	4.63	46.83
2001-02 (BE)	42.23	10	52.23

Annexure 8.2.20

Outlay and Expenditure-Shipping (Central Sector)

(Rs. crore)

Year	SCI	DG(S)	Total
1	**2**	**3**	**4**
1997-98(Outlay)	885.19	12.99	898.18
1997-98(Actual)	315	7.69	322.69
1998-99 (Outlay)	1162.61	12.99	1175.60
1998-99(Actual)	872	9.06	881.06
1999-2000(Outlay)	1478.86	12.09	1490.95
1999-2000(Actual)	140	10.77	150.77
2000-01(Outlay)	567.01	18	585.01
2000-01(RE)	567.01	18	585.01
2001-02(BE)	835.71	20	855.71

Annexure 8.2.21

Outlay and Expenditure : CIVIL AVIATION (Centre)

S. No.	Name	Ninth Plan (1997-2002) Approved Outlay	1997-98		1998-99		1999-2000		2000-2001		2001-02
			Apprd. Outlay	Actual Expnd.	Apprd. Outlay	Actual Expnd.	Apprd. Outlay	Actual Expnd.	Apprd. Outlay	Revised Esti-mates	Apprd. outlay
1	2	3	4	5	6	7	8	9	10	11	12
1	Air India Ltd.	3664.00	1233.45	517.75	602.53	550.01	433.46	383.09	675.30	699.57	445.44
					(5.00)		(0.01)				
2	Indian Airlines Ltd.	3640.75	470.00	441.90	630.00	522.03	540.01	492.27	550.00	588.81	460.00
		(125.00)			(125.00)		(0.01)				
3	Pawan Hans Ltd.	209.20	87.25	26.85	90.00	5.55	101.55	1.21	126.45	33.05	127.00
4	Airports Authority of India	3421.87	609.15	338.58	800.43	319.87	697.93	360.63	835.53	527.23	573.71
		(283.37)	(35.74)	(10.00)	(68.17)	(25.00)	(41.00)	(25.00)	(37.53)	(32.36)	(50.84)
a)	International Airports Division	1522.52	274.57	118.05	257.58	109.05	300.32	159.61	329.81	175.28	155.91
b)	National Airports Division	1899.35	334.58	220.53	542.85	210.37	397.61	201.02	505.72	351.95	417.80
		(283.37)	(35.74)	(10.00)	(68.17)	(25.00)	(41.00)	(25.00)	(37.53)	(32.36)	(50.84)
5	D.G.C.A.	27.00	3.77	1.07	4.45	3.41	4.40	3.47	5.00	5.00	5.50
		(27.00)	(3.77)	(1.07)	(4.45)	(3.41)	(4.40)	(3.47)	(5.00)	(5.00)	(5.50)
6	B.C.A.S.	25.00	2.50	0.00	3.00	2.35	3.58	1.37	5.72	3.59	5.41
		(25.00)	(2.50)	(0.00)	(3.00)	(2.35)	(3.58)	(1.37)	(5.72)	(3.59)	(5.41)
7	I.G.R.U.A.	35.00	14.73	10.00	12.94	11.00	6.00	2.45	6.75	6.41	1.25
		(35.00)	(14.73)	(10.00)	(12.94)	(11.00)	(6.00)	(2.45)	(6.75)	(6.41)	(1.25)
8	Hotel Corporation of India	89.55	50.00	8.52	42.40	10.19	20.00	13.37	24.77	21.77	23.00
	Total	11112.37	2470.85	1344.67	2185.75	1424.41	1806.93	1257.86	2229.52	1885.43	1641.31
		(495.37)	(56.74)	(21.07)	(218.56)	(41.76)	(55.00)	(32.29)	(55.00)	(47.36)	(63.00)

Note: Figure in bracket indicates budgetary support

Annexure 8.2.22

Air India

Physical Performance

Particulars	1997-98 (Actual)	1998-99 (Actual)	1999-00 (Actual)	2000-01 (Estimate)	2001-02 (Projected)
Available Tonne Kms. (Million)	2293.7	2394.3	2238.3	2206.3	2350.8
Revenue Tonne Kms. (Million)	1453.8	1473.6	1456.5	1413.5	1494.5
Overall Load Factor (%)	63.4	61.5	65.1	64.1	63.6
Available Seat Kms. (Million)	16933.3	17496.6	16485.8	16073.3	17201.2
Revenue Passengers Kms. (Million)	11422.4	11709.0	11587.0	11225.0	12096.8
Passenger Load Factor (%)	67.5	66.9	70.3	69.8	70.3
Aircraft Utilisation Per annum (hours/per annum)	2717.0	3092.0	Not Available	Not Available	Not Available

Financial Performance (Rs. In Crore)

Perticulars	1997-98 (Actual)	1998-99 (Actual)	1999-2000 (Actual)	2000-01 (Prov. Actual)	2001-02 (Antici-pated)
Operating Revenue	3837.21	4135.26	4448.05	4925.66	5436.70
Operating Expenses	4029.84	4139.84	4372.00	4999.92	5464.40
Operating Profit/(loss)	(192.63)	(4.58)	76.05	(74.26)	(27.70)
Total Revenue	4174.16	4236.72	4716.97	5211.25	5691.90
Total Expenses	4355.17	4411.20	4754.60	5263.75	5670.40
Net profit/(loss)	(181.01)	(174.48)	(37.63)	(52.50)	21.50

Annexure 8.2.23

Indian Airlines

Physical Performance

S. No	Particulars	1997-98	1998-99	1999-2000	2000-01 (Anti.)	2001-02 (Projected)
1	2	3	4	5	6	7
1	Available Tonne Kms. (Million)	1094.132	1122.922	1120.926	1152.000	1194.000
2	Revenue Tonne Kms. (Million)	700.896	709.079	740.285	768.000	806.000
3	Available Passenger Kms. (Million)	10408.437	10803.962	10911.266	11212.000	11669.000
4	Revenue Passenger Kms. (Million)	7015.477	6846.820	6982.502	7182.000	7526.000
5	Overall Load Factors (%)	64.1	63.1	66.0	66.7	67.5
6	Seat Factor (%)	67.4	63.4	64.0	64.1	64.5
7.	Aircraft Utilization per aircraft per annum on Total hours					
(a)	A-300	2727	2528	2274	2394	2550
(b)	A-320	2770	2834	2954	3034	3000
8	Aircraft Fleet					
(a)	A-300	10	11*	11*	10**	12***
(b)	A-320	30	30	30	30	30
9	Seating Capacity					
(a)	A-300	245	245	245	245	245
(b)	A-320	145	145	145	145	145

* Includes two aircraft on lease.

** One A-300 aircraft phased out w.e.f. October, 2000.

*** One A-300 aircraft will be phased out w.e.f. April,2001 and 3 proposed to be purchased from Air India.

Financial Performance

(Rs.in crore)

S. No.	Particulars	1997-98 (Actual)	1998-99 (Actual)	1999-2000 (Actual)	2000-01 (RE)	2001-02 (Target)
1	Operating Revenue	3243.45	3423.57	3549.17	3758.50	3922.00
2	Operating Expenses	2984.56	3129.33	3349.36	3783.25	4054.50
3	Operating Profit/(loss)	258.89	294.24	199.81	(24.75)	(132.50)
4	Total Revenue	3268.25	3445.61	3565.88	3766.00	3928.50
5	Total Expenses	3220.98	3431.44	3514.46	3943.25	4180.00
6	Net Profit/(loss) before Tax	47.27	14.17	51.42	(177.25)	(251.50)
7	Provision for Tax	-	1.05	6.15	-	-
8	Net profit after tax	47.15	13.12	45.27	(177.25)	(251.50)

8.3 COMMUNICATION

8.3.1 POSTS

Upgradation of technology and modernisation of postal operations is the thrust area during the Ninth Plan. Modernisation of mail processing, counter facilities, money transfer system, development of manpower and introduction of new and value-added services are the major priority areas. Expansion of the postal network in the uncovered and far flung areas is another priority area. Ninth Plan aims at making the postal services self-financing at the sectoral level. In this context, it places emphasis on rationalization and revision of postal tariffs.

Review of Annual Plan 2000-01

2. The entire Plan outlay of the Deptt. of Posts is funded through budgetary support. Keeping in view the requirement of funds based on various programmes and availability of resources, an outlay of Rs.120 crore was approved for the Annual Plan 2000-01. The achievement of targets in the major areas except modernization of mail processing has been satisfactory. The Annual Plan had envisaged the setting up of Culler-Facer - Canceller (CFC) equipment to the two existing Automatic Mail Processing Centres (AMPCs). The project could not be taken up. Due to this, major chunk of outlay earmarked for mail processing could not be utilized. The details of schematic breakup of financial outlay and physical performance may be seen in Annexure 8.3.1 and 8.3.2 respectively.

Annual Plan 2001-02

3. Keeping in line with the policies and priorities of the Ninth Plan, the thrust areas of the Annual Plan 2001-02 continued to be technology upgradation, modernization of the postal operations and expansion of the postal network especially in the rural, tribal, hilly and far flung areas of the country. For implementing various schemes during the year, an outlay of Rs.135.00 crore has been approved for the Dept. of Posts. The entire outlay is to be funded through budgetary support. The details of schematic breakup of financial outlay and physical targets may be seen in Annexure 8.3.1 and 8.3.2 respectively.

4. An outlay of Rs.82.00 crore i.e. about 61% of the total has been earmarked for the core area of technology, upgradation and modernization of postal operations. The major targets under modernization of mail processing include setting up of an Automatic Mail Processing Centre (AMPC) at Kolkata comprising of two Culler Facer Cancellers (CFCs), one Optical Character Reader (OCR) and one Letter Setting Machine (LSM) at the cost of Rs.27.02 crore. The other major targets envisaged for 2001-02 are :

i) Setting of 2000 Panchayat Dak Sanchar Kendras i.e. rural post offices;

ii) Opening of 500 Extra Departmental Branch Offices (EDBOs) and 50 Departmental Sub-Post Offices (DSOs);

iii) Installation of 1000 multi-purpose counter machines;

iv) Computerization of post office saving banks at selected post offices in the country;

v) Providing training to about 40148 officials including 21500 Extra Departmental Branch Post Masters (EDBPMs), about 6000 officials under in-service training programme and 10000 officials computer training etc.

vi) Development of a Maintenance of Information System (MIS) , inter-linking all regional and circle headquarters with the Directorate.

5. Manpower development has a crucial role to play in the entire process of modernization underway in the sector. In-service training / refresher courses need to be reoriented keeping in view the changing requirements. A comprehensive training programme in computers needs to be drawn up and implemented to ensure optimum returns on investment being made on computerization. For the year 2001-02, a target of training 40148 employees has been fixed for various service / refresher courses and computer courses.

6. About 49% of the Gram Panchayat villages in the country do not have the facility of a post office of their own. Of these, only 5446 (as on 31.03.2000) Gram Panchayat Villages fulfill the criteria for opening a new post office as per present norms. At the present pace, it would take a number of decades to cover all the eligible villages. New strategies may have to be adopted to ensure access to all important postal services to all villages in a time bound manner. For the Annual Plan 2001-02, a target of opening of 500 branch offices (EDBOs); 50 DSOs and 2000 PSSKs has been fixed.

7. Judged by the size of outlays and expenditure till 2000-01, construction of buildings and staff quarters has been more vigorously implemented component of postal sector plan next only to upgradation of technology. The expenditure on this activity during the first four years of the Ninth Plan is expected to be about Rs.100 crore. Keeping in view the overall policy objectives, much lower priority was accorded to this activity during the Ninth Plan. Fresh initiatives are envisaged to be kept to the minimum giving priority to completion of ongoing works. Keeping in view the committed liabilities, an outlay of Rs.24 crore have been provided for this activity during 2001-02. The targets envisaged include construction of 48 Post Offices/ Mail Offices; 190 Staff Quarters and 5 Administrative Offices.

Policy Issues

8. The position of the postal finance in India has deteriorated quite sharply over the last decade. The deficit of Department of Posts has increased almost 20 times over the last nine years – increasing from Rs.91.81 crore in 1992-93 to Rs.1576.35 crore in 2000-01 (RE). 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 revenues which recorded much lower average annual growth of less than 10% . Interestingly the manpower employed in the Deptt. has remained almost constant over this period. The following table gives the trend of revenue and deficit in the Postal Sector.

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(RE)	603430	4044.98	4923.70	3347.35	1576.35
2001-02(BE)	603950		5210.83	3752.46	1458.37

9. The Postal Deficit is an open-ended subsidy from the General budget. This is an explosive situation which cannot be sustained for long period except at a very high cost to the nation in the shape of retarded development due to reduced flow of funds to the more needy sectors like infrastructure and social development.

10. To contain the burgeoning deficit, a two pronged strategy of minimizing costs especially on manpower and generating more resources both through tariff and other means would have to be adopted. The major elements of the strategy need to be :

- The social obligation of coverage of basic postal services to be clearly defined.
- Non-merit services to be charged on 'cost-plus' basis.
- Subsidy on services under social obligation should be accounted for separately.
- Introduction of new and value added postal products / services is to be accelerated.
- Encouragement of agency services including collection of bills, railway reservation and parcel services.
- Financial services – banking and insurance to be a priority area in the product mix.
- Commercial exploitation of land.

8.3.2 TELECOMMUNICATIONS

11. Telecommunications is a critical part of infrastructure. It is becoming increasingly important keeping in view the trend of globalisation and the shift to a knowledge based economy. Technological change in telecommunication has been especially rapid and is expected to lead to major changes in the structure of the industry world wide. Convergence between telecom and broadcasting has added a new dimension which needs to be taken into account.

12. The telecom sector in India has been witnessing a continuous process of reforms since 1991. A major milestone in this area was the announcement of new policy called New Telecom Policy (NTP), 1999 replacing the 1994 policy to take care of the development arising out the rapid technological changes like convergence of technologies, liberalization and opening of the economy. This process of reform was carried further since then through a number of new policy initiatives undertaken by the Government. The major among these included :

- Resolution of subsisting problems arising out of migration of existing licences from fixed licence regime to revenue sharing.
- Permitting ISPs to set up sub-marine cable landing stations for international gateways for Internet.
- Opening of National Long Distance Service for competition in August, 2000.
- Corporatization of Deptt. of Telecom into public limited company called Bharat Sanchar Nigam Ltd. (BSNL) from 1.10.2000.
- Opening of International Long Distance Service for competition from 1.4.2002.

Review of Annual Plan 2000-01

13. For the Annual Plan 2000-01, an outlay of Rs.19441.67 crore was approved for the telecom sector i.e. Deptt. of Telecom and its allied Public Sector Undertakings (PSUs); a step-up of 15.71% over the previous year. Keeping in line with Ninth Plan policy of restricting budget support only for the regulatory bodies, the entire outlay of all organizations was envisaged to be financed out of internal and extra budgetary resources (IEBR). A budget support of Rs.17.00 crore was approved for financing the Plan outlay of the Wireless Monitoring Organization (WMO), Wireless Planning and Co-ordination wing and Telecom Regulatory Authority of India(TRAI).

14. The utilization of funds for the telecom sector as a whole is expected to exceed the target by about 4.50% as reflected by the Revised Estimates of expenditure of Rs.20313.85 crore. This is basically due to a substantial increase in the requirement of funds by VSNL (Rs.808.39 crore) and additional requirement of funds (Rs.575.65 crore) by the newly corporated BSNL. This represents an additional utilization of 69.49% in case of VSNL and 3.63% in respect of DOT/BSNL in excess of their approved outlays. While VSNL envisaged to finance the entire additional expenditure out of internal resources, its national counterpart i.e. BSNL had planned to finance this expenditure out of increased market borrowings. A shortfall in utilization of funds was likely in case of MTNL and Wireless Planning Cell of the Deptt. of Telecom as some of the major projects failed to take off as envisaged.

15. The progress with regard to achievement of physical targets has been satisfactory. All the targets fixed are likely to be achieved fully or exceeded. The details may be seen in Annexure 8.3.3.

Annual Plan 2001- 02

16. An outlay of Rs.20298.84 crore has been approved for the Annual Plan 2001-02. This represents a marginal decrease as compared to last year's outlay (BE). It is envisaged to be financed basically through internal and extra budgetary resources; internal resources constituting 73.37% of the total outlay. A budget support of Rs.165.00 crore has been

provided for financing the Plan outlay of the regulatory and R&D organizations i.e. Wireless and Planning Coordination Wing of the Ministry of Communications (WPC) and Telecom Regulatory Authority of India (TRAI), Telecom Engineering Centre and C-DOT . The increase in the budget support for the regulatory bodies has been necessitated by the requirement of funds for the World Bank assisted projects of WPC and TRAI, in addition to the financing pattern of C-DOT which was previously met out of internal resources of Department of Telecommunication. Consequent upon corporatization of DOT's operational network into BSNL, the funds for C-DoT has been provided by way of budget support. The organisation-wise breakup of the approved outlay and financing pattern may be seen in the Annexure 8.3.4.

Bharat Sanchar Nigam Limited (BSNL)

17. The operational network of the erstwhile Department of Telecom has been converted into a fully owned PSU called Bharat Sanchar Nigam Ltd. (BSNL). The company has become operational from 1.10.2000. Keeping in line with the Ninth Plan objective of providing telephones on demand by 2002, the Corporation plans to continue with the established policy of rapid expansion of basic services. The company envisages to provide 72.30 new connections during 2001-02 – about 38% more than last year's target. In order to implement these and other targets / programmes, an outlay of Rs.16,574 crore comprising of an extra budgetary resource of Rs.5233 crore has been approved for BSNL. No budget support is provided for. With a view to improve the long distance connectivity further, a substantially enhanced target of installing 9.00 lakh additional TAX lines is envisaged for the Annual Plan 2001-02. Details of physical targets may be seen in Annexure 8.3.3.

Mahanagar Telephone Nigam Ltd. (MTNL)

18. MTNL is providing telecom services in the two metros of Delhi and Mumbai. Telephones are virtually available on demand in the two cities. Keeping the slow growth in demand, a target of providing 5.90 lakh new connections has been fixed for the year 2001-02 keeping in view a trend in the last two years and saturation of the market. To take care of the increased long distance transmission requirements, additional 1.15 TAX lines are expected to be added to the network during 2001-02. Modernization of equipment and implementation of schemes aimed at providing new and value added services is expected to be the new focus area of the company during the year. The major steps in this direction includes digitalization of the entire network, introduction of new services like VPN, Chat Service, Shopping Malls on Internet, provision of WILL equipments etc. To finance the various programmes of the Corporation, an outlay of Rs.1600 crore has been approved for the Annual Plan 2001-02. This is to be financed entirely out of internal resources.

Videsh Sanchar Nigam Ltd. (VSNL)

19. The approved outlay of VSNL for the year 2001-02 has been fixed at Rs.1814.66 crore. It is envisaged to be financed entirely out of internal resources. India M multi-media network, SAFE cable project, establishment of ATM/International Super Highway Gateway Nodes at Mumbai, New Delhi, Chennai, Calcutta and Bangalore etc. E-commerce / VoIP, DTS Satellite System facilities are the new schemes to be undertaken during 2001-02. Investment in Indian joint ventures like Antariksh , long-distance connectivity etc. are also envisaged.

Wireless Monitoring Organisation (WMO)

20. WMO is a field organization of WPC Wing of Ministry of Communications. An outlay of Rs.105 crore has been approved for the year 2001-02 – Rs.10 for WMO and Rs.95 crore for WPC. The entire outlay of WMO is financed through budget support. The targets for the year, apart from completion of continuing schemes, include upgradation of direction finding systems and upgradation of training centres. National Spectrum Management is a major priority area of WPC. Budgetary support is being provided to WPC Wing for the first time in the Ninth Plan in order to implement the World Bank assisted programme of modernization.

ITI Ltd.

21. ITI Ltd. is the largest telecom equipment manufacturing company in the country. The company has been able to achieve a turn-around in recent past.As per the Plans drawn out by the Company, completion of the on-going technology upgradation schemes would be a priority area. The new projects envisaged to be taken up during the year include CSN-MM projects, Wireless in Local Loop (WILL) etc.. For implementing the various projects / schemes of the Company, an outlay of Rs125.00 crore has been approved for the Annual Plan 2001-02. This is to be financed entirely through internal resources.

HTL Ltd.

22. For the Annual Plan 2001-02, an outlay of Rs.20.18 crore has been approved for the Company. It is envisaged to be financed through internal resources of Rs.12.92 crore and Rs.7.26 crore raised through 'other' means. The main production activities of the Company include C-DOT switching equipment, Main Distribution Frames, EWSD equipment etc.

Special Focus Areas

23. Development of North Eastern Region of the country has been receiving special attention in view of the strategic location and general backwardness of the area. To accelerate the pace of economic development of the region, it is envisaged to strengthen the telecom network by adding 12.30 lakh lines of switching capacity, providing 1.05 lakh DELs and 8043 VPTs during 2001-02 among other things.

24. With a view to give a fillip to the economic development and growth in tribal and hilly areas and their integration into mainstream of national life, the Ninth Plan has laid special emphasis on accelerated development of telecom facilities in such areas. The telecom network is envisaged to be further strengthened during 2001-02 by adding 4.83 lakh lines of switching capacity, 3.38 lakh DELs, 20280 VPTs and 49 Satellite stations.

25. Under the NCR Plan, all areas / cities excluding Delhi are envisaged to receive special attention during the Ninth Plan. All efforts are being made to improve telecom facilities of NCR and to introduce various value added services in order to make it at par with Delhi. During the Annual Plan 2001-02, about 1.18 lakh new connections are expected to be provided in the region.

26. Rural connectivity is another important focus area. As per NTP, 1999, all the remaining villages in the country are to be covered by the year 2002. Keeping this in view, a target of providing 77 thousand additional VPTs has been fixed for the Annual Plan 2001-02.

Policy Issues

27. Technological change in telecommunications has been quite fast and is constantly leading to a paradigm shift in the structure of telecommunications industry worldwide. Convergence of data, voice and image, use of wide bandwidth and high speed Internet connectivity have added new dimensions to the process of change. Towards achieving this objective, the Government plans to introduce a legislation. As per the draft Communications Convergence Bill, a super regulator to be called Communications Commission of India and a disputes settlement mechanism to be called Communications Appellate Tribunal are envisaged to be set up. The Commission would regulate the carriage and content of communications which would include telecommunications, broadcasting and multimedia. Licensing powers are also envisaged to be vested with the Commission.

28. Internet telephony is bound to revolutionize long distance communications as it will provide services at a fraction of the present cost. Internet telephony is not permitted under the present policy. 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. Keeping the technological and cost advantages in view, Internet telephony may have to be opened up.

29. About 38% of 6.07 lakh villages in the country are yet to be provided telecom connectivity. The efforts in this regard are still confined to the Government sector as the private sector is totally disinterested due to the unremunerative nature of operations. The New Telecom Policy, 1999 envisages to provide voice and low speed data services to all the villages by 2002 and providing telephone on demand. Keeping the slow pace of the present arrangement in view, new strategy needs to be worked out to accelerate the pace and achieve the targets.

30. Under the Universal Service Obligation (USO) provisions of the NTP, 1999, telephones are to be provided on demand by 2002 in both urban and rural areas. At present, Bharat Sanchar Nigam Ltd. (BSNL) accounts for more than 95% of the basic telecom network in the country. More than 50% of this network is of unremunerative nature comprising of rural and low paying urban DELs. Compensating the deficit out of USO funds would require immense funds which would be a tall order by international standards. Corrective steps would be needed immediately besides operationalizing USO funds to honour the commitments of USO.

8.3.3 INFORMATION & BROADCASTING

Review of Annual Plan 2000-01

31. An outlay of Rs.709.35 crore was approved for the Information & Broadcasting sector for the Annual Plan 2000-01 comprising Budgetary Support of Rs.270.00 crore and IEBR of Rs.439.35 crore. The revised estimates for 2000-01 show an outlay of Rs.683.39 crore

with a Budgetary Support of Rs.256.93 crore and IEBR of Rs.424.66 crore. The increase in the budgetary support was mainly because of the implementation of the special package for improving AIR and Doordarshan services in Jammu & Kashmir, which was approved by the Union Cabinet after the Kargil Conflict. Like earlier years of the Ninth Plan, this year too, a shortfall is anticipated in the IEBR component of the Annual Plan. Sector-wise outlays and expenditures for the first four years of the Ninth Plan can be seen in Annexure 8.3.5.

Annual Plan 2001-02

32. The approved outlay for this sector in the Annual Plan 2001-02 is Rs.811.40 crore, comprising budgetary support of Rs.340.00 crore and IEBR of Rs.471.40 crore. The budgetary support includes Rs.190.00 crore for the special package for J&K. This being the last year of the Ninth Plan, emphasis has been given on timely implementation of the Ninth Plan schemes rather than starting new schemes so that there is no spill over of schemes into the Tenth Plan. Besides consolidation of existing facilities to make them more effective, stress has been given on adoption of new technology and allowing adequate autonomy to media units to function effectively.

Thrust Areas For Annual Plan 2001-02

Broadcasting Sector

33. With the opening up of the Broadcasting sector, and convergence of technologies in broadcasting, communication and information technologies, the need was felt of adequate investments to ensure necessary technological upgradation and modernization of Prasar Bharati, so that the public service broadcaster can effectively compete with the private channels. Reasonable provision has been made for this purpose.

34. The outlay for the Broadcasting sector for 2001-02 is Rs.752.93 crore with Rs.292.77 crore as budgetary support and Rs.460.16 crore as IEBR. This includes Rs.190.00 crore as budgetary support for the special J&K package.

All India Radio

35. The approved outlay for All India Radio is Rs.190.93 crore. Among the important schemes envisaged for 2001-02 are addition of new facilities and replacement of obsolete equipments for improving programme generation and transmission, and creation of hardware and software facilities for the J&K package.

Doordarshan

36. The approved outlay for Doordarshan is Rs.562.00 crore and the emphasis is in expansion of network to areas like the North-East, J&K, hill and border areas, modernization of news gathering facilities and digitalization of transmission and studio production.

Films Sector

37. For the Annual Plan 2001-02, the approved outlay for the Films sector is Rs.41.39 crore. The major programmes/schemes to be undertaken during the year include the International Film festival, construction/addition of Film Festival complex and Children's Film

society complex, providing Films Division with video facility for making films in videomatic format and opening of Regional offices of Central Board of Film Certification at Hyderabad, New Delhi, Cuttack and Guwahati.

Information Sector

38. The approved outlay for Information sector for 2001-02 is Rs.17.08 crore. The thrust areas for the Annual Plan include opening of new field units of Directorate of Field Publicity, construction of Soochna Bhawan (Phase IV), setting up of the National Press Centre at New Delhi, putting Publications Division on the Internet and computerization and modernization of various media units.

Issues and Strategies

39. The media is undergoing rapid changes both in terms of technology and content creation. Pointing out the challenges facing this sector, the Mid-Term Appraisal of the Ninth Plan stressed the need for reviewing the roles of various media units of the Ministry of I&B in the fast changing scenario. The Financial Reforms committee has also recommended restructuring of several media units. In view of this, urgent steps are required to clear the uncertainities.

40. The role of AIR and DD as public service broadcasters makes extra demands on their financial and human resources which are not encountered by private channels. It was therefore felt that while there should be greater stress on marketing and better performance of IEBR, the funding for special requirements like expansion of terrestrial coverage to border and remote areas should be provided through budgetary support. The Ninth Plan document mentioned that the two major issues facing the sector are the use of Airwaves and the status of Prasar Bharati. Prasar Bharati's status remains ambiguous. Special care needs to be taken about the timely implementation of J&K package for improving broadcasting services in the State. In the first two years, the implementation has been less than satisfactory and there has been some diversion of fund from hardware to software schemes.

41. Many of the media units in the Information sector were started during the First Plan period in a scenario of low media development in the country. Since then the production standards and the reach of media in the private sector in the case of books, publications, advertisement and films have attained international levels. The role and relevance of many of the official media units need to be reexamined in the context of the changes that have taken place over the years.

42. Similarly, in the Film sector, a fresh look into the role and structure of various media units is urgently required. There is some duplication of work between the Films Division and Doordarshan on making documentaries, albeit on different hardware. There is also need to examine the way Film Festivals and National Film Awards are organized. These can be entrusted to a professional body like the NFDC, which is already in the business of Film financing.

Annexure 8.3.1

Annual Plan 2001-02 - Postal Sector

(Rs. crore)

Scheme	Ninth Plan	1997-98		1998-99		1999-00		2000-01		2001-02
		BE	Actual	BE	Actual	BE	Actual	BE	RE	BE
1	2	3	4	5	6	7	8	9	10	11
Expansion of Network	42.70	3.55	3.92	5.03	3.96	4.97	7.79	10.89	10.89	15.00
Technology	133.98	31.12	28.30	21.28	22.76	29.63	30.22	28.17	28.17	21.01
HRD	14.08	2.79	2.35	2.94	2.84	2.74	2.96	2.73	2.73	3.67
Mail proces	141.30	8.79	3.37	12.72	7.28	38.22	16.57	43.94	43.94	61.00
Business dev	17.80	3.85	2.29	4.25	3.66	7.20	6.03	4.15	4.15	4.00
Material mangt	1.20	0.00	0.00	0.00	0.00	0.00	0.12	0.63	0.63	0.77
PLI	14.42	4.00	2.96	4.35	2.28	1.52	1.34	0.00	0.00	0.00
Philately	5.12	0.50	0.50	0.85	0.69	0.57	0.52	1.74	1.74	1.20
Buildings	119.62	35.00	24.13	39.80	27.53	10.88	20.76	26.65	26.65	24.00
Admn.&fin	9.63	5.40	2.73	3.78	1.69	2.73	1.21	0.75	0.75	4.00
Public Grievances	7.40	0.00	1.72	0.00	1.00	1.54	0.76	0.35	0.35	0.35
Total	**507.25**	**95.00**	**72.27**	**95.00**	**73.69**	**100.00**	**88.28**	**120**	**120**	**135.00**

Annexure 8.3.2

Physical Performance – Postal Sector

Schemes	Ninth Plan	1997-98 Actual	1998-99 Actual	1999-00 Actual	2000-01 Target	2001-02 RE	2001-02 BE
1	2	3	4	5	6	7	8
Expansion of Postal Network : a.Opening of Pos.							
EDPOs	2500	402	598	598	500	500	500
Dsos	250	52	50	50	50	50	50
Infrastre. Equip. to EDBOs	2400	7746	3395	3395	8000	500	8000
Panchayat Sanchar Sewa			200	200	1000	2000	2000
Upgradation of Technology Counter Computerisation							
a)Supply of MPCMs including SB lans	5000	918	1429	1429		1000	1000
b)Modernisation of Pos	505	308	98	98	100	100	125
Mechanical Equipment							
Hand Cancellors	10000	0	3285	3285			
Stamp Cancelling Machines	100	20	20	20	20	20	20
Electronic Franking Machines	500	250	150	150	100	100	100
Tying and bunding Machines	30		30	30			
Satellite MO : Setting up of HUB							
Installation of VSATs	170		0	0	88	88	
Installation of ESMOs	2000	318	10		466	466	400
Upgradation of VSATs	75		21	21			
Material Management						15PSDs	
Printing & Paper cutting	1						
Diesel fork lift trolleys	4						
Training System Operations	150						100
Human ResourceDevelopment :							
In service training Gr "A"	180	30	30	24	40	40	48
Refresher training	16051	4551	4315	4315	2167	2167	2500
Computer training	12000	2775	4062	4062	2000	2000	10000
Training for EDBPMs	51000				14073	14073	21500
Training to Gr.C and postman	15750	7107	7148	6970	5120	5120	6000
Customer care centre	All Div.		60	60	45	23	23
Modernisation of mail Processing							
Setting up of AMPCs	3				0	0	2
Mail office Modernisation	120	20	43	43	20	20	17
RMS Vans	28		24	24	2		
Purchase of MMS Vehicles	50	8	12	12	13	13	15
Registration Delivery			22+6	22			
HRO/DO Comp.	20	1			7	7	7
TMO computerisation	25	6	6	6	4	5	4
Mopeds	500		147	147			
Business Development Marketing							
Computerisation of PPCs	40	8	10	10	5		5
Business off. for Speed Post	40 Centres		7		2	53	2
Computerisation of SPCCs	50	7	20	20		15	
Postal Life Insurance							
RPLI Computerisation	32R	19 regions	11 +120HO	11R			
Upgradation of Computers	20R	5 circles	4C+1PLI	4C			
Philately (Computerisation)	52E+200N	5	21	21	120		
Postal Buildings	400	72	25	27	30+3	30 +3	48 +5
Staff Quarters	950	275	196	196	236	255	190
Streamlining of Adm. & Finl. Management.							
Comp. Of Admn.Br.						6	
MIS interlinking							17

Annexure 8.3.3

Scheme Wise Targets and Achievements - Telecommmunications Services

Name of Scheme	Original Target	Revised Targets	1999-00 Actual	2000-01		2001-02
				Target	RE	Target
1	2	3	4	5	6	7
Switching Capacity	**230.00**	**298.00**	**68.72**	**72.35**	**57.30**	**82.46**
BSNL(lakh lines)	200.60	273.00	63.02	67.00	53.00	77.76
MTNL(lakh lines)	29.40	25.00	5.70	5.35	4.30	4.70
Direct Exchange lines	**185.00**	**222.70**	**50.30**	**57.90**	**56.75**	**72.30**
BSNL(lakh lines)	160.00	200.70	45.40	53.50	53.50	68.30
MTNL(lakh lines)	25.00	22.00	4.90	4.40	3.25	4.00
Mobile Services				**0.10**	**0.43**	**12.00**
BSNL(lakh lines)				0.10	0.43	12.00
MTNL(lakh lines)						
TAX (lakh lines)	**18.00**	**23.06**	**4.80**	**5.15**	**4.20**	**10.10**
BSNL(lakh lines)	15.24	18.87	4.03	4.00	4.00	9.00
MTNL(lakh lines)	2.76	4.19	0.77	1.15	0.20	1.10
Microwave Systems ('000kms)	**90.00**	**70.00**	**19.88**	**10.00**	**10.00**	**7.50**
(Route Kms.'000)						
Optical Fibre System (-do-)	**140.00**	**270.00**	**63.27**	**100.00**	**100.00**	**126.00**
(Route Kms.'000)						
VPT ('000 Nos.)	**239.16**	**278.87**	**33.97**	**70.00**	**100.00**	**77.04**

Annexure-8.3.4

Financing Pattern of Telecom Sector

(Rs in crore)

Organisation	Approved Outlay	1997-98 Actual	1998-99 Actual	1999-00 Actual	2000-01		2001-02 BE
					BE	RE	
1	2	3	4	5	6	7	8
DOT*	**37995.00**	**8733.58**	**9556.11**	**9485.14**	**15834.00**	**16409.65**	**16574.00**
IR	30965.00	8733.58	9556.11	9485.14	13682.00	12239.65	11341.00
Bonds	7030.00	0.00	0.00	0.00	2152.00	2994.00	5233.00
Others						1176.00	0.00
MTNL	**5446.00**	**912.54**	**977.44**	**872.00**	**2155.00**	**1645.00**	**1600.00**
IR	4066.00	912.54	977.44	872.00	2155.00	1645.00	1600.00
Bonds	1380.00	0.00	0.00	0.00	0.00	0.00	0.00
VSNL	**2737**	**407.71**	**761.62**	**431.41**	**1163.34**	**1971.73**	**1814.66**
IR	**2737**	407.71	761.62	431.41	1163.34	1971.73	1814.66
WMO	**44.04**	**4.37**	**5.75**	**1.53**	**10.00**	**8.39**	**10.00**
WPC					**5.00**	**1.5**	**95.00**
TRAI					**2.00**	**2.00**	**4.00**
TEC				**3.11**	**0.00**	**9**	**4.00**
IR				3.11	0.00	0	0.00
GBS				0.00	0.00	9	4.00
C-Dot				**80.97**	**166.00**	**150**	**52.00**
IR				80.97	166.00	110.66	0.00
GBS				0.00	0.00	39.34	52.00
ITI	**175.00**	**15.00**	**42.00**	**44.00**	**90.00**	**90**	**125.00**
IR	0.00	-148.00	-52.00	44.00	35.00	62	125.00
Bonds	150.00	150.00	94.00	0.00	0.00	0.00	0.00
Others	25.00	13.00	0.00	0.00	55.00	28.00	0.00
Budgetary support	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HTL	**45.00**	**7.73**	**9.42**	**5.34**	**16.33**	**26.58**	**20.18**
IR	27.00	5.73	9.42	5.34	14.39	9.89	12.92
Bonds	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others	18.00	0.00	0.00	0.00	1.94	16.69	7.26
Budgetary support	0.00	2.00	0.00	0.00	0.00	0.00	0.00
Total	**46442.04**	**10080.93**	**1796.23**	**10923.50**	**19441.67**	**20313.85**	**20298.84**
IR	46398.00	9911.56	1696.48	10921.97	17215.73	16038.93	14893.58
Bonds		150.00	94.00	0.00	2207.00	3022.00	5233.00
Others	0.00	13.00	0.00	0.00	1.94	1192.69	7.26
Budgetary support	44.04	6.37	5.75	1.53	17.00	60.23	165.00

* : BSNL came into existence on 1.10 2000. RE figure for 2000-01 includes BSNL's IR Rs 5412 crore; Bonds Rs 2944 crore: Others Rs 1176 crore The figure for 2001-02 pertains to BSNL only

Annexure – 8.3.5

Ministry of Information and Broadcasting – 9th Plan and Annual Plan outlays and Expenditure

Rupees Crore

S. No.			9th Plan Outlay (1997-02)	App. Outlay 1997-98	Actual 1997-98	App. Outlay 1998-99	Actual 1998-99	App. Outlay 1999-2000	Actual 1999-2000	App. Outlay 2000-01	RE 2000 01 (Prov.)	App. Outlay 2001-02
1	**Information Sector**											
	Total		93.30	19.00	12.51	19.55	14.70	19.26	17.95	19.72	15.12	17.08
	DBS		93.30	19.00	12.51	18.20	14.20	17.50	16.45	18.21	13.32	14.46
	IEBR		0.00	0.00	0.00	1.03	0.50	1.76	1.50	1.51	1.80	2.62
2	**Film sector**											
	Total		182.70	42.00	37.22	42.98	26.68	36.60	30.43	49.19	39.47	41.39
	DBS		137.20	33.80	28.99	34.28	21.97	30.50	26.95	38.49	33.35	32.77
	IEBR		45.50	8.20	8.23	8.70	4.71	6.10	3.48	10.70	6.12	8.62
3	**Broadcasting Sector**											
	Total (a+b)	**Total**	2567.05	558.80	434.63	599.40	389.34	513.52	484.87	640.44	628.80	752.93
		DBS	449.55	74.80	42.64	74.80	43.20	97.00	141.22	213.30	210.26	292.77
		IEBR	2117.50	484.00	391.99	524.60	346.14	416.52	343.65	427.14	418.54	460.16
(a)	**AIR**	Total	805.80	143.20	88.24	150.00	81.25	122.00	90.05	140.00	145.62	190.93
		DBS	261.00	48.20	21.51	48.20	7.39	45.20	35.84	65.00	64.26	115.39
		IEBR	544.40	95.00	63.73	101.80	73.86	76.80	54.21	75.00	81.36	75.00
(b)	**Door-darshan**	Total	1761.65	415.60	346.39	449.40	308.09	391.52	394.82	500.44	483.18	562.00
		DBS	188.55	26.60	18.13	26.60	35.81	51.80	105.38	148.30	210.26	176.84
		IEBR	1573.10	389.00	328.26	422.80	272.28	339.72	289.44	352.14	418.54	385.16
	TOTAL (1+2+3)		2843.05	619.80	484.36	661.93	430.72	569.38	533.25	709.35	683.39	811.40
	DBS		680.05	127.60	84.85	127.60	79.37	145.00	184.63	270.00	256.93	340.00
	IEBR		2163.00	492.20	400.21	534.33	351.35	427.38	348.62	439.35	424.66	471.40

8.4 INFORMATION TECHNOLOGY

Information Technology revolution has opened up new possibilities of growth and social transformation in every walk of life. Keeping our perceived comparative advantage in view, IT has been identified as one of the major areas of growth in exports, employment opportunities and improving efficiency.

2. The IT industry performed well in 2000-01 by registering overall growth rate of 31 per cent against 26.4 per cent in 1999-2000. While the software export and domestic software recorded a growth of 56 per cent, the growth in hardware sector remained stagnant at 9 per cent as in the last five - six years. The hardware industry is facing stiff competition due to poor infrastructure, high cost of finance, tariff structure and large scale imports. The performance of the IT sector during the first four years of the Ninth Plan is given in the table below. Segment-wise details may be seen in Annexure- 8.4.1

(Rs. crore)

Item	1997-98	1998-99	1999-2000	2000-01
IT Hardware	22,100	25,250	28,100	30,700
Software Exports	6,500	10,940	17,150	28,350
Domestic Software	3,470	4,950	7,200	9,400
Total	32,070	41,140	52,450	68,450

Review of Annual Plan 2000-01

3. For promoting IT in a big way particularly in the State Sector and with a view to arrive at Common Action Plan, the Government organized first ever National Conference of various States IT Ministers, wherein a consensus Action Plan as depicted in the box below was adopted for promotion of IT across the country.

Consensus Action Plan adopted in the National Conference of State IT Ministers and Chief Ministers

- Allowing free Right of Way Facility for laying optical fiber cables along National and State highways
- Reducing custom and excise rates for optical fiber, IT hardware and Internet access devices
- No sales tax or any other state taxes on IT hardware for next three to five years
- Promotion of E-Governance by Central and State Governments
- Development of Indian languages on computers and creation of useful content on the Internet
- Expansion and improvement in IT education and IT based education
- Strengthening accreditation mechanism for IT education and offering special reduced rates by ISPs for Internet access to educational institutions
- Deregulation of National Long Distance Operation (NLDO) in the Telecom sector
- Demonopolization of undersea optical fibre connectivity for ISPs
- Setting up of a Task Force on human resource development in IT

4. The penetration of personal computers is an indicator of the diffusion of IT in various sectors of the economy. The PC penetration increased from 4.3 in 1999 to 5.8 per thousand during 2000-01. The growth of PC market has been mainly due to reduction in Government levies and boom in demand for internet connectivity. The number of internet connections which were 9 lakh by March, 2000 increased to 20 lakh by March, 2001.

5. To facilitate growth of E-Commerce, electronic communication through Internet and accelerate induction of IT in critical sectors of the economy, an "Information Technology Act, 2000" has been passed. It will provide legal framework to facilitate E-Commerce and electronic transactions, recognizing electronic contracts, prevention of computer crimes, electronic filing/documentation, digital signature etc. The Controller of Certifying Authority has been appointed. The business transactions in E-Commerce mode during 2001-02 are estimated to be about Rs.2300 crore.

6. India has achieved a capability of designing and building supercomputers using massively parallel processing technology. The Centre for Development of Advanced Computing (C-DAC) has released its latest model-the PARAM 10000. C-DAC recorded a turnover of around Rs.85 crore by commercializing its products and services. Further efforts are being made to commercialize supercomputing technology developed by India.

7. The Software Technology Parks of India (STPI) has set up 19 STPs across the country to provide "Single Window Interface" for implementing the STP scheme and provide services to the software exporters. During 2000-01, 747 new units were approved under the scheme taking the total number of units approved to 6329 till February, 2001. These units contributed up to 64 per cent of the software exports of the country during the year 2000-01. To provide international connectivity for high speed data transmission, six earth stations were set up at Pune, Guwahati, Chennai, Vizag, Indore and Srinagar.

8. In the area of health care, a project for indigenous development and commercialization of 6 mev state-of-art LINAC system including computerised 3 D treatment planning for radiation treatment of cancer has been undertaken. During the year 2000-01, the LINAC tube has been successfully developed. The LINAC machines developed under this project would be deployed at six identified cancer hospitals in the country.

9. To promote information processing in Indian languages a project has been taken up at 13 educational and R&D institutions across the country. The project aims at increasing IT penetration in the society, leading to general improvement in the quality of life of people, development of new products and services, promotion of content creation efforts in Indian languages for better dissemination of information among the Indian masses apart from facilitating research in technology intensive areas of language engineering.

10. The Government envisages taking a project for setting up of Community Information Centres (CICs) in 487 blocks in the North-East and Sikkim at an estimated cost of Rs.220 crore. During the year 2000-01, 30 CICs have been set up on pilot basis. VSATs are being used for providing reliable connectivity. The Centers aim at addressing the issue of digital divide in the North Eastern states. The CICs are also expected to have application of IT in education, E-Governance, data transmission, tele-healthcare, documentation, connectivity for management of natural calamities and poverty alleviation.

11. National Informatics Centre (NIC) has established NICNET facilities in all Central Government Departments, 32 States/UTs and in about 540 District Centres to facilitate informatics development for decision making and information exchange. The quality of NICNET based computer services was further upgraded during 2000-01. Video Conferencing facility was made operational at the Secretariat of Assam, Manipur, Tripura and Mizoram. Some of the major programmes being pursued by NIC are; NICNET based land records computerisation, implementation of Grass Roots Input to Districts (GRID), extension of NICNET services to newly created states and districts in the country, expansion of videoconferencing network, Modeling Graphics & Design Programme, Treasury Accounting Project, implementation of Court Information System Programme for High Courts and District Courts and Bibliographic Information System.

Annual Plan 2001-02

12. Besides implementing the ongoing schemes /projects, the major initiatives envisaged for 2001-02 include;

13. With a view to ensuring speedy disposal of cases and making the judicial process more transparent and people friendly, the Government has drawn plans to computerize city courts in all the four metro cities. It is also envisaged that the State Governments of Uttar Pradesh, Chattisgarh, J&K, Orissa, Bihar, Punjab, Haryana, Jharkhand, Uttaranchal and Tamil Nadu would set up Computerized Inquiry and Facilitation Centres in their High Courts on priority basis. With these facilities the litigating public can know the fixing of dates of hearing, status of cases, access to daily case lists, supply of certified copies of judgments and generation of notices.

14. Media Lab, of the Massachusetts Institute of Technology, USA have done some work on IT related products and innovative technology. A research cum extension project is envisaged to be set up in Asia in collaboration with MIT, USA, corporate and research organizations from across the world and the Government. An allocation of Rs.67 crore has been approved for 2001-02 to explore and firm up the various parameters of the scheme and finalise the detailed project report. The focus of the facility is envisaged to be on developing low cost technology solutions aimed at substantial improvement in the quality of life of common people in India, especially in the rural areas.

15. Upgradation of Education and Research Network (ERNET) is envisaged to be undertaken for establishing national backbone of 2/8 Mbps bandwidth, VSAT network and providing leased line/wireless link connectivity of 128 kbps-2 Mb bandwidth. This will improve speed and quality of the network.

16. In order to promote basic research, a project on Quantum Computing with Ultra Fast Pulse Shaping Technology is envisaged to be initiated at Tata Institute of Fundamental Research.

17. An outlay of Rs.535.06 crore with a budget support of Rs.425 crore has been approved for various schemes of Ministry of Information Technology for Annual Plan 2001-02. This is against last year's approved outlay of Rs.541.70 with a budgetary support of Rs.360 crore. Scheme-wise breakup of the outlay may be seen in Annexure-8.4.2.

Major Policy Issues

18. Development and manufacturing of hardware is important for balanced growth of the IT sector. The growth of hardware sector has been stagnating at around 10 per cent for the past five – six years. Only about one-third of our total requirement of hardware is manufactured indigenously. As IT penetration is bound to increase many folds in the future, requirement of hardware will grow rapidly. This sector can provide substantial opportunities of income and employment generation if we are able to encourage indigenous manufacturing. Urgent attention, with a practical approach, is necessary to give a boost to this sector which is expected to face greater competition in the future. The customs duty on all IT hardware is envisaged to be brought to zero level by the year 2003 under WTO agreement which may affect development of the domestic industry. The recommendations in the Second and Third Reports of the National Task Force on IT & Software Development which focus mainly on Development, Manufacture & Export of IT Hardware and Long Term National IT Policy are relevant in the present context to evolve suitable action plan. The Tenth Five Year Plan Working Group on IT is also to work on the issue and is expected to make recommendations for the accelerated growth of the domestic hardware industry.

19. In view of our comparative advantage in software development and exports, there is a need to explore new markets, raise quality standards and develop higher end products and services to maintain brand image and sustain growth in this sector which at present is facing a lean phase.

20. India offers many advantages of serving as an IT enabled services destination for major global companies. The spectrum of IT enabled services applications already evident in the country include Call Centres, Medical Transcription, Back Office Operations, Insurance Claim Processing, Payroll and Legal Databases etc. With a view to promoting this sector a number of IT enabled services have been exempted from Income Tax. The industry association NASSCOM has also recently suggested an Action Plan to make India a sustainable destination for these services. Keeping in view the potential of employment generation, innovative strategies particularly the training and action plan for promotion of IT enabled services need to be pursued.

21. E-Governance is emerging as the main tool for efficient, transparent and accountable governing systems. Large scale induction of IT by State Governments in their establishments and Public Utility Services are a pre-requisite for promotion of E-Governance.

22. Digital divide is becoming increasingly important due to enabling capabilities of IT in all sectors. The issue is all the more important in India due to highly skewed PC penetration and accessibility in favour of relatively well-to-do sections of the population and urban areas. Language barrier has added another dimension to this divide. Active participation by State Governments will be a crucial element of the strategy to address this issue. The decision of the Government to spend upto 3% of the budget on IT by Central and State Government departments will help in IT penetration and improving public services through E-Governance and may be a step in bridging the digital divide.

ANNEXURE-8.4.1

Production of IT Hardware and Software in the initial four Years of the Ninth Five Year Plan

(Rs.Crore)

Sl. No.	Item	1997-98	1998-99	1999-2000	2000-01
1.	Consumer Electronics	7,600	9,200	11,200	11,500
2.	Industrial Electronics	3,150	3,300	3,750	4,000
3.	Computers	2,800	2,300	2,500	3,400
4.	Communication & Broadcast Equipment	3,250	4,400	4,000	4,500
5.	Strategic Electronics	900	1,300	1,450	1,750
6.	Components	4,400	4,750	5,200	5,500
	Sub-total (Hardware)	22,100	25,250	28,100	30,700
7.	Software Exports	6,500	10,940	17,150	28,350
8.	Domestic Software	3,470	4,950	7,200	9,400
	Total	**32,070**	**41,140**	**52,450**	**68,450**

Annexure – 8.4.2

Ministry of Information technology – Annual Plan 2001-02

(Rs. Crore)

SCHEME NUMBER / NAME		A.P. 1999-2000 Act. Expdr.	Annual Plan 2000-01 (RE)			Annual Plan (2001-02) BE		
			Outlay	Gross BS	Net BS	Outlay	Gross BS	Net BS
400	SAMEER	9.82	9.60	7.00	7.00	30.11	12.00	12.00
500	Industrial Electronics Promotion Prog.	1.12	5.50	2.50	2.50	6.25	3.25	3.25
600	Microelctronics Devp. Prog. - NMC	1.84	2.00	2.00	2.00	3.00	3.00	3.00
700	Technology Development Council	1.98	8.00	4.00	4.00	5.00	5.00	5.00
800	Dev. of Strategic Electronic Eqpt.	1.88	2.00	2.00	2.00	3.00	3.00	3.00
1201	EMDC	2.00	1.50	1.00	1.00	3.50	3.50	3.50
1202	C-MET	3.91	1.00	1.00	1.00	2.50	1.50	1.50
2200	C-DAC	10.50	8.00	8.00	8.00	13.00	10.00	10.00
2400	Photonics/Optoelectronics	1.71	2.00	2.00	2.00	3.00	3.00	3.00
2700	ERDCs	27.21	4.50	4.50	4.50	28.49	8.00	8.00
2800	Electronics in Health and Bio-Tech.	3.00	3.00	3.00	3.00	5.00	5.00	5.00
3200	TechnologyDev.for Indian Languages	1.97	4.50	4.50	4.50	6.00	6.00	6.00
3300	National HVDC Programme	0.00	0.00	0.00	0.00	0.10	0.10	0.10
3400	Devp.of IntelligentManufacturingSys.	0.66	0.75	0.75	0.75	0.40	0.20	0.20
3600	Development of CG Industry	0.55	0.50	0.50	0.50	2.00	1.00	1.00
3800	Transport & Power Distribution Prog.	0.84	1.75	1.75	1.75	6.50	2.50	2.50
6400	Centre for Liquid Crystal Research	1.96	1.26	1.26	1.26	1.70	1.70	1.70
6500	Power Electronics	0.33	0.50	0.50	0.50	20.67	2.00	2.00
6600	IPR Promotion Programme	0.45	0.50	0.50	0.50	0.40	0.40	0.40
6700	Environmental Mgt. in Electronics	0.11	0.50	0.50	0.50	0.17	0.17	0.07
7200	Special IT Projects	3.13	0.00	0.00	0.00	3.00	3.00	3.00
7210	IT for Masses	0.00	0.00	0.00	0.00	2.00	2.00	2.00
7230	Media Lab. In Asia	0.00	0.00	0.00	0.00	0.10	0.10	0.10
	R&D Sub-Total	**74.97**	**57.36**	**47.26**	**47.26**	**145.89**	**76.42**	**76.32**
	II. INFRASTRUCTURE DEVELOPMENT							
1700	ERNET	19.91	9.00	9.00	9.00	5.00	5.00	5.00
1000	STQC	23.58	26.47	23.02	23.02	27.00	27.00	25.00
1600	Software Export Promotion (SEPP)	5.89	4.50	4.50	4.50	6.00	6.00	6.00
1610	Software Technology Parks (STPI)	0.00	0.00	0.00	0.00	8.00	8.00	8.00
7000	National Information Infrastructure	9.99	8.00	8.00	8.00	5.00	5.00	5.00
7010	IT Venture Capital	20	0	0	0	1.00	1.00	1.00
7020	Misc. Schemes in IT Sector	1.28	120.18	6.8	6.8	0.40	0.40	0.40
7030	Electronic Governance	1.84	2	2	2	9.00	5.00	5.00
7050	IT Act / Certification	0	0.75	0.75	0.75	5.00	5.00	5.00
7100	Hi-Tech Investment Park	0	0.05	0.05	0.05	0.05	0.05	0.05
7300	SemiconductorLayoutDesign Act-2000	0	0	0	0	1.00	1.00	1.00
7400	Community Information Centres	20	0	0	0	67.00	67.00	67.00
	Infrastructure Sub-Total	**102.49**	**170.95**	**54.12**	**54.12**	**134.45**	**130.45**	**128.45**

Annexure – 8.4.2

Ministry of Information technology – Annual Plan 2001-02

(Rs. Crore)

	SCHEME NUMBER / NAME	A.P. 1999-2000 Act. Expdr.	Annual Plan 2000-01 (RE)			Annual Plan (2001-02) BE		
			Outlay	Gross BS	Net BS	Outlay	Gross BS	Net BS
	III. HUMAN RESOURCE DEVELOPMENT							
2903	CEDT	13.87	3.00	3.00	3.00	8.00	4.00	4.00
1500	NCST	5.56	1.50	1.50	1.50	6.30	2.60	2.60
2907	Sustainability Support Scheme-IMPACT	3.39	1.70	1.70	1.70	1.37	1.37	1.37
2910	Manpower Dev. for Software Export	5.00	5.50	5.50	5.50	6.00	6.00	6.00
2920	Special Manpower for ASIC Design	0.91	1.10	1.10	1.10	2.00	2.00	2.00
2940	Employment Generation for SC/ST,	1.96	1.00	1.00	1.00	3.00	3.00	3.00
	Backward Region							
	HRD Sub-Total	**30.69**	**13.80**	**13.80**	**13.80**	**26.67**	**18.97**	**18.97**
	IV. RURAL DEVELOPMENT							
2300	El. for Rural+Knowledge Based Enterprise	1.75	1.50	1.50	1.50	12.94	4.00	4.00
	V. MISCELLANEOUS					0.00	0.00	
4000	Headquarter (Secretariat & Bldg.)	5.01	8.00	8.00	8.00	10.00	10.00	10.00
5500	Tech. Information and Forecasting in Electronics	0.39	0.00	0.00	0.00	0.50	0.50	0.50
6800	Electronics Industry Information Prog.	0.04	0.15	0.15	0.15	0.25	0.25	0.25
6810	Industrial Trade and Policy System	0.05	0.15	0.15	0.15	0.10	0.10	0.10
6820	Electronic Commerce & IT Security	0.00	0.50	0.50	0.50	4.50	4.50	4.50
6830	Policy & Economic Analysis in IT Sector	0.00	0.00	0.00	0.00	0.60	0.60	0.60
	Miscellaneous Total	**5.49**	**8.80**	**8.80**	**8.80**	**15.95**	**15.95**	**15.95**
	SUB-Total (I to V)	**215.39**	**252.41**	**125.48**	**125.48**	**335.90**	**245.79**	**243.69**
	VI. PSUs							
100	E T & T Ltd.	0.00	8.52	8.52	8.52	0.10	0.10	0.10
200	Semiconductor Complex Ltd.	0.00	9.27	0.02	0.02	0.06	0.06	0.06
300	CMC Ltd.	14.05	69.53	0.00	0.00	16.00	0.00	
	PSUs Sub-total	**14.05**	**87.32**	**8.54**	**8.54**	**16.16**	**0.16**	**0.16**
	Total	**229.44**	**339.73**	**134.02**	**134.02**	**352.06**	**245.95**	**243.85**
	VII. NIC	**143.60**	135.98	135.98	135.98	175.05	175.05	172.00
	VIII. ESC	**1.00**	0.00	0.00	0.00	7.95	4.00	4.00
	IX.North East Component		30.00	30.00	30.00			
	Grand Total	**374.04**	**505.71**	**300.00**	**300.00**	**535.06**	**425.00**	**419.85**