CHAPTER 7

INFRASTRUCTURE DEVELOPMENT

7.1 ENERGY

(i) POWER

1. Availability of reliable Power is a vital prerequisite for sustained economic growth and development. India has made substantial progress in the development of power sector since Independence. As a result, the installed generation capacity which was only 1300 MW at the time of Independence, has gone up to more than 1,00,000 MW today. Along with the growth in installed generation capacity, there has been a phenomenal increase in transmission & distribution capacity also. Despite these achievements, the country continues to face energy and peaking shortages.

2. In spite of State Electricity Boards (SEBs) having a greater role in the generation and supply of power, in the past , their financial health has been a matter of concern. This is mainly due to subsidised tariff for Agriculture and Domestic Consumers and high T& D losses in the system, which often disguise large scale theft, low billing and poor collection.

3. During Ninth Plan number of policy initiatives were taken namely; setting of Regulatory Commission at Centre and State level, unbundling /corporatisation of SEBs in to separate companies for generation, transmission and distribution, drafting of new electricity bill to replace the existing laws relating to electricity and one time settlement of outstanding dues of CPSUs etc. However, private investors continue to have apprehension about the bank ability of the SEBs In fact, it has been one of the main reasons for short- fall in capacity addition during the Ninth Plan. The capacity addition achieved during the Ninth Plan was only 19015 MW only (47.2% of the target) as against the capacity addition target of 40245 MW. The improvement in PLF from a level of 64.4% in 1996-97 to 69.9% in 2001-02 has been a facilitating factor in managing the peak and energy shortages in the country.

4. Tenth Plan envisages a capacity addition programme of 41110 MW . To achieve the Tenth Plan objectives, the Government proposes to take a number of new policy initiatives and is committed to carry forward Power Sector Reforms (PSR) aggressively to improve the financial health of the SEBs and make the sector competitive and viable. Some of the key reform objectives are : (a) rationalising power tariff and making tariff setting process transparent, b) encourage competition and private participation in each element of the electricity value chain and carry forward reforms in distribution sector through redesigning APDP as APDRP (Accelerated Power Development and Reform Programme) with provision for release of funds linked to achievement of certain parameters and bench mark etc.

REVIEW OF ANNUAL PLAN 2001-02

Generation of Electricity (Utilities)

5. Against a target of 539.5 Billion Units (BU), actual generation during the year was 515.271 BU, representing a marginal shortfall of 0.5 %. In the case of the hydel and thermal generation the achievement was 88.9% and 96.3% respectively. However, the nuclear generation exceeded the target by 7.7%. The total generation during 2001-02 was higher than that in 2000-01 by 3.1%.

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

7. The source-wise generation targets and achievements for 2001-2002 with actual for 2000-2001 and projections for 2002-2003 in respect of utilities are given in Table 7.1.1

Table 7.1.1

Source-wise Electricity Generation

(Million Units)

Source	2000-2001 Actual	2001-2002 Target	2001-2002 Actual	2002-2003 Target
Hydro	74481	83241	73992	82814
Thermal	408139	438356	422001	445558
Nuclear	16928	17903	19278	17180
Total	**499548**	**539500 ***	**515271**	**545552**

*Target revised

8. The region-wise break-up of actual generation in 2001-2002 is given in Annexure 7.1.1

9. During 2001-2002, the target for All India Plant Load Factor (PLF) was 69.9% for thermal stations. As against this, the achievement based on Actual-cum-Assessment was 69.9%. Table 7.1.2 gives the sector-wise break-up of PLFs for the year 2000-2001 (Actual), 2001-2002 (Target) and (Actual) and 2002-2003(Target). The target and achievement in regard to PLF for all State Electricity Boards, Central Power Organisations and Private Sector are indicated in Annexure 7.1.2

Table 7.1.2

Sector-wise Plant Load Factor (%)

Sector	2000-2001 Actual	2001-2002 Target	2001-2002 Achievement	2002-03 Target
Central Sector	74.3	72.8	74.3	74.8
State Sector	65.6	67.9	67.0	68.2
Private Sector	73.1	73.3	74.7	74.0
All India	**69.0**	**69.9**	**69.9**	**70.8**

Addition in capacity

10. The target for addition to generating capacity during 2001-2002 was 4764.70 MW against which the achievement was 3115.20 MW (65.4%) as given in the Table 7.1.3. This comprised 656.1 MW capacity (2 units of 250 MW each at Suratgarh TPP St-II and 156.1 MW from Hazira CCPP) commissioned outside the programme.

Table 7.1.3

Addition in Capacity (MW)

Source	2000-2001 Actual	2001-2002 Target	2001-2002 Achievement	2002-2003 Target
Hydel	1285.00	1536.20	1106.20	607.00
Thermal	2173.97	3228.50	2009.00	3502.10
Nuclear	440.00	0.00	0.00	0.00
Total	**3898.97**	**4764.70**	**3115.20**	**4109.10**

11. The project-wise details of achievements are given in Annexure 7.1.3. There were 25 generating units totaling 2340.6 MW which have slipped from 2001-2002 generating capacity addition programme. This comprised 445 MW of hydro (10 generating units) and 1895.6 MW of thermal(15 generating units). The complete list is at Annexure 7.1.4.

Transmission & Distribution

12. The programme and achievement in respect of construction/ energisation of 800 KV/ 400 KV/ 220 KV transmission lines is given in Table 7.1.4.

Table 7.1.4

Transmission Lines additions

(Ckt. kms)

Transmission Lines Additions	2000-2001 Actual	2001-2002 Target	2001-2002 Achievement	2002-2003 Target
+/- 500 KV HVDC		680	800	636
800 KV	375	224	51	173
400 KV	2091	1780	1780	3198
220 KV	3674	4240	3543	3024

Renovation & Modernization (R&M)

13. Since 1984 Renovation & Modernization is considered as the most cost-effective option to maximize the generation from the existing generation capacity. Phase-I of R&M Programme taken up in September 1984 for execution during the Seventh Plan covered 163 thermal units with a total capacity of 13,570 MW at 34 selected power stations in the country. The programme was successfully completed in the year 1991-92 at a total cost of

Rs. 1066 crore. An average additional generation of 10,000 MU/Year was achieved as against the targeted benefits of 7000 MU/Year after completion of the programme.

14. Encouraged with the results of Phase-I of the R&M programme, Phase-II was taken up in 1990-91 for 44 Thermal Power Stations comprising 198 units with a total capacity of 20,870 MW. The Programme was estimated to cost Rs. 2383 crore and was scheduled to be completed during the Eighth Plan. An additional generation of 7864 MU/Year was anticipated after completion of the programme. However, many utilities could not implement their, R&M Schemes on schedule, due to non-availability of funds.

15. As a result, by the end of Eighth Plan, only around 50% of the works could be completed yielding an additional generation of 5000 MU/year. The remaining R&M activities under Phase II, were taken up during the Ninth Plan period. The works for 153 thermal units are at various stages of completion and is anticipated to be completed during the Tenth Plan period.

16. By the end of the 9^h Plan, Life Extension Work on 28 units (with a total capacity of 1981 MW) was taken up. Out of this, 19 units have been completed and the remaining 9 units, it is anticipated to be completed by March, 2003. The life of the units covered by the programme is likely to be extended by 12-15 years.

17. Constraints on the R&M and Life Extension Programmes

- Non-availability of timely and adequate funds due to poor financial health of most SEBs/ Utilities.
- Delay in obtaining loans from PFC due to non-fulfilment of loan conditionalities.
- Procedural delays in formulation of schemes and finalisation of orders by SEBs/ Utilities.
- Reluctance on the part of the State Electricity Board to undertake renovation and modernization as this leads to the units going out of the system temporarily thereby lowering generation.

18. In the Ninth Plan, 36 Hydro schemes (23 under Phase-I and 13 under Phase II), with an aggregate installed capacity of 9,001 MW, were identified for Renovation, Modernization and Uprating (RM&U) work at an estimated cost of Rs. 917.30 crore. The (RM&U) programme was estimated to add 1,609 MW of capacity and enhance generation by 4,987 MU.

19. Of these 36 schemes, RM&U work has so far been completed on 18 hydro schemes with an aggregate installed capacity of 4,860 MW at an estimated cost of Rs. 554 crore and benefits expected to accrue are to the tune of 1,123 MW/3,350 MU. Of the remaining 18 RM&U schemes, five, with an aggregate installed capacity of 369 MW, have been declared “closed” and work on four, with an aggregate installed capacity of 380 MW, is yet to commence. The balance nine schemes, with an aggregate installed capacity of 3,392 MW, are under various stages of implementation.

Financial Performance of SEBs

20. The SEBs continue to incur commercial losses which is a matter of concern. Commercial losses of SEBs without subsidy increased from the level of Rs. 11305 crore in 1996-97 to Rs. 25394.89 crore in 2000-01. The estimates for 2001-02 (RE) and 2002-03 (AP) asses these losses at Rs. 27560.68 crore and Rs. 24164.94 crore respectively. The internal resource of the SEBs continued to be negative. As per the resource discussions 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 (-) 15620.60 crore in 2000-01 (RE). In the year 2001-2002, it was expected to be Rs.(-) 19103.90 crore.

21. In case the SEBs are to achieve break-even i.e. 0% ROR in 2001-2002, they would have to raise average tariff on an All-India basis by 110 paise/unit over the current average tariff. This would yield additional revenue of as much as Rs.33177 crore. For achieving 3% ROR, the average tariff on All-India basis has to be increased by 117 paise/unit and it would yield additional revenue of Rs.35433 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. 1984 crore in the year 2001-2002.

Power Sector Reforms

22. 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 center and also to create appropriate incentive for efficiency in each area. A brief on the status of reforms is given below :

23. Central Electricity Regulatory Commission formed under the provisions of Electricity Regulatory Commissions Act, 1998 has been made fully functional. The Commission has passed orders on Availability Based Tariff and has also brought out terms and conditions for determination of tariff. Ninteen States namely, Orissa, Haryana, Andhra Pradesh, Uttar Pradesh, Karnataka, West Bengal, Tamil Nadu, Punjab, Delhi, Gujarat, Madhya Pradesh, Arunachal Pradesh, Maharashtra, Rajasthan, Himachal Pradesh, Assam, Chhatisgarh, Kerala and Uttarnchal have either constituted or notified the constitution of SERC. SERCs of Orissa, Andhra Pradesh, Uttar Pradesh, Maharashtra, Gujarat, Haryana, Karnataka, Rajastjan, Delhi, Madhya Pradesh, Himachal Pradesh and West Bengal have issued tariff orders.

24. Orissa, Haryana, Andhra Pradesh, Uttar Pradesh, Karnataka, Rajasthan, Madhya Pradesh and Delhi have enacted their State Electricity Reforms Acts which provide, interalia, for unbundling/corporatisation of SEBs, setting of SERCs, etc. The SEBs of Orissa, Haryana. Andhra Pradesh, Karnataka, Uttar Pradesh, Rajasthan and Delhi have been unbundled/corporatised. The distribution companies formed after unbundling in the States of Orissa and Delhi have been privatized.

25. Hundred per cent metering of 11 KV feeders have either been completed or is in the final stages of completion in Goa, Maharashtra, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Lakhsdweep, Haryana, Himachal Pradesh, Delhi, Uttar Pradesh, Madhya Pradesh, Rajasthan and Punjab. The Ministry of Power has signed memorandums of

understanding (MoUs) with 20 States to undertake reforms in a time-bound manner. These MoUs provide for time-bound metering in two phases i.e. (i) metering of 11 KV feeders and (ii) all consumers. Monitoring is being done to ensure that the agreed milestones are achieved.

Electricity Bill 2001

26. The draft Electricity Bill, 2001 has been introduced in the Parliament. The new Electricity Bill would replace the existing three laws relating to electricity, namely :-

- The Indian Electricity Act, 1910 as amended from time to time.
- The Electricity (Supply) Act, 1948 as amended from time to time.
- The Electricity Regulatory Commission Act, 1998.

Accelerated Generation & Supply Programme (AG&SP) Scheme

27. AG&SP Scheme was initiated in the financial year 1997-98 of the Ninth Plan and was extended upto the end of the Ninth Plan. The scheme provided incentives in the form of interest subsidy to SEBs/states and central power utilities. This has helped in carrying out power development activities particularly in the state sector. The capacity addition in the state sector achieved was around 88 per cent of the target, in which the contribution of AG&SP was around 55 per cent. The scheme has also given boost to the renovation and modernization (R&M) programme during the Ninth Plan period. The additional generation due to the incentives given through AG&SP is estimated to be about 10,000 MU/annum. It has been proposed to be extend the AF&SP scheme to the Tenth Plan period with some modifications.

Accelerated Power Development and Reforms Programme (APDRP)

28. A scheme on Accelerated Power Development Programme (APDP) was initiated in the financial year (2000-01). In order to give a fillip to the reform process in the power sector, one of the main strategies identified in this regard is development of distribution plans/projects for all distribution circles as centers of Excellence that can be replicated by the States in the later phase of distribution reforms. Sixty-three such circles under APDP funding have been taken up initially, which envisages 11 KV feeders metering, improvement/strengthening of sub-transmission & distribution network, 100% metering, establishing of a MIS system to improve billing, collection etc. To ensure better Utilization of funds for reforms, an Accelerated Power Development and Reforms Programme (APDRP) has been formulated by making certain modifications in the APDP scheme. It is aimed at promoting investment for distribution reforms. The funding under APDRP is proposed to be 50 per cent on investment stream and 50 percent on incentive stream. The focus is to ensure that investment must result in quantifiable physical and financial benefits in the selected circles.

29. In order to avail of transition assistance, the States may have to achieve minimum eligibility as shown below :

- The State should have set up a State Electricity Regulatory Commission (SERC)

- SEB/Utility should have filed its first tariff petition before SER.
- SEB/Utility should have achieved a minimum of prescribed percentage reduction in cash losses compared to the previous year.

30. An amount of Rs. 1000 crore and Rs. 1500 crore were provided during the year 2000-01 and 2001-02 respectively. As against this, an amount of Rs. 854.30 crore and Rs. 477.60 crore were utilized during the year 2000-01 and 2001-02 respectively. For the Annual Plan 2002-03, i.e. the first year of Tenth Plan, an amount of Rs. 3500 crore has been provided under the APDP scheme.

Thrust Areas and Objectives of the Tenth Five Year Plan (2002-07)

31. The Tenth Five Year Plan envisages the following key reform objectives

- Rationalizing power tariffs and making the tariff setting process ransparent;
- Reflecting cost of service in the tariffs and transferring all subsidies explicitly to State budgets;
- Improving efficiency in all the three segments viz. generation, transmission and distribution either by creating separate profit centers with full accountability within the vertically integrated structure, or unbundling - SEBs into generation, transmission and distribution entities or through other model of reform depending on the choice of the State Government;
- Encouraging competition and private participation in each element of the electricity value chain;
- Instituting open access by separating the carriage (transmission & distribution network) from the content (power and energy) thereby enabling customers to source their requirements from the most efficient source;
- Strengthening the transmission & distribution system to reduce losses, improve metering, instituting energy audits and improving billing & collection.
- Redesigning APDP as APDRP (Accerlated Power Development and Reform Programme) with provision for release of funds linked to achievement of certain parameters and benchmarks;
- Integrating captive generation (especially co-generation) into the power system.
- Stepping up public funding for the sector even as steps are taken to attract private investment.
- Encouraging NTPC to take up projects through joint venture with private promoters and the State Governments.

Tenth Plan Targets

32. The Tenth Plan (2002-07) envisaged a capacity addition of 41,110 MW. Of this, 22,832 MW (55.6%) in Central Sector, 11,157 MW (27.1%) in the State Sector and 7,121 MW (17.3%) is expected to be added in the Private Sector as given in Table 7.1.5.

Table 7.1.5

Sector-wise / Mode-wise Capacity Addition During the Tenth Plan (MW)

Source	Central	State	Private	Total
Hydro	8742	4481	1170	14393
Thermal	12790	6676	5951	25417
Nuclear	1300	—-	—-	1300
Total	**22832**	**11157**	**7121**	**41110**

Annual Plan 2002-03

Generation of Electricity (Utilities)

33. The total electricity generation in utilities in 2002-03 is targetted at 545.552 BU (Table 7.1.1). Region-wise details are given in Annexure 7.1.1.

34. The total generation envisaged for 2002-03 is 1.12 % higher than the target for the preceding year. The overall Plant Load Factor envisaged is 70.8%. Additional Energy of about 1.4 BU is also expected to become available from the Chukha Hydel Project in Bhutan.

Addition in Capacity

35. The target for addition to installed capacity during 2002-03 is 4109.10 MW (Table 7.1.3). This includes the projects aggregating to 893.6 MW capacity slipped over from 2001-02.

36. The total additional generating capacity targeted for 2002-03, a capacity of 1170 MW in the Central Sector, 1147.10 MW in the State Sector and 1792 MW in the Private Sector is expected to be commissioned. The scheme-wise details of additions to installed capacity during 2002-03 are indicated in Annexure 7.1.5.

Plan Outlay

37. The total expenditure in the power sector (including Rural Electrification) during 2001-02 is estimated around Rs. 26309 crore against the Approved Outlay of Rs.27993 crore, as shown in Table 7.1.6.

Table 7.1.6

Annual Plan Outlays

(Rs. crore)

Annual Plan Outlays	**2000-01 Revised Estimates**	**2001-2002 Approved Outlay**	**2001-2002 Revised Estimates**	**2002-2003 Approved Outlay**
States & U.Ts @	14134.88	15146.30	13431.62	Yet to be finalized
Central Sector @ (Actual)	7931.51	12846.37	12877.23	15491.72
Total (All India)	**22066.39**	**27992.67**	**26308.85**	

@ The details are given in Annexure 7.1.6.

38. The utilization of other provisions excluding Rural Electrification (RE) component, available for development programme in the power sector, is given in Table 7.1.7.

Table 7.1.7

Utilization of other provisions

(Rs. crore)

Utilization of other provisions	**2000-01 Actual Expenditure**	**2001-2002 Approved Outlay**	**2001-2002 Anticipated Expenditure**	**2002-2003 Approved Outlay**
Power component of Special Area Programme of North Eastern Council (NEC)	328.62	154.31	228.89	57.50

Captive Power

39. The addition to installed capacity in respect of Non-Utilities during 1999-2000 was about 569 MW. With this addition, the total installed capacity of such plants (including Railways) is estimated to have gone upto 14660 MW (covering captive plants of 1 MW capacity and above) by the end of March, 2000. The generation from Non-Utilities in 1999-2000 was placed at 51.525 BU approximately.

Externally Aided Power Projects

40. The year-wise allocation and actual utilization of external assistance during the Ninth Plan period for power projects under Ministry of Power through bilateral and multilateral arrangements are indicated in Table 7.1.8.

Table 7.1.8

Year-wise Allocation and Actual Utilization During 1997-98 to 2001-02

(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**
1999-00			
Central Sector	1724.69	1491.92	86.50
State Sector	1948.82	1751.05	89.85
Total	**3673.51**	**3242.94**	**88.28**
2000-01			
Central Sector	1284.64	1694.42	131.90
State Sector	2220.36	1855.84	83.58
Total	**3505.00**	**3550.26**	**101.29**
2001-02			
Central Sector	1675.43	2336.09	139.43
State Sector	2392.14	1651.67	69.05
Total	**4067.57**	**3987.76**	**98.04**

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.

Zero Based Budgeting (ZBB)

41. The ZBB exercise for the Ministry of Power (MOP) was undertaken by the Planning Commission in consultation with the Ministry for the Annual Plan (2002-03) with a view to achieving the objectives of convergence, retention, retention with modifications, transfer to States and weeding out of the Central Sector Scheme and Centrally Sponsored Scheme (CSS) under MOP. A summary of the same is given in table 7.1.9. The scheme-wise details are given in Annexure 7.1.7.

Table 7.1.9

Summary of ZBB exercise of Ministry of Power (MOP)

Sl. No.	Category	No. of Schemes	
		Central	CSS
1	Schemes to be retained	5	Nil
2	Schemes to be merged	3/8	Nil
3	Schemes to be weeded out	10	1
4	Total Ninth Plan Schemes	23	1
5	Schemes continuing in the Tenth Plan	8	Nil

Private Participation in Power Sector

42. 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.

43. The initial response of domestic and foreign investors to the policy of private participation in the power sector had been encouraging. However, many projects have encountered unforeseen delays in the finalization of power purchase agreements, guarantees and counter-guarantees, environmental clearances, matching transmission networks and legally enforceable contracts for fuel supplies. One of the most important impediments to private participation was the bankruptcy of the monopoly purchaser – the SEBs. This necessitated complex payment security mechanisms for achieving financial closure. Further, the high tariff of power from some of the commissioned independent power projects (IPPs) due to factors such as high cost of liquid fuels, risk factors involved and unrealistic forecast for future growth of demand etc. have prevented full utilization of available capacities. With the power sector reforms already set in motion, these problems are expected to be sorted out in due course.

- The policy of inducting private investment into the power sector, initiated in 1991, was expected to result in the addition of 17, 588 MW of power capacity in the Ninth Plan. The actual achievement was 5,061 MW, a mere 29 per cent of the target. The achievement ratio for the central and state sectors comparatively were higher at 38 per cent and 88 percent respectively. The main impediments have been :

    (i) The chronic financial weakness of SEBs.
    (ii) Unviable tariffs to IPPs, due to factors such as high cost of liquid fuels, risk factors involved and slow growth in demand for future power below the expected levels etc.
    (iii) The absence of an enabling regulatory, legislative and market environment.
    (iv) The slow pace of reform in the power sector and related sectors such as coal, transport.
    (v) The inability to deliver bankable contractual frameworks.

44. The status of private power projects as on 1st February, 2002 in table 7.1.10

Table 7.1.10

Status of private power projects as on 1st February, 2002

Description	Number	Capacity (MW)
Projects techno-economically cleared by CEA	58	29,614.50
Private power projects fully Commissioned	15	4,427
Private power projects under construction	7	3,432

45. In addition, 18 private projects not requiring techno-economic clearance of the CEA, with a total capacity of about, 2,340 MW, have been commissioned and two projects with total capacity of 36 MW are under construction.

Energy Conservation

46. The Government has enacted the Energy Conservation Act, 2001 which provides for :

(i) The establishment of Bureau of Energy Efficiency (BEE) by merger of existing Energy Management Center (EMC) under Ministry of Power.
(ii) Declaring user or class of users of energy as designated consumer.
(iii) Laying down minimum energy consumption standards and labeling for identified appliances / equipments and norms for industrial processes for energy intensive industries.
(iv) Formulation of energy consumption codes.
(v) Establishment of Energy Conservation Fund both at the Central and state Levels
(vi) Penalties and adjudication. No penalties would be effective during the first five years as the initial period of five years would be promotional and creating infrastructure for the implementation of the Energy Conservation Act, 2001.
(vii) The BEE would facilitate the evolution of a self-regulatory system and organizations that will regulate on their own because saving energy also makes good commercial sense.

47. The Bureau of Energy Efficiency (BEE) has become operational and has brought out an Action plan for implementing projects and programmes on efficient use of energy and its conservation. This Action Plan includes the formation of task forces in Cement, Pulp and Paper, Textile, Fertilizer, Chlor-Alkali and Aluminium industry sectors. Cement, Pulp and Paper and Textile industry sectors will be notified as “designated consumers”. Energy Audits will be conducted for these designated consumers by the accredited energy auditors. The Action Plan, in addition to the activities mentioned above will also contain medium and long term activities. The Action Plan would also address the issues relating to other thrust areas like Demand Side Management (DSM), Standards and Labelling Programme, Energy Efficiency in Buildings and Establishments, Energy Conservation Building Codes, Professional certification and Accreditation, Manuals and Codes, Energy Efficiency Policy Research Programme, School Education, Delivery Mechanism for Energy Efficiency Services etc.

Review of Annual Plan 2001-02 and Programmes for 2002-03

48. During 2001-02, budget allocation of Rs.9.60 Crore was made for promoting energy conservation activities and Rs.28.00 lakhs for grants-in-aid to Energy Management Center (EMC). A number of pilot projects / demonstration projects were taken up for load management and energy conservation through reduction of T&D losses in the system. An amount of Rs.50.00 Crore has been given as budget estimate for Bureau of Energy Efficiency (BEE) for 2002-03 to implement various programmes of energy conservation.

Rural Electrification Programme

49. There are 5.87 lakh villages in the country as per 1991 Census. By the end of March, 2002, 5.09 lakh villages have been electrified achieving a national average of 86.7%. 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 31.3.2002 a total of 130.84 lakh pumpsets have been energized in the country against the total estimated potential of 195.94 lakhs which amounts to 66.8% 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 remaining villages feasible to be electrified by grid by the end of the 10^{th} (2002-2007) Plan. The left out remote villages which are not feasible to be connected to the grid will be electrified by decentralized energy sources like solar, small hydro and biomass and this work will be completed by the end of the 11^{th} Plan i.e. 2007-2012.

50. 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. In addition, from the year 2002-03 onwards the Minimum Need Programme (MNP) component of rural electrification has been given adequate importance and it has been desired that the funds would be disbursed to the eligible States in the grant loan ratio of 90:10 in the case of Special Category States and 30:70 for Non-Special Category States. The quantum of funds provided for this programme has also been increased to the level of Rs.600 crores during the current Annual Plan (2002-03) as against the earlier level of Rs.175 crores. The funds under PMGY and the MNP components would be utilisedfor the electrification of unelectrified villages whereas the other R.E. works like system improvement, load intensification, household electrification etc. would be done by the State Govts. by availing loans out of Rural Infrastructure Development Fund (RIDF) and loans given by REC. The proposal of Ministry of Power to provide interest subsidy for the RIDF scheme has been agreed in principle and the rate of interest subsidy is in the process of finalisation.

New and Renewable Sources of Energy

51. 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 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, 2001, the contribution of power generation from renewables has reached 3400 MW representing 3.5% of total installed generating capacity. Of this, wind power alone accounts for a major share with 1507 MW, while biomass power and cogeneration accounts for 400 MW and small hydro 1423 MW.

Review of Annual Plan 2001-2002

52. Under the National Project on Biogas Development (NPBD), a target to install 1.80 lakh family size biogas plants was set for 2001-2002 with a budget estimate of Rs. 59.50 crores. Upto December 2001, 75,000 plants had already been installed and target is expected to be achieved. During 2001-2002 against the target of 17.55 lakh improved chulhas to cover 10,000 villages, around 7 lakh chulhas have been installed upto the end of December, 2001 and the balance target is expected to be achieved during the year. Under the National Biomass Gasifier Programme, during 2001-02, against the targrt of 7 MW (equivalent) gasifier systems 2.635 MW (equivalent) capacity has been installed in various States including Andhra Pradesh, Gujarat, Tamil Nadu and West Bengal. Under the Solar Photovoltaic Lighting Programme, the targets set for the year 2001-02 were 85,000 solar lanterns, 35,000 solar home lighting systems, 3,000 street lighting systems and solar power plants of equivalent capacity of 220 KWp. Againt these targets, up to 31st December, 2001 31,998 solar lanterns, 24,782 home lighting systems, 547 street lights and solar power plant of 40 KWp aggregate capacity have been installed. The targets are likely to be achieved in full. Under power generation programme, 167 MW of wind power and 66 MW of biomass power (co-generation) have been installed during the year. In the case of small hydro power during 2001-02 MNES has supported Small Hydro projects aggregating to 60.15 MW have been commissioned up to December, 2001. The achievements in the other programmes of MNES are also satisfactory. The physical and financial progress of the programmes were regularly reviewed in the Annual Plan and quarterly review meetings in the Planning Commission with the participation of the other concerned Ministries.

53. Zero Based Budget (ZBB) exercise for the Ministry of Non-Conventional Energy Sources (MNES) was undertaken during Annual Plan 2001-02. An exercise for convergence, retention, retention with modifications, transfer to States and weeding out of the Central Sector / Centrally Sponsored Schemes (CSS) under MNES was carried out by the Power & Energy Division in consultation with MNES. Accordingly, a large number of schemes implemented by the MNES at present numbering around 35 are converged under 12 major schemes. Apart from this, 2 nos. of CSS under MNES have been identified to be transferred to the States. One scheme viz. Animal Energy has now been discontinued in view of the reason that the scheme is not making any headway in a significant manner

while under implementation by MNES. A summary of the same is given in table 7.1.11. Scheme-wise details are given in Annexure 7.1.8

Table 7.1.11

Summary of ZBB exercise of Ministry of Non-Conventional Energy Sources (MNES)

Central Sector Schemes to be continued	Centrally Sponsored Schemes (CSS) identified for transfer to States	Central Sector scheme weeded out
1. National Project on Biogas Development (NPBD) 2. Wind Power 3. Small Hydro Power 4. Biomass Power 5. Solar Power 6. Village Electrification Programme 7. Research, Design & Development (RDD) 8. Awareness & Extension (includes IREP) 9. Infrastructure Development and Capacity Building 10. Institutional Support Scheme 11. Indian Renewable Energy Development Agency (IREDA)	1. National Programme on Improved Chulhas (NPIC) 2. Community / Institutional Biogas Plants	1. Animal Energy Programme

Annual Plan 2002-2003

54. The total outlay of MNES for 2002-2003 is approved for an amount of Rs. 1101.48 crores (Rs.625.00 crores of Gross Budgetary Support and Rs.476.48 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.625.00 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 1.70 lakh family size biogas plants, 20 lakh improved chulhas to cover 10,000 villages, 80,000 solar lanterns, 45,000 home lighting systems, 1000solar generators, solar power plants equivalent to 0.45 MW, 1200 SPV pumps, 300 MW of wind power, 150 MW of biomass power, 7 MW equivalent biomass gasifier systems, 80 MW small hydro power and 20 MW equivalent capacity of energy from urban and industrial wastes. Approximate renewable energy potential vis-a-vis achievements are indicated in Table 7.1.12.

Table 7.1.12

Renewable Energy Potential & Achievements

Source/System	Approximate Potential	Cumulative Achievements (Upto 31.12.2001)
Biogas Plants (No.)	120 lakh	32.75 lakh
Improved Chulha (No.)	1200 lakh	338.00 lakh
Biomass	19,500 MW	400.80 MW
Solar Photovoltaic	20 MW/sq.km.	82 MWp
Solar Thermal Systems	1400 lakh sq.m.	6.0 lakh sq.m
Solar Water Heating	collector area	collector area
Wind power	45,000 MW	1507 MW
Small Hydro Power	15,000 MW	1423 MW
Urban and Municipal Wastes	1700 MWe	17.10 MWe

(II) COAL AND LIGNITE

Review

55. Annual Plan 2001-02 was the terminal year of the Ninth Plan (1997-2002). A brief review of the IX Plan performance is given below. The performance of the Annual Plan 2001-02 is discussed along with the Annual Plan 2002-03.

56. The Ninth Plan envisaged augmenting domestic coal production with a long-term perspective keeping in view the sharply increasing demand for the power sector through improved productivity, capacity utilisation, technology adaptation, simplified project clearance procedures, improved project implementation, exploration, conservation etc. An important area of the Plan concerns restructuring the coal sector and facilitating private sector participation in commercial coal mining by means of necessary legislative amendments. The Plan laid emphasis on Clean Coal Technologies (CCT), Science & Technology (S&T) in the coal industry, development of Coal Bed Methane resources, augmentation of port and rail infrastructure facilities for improved coal movement and development of lignite resources.

57. Lower than expected economic growth and non-materialisation of new coal based power generation capacity affected coal offtake and coal production. As against the MTA's revised target of growth of 4.6% in coal demand the anticipated growth in the IX Plan is 3.32%. Similarly, the anticipated growth in coal production is 2.4% against the MTA's revised growth target of 2.86%. The coal production from captive blocks has also fallen short of the envisaged targets.

58. Lignite production from Neyveli Lignite Corporation (NLC) fell short of IX Plan target due to delays in implementation of major ongoing projects and the lignite production registered a growth of 0.17% against the envisaged growth of 4.90%.

59. Presently, private sector is permitted in coal mining limited to captive consumption. As this has not yielded the desired results it was proposed in the IX Plan to allow private sector in commercial coal mining. However, the Bill to amend the Coal Mines (Nationalisation) Act 1973 for permitting private sector in commercial coal mining has not come through. Also, the proposed restructuring of CIL to do away with the holding company structure and to give autonomy to the individual coal subsidiaries for bringing in competition, has not taken place. The coal prices were decontrolled totally. VRS has been introduced for rationalising manpower in loss making coal companies. However, revival of loss making coal companies has not taken place.

60. The anticipated cumulative IX Plan expenditure is about 74% of the Plan outlay. The main reasons for shortfall in expenditure have been shortfall in IR generation and not taking up of the envisaged new projects in view of sluggish demand and reduction in capital requirement in case of Singareni Collieries on account of offloading of OB removal and not procuring the HEMM departmentally and delay in implementation of major projects in NLC.

Annual Plan 2002-03

61. The Annual Plan 2002-03 is the first year of X Five Year Plan covering the period 2002-03 to 2006-07. Accordingly, the following emanates from the X Plan thrust areas and Programmes.

Coal Demand

62. As against the anticipated coal offtake/consumption of 348.43 mt of raw coal (excluding 4.93 mt of washery middlings) in 2001-02 the terminal year of the IX Plan, the estimated coal demand in the terminal year 2006-07 of the X Plan is 460.50 mt (excluding 5.24 mt of middlings). This implies a compound annual growth rate of 5.74% in coal demand in the X Plan against an anticipated growth of 3.32% during the IX Plan. Of this estimated demand, 37.21 mt (8%) is of coking coal for steel sector for a hot metal production programme of 25.59 mt in 2006-07 and 423.29 mt (92%) is of non-coking coal. About 69% of the total estimated demand is for power sector utilities and includes the demand for a projected incremental coal based generation capacity addition of 18308 MW and an overall coal based generation programme of 452 billion Kwh in 2006-07. About 5% is for cement sector related to a cement production programme of 153.50 mt. About 6% for captive power and the remaining about 12% is for other sectors.

63. For the Annual Plan 2002-03, a coal demand of 363.30 mt (excluding 4.93 mt of washery middlings) has been assessed. This includes 249.50 mt (excluding 3.3 mt washery middlings) for the power sector for a coal based thermal generation programme of 353.52 BU and an incremental coal based generation capacity of 960 MW in 2002-03. The demand for steel sector has been assessed at 34.40 mt of raw coal corresponding to a hot metal production of 24.31 mt in 2002-03. For cement sector the coal demand has been assessed at 17.10 mt for a targeted cement production of 121 mt in 2002-03. The details of coal demand/offtake are given in the Table-7.1.13.

Table 7.1.13

Sectoral Coal Demand/Offtake

(in million tonnes)

Sl. No	Sector	Ninth Plan				Tenth Plan		
		2000-01	2001-02		% ACGR	2002-03	2006-07	% ACGR
		Actual	Target	Anticip-ated		Target	Projected	
	Coking Coal							
1	Steel	28.76	32.21	29.75		32.90	35.32	
2	Coke Ovens	0.50	1.91	0.66		1.50	1.89	
	Sub-Total	29.26	34.12	30.41	-2.77	34.40	37.21	4.12
	Non-Coking							
3	Power Utilities	237.03	241.54	241.19	3.92	249.50	317.14	5.63
		(2.49)	(2.78)	(3.27)		(3.27)	(3.74)	
4	Cement	14.68	17.00	15.00	5.75	17.10	24.56	10.36
5	Steel DR	3.72	3.48	5.16	21.36	4.00	7.00	6.29
6	Railways	0.01	0.01	0.00	0.00	0.00	0.00	
7	Fertilisers	3.18	3.50	3.10	-6.68	3.50	4.18	6.16
8	LTC/Soft Coke	-	-	*	-	-	0.20	
9	Cokeries/Coke Oven (NLW)	1.40	1.40	*	-	-	1.50	
10	Export	0.04	0.07	0.02	-	0.05	0.10	
11	Captive Power	16.03	21.11	18.39	3.75	21.15	28.26	8.97
	(1.28)	(1.35)	(1.45)		(1.55)	(1.40)		
12	BRK & Others	33.00	29.56	33.00	5.55	31.10	37.85	2.78
	(0.77)	(0.70)	(0.22)		(0.11)	(0.10)		
13	Colliery consumption	2.19	2.50	2.17	-8.54	2.50	2.50	2.87
	Sub-Total							
	Non Coking:	**311.28**	**320.17**	**318.03**	**4.04**	**328.90**	**423.29**	**5.88**
		(4.53)	**(4.83)**	**(4.93)**		**(4.93)**	**(5.24)**	
	Grand Total:	**340.54**	**354.29**	**348.44**	**3.32**	**363.30**	**460.50**	**5.74**
		(4.53)	**(4.83)**	**(4.93)**		**(4.93)**	**(5.24)**	

Note : 1. Figures in brackets are washery middlings and are not included in totals.

2. * Included in BRK & Others.

Coal Production

64. The coal production target in the terminal year 2006-07 of the X Plan is set at 405 mt against an anticipated coal production of 325.65 mt in 2001-02 implying annual compound growth of 4.46% in the X Plan against 2.4% anticipated in the IX Plan. This comprises 350 mt from the coalfields of CIL, 36.13 mt from SCCL, 5.24 mt from TISCO, 2.4 mt from Other PSUs like IISCO, DVC, BSMDCL etc., 6.73 mt from Captive Block holders and 4.5 mt from private sector of Meghalaya State. The incremental coal production in the X Plan is 79.35 mt against 39.56 mt in the IX Plan. This comprises of 71 mt from CIL, 5.13 mt from SCCL and 3.22 mt from others. Of the 71 mt of incremental production from CIL, the major incremental contribution is from SECL – 21.55 mt, MCL – 21.5 mt, NCL – 8.5 mt and CCL – 10.3 mt.

65. The coal production target for Annual Plan 2002-03 has been set at 335.70 mt against the anticipated coal production in 2001-02 of 325.65 mt. The details of company-wise coal production are given in the Table-7.1.14 .

Table –7.1.14

Coal Production

(in million tonnes)

Company	Ninth Plan				Tenth Plan		
	2000-01	2001-02		% ACGR	2002-03	2006-07	%
	Actual	Target	Anticipated		Target	Projected Target	ACGR
ECL	28.03	28.50	28.50	-0.79	29.00	31.00	1.70
BCCL	25.97	30.00	27.50	0.27	28.00	33.00	3.71
CCL	31.75	36.00	33.00	0.50	34.25	43.30	5.58
NCL	41.40	41.50	43.50	3.28	44.00	52.00	3.63
WCL	35.20	35.00	36.50	3.17	37.00	37.50	0.54
SECL	60.33	63.00	63.00	2.64	65.25	84.55	6.06
MCL	44.80	44.50	46.50	4.47	48.00	68.00	7.90
NEC	0.66	0.50	0.50	-7.79	0.50	0.65	5.39
CIL:	268.14	279.00	279.00	2.17	286.00	350.00	4.64
SCCL	30.27	32.38	31.00	1.53	32.50	36.13	3.11
TISCO/ ISCO/DVC	7.33	7.60	7.55	2.33	7.60	7.64	0.24
Captive	3.83	3.75	4.00	-	5.50	6.73	10.97
Others	4.07	NA	4.10	5.02	4.10	4.50	1.88
Total:	313.64	322.73	325.65	2.40	335.70	405.00	4.46

66. Only 36% of the envisaged coal capacity addition materialised during the IX Plan. As against the envisaged contribution of 60 mt of coal production from new projects from CIL and SCCL, projects yielding a production capacity of only 21.62 mt (CIL 17.16 mt capacity from 37 projects and SCCL 4.46 mt capacity from 10 projects) have been sanctioned during the IX Plan. This slow rate of capacity addition is likely to affect the coal availability in the X Plan and beyond.

67. In the X Plan of the envisaged total coal production of 386.13 mt from CIL & SCCL, 83.12 mt (CIL 79.11 mt; SCCL 4.01 mt) or about 22% is to come from 115 new projects (CIL - 98 projects for a total capacity of 197.40 mt and an estimated capital investment of Rs.23159.24 crore; SCCL -17 projects for a capacity of 4.13 mt and a capital investment of Rs.2116.96 crore), which are to be taken up during the X Plan. The contribution from new projects in 2002-03 from CIL is 7.01 mt and SCCL 0.10 mt. Unless these projects come up, it will be difficult to meet the requirements from domestic sources and the preparedness of the coal companies in realising this production needs to be ascertained. The contribution from captive blocks is only 2% of the total targeted production of 405 mt in 2006-07. This implies an urgent need to encourage private participation for augmenting coal production from domestic sources. The category-wise coal production is given in Table-7.1.15

Table –7.1.15

Category-wise Coal Production

(million tonnes)

Category	CIL	SCCL	TISCO/ IISCO/DVC	Captive Blocks	Meghalaya	Total
Existing	25.50	3.87	7.55	4.00	4.10	45.02
Completed	200.81	19.03	-	-	-	219.84
Ongoing	44.59	9.22	-	-	-	53.81
New	79.11	4.01	0.09	2.73	0.40	86.34
TOTAL:	**350.00**	**36.13**	**7.64**	**6.73**	**4.50**	**405.00**

68. As against the anticipated washed coking coal production of 5.19 mt from CIL in 2001-02, the target of washed coking coal production in 2006-07 is fixed at 5.96 mt and for Annual Plan 2002-03 at 5.38 mt. There is dire necessity to improve the situation of declining production of washed coking coal from domestic sources by undertaking modernisation of all the coking coal washeries and converting them into multi-product washeries suiting to the raw coal feed and specifications of the steel sector for improved financial viability.

69. Similarly for complying with the requirement of MOEF's directive a number of non-coking coal washeries would need to be set up in the X Plan**.**

Demand Supply

70. The estimated raw coal demand of 460.50 mt in 2006-07 is proposed to be met through a domestic production of 405.00 mt leaving a gap of 55.50 mt. It is proposed to

import 24.18 mt (5.4% of total demand) comprising 17.18 mt of coking coal for steel sector, 3.7 mt of non-coking coal for power sector and 3.3 mt of non-coking coal for cement sector as against a total likely import of 19.6 mt (5.6% of demand) in 2001-02 (Coking coal – 10.8 mt, Non-coking coal - 8.8 mt). This would still leave a gap of 31.32 mt, which emphasizes the need for augmenting domestic coal production with private participation.

71. Similarly the estimated raw coal demand of 363.30 mt for **2002-03** is proposed to be met through a domestic coal production of 335.70 mt leaving a gap of 27.60 mt. The proposed imports of coking coal for steel are 16.78 mt and non-coking coal 6.33 (Power- 3.13 mt; Cement- 3.20 mt) totaling to 23.11 mt would still leave a gap of 4.49 mt. Considering a stock liquidation of 0.40 mt from CIL the gap would be about 4 mt.

Productivity

72. To improve the overall productivity of men and machinery certain steps like rationalisation of manpower through implementation of Voluntary Retirement Scheme (VRS), decommissioning of uneconomic mines, prioritizing the investment programme, improving the utilisation of capital intensive HEMM, etc have been taken up during the IX Plan. As a result the overall productivity in CIL and SCCL, which was standing at 1.86 t (UG – 0.57 t; OC – 5.12 t) and 1.34 t (UG – 0.72 t; OC – 6.25 t) at the beginning of the IX Plan has improved to 2.44 t (UG – 0.66 t; OC – 6.41 t) and 1.55 t (UG – 0.81 t; OC – 7.00 t), respectively. The improvement in Out Put per Manshift (OMS) is primarily the result of improvements at OC mines. The UG productivity needs to be further improved. In case of HEMM, the norms prescribed earlier by CMPDIL are under review by a Committee of DOC whose report is awaited.

73. Against an anticipated overall OMS of 2.44 t (UG-0.66t, OC-6.41t) in CIL in 2001-02 the projected OMS in 2006-07 is 3.55t (UG-0.88t, OC-9.25t). For the Annual Plan 2002-03 the target of OMS is 2.58t (UG-0.69t, OC-6.86t).

74. In case of SCCL against the anticipated overall OMS of 1.55t (UG-0.81t, OC-7.0t) the projected OMS in 2006-07 is 1.77t (UG-0.94t, OC-7.31t). For the Annual Plan 2002-03 the target of OMS is 1.66t (UG-0.84t, OC-7.98t).

75. Bench marking of operations with regard to productivity, capacity utilisation, investment etc. in coal companies is important for the operations. Need for independent auditing of the operations, efficiency of investment and resources was identified as the requirement for understanding the productive investment of resources for making the coal companies competitive.

Lignite

76. Against the initially envisaged lignite production target of 22 mt in 2001-02 for NLC, the Annual Plan 2001-02 target was set at 17.50 mt matching the requirements of down stream units. The anticipated lignite production from NLC in 2001-02 is 17.50 mt. The growth in NLC's lignite production in the IX Plan has been 0.17% only against the envisaged growth of 4.9%. This has been mainly due to delay in commissioning of ongoing TPS-I Expansion project, Mine-I Expansion project and Mine-1A project.

77. The projected demand for lignite in the country in 2006-07 is 57.79 mt of which the demand for power generation is 49.34 mt (85.4%) and other sectors 8.45 mt (14.6%). Of this, the demand on the part of NLC is 27 mt and the production target for NLC in 2006-07 is fixed at 27 mt.

78. The target of lignite production for Annual Plan 2002-03 from NLC is 19.95 mt.

Project Implementation

79. Land acquisition, forestry clearance, rehabilitation, equipment supplies, availability of funds, inadequate geological studies, improper project formulation, etc. continue to cause delays in the implementation of coal projects, deration of capacity of some projects and some foreclosures. The decision of DOC to only undertake projects yielding an IRR of 16% or more has also affected a number of technically viable coal projects. However, DOC has reviewed this decision at the end of the IX Plan and lowered the hurdle IRR to 12%.

80. There appear to be repeated instances of projects, which are formulated with low initial specific investments only to be revised subsequently with significant cost overruns and delays. While this in itself is cause for concern, what is even more worrisome are repeated instances of a third level of revisions which essentially lower production estimates for varying technical and non-technical reasons resulting in even higher specific investment costs. This pattern appears consistently across projects promoted by ECL & BCCL and hinders proper assessment and utilisation of limited resources. This establishes a need for reviewing project formulation practices of the coal companies. The problems of mutation & transfer of land by the State Governments need to be addressed in the right perspective for meaningful implementation of coal projects by coal companies. Similarly, the aspects of grant/renewal of lease by State Governments are also equally important to reduce time delays in case of new projects. With regard to environmental and forestry clearances, it was opined earlier that a single window system with specific time frame was essential. However, there is no improvement in this regard and it continues to take unduly long time for clearance of new projects. Further, charging of the “expectation value” towards forestland by the State Governments is becoming a hurdle in project implementation and coal companies are made to pay huge amounts in this regard adding to the cost of the projects over and above the cost of afforestation.

Coal & Lignite Reserves

81. As against the coal reserve inventory of 204.65 bt (Proved – 72.73 bt; Indicated – 89.84 bt; Inferred – 42.08 bt) at the beginning of the IX Plan, the reserves of coal as on 1.1.2001 stand at 220.98 bt [Proved - 84.4 bt (38%); Indicated - 98.5 bt (45%); Inferred - 38.00 bt (17%)]. Of the 84.4 bt of proved coal reserves, the estimated extractable reserves are 17.96 bt (21%) only. Similarly, the reserves of lignite in the country as on 1.1.2001 are estimated to be 34.61 bt against 27.45 bt during the beginning of the Plan. There is a need to upgrade the available coal reserves to proved and extractable reserves.

Zero Based Budgeting

82. A review of all the central schemes under DOC on a Zero based budget methodology with a view to ascertaining whether they require continuation in the X Plan and, if so, if

they also require any modification and changes was carried out in the Planning Commission in consultation with DOC. Accordingly, the schemes, namely, R&D/S&T, Coal Controller Organisation, Promotional Exploration, Detailed Exploration in Non-CIL blocks, VRS have been agreed to be continued in the X Plan. However, the schemes of Environmental Measures and Subsidence Control (EMSC) and Rehabilitation, control of fire & subsidence in Jharia and Raniganj Coalfields have been merged under one scheme, namely, EMSC for continuation in the X Plan and the scheme of IT has been taken out of Plan schemes.

Promotional Exploration

83. In order to accelerate the pace of Regional Exploration in coal & lignite and the subsequent detailed exploration for projectisation of reserves to match the rapidly increasing demand for coal during the Seventh Five Year Plan and after, a separate fund under a plan scheme namely “Regional/Promotional Exploration” was created by the Planning Commission under the budget of the Department of Coal, in 1989-90.

84. Against IX Plan target of drilling for promotional exploration of 7.75 lakh meters, the anticipated cumulative achievement is 6.59 lakh meters and 24 bt of coal reserves and 25.44 bt of lignite reserves have been established. The target of drilling for promotional exploration for Annual Plan 2001-02 was 1,55,000 meters. Against this, the anticipated achievement is 1,20,300 meters.

85. For promotional exploration during the Tenth Plan, a drilling target of 3.3 lakh metres for coal and 2.7 lakh metres for lignite totaling to 6.0 lakh metres has been set. About 994 sq. km. area will be covered for coal and a reserve of 6.68 bt of coal is planned to be established during the X Plan. This work will be carried out by GSI, CMPDI and MECL with funding from DOC. In addition to the drilling programme a scheme to create coal & lignite database for consolidating the data generated by various exploration agencies for facilitating future decisions has been proposed to be taken up under Promotional Exploration. Similarly, studies for Coal Bed Methane (CBM) for collection of desorption data on CBM from boreholes drilled under Promotional Exploration programme has also been proposed.

86. The target of drilling for promotional exploration for Annual Plan 2002-03 is set at 1,20,300 meters.

Detailed Drilling in Non-CIL Blocks

87. This scheme was taken up in IX Plan through budgetary support in order to reduce time lag between allotment of mining blocks to the private entrepreneurs and the coal mining operations and thus to make up the gap between the demand and availability of coal. A target of 3.63 lakh meters was set for drilling under this scheme during the IX Plan. Against this, the anticipated achievement is 2.76 lakh meters and 1.99 bt of coal reserves are likely to be established. The target of drilling for Annual Plan 2001-02 under this scheme was 1.49 lakh meters, which is likely to be achieved.

88. For the Tenth Plan, a target of 2.13 lakh meters has been set for detailed drilling in Non-CIL blocks, which will lead to establish 3.58 bt of coal reserves. The target of drilling for Annual Plan 2002-03 is set at 0.42 lakh meters.

Science & Technology (R&D)

89. The Research & Development Programme in coal sector gained importance after nationalisation of coal industry. The programme was initiated in the year 1975. The Standing Scientific Research Committee (SSRC) was set up in DOC under the chairmanship of Secretary (Coal) and members from other Government Departments & Industry. SSRC is assisted by four Sub-Committees, namely, Production, Productivity & Safety; Coal Beneficiation; Coal Utilisation; and Environment & Ecology.

90. Though Research & Development (R&D) has been a thrust area in the Ninth Plan, not much of progress has taken place in coal sector S&T. As a result, the outlays provided remained un-utilised to a large extent and the cumulative utilisation is only about 26%. However, amongst others, two important projects, namely, coal bed methane extraction in collaboration with UNDP & GEF and Washing of Low Volatile Medium Coking Coal have been taken up for demonstration under Coal Sector S&T Grants.

91. The three pronged approach envisaged in the IX Plan i.e. (i) Coal S&T programme under SSRC to continue (ii) in-house R&D programme with coal companies and (iii) Inter-Sectoral Research - Technology Advisory Committee (IS-STAC), would continue in the X Plan also. The major identified issues under the thrust areas for coal S&T programme are – coal gasification, coal washing, beneficiation of low volatile coking coals (LVMC), coal liquefaction, fluidised bed combustion, sequestration of CO_2 in control of green house gas and extraction of CBM, etc. DOC has to identify and formulate new schemes matching the thrust areas under S&T.

Environmental Measures and Subsidence Control (EMSC)

92. This scheme was introduced in the Eighth Plan for improvement of environmental conditions in the mined out areas and mitigation of problems arising out of subsidence and fire in Raniganj and Jharia coalfields. However, the utilisation of the outlays provided is only about 43%. DOC has to identify new schemes to be taken up during the X Plan under EMSC.

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

93. Based on the recommendations of the High Level Committee, DOC formulated this scheme in the IX Plan considering the urgency for shifting of population from unsafe areas in ECL (Raniganj Coalfield) and BCCL (Jharia Coalfields) and forms a part of the Master Plan. The utilisation of the outlays provided is only about 17%. This scheme has been merged with EMSC scheme from 2002-03 onwards.

Information Technology

94. This scheme was introduced by MOC in 1999-2000, under the head of IT defining its 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 DOC. The estimated cost of the scheme is Rs. 1.94 crore. This scheme is phased over five years. After ZBB Exercise this has been taken out of Plan schemes with effect from 2002-03.

Voluntary Retirement Scheme (VRS)

95. This scheme was introduced in the IX Plan for improving the financial health of loss making coal companies by means of rationalisation of manpower by making available required funds through NRF initially, which was, later supported by extending budgetary support. To begin with it was started in ECL and BCCL, which was extended to CCL later on. It was planned to retire 44,400 employees (ECL – 19200; BCCL – 19200; CCL – 6000) in all. The anticipated achievement is retirement of 37,380 persons (85%) under this scheme during the IX Plan.

96. As against the target of retiring 11,500 persons (ECL – 4500; BCCL – 4500, CCL – 2500) in 2001-02, the anticipated achievement is 10850 (ECL –4350, BCCL – 3600, CCL – 2900). The target for X Plan is retiring of 15,500 persons (ECL – 4000; BCCL – 9000; CCL – 2500). For Annual Plan 2002-03, a target of retiring 7,485 employees (ECL-3125, BCCL-3635, CCL-725) is fixed.

Monitoring Mechanism

97. With a view to ensuring timely and effective implementation of projects and Central Sector Schemes of Coal Sector, Quarterly Performance Review (QPR) Meetings have been introduced in the Planning Commission in addition to the QPR Meetings being held in the Ministry.

Policy Measures

98. During the Ninth Plan, the Government implemented the recommendations of the Committee on ‘Integrated Coal Policy’. The coal prices have been deregulated and the Bill for permitting private sector in commercial coal mining is before the Parliament. However, implementation of the other recommendations with regard to setting up of independent body, allocation of coal blocks for exploration and mining, establishing regulatory authority etc. are contingent on the approval of the Bill.

99. The IX Plan laid emphasis on making the coal sector competitive by restructuring the coal producing PSUs. It was proposed to extend more autonomy to coal producing PSUs and to do away with the holding company structure. The capital restructuring of both CIL and SCCL was done at the beginning of the IX Plan and again during the IX Plan. Some coal PSUs have started posting profits and paying taxes and dividends to the Government. However, some inherently sick coal companies like ECL and BCCL could not be revived and are currently before BIFR. More importantly, rationalisation of manpower has been taken up by implementing Voluntary Retirement Scheme (VRS) in these coal companies. Of late, CCL has also started posting losses and implementation of VRS has been extended to CCL. The proposal of doing away with the holding company structure has not been implemented. Though the prices of all grades of coal stand decontrolled, however, in view of the fact that coal still remains under Essential Commodities Act, selling of coal by private parties is not permitted. The royalty rate on lignite has been revised.

100. The huge outstanding coal sale and power sale dues are adversely affecting the financial health of the coal companies and the envisaged securitisation of dues has not taken place. The domestic coal is getting outpriced due to high rail freights when compared

to the imported coal particularly in the coastal regions. This is because of cross subsidy by Railways. There is need for rationalising rail freight rates for coal.

101. Continuation of reforms initiated earlier need to be intensified in the X Plan. Expeditious passing of the pending coal bill for permitting private sector in non-captive coal mining, restructuring of coal PSUs by doing away with CIL, the holding company and making subsidiary coal companies of CIL independent for promoting competition and improving performance, setting up of an independent body for allocating coal blocks for both exploration and exploitation, installing regulatory authority/mechanism, undertaking all the required legislative amendments including that of labour laws, land acquisition, etc. are critical for proper development of the coal sector.

Coal Bed Methane (CBM)

102. Coal Bed Methane is emerging as a new source of commercial energy in the country. It is estimated that there exists a potential of about 850 billion cu m of CBM in the country. The IX Plan laid emphasis on the exploration and exploitation of CBM. The Government in July 1997 approved the policy for exploration and exploitation of CBM. Pursuant to this, necessary steps to implement the policy were initiated and blocks for exploiting CBM potential have been offered. The X Plan will continue to lay emphasis on development of CBM in the country in view of its large potential as a domestic source of clean commercial energy. Further, CO2 sequestration has been identified as an important area of development in the coal sector.

Safety & Welfare

103. During the IX Plan certain important areas for safety in coalmines had been identified and the same are under implementation. The fatality rate in CIL for the year 2001 is reported as 0.27 per million tonne of coal production excluding the unfortunate Baghdigi disaster in BCCL, in which 29 persons were killed due to inundation. Similarly, the fatality rate in SCCL is reported as 0.99 per million tonne of coal production in the year 2001. Some of the major thrust areas identified for safety in coal mines for the X Plan are – (i) installation of environmental Tele-Monitoring Systems (ETMS) in mines; (ii) digitizing mining plans at area level for identification of water danger from adjoining mines, checking correlation survey and estimating thickness of barriers; (iii) replacement of timber support by steel support; (iv) improved self-rescuers; etc.

104. The housing satisfaction has reached a level of 75% in CIL and about 50% in SCCL. A total population of 23.24 lakh has been covered under water supply scheme in CIL and 6.5 lakh in SCCL till 2001-02. 87 hospitals with 5965 beds in CIL and 7 hospitals with 1070 beds in SCCL are in operation. In addition to this, 436 dispensaries in CIL and 43 dispensaries in SCCL are also functioning. During the X Plan, increasing the housing satisfaction in the coalfields and water supply facility to cover additional population is envisaged.

Externally Aided Projects

105. The major projects availing EAP component during the IX Plan have almost been completed and some residual amount is spilling over to X Plan. An amount of Rs.15.48

crore towards the Coal Sector Environment and Social Mitigation Project of CIL has been provided in Annual Plan 2002-03 against the RE provision of Rs. 66.52 crore in 2001-02. Similarly the residual component of World Bank loan for coal sector rehabilitation project of CIL of Rs. 26.67 crore has been provided in Annual Plan 2002-03 against the RE provision of Rs. 183.40 crore in 2001-02.

Plan Outlay

106. For Annual Plan 2001-02, an outlay of Rs.3977.15 crore including Rs.538.84 crore for NLC (Power) was provided to DOC. As against this, the RE provision for 2001-02 has been Rs.3127.69 crore including Rs.494.96 crore for NLC (Power). With this, the cumulative expenditure during the IX Plan works out to Rs.14387.72 crore and forms about 74% of the IX Plan outlay of Rs.19441.59 crore for DOC. Broadly, the Plan expenditure suffered due to not taking up of envisaged new coal projects, reduction in capital requirements due to recourse to offloading of overburden removal by SCCL instead of doing the same by procuring HEMM departmentally, delay in implementation of projects etc.

107. As against the RE provision of Rs.3127.69 crore for 2001-02, the outlay provided for Annual Plan 2002-03 for DOC is Rs.3491.47 crore. This comprises an outlay of Rs.292.72 crore for NLC (Power). The outlay for 2002-03 is planned to be financed through an IEBR of Rs.3164.47 crore, EAP of Rs.15.48 crore and DBS of Rs.311.52 crore. The budgetary provision is mainly for the Central Sector Schemes under DOC including Voluntary Retirement Scheme (VRS). There is no DBS provision for PSUs. The company-wise/ scheme-wise details are given in Table 7.1.16.

Table-7.1.16

Companywise/Schemewise Financial Outlays

(Rs. Crore)

Company/Scheme	2000-01 Actual	2001-02		2002-03 BE
		BE	RE	
Coal India Ltd.	1059.32	2309.90	1540.00	2190.00
Singareni Coll. Co. Ltd.	194.10	355.00	290.00	405.00
Neyveli Lignite Corp. (Mines)	591.53	449.97	401.81	292.23
Science & Tech.	0.16	11.92	1.71	7.76
Regional/Promotional .Expl.	30.37	32.26	35.21	49.19
EMSC	10.00	12.17	5.41	34.65
Detailed drilling in Non-CIL Blocks	10.00	37.27	50.00	13.92
Rehab. Project	0.50	7.24	8.04	0.00
Information Tech.	0.33	0.39	0.55	0.00
VRS	140.03	156.99	300.00	206.00
Total Coal & Lignite	**2036.34**	**3373.11**	**2632.73**	**3198.75**
Neyveli Lignite Corp. (Power)	469.49	538.84	494.96	292.72
NEC	57.14	65.20	*	*
Total DOC	**2562.97**	**3977.15**	**3127.69**	**3491.47**

Note:- * The provision for NEC in RE 2001-02 and BE 2002-03 is included in the provision of individual schemes.

Emerging Issues/Thrust Areas

108. The following issues/thrust areas need to be addressed during Annual Plan 2002-03/ Tenth Plan for proper development of Coal Sector in the Tenth Plan period and beyond.

- Continuation of reform process and facilitating private sector participation in commercial coal mining with a view to gaining access to latest technologies for coal exploration, production and utilisation and to encouraging competition.
- Expeditious passing of pending Coal Mines (Nationalisation) Amendment Bill for permitting private sector in non-captive mining.
- Restructuring the coal sector by doing away with CIL, the holding company, and providing more autonomy to individual coal producing companies for promoting competitiveness, revival of loss making coal companies, etc.
- Setting up of an independent Regulatory Authority to oversee the introduction of competition in each segment of the coal production & supply chain, resolution of disputes and allocation of coal blocks both for exploration and exploitation.
- Amendments to Contract Labour (Regulation & Abolition) Act, 1970 for facilitating offloading of certain activities in coal mining.
- Coal to be removed from the List of Essential Commodities in order to allow free sale and to withdraw Colliery Control Order 2000 along with the Coal Control Orders of the State Governments.
- Rationalisation of rail freight rates for coal movement.
- Need for rationalising import duty on coal for improving competitiveness of the Sector.
- Mechanism for expeditious clearance of huge coal dues from SEBs for improving financial health of coal sector PSUs.
- Augmentation of coal production capacity to meet the projected demand of power sector in particular and other end use sectors in general.
- Intensification of exploration and upgradation of coal reserves to proven and recoverable category in the context of the energy security net of the country.
- Improvement of environmental aspects and promotion of clean coal technologies – beneficiation of non-coking coal for power generation; development of coal bed methane; CO_2 sequestration; coal gasification; IGCC and FBC route of power generation, development of slurry transportation, etc.
- Promoting washed coking coal with adoption of better technologies and making domestic product competitive for steel sector with a view to reduce import dependence.
- Development of port and rail infrastructure for coal movement and to reduce dependence on road transportation and promoting other modes of coal transportation.
- Rapid development and utilisation of lignite resources both for power generation and industrial purposes.
- Development of in-house R&D.
- Need for improving the productivity & capacity utilisation.
- Pricing and grading of coal on Gross Calorific Value (GCV).

(III) PETROLEUM AND NATURAL GAS SECTOR

109. Petroleum & Natural Gas sector plays a vital role in the economic growth of the country. Presently, about 44.9% (36.0% for oil and 8.9% for natural gas) of the total primary commercial energy needs of the country are met by oil and natural gas. Natural gas is emerging as the preferred fuel of the future in view of it being an environmental friendly and desirable feedstock. Against the world trend of increasing use of natural gas, the scope of increasing share of natural gas is limited in India, unless some large finds of gas become available or there is large scale import of natural gas/liquified natural gas (LNG).

110. With the projected increase in demand of petroleum products and stagnating indigenous production of crude oil, the import dependence has been increasing over the years. Therefore, there is a need to increase indigenous production of oil and gas.

111. The increasing imports of crude oil, the proposed LNG imports during the Tenth Plan, high price volatility in the international markets and disruption of supplies due to war etc. raise the issue of oil security. Oil security is proposed to be ensured through strategic storage of crude oil and petroleum products, diversification of oil imports and investing in equity oil abroad.

112. During the Ninth Plan the growth in petroleum products is lower than the targets mainly due to slow down of the economy, improvement of roads (including construction of bridges and by-passes), introduction of fuel efficient vehicles, increasing share of service sector, especially Information technology (IT) and e-commerce in GDP.

Policy Initiatives and Measures Taken

113. Reforms in the petroleum sector initiated in the Ninth Plan were carried forward which facilitated dismantling of the APM w.e.f. 1.4.2002, and opening the way for the entry of new players into marketing of transportation fuels.

114. In view of the strategic importance of oil sector in the economy, there is a need to restructure the public sector undertakings in the oil sector to have the required strength to compete with MNCs. Following restructuring, the disinvestment process will be carried forward in selected oil and gas PSUs during the Plan period to enhance competition and maximise shareholder value.

115. With a view to reduce vehicular emissions, a number of steps such as introduction of lead free & low benzene petrol and low sulphur diesel oil were initiated during the Ninth Plan. The product quality upgradation would further be carried out to meet the emission norms of Bharat stage II & III norms. For this purpose, the further reduction in sulphur content for diesel oil and blending of petrol with ethanol would be taken up during the Tenth Plan.

116. Several measures have been initiated to intensify exploration and enhance hydrocarbon reserves. These include exploration and development of new fields, additional development of existing fields, implementation of Enhanced/Improved Oil Recovery, induction of specialised technology and encouraging participation of private and joint

venture companies in the exploration programme through various rounds of bidding announced by the Government of India including the New Exploration Licensing Policy (NELP). The NELP provided attractive incentives and level playing field with the private parties that bid for exploration blocks under international competitive bidding process.

117. Under the first round of NELP (January 1999), 48 blocks were offered. Out of these, 25 blocks were awarded. The Government of India has since signed Production Sharing Contracts for 24 out of 25 blocks with national and private oil companies. The second round of NELP was announced in December 2000 wherein 25 blocks were offered, out of which 23 blocks were awarded to various private and public oil companies. The third round of NELP was announced in March 2002 wherein 27 blocks – 9 in deep water, 7 in shallow water and 11 in on land areas, have been offered for international bidding.

Objectives of the Tenth Plan

118. The Tenth Plan has the following major objectives:

- To make the industry internationally competitive so that it becomes a global player.
- Creation of competition among the oil companies with the objective to protect consumer interests.
- Benchmarking of the petroleum sector/companies against international standards.
- To pursue extensive exploration in non-producing and frontier basins including deep sea offshore area.
- To acquire foreign exploration acreage and discovered oil/gas fields.
- Setting up of a regulatory framework.

Thrust Areas

119. Keeping in view the above objectives, the following thrust areas have been identified for the Tenth Plan.

- Oil Security
- Infrastructure development
- Efficiency Improvement
- Environment & Quality Improvement
- Restructuring/Disinvestment

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Demand and Consumption of Petroleum Products

120. The consumption of petroleum products during 2001-02 was 100.43 million tonnes against consumption of 100.08 million tonnes during 2000-01. The demand for petroleum

products in 2002-03 is estimated to be 101.72 million tonnes indicating an anticipated growth in consumption of about 1.27% over the previous year.

Exploratory and Development Drilling

121. The actual achievement during 2000-01, targets and anticipated achievements for 2001-02, targets for 2002-03 in respect of exploratory and developing drilling are given in Annexure 7.1.9. The achievement in exploratory drilling for 2001-02 is anticipated to be 451.95 thousand meters which is almost in line with the achievement in the previous year. The achievement for development drilling in 2001-02 is anticipated to be 384.97 thousand meters. The targets for exploratory and development drilling for 2002-03 are kept at 476.81 thousand meters and 466.46 thousand meters respectively.

Production of Crude Oil and Natural Gas

122. The production of crude oil for 2001-02 including production from joint venture/private sector companies, was 32.03 MMT against the target of 32.50 MMT. The crude oil production target for 2002-03 is 33.08 MMT showing an increase of about 3.3% over the previous year. The details of crude oil production are at Annexure 7.1.10.

123. The Natural Gas production for 2001-02 was 29.69 BCM against the target of 29.76 BCM. The target for 2002-03 has been fixed at 31.37 BCM indicating a growth of 5.7% over 2001-02. The details of natural gas production are at Annexure 7.1.11.

Refining Capacity

124. Since the refinery sector has been de-licensed, it is not possible to correctly assess the future plans of refining capacity additions. The projection of total refining capacity materialization during the Tenth Plan would depend upon several factors including domestic demand, duty structure that would affect import and export possibilities and refining margins.

125. The refining capacity as on 1.4.2002 is 116.07 million tonnes per annum (MMTPA) against 112.54 MMTPA as on 1.4.2001 i.e. an addition of 2.13 MMTPA (as shown in Annexure 7.1.12). The refining capacity is likely to increase from 114.67 MMTPA (as on 1.4.2002) to 117.87 MMTPA as on 1.4.2003 i.e. an addition of 3.13 million tonnes. The increase is projected to be on account of expansion of refining capacity at Haldia and Barauni refineries.

Regulatory Mechanism

126. An independent statutory regulator for the downstream petroleum sector will be set up to ensure fair competition that protects the consumer interest.

Environment concerns

127. Presently, the product quality requirements in India are ahead of most of the countries in the Asia Pacific and the Middle East regions. Government of India constituted a Committee of Experts for recommending an Auto Fuel Policy for the country including major

cities and other related issues. The Committee submitted its Interim Report on 1.1.2002. The Government has since accepted the recommendations contained in the Interim Report of the Committee.

128. In order to enable adoption of Bharat Stage-II vehicular emissions standards throughout the country and Euro-III equivalent emission norms in seven mega cities from April 2005, quality of petrol and diesel would need to be further improved. For this purpose, measures such as further reduction of sulphur content need to be taken in a time bound manner.

129. On the basis of the positive feed back from the three pilot projects – two in Maharashtra and one in U.P., it has been decided to introduce mandatorily Ethanol blended petrol (5% gasohol) – in the first phase in 8 sugar-producing states of Andhra Pradesh, Gujarat, Karnataka, Punjab, Haryana, Maharashtra, Tamil Nadu and U.P. by the end of the year 2002 and in the rest of the country, in the second phase. In addition, an Inter-Ministerial Task Force has been constituted to prepare a road map to switch over to Ethanol blending with diesel and also for 10% blending of Ethanol with Petrol.

Outlay

130. An outlay of Rs.17183.26 crore(BE) has been provided for 2002-03 for the Petroleum and Natural Gas Sector (Rs.11366.26 crore for Exploration and Production of Oil and Gas, and Rs.5817.00 crore for Refining and Marketing). The company-wise outlays for 2000-01 (actual), 2001-02 (BE and RE) and 2002-03 (BE) are given at Annexure 7.1.13. The entire Plan outlay of the sector is proposed to be met from the internal and extra budgetary resources of Public Sector Undertakings. In view of the low utilisation of plan funds in Ninth Plan, all efforts need to be made to stick to the approved cost and time schedule for the project through regular monitoring so as to fully utilise the outlay.

Annexure-7.1.1

Energy Generation in 2000-01, 2001-02 and 2002-03 (Utilities)

Year	Type		Region					All India
			Northern	Western	Southern	Eastern	N-Eastern	
1	2	3	4	5	6	7	8	9
2000-2001								
	Hydro		29126	7072	30283	5809	2191	74481
	Thermal	Actual	108515	149408	93819	53436	2961	408139
	Nuclear		6616	5913	4399	-	-	16928
	TOTAL		**144257**	**162393**	**128501**	**59245**	**5152**	**499548**
	Hydro		31598	9326	32990	6703	2624	83241
	Thermal	Target	112775	165848	102144	54022	3567	438356
	Nuclear		8316	4842	4925	-	-	17903
	TOTAL		**152689**	**180016**	**140059**	**60725**	**6191**	**539500**
2001-2002								
	Hydro		29221	7777	27000	7840	2154	73992
	Thermal	Actual	113801	151024	98340	55739	3097	422001
	Nuclear		8001	6050	5227	-	-	19278
	TOTAL		**151023**	**164851**	**130567**	**63579**	**5251**	**515271**
2002-2003								
	Hydro		31248	9382	31329	7197	3658	82814
	Thermal	Target	118127	155073	110584	58330	3444	445558
	Nuclear		7280	5800	4100	-	-	17180
	TOTAL		**156655**	**170255**	**146013**	**65527**	**7102**	**545552**

Annexure 7.1.2

Plant Load Factor of Thermal Power Plants during the year 2001-2002

Sl. No.	SEB/ Organisation	Target	Achievement
	State Sector		
1	**2**	**3**	**4**
1	D.V.B.	51.90	45.20
2	H.P.G.C.	58.00	60.50
3	RRVUNL	82.20	84.80
4	P.S.E.B.	73.80	79.20
5	UPRVUNL	60.90	59.70
6	G.E.B.	68.90	66.30
7	GSECL	80.20	85.20
8	M.S.E.B.	73.40	74.50
9	M.P.E.B.	74.10	63.00
10	C.S.E.B.	67.30	71.30
11	APGENCO	83.00	86.30
12	T.N.E.B.	82.70	78.00
13	K.P.C.L	86.10	81.10
14	B.S.E.B.	13.60	14.50
15	JHARKHAND	21.50	21.00
16	Tenughat V	39.40	31.50
17	O.P.G.C.	76.10	70.70
18	W.B.S.E.B.		38.30
19	WB.P.DEV.CORP	52.40	51.70
20	D.P.L.	41.60	30.40
21	A.S.E.B.	23.40	16.80
Average : SEB's		**67.90**	**67.00**
* Bendal and Santadhih transfer to WBPDC w.e.f. 1.7.2001			
Central Sector			
1.	NTPC (STPS)	77.70	80.10
2.	Badarpur	82.60	85.50
3.	Neyveli	77.00	79.50
4	D.V.C.	37.80	33.60
Average: Central Sector		**72.80**	**74.30**
Private Sector (Utilities)			
1	A.E. Co./Sabarmati	82.30	82.30
2	Trombay (TATA)	66.30	72.00
3	CESC/Titagarh	72.60	69.00
4	BSES Co.	84.00	86.50
Average:Private (Utilities)		**73.30**	**74.70**
Average: All India		**69.90**	**69.90**

Annexure 7.1.3

Generating Units Commissioned/Rolled during the year 2001-2002

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implementing Agency	Units Rolled/ Commd.	
							Capacity (MW)	Date
1	2	3	4	5	6	7	8	9
NORTHERN REGION								
1.	Pragati CCGT	GT-I	Thermal	State	Delhi	DVB	104.60	15.03.2002
2.	UpperSindh Ext.	2	Hydro	State	J&K	JKPDC	35.00	29.03.2002
3	UpperSindh-II	2	Hydro	State	J&K	JKPDC	35.00	11.09.2001
4	Seva-III	1	Hydro	State	J&K	JKPDC	3.00	18.03.2002
5	Seva-III	2	Hydro	State	J&K	JKPDC	3.00	18.03.2002
6	Seva-III	3	Hydro	State	J&K	JKPDC	3.00	19.03.2002
7	Suratgarh TPP St-II	3	Thermal	State	Raj.	RRVUNL	250.00	29.10.2001
8	Suratgarh TPP St-II	4	Thermal	State	Raj.	RRVUNL	250.00	23.03.2002
9	Malana	1	Hydro	Private	H.P.	MPCO	43.00	05.07.2001
10	Malana	2	Hydro	Private	H.P.	MPCO	43.00	09.07.2001
		Central	**State**	**Private**	**Total**			
	Hydro	0.00	79.00	86.00	165.00			
	Thermal	0.00	604.60	0.00	604.60			
	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(NR)	**0.00**	**683.60**	**86.00**	**769.60**			
WESTERN REGION								
1.	Hazira CCGT	1to 3	Thermal	State	Gujrat	GSES Ltd.	156.10	1.11.01 to 31.03.02
2.	Bansagar Tons Ph-III	2	Hydro	State	M.P.	MPEB	20.00	25.08.2001
3	Bansagar Tons Ph-III	1	Hydro	State	M.P.	MPEB	15.00	18.02.2002
		Central	**State**	**Private**	**Total**			
	Hydro	0.00	35.00	0.00	35.00			
	Thermal	0.00	156.10	0.00	156.10			
	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(WR)	**0.00**	**191.10**	**0.00**	**191.10**			

Annexure 7.1.3 contd.

Generating Units Commissioned/Rolled during the year 2001-2002

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implementing Agency	Units Rolled/ Commd.	
							Capacity (MW)	Date
1	2	3	4	5	6	7	8	9
Southern Region								
1.	Simhadri TPS	1	Thermal	Central	A.P.	NPC	500.00	22.02.2002
2.	Srisailam LBC	2	Hydro	State	A.P.	APGENCO	150.00	29.10.2001
3	Srisailam LBC	3	Hydro	State	A.P.	APGENCO	150.00	29.03.2002
4	Sharavathy tailrace	2	Hydro	State	Kar.	KPCL	60.00	15.05.2001
5	Sharavathy tailrace	3	Hydro	State	Kar.	KPCL	60.00	25.10.2001
6	Sharavathy tailrace	4	Hydro	State	Kar.	KPCL	60.00	30.03.2002
7	Kolpaong	2	Hydro	State	A&N	NHPC	2.60	24.07.2001
8	Kolpaong	3	Hydro	State	A&N	NHPC	2.60	15.08.2001
9	LVS DGPP	DG 1-2	Thermal	Private	A.P.	LVS Power	36.80	18.10.2001
10	Peddapuram CCGT	GT	Thermal	Private	A.P.	BSESAPP	142.00	26.01.2002
11	Tanir Bavi CCGT/ST	1 to 4	Thermal	Private	Kar.	TBPCO	220.00	08.05.2001
12	Pillaiperumanallur PPN CCGT	ST	Thermal	Private	T.N.	PPN Power	105.50	21.11.2002 05.04.2001
13	Samayanallur DGPP	1 to 7	Thermal	Private	T.N.	B. Power	106.00	22.10.2001
		Central	**State**	**Private**	**Total**			
1.	Hydro	0.00	485.20	0.00	485.20			
2.	Thermal	500.00	0.00	610.30	1110.30			
3	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(SR)	**500.00**	**485.20**	**610.30**	**1595.50**			
Eastern Region								
1	Jojobera TPS	2	Thermal	Private	Jharkhand	Jam. Power	120.00	27.08.2001
		Central	**State**	**Private**	**Total**			
1	Hydro	0.00	0.00	0.00	0.00			
2	Thermal	0.00	0.00	120.00	120.00			
3	Nuclear	0.00	0.00	0.00	0.00			
	TOTAL(ER)	**0.00**	**0.00**	**120.00**	**120.00**			

Annexure 7.1.3 contd.

Generating Units Commissioned/Rolled during the year 2001-2002

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implementing Agency	Units Rolled/ Commd.	
							Capacity (MW)	Date
1	2	3	4	5	6	7	8	9
North Eastern Region								
1	Ranganadi	1	Hydro	Central	Ar.Prades	NEEPCO	135.00	14.01.2002
2	Ranganadi	2	Hydro	Central	Ar.Prades	NEEPCO	135.00	14.01.2002
3	Ranganadi	3	Hydro	Central	Ar.Prades	NEEPCO	135.00	21.03.2002
4	Likim-ro	2	Hydro	State	Nagaland	E.Deptt.	8.00	12.09.2001
5	Likim-ro	3	Hydro	State	Nagaland	E.Deptt.	8.00	12.09.2001
6	Leimakhong DG	1 to 3	Thermal	State	Manipur	E.Deptt.	18.00	23,25, 27/03.02
		Central	State	Private	**Total**			
1.	Hydro	405.00	16.00	0.00	421.00			
2.	Thermal	0.00	18.00	0.00	18.00			
3	Nuclear **TOTAL(NER)**	0.00 **405.00**	0.00 **34.00**	0.00 **0.00**	0.00 **439.00**			
		Central	State	Private	**Total**			
	Hydro Thermal Nuclear **TOTAL(All India)**	405.00 500.00 0.00 **905.00**	615.20 778.70 0.00 **1393.90**	86.00 730.30 0.00 **816.30**	1106.20 2009.00 0.00 **3115.20**			

Annexure 7.1.4

Generating Units Slipped from the Programme of 2001-2002

Sl. No.	Name of the Project `	Unit No.	Type	Sector	State	Imple-menting Agency	Capacity (MW)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Neyveli FST Ext.	1	Thermal	Central	T.N.	NLC	210.00
2	Tehri St-I	4	Hydro	Central	Uttaranchal	THDC	250.00
3	Pragati CCG T	2	Thermal	State	Delhi	DVB	104.60
4	Leimakhong DG	4 to 6	Thermal	State	Manipur	E.Deptt.	18.00
5	Rokhia GT ExtPh-II	7	Thermal	State	Tripura	E.Deptt.	21.00
6	BansagarTonsPh-III	3	Hydro	State	M.P.	MPEB	20.00
7	Srisailam LBPH	4	Hydro	State	Ar. Pradesh	APGENCO	150.00
8	Chandil LBC	1 to 2	Hydro	State	Jharkhand	JSEB	8.00
9	Potteru Ph-I	1	Hydro	State	Orissa	OHPC	3.00
10	Potteru Ph-II	1	Hydro	State	Orissa	OHPC	3.00
11	Likim-ro	1	Hydro	State	Nagaland	E.Deptt.	8.00
12	Pahalgam	1 to 2	Hydro	State	J&K	JKPDC	3.00
13	Bambooflat DG	1 to 4	Thermal	Private	A&N	SuryaPower	20.00
14	Peddapuram CCGT	ST	Thermal	Private	Ar. Pradesh	BSES APP	78.00
15	Dabhol CCGT Ph-II	Block					
		I&II	Thermal	Private	Maharastra	DabholPowe	1444.00
	Total	**25 Units**					**2340.60**

Annexure 7.1.5

Generating Capacity Addition Programme for the year 2002-03

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implem-enting Agency	Units No. Capacity (MW)	Likely Comm. Sch. (Mon/Yr)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
NORTHERN REGION								
1	Tehri St-I	1	Hydro	Central	Utaranchl	THDC	250.00	March,2003
2	Pragati CCGT	GT-2	Thermal	State	Delhi	DVB	104.60	May., 2002
3	Pragati CCGT	ST	Thermal	State	Delhi	DVB	121.20	Nov., 2002
4	Ramgarh CCGT St-II	GT-2	Thermal	State	Raj.	RRVUNL	37.50	June, 2002
5	Ramgarh CCGT St-II	ST	Thermal	State	Raj.	RRVUNL	37.80	Dec., 2002
			Central	**State**	**Private**	**Total**		
		Hydro	250.00	0.00	0.00	250.00		
		Thermal	0.00	301.10	0.00	301.10		
		Nuclear	0.00	0.00	0.00	0.00		
		Total(NR)	250.00	301.10	0.00	551.10		
WESTERN REGION								
1	BansagarTonsPh-III	2	Hydro	State	M.P	MPEB	20.00	Aug., 2002
2	BansagarTonsPh-III	3	Hydro	State	M.P	MPEB	15.00	Aug., 2002
3	Dabhol CCGT Ph-II	Block I-II	Thermal	Private	Mah.	Dabhol PCO	1444.00	uncertain
4	Akrimota Lignite	1	Thermal	State	Guj.	M/S GMDCL	125.00	Jan., 2003
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	35.00	0.00	35.00		
		Thermal	0.00	125.00	1444.00	1569.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total(WR)	**0.00**	**160.00**	**1444.00**	**1604.00**		

Annexure 7.1.5 contd.

Generating Capacity Addition Programme for the year 2002-03

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implem- enting Agency	Units No. Capacity (MW)	Likely Comm. Sch. (Mon/Yr)
1	2	3	4	5	6	7	8	9
SOUTHERN REGION								
1	Simhadri TPS	2	Thermal	Central	A.P.	NTPC	500.00	Dec., 2002
2	Neyaveli FST Ext.	1	Thermal	Central	T.N.	NLC	210.00	June, 2002
3	Neyaveli FST Ext.	2	Thermal	Central	T.N.	NLC	210.00	Dec., 2002
4	Srisailam LBPH	4	Hydro	State	A.P.	APGENCO	150.00	Oct., 2002
5	Srisailam LBPH	5	Hydro	State	A.P.	APGENCO	150.00	Feb., 2003
6	Raichur TPP	7	Thermal	State	Kar.	KPCL	210.00	Feb., 2003
7	Valuthur CCGT		Thermal	State	T.N.	TNEB	60.00	May, 2002
8	Valuthur CCGT	ST	Thermal	State	T.N.	TNEB	34.00	Sept.,2002
9	Pddapuram CCGT	ST	Thermal	Private	A.P.	BSES APPL	78.00	June.,2002
10	Neyaveli Zero Unit		Thermal	Private	T.N.	CMS EleCO	250.00	Sept.,2002
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	300.00	0.00	300.00		
		Thermal	920.00	304.00	328.00	1552.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (SR)	**920.00**	**604.00**	**328.00**	**1852.00**		

Annexure 7.1.5 contd.

Generating Capacity Addition Programme for the year 2002-03

Sl. No.	Name of the Project	Unit No.	Type	Sector	State	Implem-enting Agency	Units No. Capacity (MW)	Likely Comm. Sch. (Mon/Yr)
1	2	3	4	5	6	7	8	9
EASTERN REGION								
1	Chandil LBC	1 & 2	Hydro	State	Jhar-khand	JSEB	8.00	Dec., 2002
2	Potteru Ph-I	1	Hydro	State	Orissa	OHPC	3.00	Sept, 2002
3	Potteru Ph-II	1	Hydro	State	Orissa	OHPC	3.00	Sept.,2002
4	Bambooflat DG	1 & 2	Thermal	Private	AN Island	Surya Power	10.00	May, 2002
5	Bambooflat DG	3 & 4	Thermal	Private	AN Island	Surya Power	10.00	Oct., 2002
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	14.00	0.00	14.00		
		Thermal	0.00	0.00	20.00	20.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (ER)	**0.00**	**14.00**	**20.00**	**34.00**		
NORTH EASTERN REGION								
1	Likim-ro	3	Hydro	State	Nagaland	E.Deptt.	8.00	June.,2002
2	Leimakhong DG	4 to 6	Thermal	State	Manipur	ED / BHEL	18.00	April,2002
3	RokhiaGT Ext Ph-II	7	Thermal	State	Tripura	E.Deptt.	21.00	June ,2002
4	Baramura GT Ext		Thermal	State	Tripura	ED / BHEL	21.00	Sept.,2002
			Central	**State**	**Private**	**Total**		
		Hydro	0.00	8.00	0.00	8.00		
		Thermal	0.00	60.00	0.00	60.00		
		Nuclear	0.00	0.00	0.00	0.00		
		Total (NER)	**0.00**	**68.00**	**0.00**	**68.00**		
			Central	**State**	**Private**	**Total**		
		Hydro	250.00	357.00	0.00	607.00		
		Thermal	920.00	790.10	1792.00	3502.10		
		Nuclear	0.00	0.00	0.00	0.00		
		Total ALL INDIA	**1170.00**	**1147.10**	**1792.00**	**4109.10**		

Annexure 7.1.6

Outlays/Expenditure -Power

Sl. No.	State/UTs	1997-98 Actual	1998-99 Actual	1999-2000 Actual	2000-01 R.E.	2001-02 Appd.	2001-02 R.E.	2002-03 Appd.
A.	**States**							
1	Andhra Pradesh	858.25	797.06	986.63	2657.50	2330.32	2321.49	
2	Arunachal Pradesh	84.04	71.43	78.41	85.28	86.39	89.96	
3	Assam	113.12	83.81	64.38	92.84	126.63	126.63	
4	Bihar	49.10	122.96	129.00	39.95	60.58	60.58	
5	Chhatisgarh					8.57	8.57	
6	Goa	18.16	24.01	34.07	30.00	33.00	33.00	
7	Gujarat	660.39	660.39	798.49	750.00	785.40	702.42	
8	Haryana	287.40	430.00	435.42	374.00	432.00	35.85	
9	Himachal Pradesh	233.60	255.99	191.67	260.92	213.43	198.32	
10	Jammu & Kashmir	251.59	220.20	301.60	307.57	340.42	340.42	
11	Jharkhand					150.00	150.00	
12	Karnataka	557.43	1080.52	1046.24	924.94	936.05	768.05	
13	Kerala	523.20	645.00	558.46	504.64	499.00	410.00	
14	Madhya Pradesh	738.99	700.85	751.39	262.71	344.52	326.91	Yet to
15	Maharashtra	1909.16	1738.19	1684.13	1767.35	1478.83	1478.83	be com-
16	Manipur	50.18	36.00	53.13	34.50	41.61	18.11	piled
17	Meghalaya	7.10	20.64	12.50	30.43	60.31	65.76	
18	Mizoram	28.41	25.65	47.50	48.52	41.32	41.43	
19	Nagaland	15.54	15.00	14.48	15.57	39.47	44.00	
20	Orissa	153.20	424.35	255.73	538.86	855.58	448.80	
21	Punjab	1132.13	1036.18	626.64	592.37	699.00	699.00	
22	Rajasthan	1494.43	792.23	763.63	1085.60	1277.56	1206.50	
23	Sikkim	31.76	32.55	37.60	31.76	38.26	36.26	
24	Tamil Nadu	795.49	816.74	1033.61	1117.85	765.54	948.37	
25	Tripura	25.99	24.48	18.20	17.23	21.54	21.54	
26	Uttar Pradesh	1114.55	1095.15	1049.02	775.38	1054.34	728.83	
27	Uttranchal					88.60	88.60	
28	West Bengal	1026.99	1310.55	992.39	879.33	1541.70	1232.23	
	Sub Tota (States)	**12160.20**	**12459.93**	**11964.32**	**13225.10**	**14349.97**	**12630.46**	
B.	**Union Territories**							
1.	A & N Islands	23.98	26.41	29.24	36.00	30.50	30.50	
2.	Chandigarh	10.32	11.00	13.26	11.03	12.55	12.55	
3.	Dadra & Nagar Haveli	7.19	9.17	11.00	13.15	14.94	14.94	
4.	Daman & Diu	4.76	8.29	13.55	13.90	14.25	14.25	
5.	Delhi	297.97	438.25	483.58	812.55	698.50	698.50	
6.	Lakshadweep	2.92	2.22	2.21	2.27	2.73	2.73	
7.	Pondicherry	44.95	46.66	21.22	20.88	22.86	27.69	
	Sub Total (U.T.s)	**392.09**	**542.00**	**574.06**	**909.78**	**796.33**	**801.16**	
	Total (States & UTs)	**12552.29**	**13001.93**	**12538.38**	**14134.88**	**15146.30**	**13431.62**	

Annexure 7.1.6-contd.

Outlays/Expenditure -Power Sector

Sl. No.	State/UTs	1997-98 Actual	1998-99 Actual	1999-2000 Actual	2000-01 R.E.	2001-02 Appd.	2001-02 R.E.	2002-03 Appd.
C.	**Ministry of Power**							
1.	NTPC	1685.69	2111.15	1844.41	1921.10	3006.00	2903.94	3506.00
2	NHPC	506.47	506.45	1006.03	1176.86	1909.79	1846.12	2925.89
3.	POWERGRID	1583.50	1301.09	1500.52	1576.47	2869.00	2451.00	3312.00
4.	DVC	166.97	99.73	97.59	64.12	284.00	110.48	840.66
5.	THDC	321.91	203.73	337.68	476.92	1228.17	498.00	1139.80
6.	NJPC	770.60	878.45	753.76	681.15	894.00	1100.13	653.00
7.	NEEPCO	167.18	191.57	231.23	80.13	211.72	183.05	375.76
8.	PFC	716.77	1322.36	1333.00	0.47	0.00	0.00	0.00
9.	REC	30.00	75.00	184.83	91.83	37.00	37.00	0.00
10	PTC	0.00	0.00	0.00	0.00	50.00	0.00	1.00
11	MOP (Misc.)	110.63	488.09	410.29	484.86	575.85	795.73	728.89
	Sub Total(MOP)	**6059.72**	**7177.62**	**7699.34**	**6553.91**	**11065.53**	**9925.45**	**13483.00**
	DAE (Power)	**747.27**	**854.66**	**958.54**	**908.11**	**1242.00**	**1422.00**	**1716.00**
	NLC (Power)	**37.00**	**124.80**	**131.16**	**469.49**	**538.84**	**292.85**	**292.72**
	Total Central	**6843.99**	**8157.08**	**8789.04**	**7931.51**	**12846.37**	**11640.30**	**15491.72**
	Sector				**(Actual)**			
	ALL INDIA	**19396.28**	**21159.01**	**21327.42**	**22066.39**	**27992.67**	**25071.92**	**N.A.**
	N.E.C.		**163.00**	**209.50**	**328.62**	**154.31**	**228.89**	**57.50**

Annexure 7.1.7

Details of Central Sector / Centrally Sponsored Schemes (CSS) with regard to Zero Based Budgeting Exercise for the Annual Plan 2002-03

Sl. No.	Name of the Scheme	Ninth Plan		Externally	Recommendations by		Decisions of Plan Commission
		Outlay (Rs.crore)	Anti. (Rs.crore)	Expen. (Yes	Ministry/ Deptt. or No)	Planning Commission	
CENTRAL SECTOR SCHEMES							
1	Central Power Research Institute (CPRI)	100.00	68.52	NO	Retained as such	Retained as such	Should be continued
2	Energy Conservation / EMC	52.00	21.66	NO	Retained as such	Retained as such	Should be continued
3	Kutir Jyoti Programme	200.00	262.68	NO	Retained as such	Retained as such	Should be continued
4	National Power Training Institute (NPTI)	38.00	17.09	NO	Retained as such	Retained as such	Should be Merged with Schemes at Sl. No. 18 & 19
5	Powergrid Grant-in-aid	2.00	40.00	NO	Retained as such	Retained as such	Should be continued
6	Setting up of Joint Electricity Regulatory Commission	2.84	0.50	NO	To be retained with modi-fications	weeded out	Should be weeded out
7	Badarpur Thermal Power Project (BTPP)	100.00	54.13	NO	Retained as such	Weeded out	Should be weeded out
8	Flexible AC Transmission System	0.00	0.00	NO	Weeded out	Weeded out.	Should be wedded out
9	Incentive scheme for better performance of TPS/ reduction in T&D losses.	22.00	29.95	NO	Weeded out	Weeded out	Should be wedded out
10	Power Finance Corporation Subsidy	1233.00	1284.21	NO	To be with modi-fications	No decision yet.	Should be wedded out
11	Sardar Sarovar	120.00	144.87	NO	Retained as such.	No decision yet.	Should be weeded out
Central Electricity Authority							
12	Procurement of Software Pachages	2.93	2.01	NO	Retained as such	Retained as such	(Schemes at (Sl.No. 12 & (13 should be merged
13	Technology improvement in CEA	6.24	2.52	NO	Retained as such.	Merged with Sr. no. 12	

Annexure 7.1.7 Contd.

Details of Central Sector / Centrally Sponsored Schemes (CSS) with regard to Zero Based Budgeting Exercise for the Annual Plan 2002-03

Sl. No.	Name of the Scheme	Ninth Plan		Externally	Recommendations by		Decisions of Plan Commission
		Outlay (Rs.crore)	Anti. (Rs.crore)	Expen. (Yes	Ministry/ Deptt. or No)	Planning Commission	
14	Strengthening up of Regional Electricity Boards	14.18	5.74	NO	Retained as such.	Retained as such.	should be continued
15	Accelerating Power Generation-Pager Scheme	0.72	0.51	NO	Retained as such.	Retained as such.	Schemes at Sl. No. 15 to 17 should be merged
16	Project Maintenance Monitoring of Thermal Power Stations	0.61	0.16	NO	Retained as such.	Merged with Sr. no. 15	
17	Renovation & Modernisation of Thermal Power Station.	8.89	8.95	NO	Retained as such.	Merged with Sr. no. 15	
18	Power System Training Institute Stag+B24e-II	5.22	5.11	NO	Retained as such.	Merged with NPTI of MOP Scheme at Sr. no. 4	Scheme at Sl. No. 18 & 19 should be merged at Sl. No. 4
19	Hot Line Training Centre Stage-II	5.66	4.12	NO	Retained as such.	Merged with NPTI of MOP Scheme at Sr. no. 4	
20	Energy Audit & Studies for Reduction of Secondary Fuel Oil Consumption at Selected TPS	0.28	0.11	NO	Weeded out	Weeded out	Should be weeded out
21	Load Despatching Station - Construction of Staff quarters, ERLDC, Kolkatta	0.55	0.82	Yes	Weeded out	Weeded out	Should be weeded out
22	Transfer of Technology in Hydro Development	16.10	22.43	Yes	Weeded out	Weeded out	Should be weeded out
23	Updating of Planning Models	12.83	8.98	Yes	Weeded out	Weeded out	Should be weeded out
Centrally Sponsored Schemes							
1	Inter-State Transmission Lines	6.00	11.82	NO	No comments	Weeded out	Should be weeded out

Annexure 7.1.8

Operationalisation of the results of Zero Based Budgeting exercise Convergence, Weeding out of Central / Centrally Sponsored Schemes (CS)/(CSS)

Status of Scheme-wise Break-up of Annual Plan 2002.03 allocations of Ministry of Non-Conventional Energy Sources (MNES)

(Rs.in Crore)

S. No.	Category of Schemes 9th Plan	No. of schemes	9th Plan outlay	9th Plan RE	A.P. 2002-2003 Appd. Outlay
1		2	3	4	56
1.	Schemes to be Continued as such	**8**	**1108.00**	**715.74**	**238.50**
	Break-up				
	Wind power		71.00	34.20	15.00
	Small Hydro Power		187.00	116.00	28.00
	Biomass Power		251.00	73.00	25.00
	Solar Power		63.00	38.80	18.00
	Village Electrification		-	20.00	8.00
	SPV lighting National		-	-	53.50
	Project on Biogas		286.00	257.24	56.00
	IREDA		250.00	176.50	35.00
2.	Should be Continued after Restructuring/merging Indicating specific Projects/facilities	**4**	**544.00**	**367.87**	**237.50**
	Break-up				
	Research, Design Development & Demonstration				132.50
	Infrastructure Development And Capacity Building				62.50
	Awareness & Extension Programme (incl.IREP)				22.75
	MNES Institutions				19.75
3.	**Schemes to be weeded out**	**1**	**2.14**	**0.13**	**Nil**
4.	Total number of existing schemes	12	1654.14	1083.74	476.00
5.	Total schemes remaining in the Tenth Plan	11	1652.00	1097.68	476.00

Annexure 7.1.9

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

Programmes	2000-01 Actuals	2001-02 Targets	2001-02 Anticiptd. Achievement	2002-03 Target
1	2	3	4	5
1. Exploratory Drilling				
a) ONGC				
i) Onshore	291.84	364.56	325.60	307.51
ii) Offshore	67.76	137.90	85.02	111.30
b) OIL				
i) Onshore	39.16	60.20	41.33	58.00
ii) Offshore	0.00	0.00	0.00	0.00
Total (Expl.)	**398.76**	**562.66**	**451.95**	**476.81**
2. Development Drilling				
a) ONGC				
i) Onshore	266.09	243.10	247.98	266.26
ii) Offshore	47.87	52.65	78.32	140.00
b) OIL				
i) Onshore	49.56	62.30	58.67	60.20
ii) Offshore	0.00	0.00	0.00	0.00
Total (Dev.)	**363.52**	**358.05**	**384.97**	**466.46**

Annexure 7.1.10

Petroleum and Natural Gas
Crude Oil Production (MMT)

Region	2000-01 Actuals	2001-02 Targets	2001-02 Achievement #	2002-03 Target
1	2	3	4	5
a) ONGC				
i) Onshore	8.43	8.70	8.64	8.66
ii) Offshore	16.63	16.50	16.07	17.24
Sub Total (a)	**25.06**	**25.20**	**24.71**	**25.90**
b) OIL				
i) Onshore	3.29	3.45	3.18	3.50
ii) Offshore	0.00	0.00	0.00	0.00
Sub Total (b)	**3.29**	**3.45**	**3.18**	**3.50**
Total (ONGC+OIL)	**28.35**	**28.65**	**27.89**	**29.40**
JVC/Pvt	4.08	3.85	4.14	3.68
Total	**32.43**	**32.50**	**32.03**	**33.08**

 # provisional

Annexure 7.1.11

Petroleum and Natural Gas
Natural Gas Production (BCM)

	Region	2000-01 Actuals	2001-02 Targets	2001-02 Achievement #	2002-03 Target
	1	2	3	4	5
a)	**ONGC**				
i)	Onshore	5.56	5.38	5.61	5.68
ii)	Offshore	18.47	18.62	18.43	18.01
	Sub Total (a)	**24.03**	**24.00**	**24.04**	**23.69**
b)	**OIL**				
i)	Onshore	1.86	1.74	1.62	2.19
ii)	Offshore	0.00	0.00	0.00	0.00
	Sub Total (b)	**1.86**	**1.74**	**1.62**	**2.19**
	Total (ONGC+OIL)	**25.89**	**25.74**	**25.66**	**25.88**
	JVC/Pvt	**3.59**	**4.02**	**4.03**	**5.49**
	Total	**29.48**	**29.76**	**29.69**	**31.37**

provisional

Annexure 7.1. 12

Petroleum and Natural Gas Refining Capacity as on Ist April of

	Name of the Refinery	2001	2002	2003
	1	2	3	4
1.	IOC , Guwahati	1.00	1.00	1.00
2.	IOC, Barauni	4.20	4.20	6.00
3.	IOC, Gujarat	12.50	13.70	13.70
4.	IOC, Haldia	3.75	6.00	6.00
5.	IOC, Mathura	8.00	8.00	8.00
6.	IOC, Digboi	0.65	0.65	0.65
7.	IOC, Panipat	6.00	6.00	6.00
8.	HPCL, Bombay	5.50	5.50	5.50
9.	HPCL, Visakh	7.50	7.50	7.50
10.	BPCL, Bombay	6.90	6.90	6.90
11.	MRL, Madras	6.50	6.50	6.50
12.	MRL, Narimanam	0.50	0.50	0.50
13.	CRL, Cochin	7.50	7.50	7.50
14.	BRPL, Bongaigaon	2.35	2.35	2.35
15.	MRPL, Mangalore	9.69	9.69	9.69
16.	NRL, Assam	3.00	3.00	3.00
17.	RELIANCE	27.00	27.00	27.00
18.	TATIPAKA	0.00	0.08	0.08
	TOTAL	**112.54**	**116.07**	**117.87**

Annexure 7.1.13

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

	Name of the Companies	2000-01 Actuals	2001-02		2002-03
			BE	RE	BE
	1	2	3	4	5
A.	**Exploration & Production**				
1.	ONGC	3607.21	6073.75	8159.08	8973.31
2.	OIL	556.23	800.01	650.00	900.00
3.	GAIL	1066.93	1139.85	724.81	1492.95
	Sub Total (A)	**5230.37**	**8013.61**	**9533.89**	**11366.26**
B .	**Refining & Marketing**				
1.	IOC	2791.95	5844.92	2615.77	3000.00
2.	HPCL	311.89	1300.00	617.00	900.00
3.	BPCL	1082.52	398.70	299.90	650.00
4.	CPCL	85.32	599.70	399.24	1000.00
5.	KRL	59.97	525.00	68.00	75.00
6.	BRPL	31.15	47.75	35.10	10.00
7.	EIL	10.84	6.93	6.93	0.00
8.	IBP	124.20	195.83	140.00	144.00
9.	NRL	139.00	3.25	42.00	38.00
	Sub Total (B)	**4636.84**	**8922.08**	**4223.94**	**5817.00**
	Total Petroleum	**9867.21**	**16935.69**	**13757.83**	**17183.26**

7.2 IRRIGATION, FLOOD CONTROL AND COMMAND AREA DEVELOPMENT

1. The Tenth Plan envisages an annual average 8% growth rate for the economy as a whole. To achieve this, it has been estimated that agriculture will have to grow at 4%. Irrigation is the most important and vital input for agriculture and to achieve the projected growth rate in agriculture, irrigation will have to also grow at a commensurate pace. The Tenth Plan strategy for irrigation is proposed to focus on completion of on-going projects by targeting Central assistance programmes like AIBP to achieve this, promotion of water use efficiency, restructuring the CAD Programme to introduce system rehabilitation and farmers' participation, reconciliation and firming up figures of irrigation statistics, stepping up of water-rates and working out appropriate norms for administrative costs in O&M component, surface and ground water pollution and flood management.

Major & Medium Irrigation

2. The ultimate irrigation potential from major and medium irrigation projects is 58.46 m.ha. The potential achieved till end of Ninth Plan is 37.08 m.ha. Annexure 7.2.6 gives State-wise position of potential created and utilized till end of Ninth Plan. The Working Group for the Tenth Plan has recommended an investment of Rs. 1,07,327 crores for the Tenth Plan for major and medium sector to create 11.14 m.ha. additional potential. Expenditure on major & medium irrigation sector in the Ninth Plan is given in Table 7.2.1.

Table 7.2.1

Major & Medium Irrigation
(Expenditure on major & medium irrigation sector in the Ninth Plan).

(Rs. Crore)

Period	Central Sector		State Sector	
	Approved Outlay	Actual Amount/Exp.	Approved Outlay	Actual Amount/Exp.
Ninth Plan	225.70	211.53	42644.11	48259.08
1997-98	39.69	35.95	8362.92	7523.16
1998-99	47.56	47.72	10024.03	8144.31
1999-2000	52.51	48.24	12228.81	11234.79
2000-2001	50.60	36.91	12922.40	10370.56
2001-2002	56.14	48.25	12533.79	10986.27
Tenth Plan	337.13	-	70861.78	-
2002-2003	60.80	-	13646.07	-

Programme for 2002-2003

3. The Working Group for Major & Medium Irrigation for the Tenth Plan has estimated that 159 major, 242 medium and 89 Extension, Renovation, Modernisation Projects have spilled over to the Tenth Plan. Many of these projects were started in pre-Fifth Plan period. With a view to complete a substantial number of on-going projects, the Accelerated Irrigation Benefits Programme will be targeted in the Tenth Plan to complete projects in an advanced stage. The following modifications in the programmes have been recently approved.

(i) A fast track component for completion of projects in two working seasons with 100% loan assistance.

(ii) A liberalized loan assistance in ratio of 4:1 (Centre:State) against normal 2:1 for States agreeing to undertake reforms in the water sector directed towards recovery of full O&M costs from water charges in a five year time frame. For special category States, the ratio is 1:0 against normal 3:1.

4. Till March 2002, an amount of Rs. 8,480 crores has been released under the programme to 150 major/medium projects and 2450 surface M.I. schemes including Rs. 472.80 crores for 13 projects under fast track. The State Governments have reported completion of 20 projects under the programme and creation of 1.09 m.ha. additional potential. For 2002-03 a provision of Rs. 2,800 crores has been made under AIBP. Government of Rajasthan has signed an undertaking with MoWR to carry out reforms in the water sector. Government of Madhya Pradesh has also offered to carry out reforms which is under examination.

Externally Aided Projects

5. 15 Irrigation projects are receiving external assistance as shown in Table 7.2.2.

Table 7.2.2

Externally Aided Projects
(Name of Project, Assistance Amount and Disbursement till March 2002)

S. No	Name of Project World Bank Aided	Date of agreement/ Date of completion	Assistance Amount. US $ in million	Disbursement Till March 2002
1.	Andhra Pradesh III Irrigation Project	3.6.1997 31.1.2003	325.00	131.50
2.	AP Economic restructuring project	30.1.1999 31.3.2004	142.00	63.00
3.	Orissa WRCP	5.1.1996 30.9.2002	290.90	179.62
4.	Rajasthan Water sector restructuring project	15.3.2002 31.3.2008	143.00	5.00
5.	UP water sector restructuring projects	8.3.2002 31.10.2007	149.20	5.00

S. No	Name of Project World Bank Aided	Date of agreement/ Date of completion	Assistance Amount. US $ in million	Disbursement Till March 2002
6.	Tamil Nadu WRCP	22.9.1995 31.3.2003	289.90	150.06
7.	Karnataka Tank Management Project	6.6.2002 31.3.2009	98.90	-
8.	Hydrology Project	22.9.1995 31.3.2003	142.00	67.67
		EEC		
9.	Orissa Minor Irrigation Project	3.7.1995 31.12.2004	10.70 (ECU in million)	1.10
10.	Pondicherry Tank rehabilitation project	21.2.1997 21.2.2003	6.65	0.82
11.	Maharashtra Saline Land reclamation project phase II	11.7.1995 31.12.2005	15.50	1.23
		Bilateral		
12.	Modernisation of Kurnool-Cuddapali Canal in A.P. (JBIC)	25.1.1996 26.3.2003	16049.00 million yen	5177.40
13.	Maharashtra Minor Irrigation Project (Germany)	21.12.1998 31.12.2006	DM 45.00 Million	2.34
14.	Rengali Irrigation Orissa (JBIC)	12.12.1997 11.12.2002	7760.00 million yen	3620.00
15.	Rajghat Canal (MP) (JBIC)	25.2.1997 31.5.2006	13222.00 million yen	4683.60

Minor Irrigation

6. All ground water and surface water schemes having a culturable command area upto 2000 ha individually are classified as minor irrigation schemes. Minor surface flow irrigation projects comprising storage tanks, diversion and surface lift occupy a prominent place in the scheme of irrigated agriculture particularly in the peninsular part of the country and the hilly areas. Minor irrigation schemes have a short gestation period, are labour intensive and are an important means for poverty alleviation.

7. The ultimate irrigation potential from Minor Irrigation projects is estimated as 81.43 m. ha of which 17.38 m.ha is from surface water minor irrigation and 64.05 m.ha. from ground water. The Working Group for the Tenth Plan has recommended an investment of Rs. 36,200 crores in the Tenth Plan to create 8 m.ha. additional potential. Till the end of the Ninth Plan, a potential of 56.90 m. ha. had been created. State-wise position is at Annexure 7.2.6.

8. Minor irrigation schemes are funded from plan funds, institutional finance and private investment by the farmers. It is generally considered as a people's programme. The outlays and expenditure in the Central sector and State sector for Minor Irrigation during the Ninth Plan are given in Table 7.2.3

Table 7.2.3

Minor Irrigation

Outlays and Expenditure in the Central sector and State sector for Minor Irrigation during the Ninth Plan

(Rs. Crore)

Year	Central Sector		State Sector	
	Approved Outlay	Actual/Amt. Expenditure	Approved Outlay	Actual/Amt. Expenditure
Ninth Plan	393.49	347.50	8984.84	8615.07
1997-1998	70.56	42.85	1799.20	1456.59
1998-1999	67.40	48.09	2057.20	1566.25
1999-2000	55.81	56.47	2117.79	1840.21
2000-2001	85.27	66.28	1907.93	1853.28
2001-2002	96.58	116.42	2121.42	1898.74
Tenth Plan	533.80	-	13872.86	-
2002-2003	109.16	-	2057.02	-

Regulation of Ground Water Exploitation

9. As per data compiled by the Central Ground Water Board upto April 1998, out of 5711 blocks/mandals/talukas/watersheds in the country, 310 are categorized as over exploited and 160 are dark. The Central Ground Water Authority is continuing its regulatory function to see that the position of over exploitation is kept in check. The State Govts. will continue to be persuaded to enact ground water legislation, a model bill for which is already circulated.

Command Area Development

10. The Command Area Development Progamme (CADP) was initiated in 1974-75 as a Centrally Sponsered Scheme with a view to bridge the gap between potential created and utilized and optimizing agricultural production through better management of land and water use in the command areas served by selected major & medium irrigation projects. 236 projects are included now in the programme covering a CCA of 22.72 m.ha. The core components of construction of field channels, field drains, warabandi and land leveling constitute almost 70 % of the expenditure incurred on Central Sector of CADP. The physical achievements on these four components till end of the Ninth Plan are given in Table 7.2.4..

Table 7.2.4

Command Area Development (CAD) - Physical

(m.ha.)

Core component	Achievement till end of 8th Plan	Progress in 9th Plan	Achievement till end of 9th Plan
Field channels	13.94	1.78	15.72
Warabandi	8.99	1.58	10.57
Field Drains	0.35	0.33	0.68
Land Levelling	2.10	0.09	2.19

11. The Working Group for the Tenth Plan has recommended an outlay of Rs. 4,962.5 crores for the Command Area Development (CAD Programme in the Tenth Plan. The outlays and expenditure in the Central Sector and State Sector for the CADP are given in Table 7.2.5.

Table 7.2.5

Command Area Development (CAD) - FinancialOutlays and Expenditure in the Central Sector and State Sector for the CAD

(Rs. Crore)

Year	Central Sector		State Sector	
	Approved Outlay	Actual/Amt. Expenditure	Approved Outlay	Actual/Amt. Expenditure
Ninth Plan	797.52	720.45	2027.19	1519.17
1997-1998	140.70	129.96	371.35	303.43
1998-1999	188.00	175.32	348.48	311.37
1999-2000	178.00	163.92	315.39	310.50
2000-2001	160.88	144.95	298.07	353.48
2001-2002	187.19	148.27	245.16	232.39
Tenth Plan	1401.80	-	2846.44	-
2002-2003	202.00	-	271.44	-

Restructured Command Area Development Programme (CADP)

12. The CADP is being restructured in the Tenth Plan to include system rehabilitation, participatory management and revision in cost norms.The programme will however continue in the present form in 2002-03.

Flood Control

13. The Rashtriya Barh Ayog has estimated the flood prone area in the country as about 40 m.ha of which 32 m.ha can be given reasonable degree of protection. So far about 19 m. ha. has been protected through construction of embankments, drainage channels, town protections works and raising of villages above flood level. The Working Group for the Tenth Plan has recommended an outlay of Rs. 10,631.84 crores in the Tenth Plan to benefit 2.78 m.ha. The Plan Outlays and Expenditure in the Flood Control Sector during IX th Plan is given in Table 7.2.6.

Table 7.2.6

Flood Control
Plan Outlays and Expenditure in the Flood Control Sector during IX th Plan

(Rs. Crore)

Year	Central Sector		State Sector	
	Approved Outlay	Actual/Amt. Expenditure	Approved Outlay	Actual/Amt. Expenditure
Ninth Plan	623.04	409.12	2216.36	2629.23
1997-1998	72.15	48.47	365.86	351.87
1998-1999	71.65	55.87	639.94	476.77
1999-2000	61.79	68.69	662.36	486.72
2000-2001	154.87	95.13	654.25	620.10
2001-2002	148.85	124.56	801.62	693.77
Tenth Plan	1168.10	-	4562.25	-
2002-2003	151.02	-	592.06	-

14. The Working Group on Flood Management for the Tenth Plan has suggested setting up an Integrated Flood Management Commission to review the status of implementation of the recommendations of the Rashtriya Barh Ayog. Such a Commission could also study other long term permanent solutions to the flood problem like raising of village, changes in crop pattern etc. The Working Group has recommended modernization and strengthening of existing flood forecasting arrangements so as to advance the warning time.

Zero Based Budgeting

15. The Zero Based Budgeting Exercise for 2002-03 was taken up for the Ministry of Water Resources by the Planning Commission. Out of 71 schemes in operation at end of the 9th Plan, 6 were recommended for weeding out. Out of the balance 65 schemes, 47 were recommended for retention and 18 for merger into 6 schemes giving in effect 53 schemes for operation in 2002-03. The MoWR are broadly in agreement with this exercise except that there will be 59 schemes in 2002-03 due to spillover liabilities/on-going schemes in last year. In fact, from 2003-04 onwards there will be only 49 schemes in operation against 53 recommended by the Planning Commission.

National Water Policy

16. The revised National Water Policy has been adopted by the National Water Resources Council on 1/4/2002. The State Governments have been requested to bring out similar State Water Policies and also prepare an Action Plan for implementation of the NWP.

Achievements by the end of 9th Plan

17. The State Governments have indicated in various Working Group meetings about the completion of the following major, medium projects by the end of 9th Plan i.e. March 2002.

(a)	Kerala	-	Kallada
(b)	M.P.	-	Bhander Canal, Barna, Kolar.
(c)	Chattisgarh	-	Jonk Diversion.
(d)	Rajasthan	-	Jakhom, Som Kamla Amba, Pachna
(e)	U.P.	-	Bewar feeder, Sarda Sahayak, Maudha Dam, Chambal lift, Gyanpur pump Canal, Sone pump Canal, Revised Tons pump Canal, Chittaurgarh reservoir, Modernisation of Ghaghhar Canal, Gunta Nala Dam, Pathrai Dam

Rural Infrastructure Development Fund

18. The Indian Scheduled Commercial Banks are under an obligation to lend at least 40% of their aggregate loans to the priority sectors and within the overall target for priority sector at 40%, these banks have to observe a target of 18% for agriculture sub-sector. The Rural Infrastructure Development Fund (RIDF) thus came into existence with the announcement in the Union Budget for the year 1995-96.

The Funding of Rural Infrastructure Development Fund

19. The fund has been established in NABARD since April 1995. The initial corpus of the fund was Rs. 2,000 Crores (RIDF-I) for the year 1995-96 to be contributed by the Indian Scheduled Commercial Banks representing the short fall in their lending to agriculture sub-sector (18%) within the priority sector target (40%), subject to a ceiling of 1.5% of the net Bank credit. Since then, the scheme has been continued with the announcements in the successive Union Budgets with enhanced commitments, which are as under:

Programme	Year	(Rs. in Crore)
RIDF I	1995-96	2000
RIDF II	1996-97	2500
RIDF III	1997-98	2500
RIDF IV	1998-99	3000
RIDF V	1999-2000	3500
RIDF VI	2000-01	4500
RIDF VII	2001-02	5000
RIDF VIII	2002-03	5500

20. The loan assistance under RIDF is provided for incomplete or ongoing projects in Major, Medium and minor irrigation along with projects in flood protection, watershed management, soil conservation, rural roads and bridges, rural markets, primary school buildings, rural drinking water works, drainage, primary health centers, forest development etc. Loans under RIDF are sanctioned upto 90% of the project cost or the balance cost whichever is less.

21. Presenting the Central Government's Budget for 1999-2000, the Minister of Finance announced that the period of repayment has been increased from 5 to 7 years under RIDF V. It may further be mentioned that the loans to the State Governments were provided at the rate of 12% p.a. (13% p.a. under RIDF I) and in the Central Government's Budget for 2000-2001 the interest charged on lending since RIDF VI has been reduced by half per cent i.e. the rate of interest has been reduced to 11.5% p.a.

22. The disbursement and sanction of RIDF for irrigation sector has been indicated in Annexure 7.2.5. It was noticed that there has been increasing trend for availing RIDF assistance for projects relating to strengthening of existing roads. It was therefore decided in a meeting of the PSC and the Board of the Bank held on 15 October 1999 that hence forth greater priority should be given only for purposes such as irrigation and new connectivity of villages and marketing centers through construction of village roads/bridges. Accordingly, the State Governments have been advised to focus on these sectors for future assistance under RIDF. However, the nature of the fund in its present form restricts NABARD in taking up sanctions for major and medium irrigation due to longer duration of these projects.

Annexure – 7.2.1

Actual Expenditure in respect of Major & Medium Irrigation, Minor Irrigation, CAD & Flood Control for the year 1998-99

(Rs. in crore)

Sl. No.	Name of States & UTs	Major & Medium	Minor Irrigation	CAD	Flood Control	Total
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Andhra Pradesh	709.98	175.54	8.99	36.98	931.49
2	Arunachal Pradesh	0.33	13.37	0.82	4.33	18.85
3	Assam	38.77	67.59	3.19	14.72	124.27
4	Bihar	327.59	40.42	11.94	48.06	428.01
5	Goa	20.22	5.56	1.53	1.16	28.47
6	Gujarat	1212.95	148.16	11.32	4	1376.43
7	Haryana	231.27	39.46	8.99	27.36	307.08
8	Himachal Pradesh	12.03	42.81	0.23	5.54	60.61
9	Jammu & Kashmir	27.54	28.17	3.39	16.27	75.37
10	Karnataka	1431.1	92.53	20.45	14.17	1558.25
11	Kerala	171.09	72.23	12	25.48	280.80
12	Madhya Pradesh	462.85	153.44	3.91	12	632.20
13	Maharashtra	1593.68	292.25	62.92	3.23	1952.08
14	Manipur	29.02	7.43	2.05	5.1	43.60
15	Meghalaya	2.49	6.5	0.22	3	12.21
16	Mizoram	0.03	4.88	0.03	0	4.94
17	Nagaland	0	2.04	0.1	0.09	2.23
18	Orissa	526.71	83.98	6.18	16.03	632.90
19	Punjab	69.72	37.43	35.76	111.14	254.05
20	Rajasthan	444.65	48.3	66.3	5.73	564.98
21	Sikkim	0	0.85	0.02	2.84	3.71
22	Tamil Nadu	221.27	35.13	21.88	0	278.28
23	Tripura	7.58	8.94	0.02	3.75	20.29
24	Uttar Pradesh	448.4	108.59	25.15	26.45	608.59
25	West Bengal	153.65	41.44	3.77	68.39	267.25
	Total States	**8142.92**	**1557.04**	**311.16**	**455.82**	**10466.94**
	Union Territories					
26	A & N Island	0	2.40	0	0	2.40
27	Chandigarh	0	0.44	0	0	0.44
28	D & N Haveli	1.05	1.24	0.21	0	2.50
29	Daman & Diu	0.34	0.03	0	0.34	0.71
30	Delhi	0	0.66	0	14.88	15.54
31	Lakshadweep	0	0	0	2.55	2.55
32	Pondicherry	0	4.44	0	3.18	7.62
	Total U.Ts.	**1.39**	**9.21**	**0.21**	**20.95**	**31.76**
	Total States & Uts.	**8144.31**	**1566.25**	**311.37**	**476.77**	**10498.70**
	Central Sector	**59.11**	**58.75**	**175.32**	**74.57**	**367.75**
	Grand Total	**8145.70**	**1575.46**	**311.58**	**497.72**	**10530.46**

Annexure – 7.2.2

Actual Expenditure in respect of Major & Medium Irrigation, Minor Irrigation, CAD & Flood Control for the year 1999-2000

(Rs. in crore)

Sl. No.	Name of States & UTs	Major & Medium	Minor Irrigation	CAD	Flood Control	Total
1	2	3	4	5	6	7
1	Andhra Pradesh	894.48	219	5.56	34.08	1153.12
2	Arunachal Pradesh	0.34	16.33	0.9	4.25	21.82
3	Assam	53.35	69.02	3.19	19.84	14
4	Bihar	530.68	51.04	11.87	78.34	671.93
5	Goa	17.18	8.39	2.42	1.77	29.76
6	Gujarat	1607.97	270.6	18.62	5.83	1903.06
7	Haryana	245	27.71	45.13	11.96	329.8
8	Himachal Pradesh	16.25	52.89	0.35	7.36	76.85
9	Jammu & Kashmir	18.79	24.54	3.57	12.5	59.4
10	Karnataka	1766.2	113.3	27.71	15.35	1922.57
11	Kerala	140.8	44.61	8.81	30.43	224.65
12	Madhya Pradesh	415.51	147.8	3.25	0.88	567.45
13	Maharashtra	3460	379.6	50	1.92	3891.56
14	Manipur	42.49	9.39	1.85	9.41	63.14
15	Meghalaya	2	5.57	0.21	2.98	10.76
16	Mizoram	0.05	9.97	0.05	0	10.07
17	Nagaland	0	6.32	0.1	0.02	6.44
18	Orissa	468.86	97.67	5.12	11.81	583.46
19	Punjab	34.24	38.75	32.17	35.32	140.48
20	Rajasthan	363.72	40.78	50.6	3.66	458.76
21	Sikkim	0	5.9	0.02	1.64	7.56
22	Tamil Nadu	373.78	43.74	0	0	417.52
23	Tripura	7.96	16.35	0	7.38	31.69
24	Uttar Pradesh	634.16	33.71	42.5	45.63	756
25	West Bengal	139.94	96.27	4.23	116.2	356.63
	Total States	**11233.8**	**1829**	**318.2**	**458.6**	**13839.88**
	Union Territories					
26	A & N Island	0	2.26	0	0	2.26
27	Chandigarh	0	0.25	0	0	0.25
28	D & N Haveli	1	1.18	0.12	0	2.3
29	Daman & Diu	0.04	0.05	0.1	0.18	0.37
30	Delhi	0	0.82	0	17.61	18.43
31	Lakshadweep	0	0	0	3.57	3.57
32	Pondicherry	0	6.29	0	6.8	13.09
	Total U.Ts.	**1.04**	**10.86**	**0.23**	**28.17**	**40.31**
	Total States & Uts.	**11234.8**	**1840**	**318.5**	**486.7**	**13880.19**
	Central Sector	**38.5**	**56.47**	**163.9**	**68.69**	**327.58**
	Grand Total	**11273.3**	**1897**	**482.4**	**555.4**	**14207.77**

Annexure – 7.2.3

Actual Expenditure in respect of Major & Medium Irrigation, Minor Irrigation, CAD & Flood Control for the year 2000-01

(Rs. in crore)

Sl. No.	Name of States & UTs	Major & Medium	Minor Irrigation	CAD	Flood Control	Total
1	2	3	4	5	6	7
1	Andhra Pradesh	938.12	241.3	12.1	88.32	1280
2	Arunachal Pradesh	0.34	24.88	0.9	4.05	30.17
3	Assam	50.48	77.57	19.16	3.41	150.6
4	Bihar	337.68	39.81	21.6	77.5	476.6
5	Goa	101.94	5.36	2.32	1.16	110.8
6	Gujarat	277.36	250.2	14.78	0	542.3
7	Haryana	207.4	29.73	66.77	8.61	312.5
8	Himachal Pradesh	14.89	45.62	1.36	7.9	69.77
9	Jammu & Kashmir	28.18	28.85	5.17	14.34	76.54
10	Karnataka	1898.71	100.1	11.83	5.99	2017
11	Kerala	125	39	9.4	16.85	190.3
12	Madhya Pradesh	419.31	153.7	2.68	0.71	576.4
13	Maharashtra	4092.14	276.8	31.18	1.15	4401
14	Manipur	24.37	4.73	0.91	8.79	38.8
15	Meghalaya	2.49	7.2	0.09	2.59	12.37
16	Mizoram	0.01	3.35	0.05	0	3.41
17	Nagaland	0	8.1	0.08	0.03	8.21
18	Orissa	420.84	79.56	6.2	3.97	510.6
19	Punjab	37.87	33.75	50.58	90.96	213.2
20	Rajasthan	264	46.27	42.82	2.79	355.9
21	Sikkim	0	7.3	0.02	1.21	8.53
22	Tamil Nadu	221.06	134	16.61	0	371.7
23	Tripura	5.67	19.06	0	7.54	32.27
24	Uttar Pradesh	742.08	59.3	28.77	31.11	861.3
25	Uttaranchal	13.19	5.59	0	3.52	22.3
26.	West Bengal	146.78	121.9	8.05	212.11	488.9
	UTotal States	10369.9	1843	353.4	594.61	13161
	Union Territories					
27	A & N Island	0	2.33	0	0	2.33
28	Chandigarh	0	0.2	0	0	
29	D & N Haveli	0.52	0.57	0.05	0	1.14
30	Daman & Diu	0.12	0.04	0	0.18	0.34
31	Delhi	0	1.08	0	16.67	17.75
32	Lakshadweep	0	0	0	3.2	3.2
33	Pondicherry	0	6.15	0	5.44	11.59
	Total U.Ts.	**0.64**	**10.37**	**0.05**	**25.49**	**36.55**
	Total States & Uts.	**10370.6**	**1853**	**353.5**	**620.1**	**13197**
	Central Sector	**39.71**	**77.71**	**145**	**106.01**	**368.4**
	Grand Total	**10410.3**	**1931**	**498.4**	**726.11**	**13566**

Annexure – 7.2.4

Revised Approved Outlay in respect of Major & Medium Irrigation, Minor Irrgn., CAD & Flood Control for the year 2001-02

(Rs. in crore)

Sl. No.	Name of States & UTs	Major & Medium	Minor Irrigation	CAD	Flood Control	Total
1	2	3	4	5	6	7
1	Andhra Pradesh	1004.88	215.03	14.24		1277.98
2	Arunachal Pradesh	0.36	46.79	1.95	3.68	52.78
3	Assam	55.83	83.44	2.41	18.96	160.64
4	Bihar	473.00	139.64	21	63.48	697.12
5	Goa	82.62	10.73	3.05	1.65	98.05
6	Chhatisgarh	240.97	2.69	1.02	0.17	244.85
7	Gujarat	1143.25	169.34	5.37	2.68	1320.64
8	Haryana	211.51	74	10	20	315.51
9	Himachal Pradesh	11.8	50.03	1.35	6.6	69.78
10	Jammu & Kashmir	71.64	48.41	5.59	28.55	154.19
11	Jharkhand					
12	Karnataka	2296.21	83.05	13.8	5.99	2399.05
13	Kerala	95	25	10	12.5	142.50
14	Madhya Pradesh	551.39	187.55	7.04	2.3	748.28
15	Maharashtra	2335.21	262.05	22.91	0.73	2620.9
16	Manipur	46.95	5.3	2.98	2.7	57.93
17	Meghalaya	2	9	0.1	2	13.10
18	Mizoram	0.01	6.14	0.3	0	6.45
19	Nagaland	0	8.4	0.05	0.1	8.55
20	Orissa	473.84	84.1	6.5	0.6	565.04
21	Punjab	323.13	42.26	14.07	95.36	474.82
22	Rajasthan	275.81	83.01	35.15	4.78	398.75
23	Sikkim	0	3.9	3.5	0.05	7.45
24	Tamil Nadu	388.1	32.93	13.4	0	434.43
25	Tripura	6.09	45	0.02	10.17	61.28
26	Uttar Pradesh	730	45	28.48	23.47	826.95
27	Uttaranchal	28	15.04	0.12	1.5	44.66
28	West Bengal	138.07	107.75	7.81	308.63	562.26
	Total States	**10985.67**	**1885.58**	**232.21**	**660.48**	**13763.94**
	Union Territories					
29	A & N Island	0	2.8	0	0	2.8
30	Chandigarh	0	0.2	0	0	0.2
31	D & N Haveli	0.5	0.57	0.18	0	1.25
32	Daman & Diu	0.1	0.05	0	0.22	0.37
33	Delhi	0	0.68	0	24	24.68
34	Lakshadweep	0	0	0	5	5
35	Pondicherry	0	8.86	0	4.07	12.93
	Total U.Ts.	**0.60**	**13.16**	**0.18**	**33.29**	**47.23**
	Total States & Uts.	**10986.27**	**1898.74**	**232.39**	**693.77**	**13811.17**
	Central Sector	**49.65**	**122.18**	**115.53**	**145.95**	**433.31**
	Grand Total	**11035.92**	**2020.92**	**347.92**	**839.72**	**14244.48**

Annexure-7.2.5

Releases under RIDF to Irrigation Sector.

(Rs. Crore)

RIDF No. & Year	Amount Sanctioned	Amount disbursed	Percentage of irrigation w.r.t. all sectors	
			Sanctioned	Disbursed
I (1995-96)	803.45	1658.9	90.17	82.94
II (1996-97)	1254.56	1110.54	50.18	44.2
III (1997-98)	1049.72	829.12	41.98	33.16
IV (1998-99)	900.37	418.79	30.01	13.95
V (1999-2000)	1103.18	487.07	31.51	13.91
VI (2000-2001)	1312.29	625.95	29.16	13.91
VII (2001-2002)	1353.5	300.58	27	6.01

Annexure –7.2.6

Statewise Position of Potential Creation

(Th. Ha.)

Sl. No.	Name of States & UTs	Ultimate Irrgn. Pot. For Major & Medium	Potential created till end of IX Plan*	Potential utilised till end of IX Plan	Ultimate Irrgn. Pot. For Minor Irrgn.	Potential created till end of IX Plan	Potential utilised till end of IX Plan
1	2	3	4	5	6	7	8
1	Andhra Pradesh	5000.00	3303.22	3051.59	6260.00	3019.46	2781.22
2	Arunachal Pradesh	0.00	0.00	0.00	168.00	98.52	77.40
3	Assam	970.00	243.92	174.37	1900.00	603.62	494.11
4	Bihar	5223.50	2680.00	1714.83	5663.50	4716.44	3759.46
5	Jharkhand	1276.50	354.47	230.45	1183.50	588.87	471.09
6	Goa	62.00	21.17	15.33	54.00	19.14	20.00
7	Gujarat	3000.00	1430.37	1300.83	3103.00	1998.92	1876.14
8	Haryana	3000.00	2099.49	1849.97	1512.00	1630.95	1578.12
9	Himachal Pradesh	50.00	13.35	7.51	303.00	161.00	138.30
10	Jammu & Kashmir	250.00	179.69	168.75	1108.00	382.45	366.77
11	Karnataka	2500.00	2121.12	1844.82	3474.00	1585.40	1541.74
12	Kerala	1000.00	609.49	558.87	1679.00	640.02	603.76
13	Madhya Pradesh	4853.07	1386.90	875.63	11361.00	2256.13	2149.48
14	Chattisgarh	1146.93	922.50	760.74	571.00	487.70	322.86
15	Maharashtra	4100.00	3239.00	2147.24	4852.00	2942.60	2557.72
16	Manipur	135.00	156.00	111.00	469.00	75.49	62.34
17	Meghalaya	20.00	—	—	148.00	50.97	47.31
18	Mizoram	0.00	—	—	70.00	16.69	14.08
19	Nagaland	10.00	0.00	0.00	75.00	76.56	65.63
20	Orissa	3600.00	1826.56	1794.17	5230.00	1474.12	1337.55
21	Punjab	3000.00	2542.48	2485.99	2967.00	3427.56	3367.82
22	Rajasthan	2750.00	2482.15	2313.87	2378.00	2447.10	2361.80
23	Sikkim	20.00	—	—	50.00	29.67	23.61
24	Tamil Nadu	1500.00	1549.31	1549.29	4032.00	2123.38	2119.52
25	Tripura	100.00	4.90	4.50	181.00	109.65	96.09
26	Uttar Pradesh	12154.00	7910.09	6334.00	17481.00	21599.40	17279.62
27	Uttranchal	346.00	280.30	185.41	518.00	500.98	400.80
28	West Bengal	2300.00	1683.29	1527.12	4618.00	3792.52	3098.12
	UTs	**98.00**	**6.51**	**3.94**	**46.00**	**43.71**	**35.41**
	Total	**58465.00**	**37076.28**	**31027.09**	**81428.00**	**56902.70**	**49047.01**

7.3 TRANSPORT

7.3.1 RAILWAYS

INTRODUCTION

The Indian Railways is one of the largest railway systems in the world with a network of about 63,000 route km. and is a principal mode of transportation for long haul bulk freight movement, long distance passenger traffic and for mass rapid transit in sub-urban areas. The Indian Railways has played a pivotal role in national integration and in promoting trade and tourism. It has contributed very significantly to the industrial and economic development of the nation and has provided an essential link between production and consumption centres of the economy. Now the major challenge before Railways is to adapt itself to a rapidly changing market environment to maintain its premier role in the transport market.

Review of the Ninth Plan

2. For the Ninth Plan the total outlay of the Railways was projected at 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 the Market Borrowings and Internal Resources. The GBS was expected to be only 26% of the total proposed outlay during the Ninth Plan while Internal Resources and Market Borrowings were to constitute 74% of the total outlay. A review of financing of Railway Plan during the Ninth Plan period brings out that the share of GBS has increased from 26% as envisaged earlier to 35%. For the last two consecutive years i.e. 2000-01 and 2001-02 the dividend payable by the Railways to the General Exchequer was deferred. Thus, financing of Railways continues to be an area of concern. The pattern of financing during the 9th plan (1997-2002) and first year of the 10th Plan (2002-03) is listed at Annexure 7.3.1.

3. While Indian Railways exceeded the targets for passenger traffic during the 9th plan (1997-2002), there is a shortfall to the extent of 36 million tonnes as regards freight traffic in the terminal year of the Ninth Plan (Table 7.3.1). The fall in freight traffic is due to recessionary trends in the economy. The 9th plan physical targets and achievements are given in Annexure 7.3.2. It may be seen from there that in case of new lines, gauge conversion and track renewals the progress has been constrained by limitation of resources. The lower level of doubling and procurement of rolling stock has been on account of lower materialization of freight traffic.

Sectoral Trends

4. During 2001-02 Railways carried 489 million tonnes of revenue earning originating freight traffic (RE) showing increase of about 3.3% over the actual freight carried of 473.5 million tonnes during 2000-01. Freight tonne km. increased from 312.4 billion tonne km. in 2000 –01 to 323 billion tonne Km. in 2001-02 (RE) showing an increase of about 4%. In case of originating passenger traffic, the achievement of 5000.3 million in 2001-02 (RE) exceeded the achievement of 4839.8 million during 2000-01 revealing a growth of 3.3% over the past year. Passenger kms. also increased from 457.7 billion kms. in 2000-01 to 473.4 billion kms. in 2001-02 (RE) showing an increase of 3.4%.

Table 7.3.1

Ninth Plan Growth in Freight and Passenger Traffic

Traffic Category	Unit	Ninth Plan Target	Achievement
Originating Freight	Million Tonnes	525	489
Freight Net Tonne Kms.	Billion	353	323
Originating Passengers	Million	4782	5000
Passenger Kms.	Billion	399	473

Targets for 2002-03

5. Keeping in view the objectives and thrust areas of the 10th Five Year Plan (Box) an outlay of Rs.12330 crore comprising of Rs.5840 crore of gross budgetary support and Rs.6490 crore of IEBR has been approved for the Railways during 2002-03. So far as physical targets are concerned, a target of 510 million tonnes of revenue earning freight traffic has been laid down as against the target of 489 million tonnes for 2001-02 (RE). As regards passenger traffic also a higher target of 5187.8 million passengers has been proposed for 2002-03 as against 5000.3 million passengers for 2001-02 (RE). The progress of freight and passenger traffic carried by the Railways over the years is given in Annexures 7.3.3 and 7.3.4 respectively. For 2002-03 the outlays laid down for important Railway Programmes like gauge conversion, track renewals, electrification and addition of new lines are Rs. 807 crore, Rs. 2703 crore, Rs. 238 crore and Rs. 911 crore respectively (Annexure 7.3.5) which will be utilized for 542 km. of gauge conversion, 4000 km. of track renewals, 375 km. of electrification and 214 km. of new lines construction. Besides, it is also proposed to acquire 17,000 wagons (4 wheelers), 90 diesel locos, 69 electric locos and 1450 passenger coaches.

Thrust Areas in the 10th Plan – Railway Sector

Initiating measures for increasing freight traffic by the Railways

Rationalising tariff structure.

Augmenting capacity and improving the quality of service.

Upgrading technology such as improvement in tracks, increasing the speed of freight cars, modernizing signalling and communication system and increasing application of information technology.

Prioritising Railway projects keeping in view the viability of these projects and contribution towards augmenting the system.

Initiating steps to attract private sector investment in Railway projects.

Restructuring organization by setting up Rail Tariff Regulatory Authority, spinning off of non-core and peripheral activities.

Focusing on Railway safety.

Private Sector Participation

6. The private sector participation in various Railway projects has not been encouraging. The Railways had initiated Own Your Wagon Scheme (OYWS) and Build Own Lease and Transfer (BOLT) Scheme so as to mobilize private sector funds. However, the response of the private sector has been rather luke warm in most cases (OYWS) and negative in some (BOLT). The Railways are exploring various options for private/public participation in rail projects through different models. An SPV to undertake Surendernagar – Rajula city – Pipavav gauge conversion project has been formed with equity participation by the Ministry of Railways and its PSUs on the one hand and Gujarat Pipavav Port Ltd. (GPPL) and others on 50:50 basis. The old BOLT scheme has been replaced by new BOT scheme which envisages private participation by a consortium of construction contractors and financiers.

Zero Based Budgeting

7. This exercise has been carried out and all the 22 plan heads of railway budget have been retained. The main issue is the prioritisation of a large number of railway projects which needs to be carried out by the Railways.

Monitoring Mechanism

8. The Planning Commission has developed a monitoring mechanism to evaluate the progress of the Plan schemes/projects. These are called Quarterly Performance Review (QPR), where the concerned Member, Planning Commission takes periodic meeting with officials of the concerned Ministries to review the progress of programmes/schemes/ projects in the Five Year Plan. The purpose is to identify shortcomings and take remedial steps so that the Plan targets could be achieved.

Annexure7.3.1

Financing of Plan

(Rs. crore)

	9th Plan	1997-98	1998-99	1999-00	2000-01	2001-02 (RE)	1997-2002	10th Plan	2002-03
	1	2	3	4	5	6	7	8	9
G.B.S.	11791	1992	2185	2588	3597	5641	16003	27600	5840
Market Borrowings		2795	3217	2919	2897	2753	14581		3000
	33622							33000	
Internal Resources		3452	3455	3550	2901	2463	15821		3490
Total	**45413**	**8239**	**8857**	**9057**	**9395**	**10857**	**46405**	**60600**	**12330**

Annexure7.3.2

9^{th} Plan physical targets and achievements

Items	Targets	Expected Achievement during 9^{th} plan
New Lines	819 km.	702 km.
Gauge Conversion	3710 km.	1800 km.
Doubling	2500 km.	1142 km.
Track Renewals	13922 km.	12194 km.
Electrification Projects	2334 km.	2231 km.
Electric Locos	851 Nos.	705 Nos.
Diesel Locos	785 Nos.	646 Nos.
Coaches	10909 Nos.	10201 Nos.
Wagons	136000 FWUs	110315 FWUs

Annexure7.3.3

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	473.5	30.7	504.2	312.4	3.1	315.5
2001-02 (BE)	500	@	@	326.8	@	@
2001-02(RE)	489.0	@	@	323	@	@
2002-03(BE)	510.0	@	@	334.2	@	@

@' Not available

Annexure7.3.4

Passenger traffic carried by Indian Railways

Year	No. of Passengers (in Million)			Passenger Km. (in billions)		
	Suburban	Non-Suburban	Total	Suburban	Non-Suburban	Total
1	2	3	4	5	6	7
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	2867.9	1971.9	4839.8	89.5	368.2	457.7
2001-02 (BE)	2963.4	1963.6	4927	90	390.6	480.6
2001-02(RE)	2935.7	2064.6	5000.3	85.9	387.5	473.4
2002-03(BE)	3012.8	2175	5187.8	88.1	410.3	498.4

Annexure7.3.5

Plan Head-wise outlays & expenditure of Indian Railways

Sl. No.	Plan Head	1997-98		1998-99		1999-2000		2000-01		2001-02		2002-03
		BE	Actual	BE	Actual	BE	Actual	BE	Actual	(BE)	RE	BE
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Rolling Stock	4002	3614	4305	4265	3905	3488	3900	3639	3850	3473	3772
2	Workshops & Sheds	120	130	175	144	250	167	220	165	220	222	215
3	Machinery & Plant	65	49	80	63	110	90	100	91	100	88	116
4	Track Renewals	1250	1367	1425	1392	1500	1589	2000	1702	2050	1857	2703
5	Bridge Works	85	73	100	66	125	88	75	69	75	110	204
6	Gauge Conversion	910	1130	650	673	645	543	600	454	665	684	807
7	Doublings	195	291	510	447	625	554	655	524	672	620	608
8	Other Traffic Facilities	125	128	2210	147	220	171	225	149	225	202	225
9	Signalling & Telecom	230	251	350	310	375	369	425	350	425	415	725
10	Road Safety ROB/RUB Level Crossing	-	-	-	-	-	-	300	79	300	203	450
11	Computerisation	45	31	60	28	70	40	70	55	70	86	139
12	Electrification	350	319	340	328	350	319	325	302	225	325	238
13	Other Electrical Works	70	66	150	94	130	104	130	93	120	121	130
14	New Lines	400	400	500	388	600	521	825	711	1015	882	911
15	Staff Quarters	60	45	60	52	55	57	60	53	65	69	67
16	Staff Welfare	55	56	55	47	55	54	60	52	65	63	65
17	Users' Amenities	80	89	100	91	130	115	200	136	200	168	200
18	Other Specified Works	65	40	65	39	55	39	45	39	45	58	79
19	Inventories	10	-83	75	91	170	497	337	424	300	891	390
20	M.T.P.	170	146	250	184	300	245	400	263	378	295	266
21	Railway Research	3	5	10	8	10	7	10	9	10	10	20
22	Investment in PSUs	10	92	20	-	20	-	38	36	15	15	-
	Total	**8300**	**8239**	**9500**	**8857**	**9700**	**9057**	**11000**	**9395**	**11090**	**10857**	**12330**

7.3.2 ROADS

Background

A good road network is the basic infrastructure input for socio-economic development of an emerging economy. It plays the key role in opening up backward and remote regions to trade and investment and in promoting national integration. Roads, in addition, have an important role in inter-modal transport development providing linkages to hubs like airports, railway stations and ports and also connect these centers with the hinterland providing door-to-door connectivity.

2. The present road policy in India has two basic tenets viz. accessibility and mobility. The accessibility objective is to be achieved through improved rural roads network. Pradhan Mantri Gram Sadak Yojana (PMGSY) has been launched for the purpose to provide all-weather road connectivity in rural areas by the end of the Tenth Plan. The mobility is to be facilitated through strengthening high-density corridors. The National Highway Development Project is the main initiative in this regard and aims at 4/6-laning of Golden Quadrilateral and North-South, East-West corridors. The maintenance of existing network is simultaneously being emphasized so that the road assets already created do not wear out.

Review of the Ninth Plan

3. The physical progress of work on the National Highway system during the Ninth Plan (1997-2002) is given in Annexure 7.3.6. This includes Scheme-wise targets and achievements. It would be seen that the Scheme-wise achievements have, in general, been good. In the case of widening to two lanes and strengthening weak two lanes, the targets have been exceeded by a sizeable margin. This is mainly because of the availability of additional funds provided to the sector during the Plan period. Shortfalls have been in construction of bypasses and bridges. Scheme-wise Outlay and Expenditure in the Ninth Plan is at Annexure 7.3.7.

Annual Plan 2002-03

4. The year 2002-03 is the first year of the Tenth Plan. During the year, steps are being taken to expand and strengthen road system through emphasis on rural connectivity and expediting completion of Golden Quadrilateral work. In addition, strengthening National Highway network through removal of deficiencies like poor riding quality and consolidation of State Highway network are also a priority. Attention is also being accorded to the maintenance of road network so that the existing road assets do not deteriorate over time.

5. The Scheme-wise physical targets (non NHDP segments) for Annual Plan 2002-03 is at Annexure 7.3.6. It would be seen that the Target for widening to four lanes is 443 km., widening to two lanes 633 km., and strengthening weak two lanes 755 km. The Annexure also includes corresponding physical target for the Tenth Plan (2002-07) period. The Scheme-wise outlay for the Annual Plan 2002-03 and for the Tenth Plan (2002-07) is at Annexure 7.3.7. An outlay of Rs.5870 crore has been provided for the development of roads in the Central Sector in the Annual Plan 2002-03.

TENTH PLAN THRUST AREAS – ROAD SECTOR

Following would be the main areas of focus in the Tenth Plan

Improving riding quality and capacity of existing road network - National Highway Development project (NHDP) to be largely completed.

Riding quality of other National Highways is to be improved. However, the resource requirement for improving various deficiencies is immense – need therefore for prioritizing projects.

Emphasis on revamping road maintenance. The present system has weak accountability and poor monitoring. There is need to contract out maintenance to the private sector. The civil construction contracts could include a 5-year maintenance requirements.

Initiating preliminary work for constructing expressways for select high-density corridors. The role of the Government is to be restricted to that of a facilitator.

Create more conducive climate for associating private sector with road projects. Making BOT Scheme more attractive -sharing downside traffic risk.

ANNUAL PLAN 2002-03 - THRUST AREAS

National Highways

6. With more than 58,000 kilometers of length, National Highways constitute the most important component of the arterial transport network of the country. The Annual Plan 2002-03 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 receive greater attention during the year.

National Highway Development Project

7. National Highway Development Project comprising Golden Quadrilateral (GQ) and North-South, East-West corridor (N-S, E-W) projects are being executed by the National Highway Authority of India (NHAI) and envisage four /six-laning of the existing network. GQ with a total length of 5,846 kms would connect Delhi, Mumbai, Chennai and Kolkata and is targeted for completion by the end of 2003. N-S, E-W Corridors would have a length of 7,300 kms and would connect Kashmir to Kanyakumari and Silchar to Porbandar. The target for completing N-S, E-W corridor projects is 2007.

8. There have been some slippages in the completion of GQ. The total length completed by 31st July 2002 was 1159 km. and under implementation was 4551 km. Contracts for a length of 136 km are still to be awarded. As regards N-S, E-W corridor projects, the completed segment is 773 km. (including a common stretch of 210 km with GQ). Another 715 km is under implementation.

State Roads

9. In the State Roads Sector, the emphasis would be on consolidation of existing road network rather than expansion. This is necessary because existing State Highway network is often in a bad shape because of poor maintenance. Funds have been a major constraint in this regard and associating private sector in upkeep and maintenance of roads therefore needs to be explored by the State Governments. There is also need to prepare long-term plans for development of State road network. This is necessary to address various shortcomings in the network and to prioritize them according to the availability of resources.

Rural Roads

10. Rural connectivity is the key component of rural development in India. In order to give a boast to rural connectivity, a rural roads programme Pradhan Mantri Gram Sadak Yojana (PMGSY) has been launched. The primary objective of PMGSY is to provide connectivity, by way of all-weather roads, to the unconnected habitations in the rural areas, such that habitations with a population of 1000 persons and above are covered in three years (2000-2003) and all unconnected habitations with a population of 500 persons and above by the end of the Tenth Plan Period (2007). In respect of the hill States (North-East, Sikkim, Himachal Pradesh, Jammu & Kashmir, Uttaranchal) and the desert areas, the objective is to connect habitations with a population of 250 persons and above. The Programme, as a related objective, also aims to achieve an equitable development of the rural roads network in different States/Districts so as to fully exploit the latent potential for rural growth. PMGSY is being implemented as a Centrally Sponsored Scheme.

11. As on 1.4.2000, 1.60 lakh habitations were to be covered under PMGSY. States that are expected to achieve 100% connectivity for 1000+ habitation by 2002 are Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra, Gujarat, Goa, Punjab, Haryana, Meghalaya and Manipur.

Road Maintenance

12. Maintenance of roads is emerging as a high priority area, especially because of deterioration in the network condition due to poor maintenance. Studies reveal that it is far more expensive to develop new network than to maintain an existing one. The present system of maintenance has weak accountability and poor monitoring. In order to raise efficiency, there is need to contract out maintenance to the private sector. The active private sector participation in road maintenance would also be an answer to the problem of resources, which have been a major constraint in upkeep of roads.

13. Further, to emphasize the importance of maintenance, civil construction contracts, which account for bulk of the road sector contracts, could include a 5-year maintenance requirement, beginning for which could be made with National Highway contracts. A framework for long-term maintenance of roads also has to be included in the PMGSY, so that rural assets created do not wear out over time.

Private Sector Participation

14. With a view to improve private investment in road sector, the concept of private sector participation in the development, maintenance and operations of National Highways including expressways was approved in 1995. Since then, various measures have been taken to facilitate the involvement of private sector in road construction activity. However, despite steps to facilitate participation, the response of private investors has not been very encouraging and the participation of private sector has been restricted mainly to construction of by-passes and bridges. Efforts are therefore being made to make Build-Operative-Transfer (BOT) schemes more attractive. A useful suggestion in this regard is sharing of downside traffic risk to instill more confidence among investors. The fact that BOT (annuity) that involves contractual annuity payment has been a success and BOT has failed to receive encouraging response is a pointer to this fact.

15. States have also 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.

Externally Aided Projects

16. Details of externally aided National Highway projects (non-NHDP segments) funded by different international donor agencies are shown in Annexure 7.3.8. There are, in all eleven projects. Ten of these have been completed. Particulars of these projects including expenditure are at Annexure 7.3.8.

Monitoring Mechanism

17. The Planning Commission has developed a monitoring mechanism to evaluate the progress of the Plan schemes/projects. These are called Quarterly Performance Review (QPR), where the concerned Member, Planning Commission takes periodic meetings with officials of the concerned Ministries to review the progress of programmes/schemes/projects in the Five Year Plans. The purpose is to identify shortcomings and take remedial steps so that the Plan targets could be achieved. These are in addition to the regular monitoring of the progress of NHDP.

18. Another important initiative is Zero Based Budgeting exercise. The purpose is to review the Plan Schemes to make them more consistent with the Plan targets. A number of Road Sector Schemes have been merged and weeded out to make them more target oriented.

Annexure 7.3.6

Physical Targets/Achievements – Roads & Bridges

Sr. No.	Scheme	Unit	Ninth Plan Target (1997-2002)	Achievements Ninth Plan (1997-2002)	10th Plan (2002-2007) Targets	Annual Plan (2002-03) Targets
1	2	3	4	5	6	7
1.	Widening to four lanes	Kms.	944	797	800	443
2.	Widening to two lanes	Kms.	1791	1955	4000	633
3.	Strengthening weak 2 lanes	Kms.	3042	3511	2000 (10,000) IRQP	755
4.	Bypasses	No.	59	30	25	17
5.	Major bridges	No.	633	442	100	202
6.	Major Bridges including ROBs					

Annexure 7.3.7

CENTRAL ROAL SECTOR OUTLAY /EXPENDITURE

S. No.	Schemes	Ninth Plan 1997-2002		Tenth Plan	Annual Plan
		Outlay	Expenditure	Outlay (2002-07)	(2002-03)
1	2	3	4	5	6
1	Externally Aided projects	3607.16	4178.22	13990.50	2158.00
2	Other schemes N.H.(O)	3983.43	4786.12	8664.00	1440.00
3	Works under BRDB	468.00	524.80	950.00	145.00
4	Travel Expenses (Domestic)		0.59		1.00
5	Other Charges		0.20	20.00	1.00
6	Development of Information Technology		4.15	20.00	4.00
7.	E&I for States from CRF}	109.00	71.38	500.00	95.00
8.	E&I for UTs from CRF}				5.00
9	Development of Planning	0.30	-	*	*
10	Strategic Roads under Roads Wing	17.49	13.53	50.00	1.00
11.	Strategic Roads under BRDB	28.60	30.98		8.50
12	SBA Roads	0.64	0.64	*	*
13	Special Repair Programme		501.49	*	*
14	R&D Planning Studies	28.64	14.41	20.00	3.00
16	Training	5.35	0.89	10.50	1.50
17	Machinery & Equipment	25.00	25.37	15.00	2.00
18	NHAI (Investment)	551.00	5483.00	10500.00	2000.00
19	Charged Expenditure	37.41	34.45	50.00	5.00
	Total	**8862.02**	**15670.22**	**34790.00**	**5870.00**

* Weeded out

Annexure 7.3.8

Financing of Externally Aided Roads/Bridge Projects

(Rs.Crore)

No.	Schemes	Likely cost of Completion	Likely date of Completion	Total Expenditure upto 31.3.2002	Balance Amount as on 12.4.2002	Budget Alloca Completion 2002-03
1	4-laning between Karnal & Ambala Km. 132.67-212.16 NH-1 in Haryana	371.99	Completed	369.99	2.0	2.00
2	4-laning between Sirhind and Punjab/Haryana Km. 212.16-252.55 NH-1 in Punjab	241.74	-do-	241.74	0.0	2.00
3	4-laning of Cuttack-Bhubaneswar Section of NH-5 (Km.0.0 to 27.8) in Orissa	275.13	-do-	268.13	7.0	7.00
4	4-laning of Indoare-Dewas Section of NH-3 (Km.573 to 590.6) including construction of Indore bypass (32.6 Kms.) in Madhya Pradesh	264.85	-do-	243.70	21.15	10.00
5	4-laning between Bassein Creek and Manor Km. 439 to 497 (NH-2 in Maharashtra	307.00	-do-	300.06	6.94	5.00
6	4-laning between Raniganj and West Bengal/Bihar border Km.438 to 474.0 of NH-2 in West Bengal	141.09	-do-	140.00	1.09	2.50
7	4-laning of Mathura-Agra Section of NH-2 in Uttar Pradesh	154.30	-do-	142.94	11.36	10.00
8	4-laning of NH-47 from Km.8 to Km. 33.0 in Karnataka	71.15	-do-	68.43	2.72	0.10
9	4-laning of NH-47 between Alwaye-Sherthalai in Kerala	145.04	-do-	141.20	3.84	0.10
10	4-laning of NH-8 between Achrol-Kotputli in Rajasthan	106.23	-do-	104.52	1.71	0.10
11	West Bengal Corridor Development Project	1085.70	June,2006	-	1085.70	122.82

Road Transport

The Road Transport is the dominant mode of transport for moving goods and passenger traffic in the country. The sector has grown significantly during the last fifty years with the number of vehicles registered a compounded growth rate of 12.61 per cent during this period. Being the sole mechanized means of surface transport for hilly, rural and backward terrain not connected by railways, its share of passenger and freight traffic has also increased vis-a-vis railways.

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

2. Against an approved outlay of Rs.60 crore under Central Sector for the 9th Five Year Plan, the expenditure is likely to be Rs.43.34 crore (72.2%). The shortfall in the achievement is reported to be due to non-receipt of adequate proposals. Under State sector, an outlay of Rs.7355.26 crore had been approved for the 9th Five Year Plan. Against this, Rs.5894.30 crore (80%) is likely to be spent as shown in Annexure 7.3.9.

3. The physical performance of the State Road Transport Undertakings has been satisfactory. The fleet utilization, vehicle productivity, staff productivity, fuel efficiency etc. have improved considerably. However, despite improvement in physical performance, the State Road Transport Undertakings continued to incur financial losses. The net loss in the 9th Five Year Plan was Rs.8731 crore. The main reasons for such losses were increase in the input cost, operation of services on uneconomic routes, free and concessional travel, high motor vehicles tax and uneconomic fare structure.

TENTH PLAN THRUST AREAS - ROAD TRANSPORT SECTOR

The focus of the 10th Plan would be on the following:

Efforts to encourage public transport services. Private sector participation to be promoted through decontrol and removal of restrictive practices. The role of Government to be restricted to regulating transport services with an aim to providing efficient and safe services to the public.

Measures to reduce accidents and fatalities on roads.

Measures to encourage higher capacity and better technology vehicles, so that the changes in road transport could keep pace with revolution in the road sector.

Projections for the 10th Five Year plan (2002-07)

4. An amount of Rs.210 crore has been allocated for Road Sector in the 10th Five Year Plan (2002-07). The major schemes proposed to be taken up are National Highway patrolling scheme, publicity measures on road safety, pollution controls from motor vehicles and training programmes. Under the State sector, improving operation of State Road Transport Undertakings would be the major scheme.

Annual Plan 2002-03

5. An outlay of Rs. 30.00 crore has been allocated for the Annual Plan 2002-03 for the road transport sector for four schemes; viz., (i) National Data Network & Computer System, (ii) Road Safety, (iii) Pollution Control, and (iv) Model Training Institute on Driving and Research.

Private Sector participation

6. Involvement of the private sector in providing passenger transport services has eased the pressure on the SRTUs. However, there is need for further decontrol in the road transport service sector. The private sector could also be encouraged to operate services on unprofitable routes through tax incentives. The long term objective should be the pre-eminent role of private sector in providing all passenger public transport services. There is however need to check rash driving, overtaking, unscheduled operations and tax evasion.

Zero Based Budgeting

7. During zero based budgeting exercise conducted by the Planning Commission in consultation with the Ministry of Road Transport & Highways two road transport sector schemes have been weeded out and 14 others have been merged into three schemes. One scheme – Model Training Institute of Driving and Research has been converted into centrally sponsored scheme.

Monitoring mechanism

8. For the review and monitoring of physical as well as financial progress of projects/ schemes, a system of Quarterly Progress Review (QPR) meetings has been started.

Annexure 7.3.9

Outlay & Expenditure - Road Transport

	Scheme	9th plan	1997-98		1998-99		1999-2000		2000-01		2001- 02		Exp.
		Outlay	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	9th Plan
	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Capital **contribution to** SRTCs	8.63	5.63	5.63	3.00	1.52	1.00	0.00	0.00	0.00	0.00	0.00	7.15
2.	Rroad Safety Programmes	37.42	2.57	1.89	8.40	4.40	5.66	4.95	9.45	7.95	10.12	11.52	30.71
	Road Safety Cell	0.75	0.12	0.10	0.20	0.09	0.15	0.15	0.20	0.17	0.22	0.19	0.70
	Publicity measures	8.67	1.00	0.79	2.50	1.68	1.00	1.00	3.00	2.70	3.00	3.12	9.29
	Grannt in aid	3.00	0.20	0.20	1.00	0.08	0.50	0.40	0.50	0.49	0.50	0.49	1.66
	Pollution testing equipment	6.00	0.50	0.30	1.50	0.64	1.00	0.50	0.75	1.00	1.25	0.20	2.64
	Road Safety equipment	4.00	0.25	0.02	0.70	0.00	0.01	0.15	4.00	0.65	0.15	1.14	1.96
	National Highways/ Patrolling scheme	15.00	0.50	0.50	2.50	1.91	3.00	2.75	1.00	2.93	5.00	6.37	14.46
3.	Training & Computer	4.45	0.26	0.50	2.10	0.26	0.68	0.64	0.75	0.97	0.57	0.34	2.71
	National institute of road safety	2.00	0.00	0.40	1.50	0.00	0.33	0.30	0.40	0.40	0	0.04	1.14
	Training of drivers in unorganized sector	0.75	0.15	0	0.25	0.08	0.15	0.15	0.30	0.32	0.3	0.22	0.77
	Training programme (HRD)	0.50	0.01	0	0.15	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.19
	Computer system	1.20	0.10	0.10	0.20	0.13	0.15	0.15	0.20	0.20	0.22	0.03	0.61
4.	Research & Developmnent	1.15	0.20	0.10	0.20	0.00	0.15	0.00	0.10	0	0	0	0.10
5.	Strengthening of CIRT, Pune	4.65	0.20	0	1.00	0.40	1.00	1.00	0.20	0	0	0	1.40
6.	Misc. including Studies	3.70	0.36	0.33	1.30	0.24	0.51	0.35	0.65	0.16	0.80	0.19	1.27
	Transport studies	1.50	0.20	0.20	0.50	0.07	0.25	0.19	0.10	0.00	0.40	0.06	0.52
	Data collection	0.50	0.05	0.05	0.10	0.06	0.10	0.05	0.20	0.03	0.10	0.04	0.23

	Scheme	9th plan	1997-98		1998-99		1999-2000		2000-01		2001- 02		Exp.
		Outlay	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	9th Plan
	1	2	3	4	5	6	7	8	9	10	11	12	13
	National data base network	0.95	0.00	0.00	0.50	0.00	0.01	0.00	0.10	0.00	0.10	0.01	0.01
	Control of pollution of motor vehicle	0.75	0.10	0.08	0.20	0.11	0.15	0.11	0.15	0.13	0.20	0.08	0.51
	Energy Conservation	0	0.01	0	0.00	0.00	0	0.00	0.10	0.00	0	0	0.00
	TOTAL	**60.00**	**9.22**	**8.45**	**16.00**	**6.82**	**9.00**	**6.94**	**11.35**	**9.08**	**11.49**	**12.05**	**43.34**
	STATE PLAN	**7355.26**	**1227.10**	**1442.32**	**1229.64**	**968.38**	**1226.37**	**934.96**	**1265.30**	**1274.32**	**1200.00**	**1274.32**	**5894.30**
	GRAND TOTAL	**7415.26**	**1236.32**	**1450.77**	**1245.64**	**975.20**	**1235.37**	**941.90**	**1276.65**	**1283.4**	**1211.49**	**1286.37**	**5937.64**
	GRAND TOTAL	**7415.26**	**1236.32**	**1450.77**	**1245.64**	**975.20**	**1235.37**	**941.90**	**1276.65**	**1283.4**	**1211.49**	**1286.37**	**5937.64**

7.3.3 PORTS

Twelve major ports along the coastline of India handle about 75% of the port traffic of the country and remaining 25% is handled by minor / state ports.

Review of Ninth Plan

2. Against the outlay of Rs. 9428 crore, an amount of Rs. 4838.92 crore was spent. The main reasons for shortfall included – delays in sanctioning the schemes, slow progress of work by contractors, contractual disputes / litigation, delays in tender finalisation and weeding out of some schemes.

3. The traffic handled by major ports increased from 227.26 million tonne (MT) as on 31st March, 1997 to 291.10 MT as on 31st March, 2002 against the target of 429 MT including throughput by minor ports. Traffic handled by minor ports increased from 37.83 MT at the end of Eighth Plan to 71.10 MT by the end of Ninth Plan. The growth of traffic at major ports and minor ports was 4.9% and 27.9% respectively. Thus, the share of minor ports in the total traffic went up during Ninth Plan. The capacity of major ports at the end of Ninth Plan was 343.95 MT showing an increase of 124.85 MT during the plan period.

4. Port productivity, in terms of average output per ship berth day output, average pre-berthing waiting time and average turn round time has registered an improvement during the Ninth Plan. Average pre berthing waiting time came down from 1.7 days in 1996-97 to 0.50 days in 2000-01. Average turn around time improved from 7.5 days in 1996-97 to 4.7 days in 2000-01. Output per ship berth day increased from 4497 tonnes in 1996-97 to 6469 tonnes in 2000-01. The labour productivity increased from 307 tonnes in 1997-98 to 413 tonnes in 2000-01 in terms of output per gang shift.

Annual Plan 2002-03

5. Annual Plan 2002-03 being the first year of the Tenth Five Year Plan, has been formulated keeping in view the objectives and thrust areas of Tenth Five Year Plan

Thrust Areas of Tenth Five Year Plan

- Encourage private sector participation
- Affect organisational changes – corporatisation for management efficiency, institutional funding and attracting private investment.
- Establish major gateway ports and provision of inter modal linkages through efficient rail and road services.
- Rationalise manning scales.
- Make tariff authority for major ports (TAMP) an Appellate body and extend its jurisdiction on all ports

Financial Allocations

6. During Annual Plan 2002-03, an outlay of Rs. 1162.00 crore has been approved for the port sector. This includes Rs. 256.89 crore as budgetary support and Rs. 905.11 crore as Internal and Extra Budgetary Resources (IEBR).

PHYSICAL TARGETS

Cargo Traffic Target

7. The traffic at major ports is projected to increase from 291.10 MT as on 31st March, 2002 to 295.84 MT as on 31st March, 2003. The target for Tenth Plan is 415 MT. Commodity-wise break-up of traffic targets for 2002-03 in major ports is as follows:

Commodity-wise break-up of traffic targets for 10th Plan and Annual Plan 2002-03

(In Million Tonne)

Commodity	**10th Plan**	**Annual Plan 2002-03**
POL	154.30	104.280
Iron Ore	52.50	46.00
Fertilizer}	13.45	3.675
FRM dry}		6.885
Thermal Coal}	71.30	31.100
Coking Coal }		15.130
Containerised Cargo	61.10	40.710
Other Cargo	62.35	48.38
Total	**415.00**	**295.84**

Capacity Creation

8. The capacity of major ports as on 31st March, 2002 was 343.95 MTPA. Considering the present status of capacity yielding projects in the major ports, capacity addition of 18.60 MT is expected to be achieved during 2002-03. Thus the capacity of major ports as on 31st March, 2003 is expected to be about 362.55 MT against the target of 470.15 MT as on 31st March, 2007. Port-wise details are given in Annexure7.3.10. A number of projects are expected to be completed in 2002-03. A list of such projects is given in Annexure 7.3.11.

Private Sector Participation

9. The Ninth Plan envisaged private sector/captive users investment of Rs. 8,000 crore with capacity addition to the tune of 76 mt. Seventeen private sector/captive port projects of 60.05 mt capacity with an investment of Rs. 3,480.20 crore have already been approved and they are at different stages of construction.

10. Nine more private sector/captive user port projects with 32.86 mt plus 9 lakh twenty equivalent units (TEUs) and an investment of Rs. 3,608.20 crore are in the pipeline.

11. During the Tenth Plan, an ambitious investment plan for private sector participation will be initiated. In addition to Plan allocations for major ports, investment to the tune of Rs. 11,256.00 crore will be made by the private sector.

Introduction of Zero Based Budgeting

12. Another important initiative is Zero Based Budgeting exercise. The purpose is to review the Plan schemes to make them more consistent with the Plan targets. A number of Ports Sector schemes have been merged and weeded out to make them more target oriented.

Monitoring mechanism

13. The Planning Commission has developed a monitoring mechanism to evaluate the progress of the Plan schemes / projects. These are called Quarterly Performance Review (QPR), where the concerned Member, Planning Commission takes periodic meetings with officials of the concerned Ministries to review the progress of programmes / schemes / projects in the Five Year Plans. The purpose is to identify shortcomings and take remedial steps so that the Plan targets could be achieved.

Annexure 7.3.10

Projections of Capacity Addition by Major Ports during Tenth Plan and Annual Plan 2002-03

(In Million Tonne)

Sl. No.	Name of Port	Capacity as on 31-3-02	Projected capacity as on 31.3.2003	Projected capacity addition as on 31.3.07
1	**2**	**3**	**4**	**5**
1	Kolkata Port	9.80	09.80	—-
2	Haldia Port	32.40	32.40	2.00
3	Paradeep Port	32.10	38.10	0.60
4	Vizag Port	41.15	41.15	10.50
5	Chennai	38.75	40.95	4.20
6	Ennore	12.00	12.00	13.00
7	Tuticorin Port	13.95	14.95	3.35
8	Cochin Port	15.50	15.50	13.50
9	New Mangalore Port	21.30	29.50	12.00
10	Mormugao Port	20.50	20.50	7.00
11	Mumbai Port	38.50	38.50	11.50
12	JN Port	28.00	29.20	14.00
13	Kandla Port	40.00	40.00	19.55
	Grand Total	**343.95**	**362.55**	**111.20**
				## + 15.00
				* **126.20**

From improvement in productivity at various ports
* Total capacity as on 31.3.2007 will be 470.15 MT (343.95 + 126.20

Annexure 7.3.11

Details of Capacity Yielding Projects expected to be completed by 31.3.2003 – Major Ports

Sr. No.	Name of the Project	Capacity (in MTPA)
1.	Construction of Oil Berth at Paradip	6.00
2.	Further extension of Container Terminal at Chennai Port	0.50
3.	Modernisation of West Quay Berth at Chennai Port	1.00
4.	Modernization of South Quay 3 and East Quay Berths at	
	Chennai Port	0.70
5.	Dredging on front of Berth No. 8 at Tuticorin Port	1.00
6.	Port facilities for MRPL expansion at New Mangalore Port	
	(balance capacity)	5.20
7.	Construction of Multi-user Oil Berth at New Mangalore Port	3.00
8.	Construction of shallow water berth at JN Port	1.20
	Total	**18.60**

7.3.4 SHIPPING

In India, with a coastline of 5560 km. studded with 12 major and 184 minor / intermediate ports, shipping sector assumes special significance. Over 90% of India's oversea trade in terms of volume and 68% in terms of value is sea born. Share of Indian flag ships in the oversea trade of the country has been hovering around 30% during the last few years.

Review of Ninth Plan

Against the outlay of Rs. 5005.45 crore the expenditure was only Rs. 2475.02 crore. It comes to about 48.40% of the approved outlay against the target of 9 million Gross Tonnage (GT) for Ninth Plan, the achievement as on 31st March, 2002 was only 6.91 million GT which was at the level of Eighth Plan. A slow progress in tonnage acquisition was mainly due to – i) lack of fiscal incentives to remain internationally competitive, ii) difficulty in raising external commercial borrowings, iii) prevailing market condition is depressed and charter/freight rates have fallen considerably, especially in the dry-bulk and liner sector, iv) considerable changes in the trade pattern, which had compelled the SCI to abandon many of its projects.

Annual Plan 2002-03

2. Annual Plan 2002-03 being the first year of the Tenth Five Year Plan, has been formulated keeping in view the objectives and thrust areas of Tenth Five Year Plan.

Thrust Areas of Tenth Five Year Plan

- Adoption of tonnage tax regime to ensure level playing field for Indian Shipping.
- Continuation of the present policy of cargo support and its extension to LNG.
- Laying down less stringent construction, survey, loadlines and safety requirements for coastal vessels.
- Revise manning scales for coastal vessels

Financial allocations

3. During Annual Plan 2002-03, an outlay of Rs. 1342.26 crore has been provided for the shipping sector. Of it, Rs. 10.01 crore will be provided as budgetary support to Director General (Shipping) and Rs. 1332.25 crore is expected to be raised through IEBR by Shipping Corporation of India (SCI).

Physical targets

4. The Tenth Plan target of fleet acquisition is 7.71 MT. In 2002-03 SCI propose to acquire the following ships:

2 Capsize Bulk Carrier
1 Afframax Tanker
2 VLCCs

2 Aframax Tanker (Second Hand)
2 LR-I Product Carriers

Director General (Shipping)

5. During Annual Plan 2002-03 the allocated amount of Rs. 10.01 crore is proposed to be spent on training and welfare scheme for benefit of seamen, e-Governance project for DG (Shipping) headquarters and allied offices including Mercantile and Marine Departments, Shipping offices, etc and construction of buildings by CPWD and other agencies.

Director General (Light Houses and Light Ships)

6. Department of Light Houses and Light Ships is a revenue earning Department and derives its income from light dues and light charges from ships entering and leaving Indian ports. During Ninth Plan, the anticipated revenue earning was Rs. 408 crore. Against the Ninth Plan outlay of Rs. 123 crore, the expenditure in this sector was about Rs. 62 crore.

7. During Tenth Plan and Annual Plan 2002-03, an outlay of Rs. 185.00 crore and Rs. 20.00 crore respectively has been provided as budgetary support. Emphasis will be laid on automation of existing light houses, improvement in visual aids, replacement of existing light house tenders, improvement of training facilities and establishment of a Coastal Vessel Traffic Service (CVTS).

Introduction of Zero Based Budgeting

8. Another important initiative is Zero Based Budgeting exercise. The purpose is to review the Plan schemes to make them more consistent with the Plan targets. A number of Shipping Sector schemes have been merged and weeded out to make them more target oriented.

Monitoring mechanism

9. The Planning Commission has developed a monitoring mechanism to evaluate the progress of the Plan schemes / projects. These are called Quarterly Performance Review (QPR), where the concerned Member, Planning Commission takes periodic meetings with officials of the concerned Ministries to review the progress of programmes / schemes / projects in the Five Year Plans. The purpose is to identify shortcomings and take remedial steps so that the Plan targets could be achieved.

7.3.5 INLAND WATER TRANSPORT (IWT)

IWT being an energy efficient, environmentally clean and economical mode of transport could play an important role in passenger and cargo movement, establishing inter-modal connectivity. India is richly endowed with waterways comprising river systems and canals. It is estimated that a total of 14,544 kms of waterways could be used for passenger and cargo movement. However, capacity of the sector is grossly under utilised as most navigable waterways suffer from hazards like shallow water and narrow width of channel during dry weather, silting or river bed and erosion of banks, absence of adequate infrastructural facilities like terminals for loading and berthing and surface road links.

Review of Ninth Plan

2. Against the outlay of Rs. 408 crore, an amount of Rs. 201.56 crore could be spent on the provision / maintenance of fairway terminals and navigational aids on the three National Waterways, assistance to the States under Centrally Sponsored Schemes, loan interest subsidy for acquisition of inland vessels, acquisition of capital dredging vessels and modernization of handling facilities.

Annual Plan 2002-03

3. Annual Plan 2002-03 being the first year of the Tenth Five Year Plan, has been formulated keeping in view the objectives and thrust areas of Tenth Five Year Plan.

Thrust Areas of Tenth Five Year Plan

- Emphasis would be on the development of infrastructure facilities.
- Encourage Private sector participation in IWT
- Focus on North East Region for development of IWT.

Financial allocations

4. During Annual Plan 2002-03, an outlay of Rs. 80 crore has been provided for IWT including a sum of Rs. 20 crore for National Waterway 2. The expenditure will be incurred mainly on the provision / maintenance of fairway, terminal and navigational aids on the three National Waterways, techno-economic feasibility studies on several other waterways systems, assistance to States under Centrally Sponsored Schemes (CSS) and to meet the past liabilities of Loan Interest Subsidy Scheme (LISS) for acquisition of inland vessels.

Physical targets

5. The physical targets fixed for traffic movement by IWT during the year 2002-03 are 2,03,100 MT.

Private Sector Participation

6. In the Inland Water Transport Policy, a number of incentives for encouraging private sector participation have been provided in the Tenth Plan and Annual Plan 2002-03. The private sector would be involved in the whole range of inland water activities through joint ventures, BOT projects etc.

Introduction of Zero Based Budgeting

7. Another important initiative is Zero Based Budgeting exercise. The purpose is to review the Plan schemes to make them more consistent with the Plan targets. A number of IWT Sector schemes have been merged and weeded out to make them more target oriented.

Monitoring mechanism

8. The Planning Commission has developed a monitoring mechanism to evaluate the progress of the Plan schemes / projects. These are called Quarterly Performance Review (QPR), where the concerned Member, Planning Commission takes periodic meetings with officials of the concerned Ministries to review the progress of programmes / schemes / projects in the Five Year Plans. The purpose is to identify shortcomings and take remedial steps so that the Plan targets could be achieved.

7.3.6 CIVIL AVIATION

INTRODUCTION AND OVERVIEW

Civil aviation is the fastest mode of transport for movement of passenger and cargo traffic. At present there are 94 civil airports including 11 international airports and 28 civil enclaves at Defence Air Fields. The sector is broadly divided into 3 distinct functional entities viz regulatory cum development, operational and infrastructure. The regulatory functions are the responsibility of Directorate General of Civil Aviation (DGCA) and Bureau of Civil Aviation Security (BCAS). The operational functions are performed by Air India Ltd., Indian Airlines Ltd., Alliance Air Ltd., Pawan Hans Helicopter Ltd. under public sector and other private airlines operators. The infrastructural facilities are provided by Airport Authority of India (AAI).

Review of the Ninth Plan

2. During the 9^{h} Plan, under Central Sector likely expenditure was Rs. 6599.51 crore (59.4%) against the approved outlay of Rs.11112.37 crores. The utilisation of Gross Budgetary Support was 37.1% (Rs.183.77 crore). The details are at Annexure 7.3.12. The lower utilization of outlay is because of the decision of the Government to disinvest equity in Indian Airlines, Air India and restructure metro airports through private sector participation and lower utilization by BCAS. Physical performance organization-wise has been discussed in the ensuing paragraphs.

3. The Civil Aviation sector in India has undergone some significant development/ transformation during the 9^{th} Five Year Plan period such as - a) the Government considerably disengaged itself from commercial operations of airlines; b) the Government encouraged increase in the role of private sector in the civil aviation sector in order to bridge the resource gap as well as bring greater efficiency in the management; c) the process of disinvestment of Air India and Indian Airlines was initiated, d) the decision to re-structure existing airports at Delhi, Mumbai, Chennai and Kolkata.

Objectives and Thrust Areas during 10^{th} Five Year Plan

4. The main objective of the development of the civil aviation sector in the 10^{th} Five Year Plan is to provide world class infrastructure facilities and efficient, safe and reliable air services to meet the requirements of domestic and foreign trade and tourism. The objectives of the plan would be pursued in the subsequent Annual Plans including 2002-03. The details of the projections during the 10^{th} are given at Annexure 7.3.13 and Annexure 7.3.14.

Tenth Plan Thrust Areas: Civil Aviation
The objectives of development of the civil aviation sector is to provide world class infrastructure facilities and efficient, safe and reliable air services.
Disinvesting Government equity in Indian Airlines and Air India.
Restructuring of the metro airports through private sector participation.
Providing a suitable regulatory framework for the air services.
Ensuring adequate security arrangements in view of the increased threat perception.
Consider increasing the share of foreign equity in both domestic and international carries with a view to attracting new technology and management expertise.
Re-consider bar on equity participation by foreign airlines in companies formed for domestic air transportation.
Review Route Dispersal guidelines to streamline provision of air services in remote and isolated areas

Physical Targets/Financial Allocations during the Annual Plan 2002-03

5. An outlay of Rs.2521.19 crore has been approved during Annual Plan 2002-03, which includes Rs.69 crores as budgetary support. The Organisaiton-wise details are at Annexure 7.3.15.

DISINVESTMENT OF AIR INDIA AND INDIAN AIRLINES

Air India

6. Air India (AI) provides international air services. The Government of India is in the process of disinvestment of its stakes in Air India. 40% of its equity is proposed to be given to the strategic partner of which 26% would be held by foreign investor/airline. The strategic partner is expected to bring management expertise, finance and support the aircraft acquisition process. However, due to September 11, 2001 incident the process of disinvestment is likely to be delayed.

Indian Airlines Ltd.

7. Indian Airlines (IA) along with its wholly owned subsidiary Alliance Air India Ltd., primarily provides domestic air services in the country. Indian Airlines, however, also provides international air services to some of the neighbouring countries.

8. Like AI, Government has decided to disinvest 51% equity of IA within the parameters of “Domestic Air Transport Policy” of which 26% equity could be given to a group or an individual who may be called joint venture/strategic partner. The remaining 25% would be offered to employees, financial institutions and the public. The disinvestment process is being undertaken by the Ministry of Disinvestment.

9. The physical as well as financial performance of AI & IA are at Annexure 7.3.16, 7.3.17 & 7.3.18.

Airport Authority of India

10. The Airport Authority of India (AAI) is responsible for management and development of 94 civil airports including 11 international airports and 28 civil enclaves at Defence Air Fields. It is also responsible for providing navigational facilities to the aircraft operating in India. The profitability of AAI is given at Annexure 7.3.18.

11. The approved Annual Plan outlay during 2002-03 is Rs.996.05 crores which includes a provision of Rs.53.12 crores towards budgetary support. The provisions earmarked for International Airports Division (IAD) is Rs. 286.45 crores and that for National Airports Division (NAD) is Rs.709.60 crores. The break-up of Rs. 709.60 crores for NAD is as follows:

Scheme-wise Approved Annual Plan Outlay During 2002-03

(Rs. Crores)

S. No.	Schemes	Approved outlay
1.	Aerodrome works	352.98
2.	Aeronautical Communication Services	248.60
3.	Ground Safety Services	101.75
4.	Modernization of Air Traffic Services (MATS-BD)	3.00
5.	Modernization of CATC, Allahabad	3.27
	Total	709.60 (53.12)

Note: Figure in bracket indicates Budgetary Support from Government of India.

12. During the Tenth Five Year Plan, the emphasis would be on up-gradation, expansion of airport infrastructure and strengthening of the security arrangements at the airports. These would be followed in the subsequent Annual Plans including 2002-03.

Others

13. Pawan Hans Helicopter Ltd. (PHHL) was incorporated on 15th October, 1985 to provide helicopter support services to the public sector undertakings like ONGC and operate helicopter services in inaccessible areas. An outlay of Rs.133.80 crore has been approved during 2002-03 mainly for acquisition of new fleet.

14. Bureau of Civil Aviation Security (BCAS) is responsible for ensuring adequate security arrangement at the airports. During the Annual Plan 2002-03, an amount of Rs.7.69 crores has been approved. Out of this, Rs. 5 crores has been allocated for setting up of Civil Aviation Security Academy.

15. Directorate General of Civil Aviation (DGCA) is responsible for ensuring quality and safety in aircraft operations in the country. An outlay of Rs. 3.10 crore has been approved during 2002-03. The thrust will be on purchase of machinery and equipment for training to strengthen the capacity of Directorate to carry out its regulatory function.

16. Indira Gandhi Rashtriya Uran Academy (IGRUA) is the premier flying institute of the country responsible for imparting flying training for award of commercial pilots license and commercial helicopter pilots license. During Annual Plan 2002-03, an outlay of Rs. 2.09 crores has been approved.

17. Hotel Corporation of India (HCI) is a subsidiary of Air India. During Annual Plan 2002-03 an amount of Rs. 8.76 crores has been approved. The Board of Directors of Air India has approved the disinvestment proposal in principle. The process of disinvestment is being undertaken by the Ministry of Disinvestment. In case of Centeur Hotel, Delhi, Cabinet Committee on Disinvestment has directed for re-bidding by exploring ways and means to secure better response.

Private Sector Participation

18. The services and facilities available at Indian International Airports are not up to the mark. The Government of India, therefore, has decided to restructure the four metro airports of the AAI. The restructuring process will facilitate participation of the private sector in the development of metro airports.

19. The new Bangalore International Greenfield airport at Devanahalli, near Bangalore is promoted by the Government of Karnataka (GoK). The selected bidder who would become equity contributors to the extent of 74% is a consortium lead by Siemens, Germany with the other partners being Unique Zurich, Switzerland and Larsen & Toubro Ltd., India. In the project GoK along with AAI will together hold 26% equity with AAI's equity being capped at Rs.50 crore. The shareholders agreement of the project company (BIAL) was signed on the 23rd January 2002. The estimated project cost is Rs.1150 crore. The financial close is expected sometime in September 2002.

Progress of Externally Aided Projects:

20. The development of Aurangabad Airport has been taken up in phases with financial assistance of JBIC, Japan. As per agreement with JBIC, Japan, 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. The works of Phase-I of the project, inter alia, extension of runway to 7500 ft have already been completed. It has also proposed to include some of the Phase-II works like strengthening of existing runway (Rs. 4.82 crore, work already completed), Construction of New Domestic Terminal Building(Rs.18.00 crore) and New Apron and other facilities (Rs. 09.34 crore) in Phase-I.

Zero Based Budgeting

21. Exercise of Zero-Based Budgeting : Convergence and Weeding out of the Central Sector Schemes relating to Civil Aviation Sector have been carried out as per the

guidelines. It was decided that out of 13 schemes, 3 schemes to be weeded out, 2 schemes to merged into one, 2 more schemes to be merged into one with modifications and to retain 6 schemes as such. The details are at Annexure 7.3.19.

Monitoring Mechanism

22. Through the system of Quarterly Performance Review, mechanism has been evolved to monitor central sector schemes including civil aviation.

Annexure 7.3.12

Outlay and Expenditure - Ninth Plan- Civil Aviation

(Rs. Crore)

Sl. No.	Organisation	Ninth Plan Appr. Outlay	1997-98 Act.	1998-99 Act.	1999-2000 Act.	2000-01 Act.	2001-02 Anti. Exp.	9th plan Anti. Exp.	
								Amount	% age
1	2	3	4	5	6	7	8	9	10
1	AI	3664.00	517.75	550.01	383.09	641.60	345.46	2437.91	66.5
	Of Which BS			0.00					
2	IA	3640.75	441.90	522.03	492.27	421.26	431.80	2309.26	63.4
	Of Which BS	125.00		0.00					
3	AAI								
	I) NAD	1899.35	220.53	210.37	201.02	237.15	191.60	1060.67	55.8
	ii) IAD	1522.52	118.05	109.50	159.61	111.53	93.17	591.86	38.9
	Total	**3421.87**	**338.58**	**319.87**	**360.63**	**348.68**	**284.77**	**1652.53**	**48.3**
	Of Which BS	283.37	10.00	25.00	25.00	25.20	40.25	125.45	44.3
4	PHHL	209.20	26.85	5.55	1.21	2.31	32.90	68.82	32.9
5	HCI	89.55	8.52	10.19	13.37	17.34	23.25	72.67	81.2
6	BCAS	25.00	0.01	2.35	1.37	2.57	1.25	7.55	30.2
	Of Which BS	25.00	0.01	2.35	1.37	2.57	1.25	7.55	30.2
7	DGCA	27.00	1.07	3.38	3.47	4.36	4.60	16.88	62.5
	Of Which BS	27.00	1.07	3.38	3.47	4.36	4.60	16.88	62.5
8	IGRUA	35.00	10.00	11.00	6.00	5.89	1.00	33.89	96.8
	Of Which BS	35.00	10.00	11.00	6.00	5.89	1.00	33.89	96.8
	Total	**11112.37**	**1344.68**	**1424.38**	**1261.41**	**1444.01**	**1125.03**	**6599.51**	**59.4**
	Of Which BS	**495.37**	**21.08**	**41.73**	**35.84**	**38.02**	**47.10**	**183.77**	**37.1**

Annexure 7.3.13

Airports Authority Of India
Capacity, Demand And Augmentation For Passenger Terminals At Major Airports During Ninth Plan And Projection For Tenth Plan Period (2002-07)

(Annual in million)

Airports	Ninth Plan Targets (1997-02)		Ninth Plan Achievements		Tenth Plan	
	Capacity (2001-02)	Demand (2001-02)	Capacity	Demand (2000-01)	Capacity planned in 2006-07	Projected demand 2006-07
1	2	3	4	5	6	7
Mumbai						
International Terminal	7.50	6.22	7.50	5.18	8.50	6.55
Domestic Terminal	6.45	10.39	6.45	7.00	7.60	9.93
Delhi						
International Terminal	3.40	5.18	3.40	3.95	9.90	5.60
Domestic Terminal	7.20	7.04	7.20	4.98	7.20	7.03
Chennai						
International Terminal	1.80	2.20	1.55	1.83	2.12	2.91
Domestic Terminal	2.67	3.01	3.30	2.23	3.30	3.17
Kolkota						
International Terminal	1.65	0.86	0.82	0.63	1.08	0.85
Domestic Terminal	3.70	3.23	3.70	2.06	3.70	2.60
Trivandrum						
International Terminal	0.42	1.22	0.42	0.76	0.42	0.91
Domestic Terminal	0.80	0.42	0.80	0.25	0.80	0.32
TOTAL	**35.59**	**39.77**	**35.14**	**28.87**	**44.62**	**39.87**

Annexure 7.3.14

Airports Authority Of India
Capacity, Demand And Augmentation For International Cargo Terminals At Major Airports During Ninth Plan And Projection For Tenth Plan Period (2002-07)

(Annual in '000 Tonnes)

Airports	Ninth Plan Targets (1997-02)		Ninth Plan Achievements		Tenth Plan	
	Capacity (2001-02)	Demand (2001-02)	Capacity	Demand (2000-01)	Capacity planned in 2006-07	Projected demand 2006-07
1	2	3	4	5	6	7
Mumbai	219.80	352.82	296.03	211.01	296.03	313.13
Delhi	219.50	272.90	219.50	173.60	268.50	260.53
Chennai	93.44	101.16	59.53	82.03	93.44	130.17
Kolkota	28.00	34.98	28.00	25.07	41.09	39.78
Total	560.74	761.86	603.06	491.71	699.06	743.61

Annexure 7.3.15

Organization- Wise Break-up of the Annual Plan (2002-03)
Approved Outlay - Ministry of Civil Aviation

S. No.	Organisation	Approved Outlay	Budgetary Support	IEBR
1	2	3	4	5
1.	Air India	**858.70**	1.00 *	857.70
2.	Indian Airlines	**510.00**	1.00 *	509.00
3.	AAI	**996.05**	53.12@	942.93
4.	PHHL	**133.80**	-	133.80
5.	Hotel Corp. of India	**8.76**	-	8.76
6.	Indira Gandhi Rashtriya Uran Akademi	**2.09**	2.09	-
7. (a)	Directorate General of Civil Aviation	**3.10**	3.10	-
7. (b)	Aero Club of India	**1.00**	1.00	-
8.	Bureau of Civil Aviation Security	**7.69**	7.69 #	-
	Total	**2521.19**	**69.00**	**2452.19**

* Token provision towards equity contribution linked to aircraft acquisition for which appropriate approval will be sought.

@ As per details as under :-

i)	For investment in NE Region & Sikkim	Rs. 15.64 crores
ii)	For investment in other crucial areas like J&K, Leh and Lakshadweep	Rs. 15.98 crores
iii)	Development of Amritsar Airport	Rs. 21.50 crores
	Total	Rs. 53.12 crores

\# Incudes a token provision of Rs. 1.00 crore for new schemes for which appropriate approvals will be sought.

Annexure 7.3.16

Indian Airlines

Physical Performance

S. No	Particulars	1997-98	1998-99	1999-2000	2000-01	2001-02 (RE)	2002-03 (BE)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Available Tonne Kms. (Million)	1094.1	1122.92	1120.9	1153.68	1148.0	1186.0
2	Revenue Tonne Kms. (Million)	700.9	709.1	740.3	777.34	754.0	783.0
3	Available Passenger Kms. (Million)	10408	10803	10911	11185	11278	11724
4	Revenue Passenger Kms. (Million)	7015.5	6846.8	6982.5	7307.0	7218.0	7562.0
5	Overall Load Factors (%)	64.1	63.1	66.0	66.4	65.7	66.0
6	Seat Factor (%)	67.4	63.4	64.0	65.3	64.0	64.5
7	Aircraft Utilisation per aircraft per annum on Total Hours						
(a)	A-300	2727	2528	2274	2400	2468	2500
(b)	A-320	2770	2834	2954	3048	3062	3100
8	Aircraft Fleet						
(a)	A-300	10	11	11	9	8	5
(b)	A-320	30	30	30	30	36	36
(c)	A-737	12	12	12	11	11	11
	Total	**52**	**53**	**53**	**50**	**55**	**52**

All B-737 aircraft have been transferred to M/s Airlines Allied Services Ltd

Annexure 7.3.17

Air India

Physical Performance

Particulars	1997-98 (Actual)	1998-99 (Actual)	1999-00 (Actual)	2000-01 (Actual)	2001-02 (RE)	2002-03 (BE)
1	2	3	4	5	6	7
Available Tonne Kms. (Million)	2293.7	2394.3	2238.3	2226.9	2436.8	2350.8
Revenue Tonne Kms. (Million)	1453.8	1473.6	1456.5	1501.4	1617.8	1529.3
Overall Load Factor (%)	63.4	61.5	65.1	67.4	66.4	65.1
Available Seat Kms. (Million)	16933.3	17496.6	16485.8	16478.0	17825.1	17202.1
Revenue Passengers Kms. (Million)	11422.4	11709.0	11587.0	12047.7	13012.3	12418.1
Passenger Load Factor (%)	67.5	66.9	70.3	73.1	73.0	72.2
Aircraft Utilisation Per annum (hours/per annum)	2717.0	3092.0	2913	3270	3168	3164

Annexure 7.3.18

Financial Performance of Indian Airlines, Air India and AAI

(Rs. Crore)

S. No.	Particulars	1997-98	1998-99	1999-2000	2000-01	2001-02 (RE)	2002-03 (BE)
1	2	3	4	5	6	7	8
	Indian Airlines Limited						
1	Operating Revenue	3243	3424	3549	3793	3849	4528
2	Operating Expenses	2985	3129	3349	3879	4074	4515
3	Operating Profit/Loss	259	294	200	-85	-225	13
4	Total Rev.	3268	3446	3566	3854	3952	4534
5	Total Exp.	3221	3431	3514	4013	4202	4633
6	Profit/(Loss)	47.27	14.17	51.42	-159.17	-250.65	-98.9
	Before Tax						
7	Provision for Tax		1.05	6.15			
8	Net Profit/Loss	47.27	13.12	45.27	-159.17	-250.65	-98.9
	After Tax						
	AIR INDIA LIMITED						
1	Operating Revenue	3837	4135	4448	4873	4751	4833
2	Operating Expenses	4030	4140	4372	4870	4806	4960
3	Operating Profit/Loss	-192.63	-4.58	76.05	3.1	-54.53	-127
4	Total Rev.	4174	4237	4717	5224	5033	5146
5	Total Exp.	4355	4411	4755	5269	5016	5122
6	Profit/(Loss)	-181	-174	-38	-44	17	25
	Before Tax						
7	Provision for Tax					1.28	
8	Net Profit/(Loss)	-181.01	-174.48	-37.63	-44.4	15.44	24.5
	After Tax						
	AIRPORTS AUTHORITY OF INDIA						
1	Revenue	1280	1591	1691	1873	2245	2303
2	Expenses	963	1255	1347	1514	1768	1891
3	Net	316.19	335.78	344.73	359.08	476.98	412.5
	Profit/(Loss)						
	Before Tax						
4	Provision for Tax	120.05	127.37	133.35	145	210	147.26
5	Net Profit/(Loss) After Tax	196.14	208.41	211.38	214.08	266.98	265.24

Annexure 7.3.19

Summary of Outcome of Central Schemes under M/o Civil Aviation - Zero Based Budgeting

S. No. 1	Name of the Scheme 2	Decision of the Planning Commission 3
1.	Establishment Exp. On plan posts in DGCA	Weeded out
2.	Establishment Exp. Of Directorate of R&D	Weeded out
3.	Exp. on salary of plan posts in Controller of Aeronautical Inspection	Weeded out
4.	European Union India Training Project	Retained
5.	Grants-in-aid to IGRUA	Retained
6.	Capital equity for AAI	Merged with modifications *
7.	Loan for AAI	
8.	Contribution to International Civil Aviation Organization	Retained.
9.	Capital Exp. for R&D(DGCA)	Merged into one.
10.	Capital exp. on Mech. & Equip. in training and Edu. (DGCA)	
11	Capital exp. Of BCAS	Retained as such
12.	Investment in Air India	Retained **
13.	Investment in Indian Airlines	

* The budgetary support would only be available to the projects in the North Eastern region and projects for which decision is taken by the Govt..

** The schemes may be retained with the token provision in the Tenth Plan. The position can be reviewed at the time of finalization of Annual Plan 2003-04.

7.4 COMMUNICATION INFORMATION

7.4 (I) POSTAL SECTOR

1. Indian Postal system is the largest in the world in terms of number of post offices/ outlets (numbering 154919 as on 31.3.2001). Out of these, 26037 are permanent post offices. The remaining 128882 i.e. about 83% of the total post offices outlets in the country are in the rural areas. These are called Extra Departmental Branch Offices (EDBOs). The total manpower engaged in running postal services under the Department is about 6 lakh equally divided between permanent employees (294301) and extra departmental (309649). Total revenue expenditure of the Department is Rs. 5210.83 crore (2001-02) with a revenue deficit of Rs.1458.37 crore. Plan outlay constitutes a very small fraction of the total expenditure and was Rs.135 crore for 2001-02 i.e. 2.59% of the revenue expenditure. The entire plan outlay of the postal sector is funded through budgetary support.

2. Postal services duly supported by a technology-based network are an important component of the modern and efficient information and communication system. The revolution in the information technology has vast potential for the development of postal sector both in terms of coverage of area as well as quality of services. It may also contribute in a big way in minimizing the deficit by reducing operational costs and increasing revenue generation.

TENTH FIVE YEAR PLAN

Major Objectives

3. The Tenth Plan aims at making the postal services self-financing by the Tenth Plan end. To achieve this, necessary policy measures shall have to be initiated. Upgradation of technology and modernization of postal operations is envisaged to be continued as a thrust area. The major objectives envisaged for the Postal sector for the Tenth Plan are :

- Provision of universal postal services at affordable prices.
- Ensuring quality of services at international level.
- Modernisation and process re-engineering with a view to achieve better administrative efficiency and financial management.
- Upgradation of existing infrastructure with a view to ensure minimization of cost of operation and enhancing customer satisfaction.
- Making the postal operations of the Department self-financing by the end of Tenth Plan.

Thrust Areas / Policy Initiatives

4. To achieve these objectives, a comprehensive reforms programme has to be implemented during Tenth Plan. Connectivity, networking and computerization would contribute the core thrust area of the Plan. Post offices are envisaged to be given a fresh look by converting these into multi-product and multi-service outlets. Information

Technology is envisaged to play a major role in transforming and modernizing the sector by improving efficiency and quality of services and introduction of a whole spectrum of IT based products and services. The strategy and major policy initiatives envisaged for the Plan are :

- Identification and adoption of Universal Postal Service Obligation and delivering the same at affordable prices.
- Pricing of non-UPSO items to be determined on commercial basis.
- Setting up of an independent regulatory body which beside other things would look after the function of tariff fixation.
- Fresh post offices to be opened only through redeployment of staff; no additional posts to be created for this purpose.
- A comprehensive review of all existing post offices to be carried out in a time bound manner.
- Post offices to act as multi-product / multi-service centers and convergence of services to be the governing criterion.
- Computerization, connectivity and networking of the Postal network to be the cornerstone of Plan activity.
- Indian Post Office Act, 1898 to be replaced by a forward looking Act to take care of the needs of competition, convergence and other new developments.

Review of Annual Plan 2001-02

5. The two new initiatives undertaken during the Annual Plan (2001-02) were the launching of pilot projects for provision of new services of E-post and E-Bill post. The Deptt. successfully implemented the pilot project on E-post at more than 200 post offices in the five States of Andhra Pradesh, Kerala, Gujarat, Maharasthra and Goa. The objective of the project is to provide delivery of hard copy of e-mail messages received over the Internet through designated post offices and also enable the post office customers to send an e-post e-mail. The service has the potential to bridge the digital divide in the country.

6. Under the second initiative, a pilot project on e-bill post was commissioned in Bangalore and Kolkata during 2001-02. The service involves payment of bills in respect of various service providers through post offices. It may include utilities / organizations like electricity authorities, telephone companies, municipal bodies etc. Under the pilot project, a public sector telecom service provider i.e. Bharat Sanchar Nigam Ltd. (BSNL) was involved in Bangalore and another private sector telecom company i.e. Spice Telecom was involved in Kolkata. The results of this project have been encouraging and the service is envisaged to be expanded to other areas.

7. The performance in respect of the core programme of modernization and technology upgradation has been very encouraging. All the major targets have been fully achieved. Under the programme of expansion of postal network, the performance in respect of achieving the targets has been a mixed one. While 51 DSOs have been opened against the target of 50, the performance in respect of rural post offices has been less

encouraging. Against the target of opening 2500 outlets / offices under the schemes of EDBOs and PSSKs, the actual achievement was 2447. The details of physical targets and achievements may be seen in Annexure-7.4.I.

8. For the Annual Plan (2001 – 02), an outlay of Rs.135 crore was approved. The actual expenditure is estimated to be much lower at Rs.99.05 crore, i.e. a utilization of 73.37% of the approved outlay. The low utilization is basically due to reduced allocations at the RE stage. The details of scheme-wise utilization regarding the approved outlay and its utilization during Annual Plan(2001-02) may be seen in Annexure-7.4.2.

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Thrust Areas / Major Programmes

9. A comprehensive programme of reforms is envisaged for the Tenth Plan. During the Annual Plan 2002-03, the Deptt. is expected to initiate necessary action towards putting in place the various inputs required for implementing the reforms programme. Keeping in line with the policy and objectives for the Tenth Plan, modernization of postal operations including networking and computerization would be accorded the highest priority in the programmes for the Annual Plan (2002-03).For implementing the various programmes during 2002-03, an outlay of Rs.150 crore has been approved. The core area of modernization would account for Rs.101.36 crore i.e. 68% of total outlay. The schematic break-up may be seen in Annexure-7.4.2. Some of the thrust areas / programmes of the Deptt. of Posts during the Annual Plan (2002-03) are given below :

Networking and Connectivity

10. The various scheme proposed under this programme are for creating the basic infrastructure for improving the quality of existing services and providing the technological base for launch of new value added and financial services. Networking of various post offices, record offices, back offices, customer care centers, etc. forms an integral part of the entire programme. IT based services are an important part of the product-mix envisaged to be delivered by the post offices during the Plan. In the absence of this technological back up, the introduction of new services proposed may not be feasible. New services are to be launched with a view to securing more revenue from operations in order to achieve the goal of financial self-sufficiency.

Mail Processing

11. Modernization of operations including the ergonomics of work environment holds the key to better productivity.Mail processing is the central activity in the entire set up of postal operations and its modernisation is very crucial for both improving efficiency of the staff and speedy delivery of postal services. Modernization of mail motor services and RMS vans and mechanized delivery are the important activities under this scheme. It is targeted to improve ergonomics in 200 offices providing infrastructural equipment at 1818 rural post offices and modernizing 100 speed post centres. The setting up of the two Automatic Integrated Mail Processing Systems which could not be completed in the Ninth Five Year Plan would continue as a Plan scheme during the Tenth Plan.

Human Resource Development & Training

12. Manpower development, perhaps, is the crucial input in the entire process of modernization underway in the sector. Changing the mindset for accepting and using technology and imparting appropriate skills at all levels are two important elements of strategy of human resource development during Tenth Plan. In-service training and refresher courses need to be re-oriented keeping in view the changing requirements. A comprehensive training programme in computers etc. have been drawn out and is to be implemented to ensure maximum possible returns on investment being made on computerization and modernization. Distant learning have been introduced from the current year so as to get maximum spread of skill upgrading of the willing staff. Towards this end, a target of training about 69,000 employees has been envisaged. Distant learning would be the single largest trainer (53,000) during the Plan period. Necessary beginning would be made during 2002-03.

New Schemes

13. It is envisaged to take up a number of new schemes to implement the programmes envisaged for the Tenth Plan. The schemes identified include :

- Modernisation of Circle Stamp Depots;
- Computerisation of International Mail Processing;
- National Data Centre;
- Establishment of Express parcel post centres;
- Research and Development /studies/surveys;
- e-Post;
- e-BillPost;
- New Products and Services including Development of Financial Products and Services.

14. The scheme of E-post, taken up on pilot basis during 2001-02, is envisaged to be extended to all the district headquarters in the country during 2002–03. The products / services envisaged under the scheme of “New Products and Services” include distribution of social security benefits; distribution of Mutual Funds & securities; Electronic Fund Transfer (EFT); Smart Cards, Debit Cards; Electronic Banking; E-commerce transactions etc. The Deptt. would explore possibilities of providing the various services through joint ventures in collaboration with the private sector.

Monitorable Targets(2002-03)

15. Keeping in line with the goals, objectives and policy initiatives for the Tenth Plan, the major targets envisaged for the Annual Plan (2002-03) are given below. The details of physical targets envisaged for the Annual Plan may be seen in Annexure-7.4.2**.**

- Opening of 25 Departmental Sub-Offices (DSOs) and 250 Extra Departmental Branch Offices;
- Opening of 1500 Panchayat Sanchar Sewa Kendras (PSSKs);
- Computerization of 150 major post offices in the country in addition to computerization of 10 Head Record Offices;
- Upgradatinon of 62 Customer Care Centres;
- Networking of 15 transit Mail Offices;
- Setting up of National Data Centre for country-wise connectivity;
- Improving ergonomics of 200 post offices including mail offices;
- Provision of Infrastructure Equipment to 1818 rural post offices.

Major Policy Issues

16. The postal deficit is an open-ended subsidy from the General budget. The deficit has been persistently increasing over the years. This is an explosive situation which cannot be sustained for a 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. Keeping this in view the Tenth Plan aims to make the Deptt. self-financing by Plan end through a series of reforms and policy initiatives. To ensure that this goal is achieved in a time bound manner the progress of reforms needs to be monitored very tightly. An appropriate monitoring mechanism would have to be put in place at the earliest.

7.4 (II) TELECOMMUNICATIONS

1. Telecommunications is one of the prime movers of modern economies. It is one of the fastest growing sectors of the Indian economy and has immense potential of growth in the future. Starting with about one lakh lines at the time of Independence (March, 1948), the Indian telecom network has increased to about 450.26 lakh lines including Cellular connections by the end of March,2002. Of the 6.04 lakh villages in the country about 4.68 lakh villages have been covered (as on 31st March,2002). In spite of rapid expansion of the network during the last decade, there is large unmet demand for telecom services. Giving India's large size and population the present density of 4.1 persons per hundred is quite low viewed in the context of world average of 32.78 and that of developing countries viz. 49.86 in Malaysia, 38.52 in Brazil and 24.98 in China.

2. 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 include:

- 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.

3. As a result of record growth of telecom services during the Ninth Plan, the telecom network in the country has grown to 450.26 lakh lines. The status of the network, as on 31.03.2002, is given below :

- Total number of telephone exchanges - 35023
- Number of rural exchanges – 26953
- Total Fixed Telephone connections – 385.95 lakh
- Number of Cellular mobile phones – 64.31 lakh
- Trunk Auto Exchange Lines (TAX) – 34.27 lakh
- Tele Density - All India - 4.4
- Number of Village Public Telephones – 4.68 lakh
- Internet Connections – 38 lakh(as on January 31, 2002).

TENTH FIVE YEAR PLAN

Major Objectives and Targets

4. The Tenth plan policies and programmes are guided by the basic goal of creating a world-class telecom infrastructure in order to meet the requirements of information technology based sector and needs of a modernizing economy on the least cost basis. Ensuring value for money to the consumers and easy and affordable access to basic telecom services to everyone and everywhere would be the other goal of policies to be pursued in 10th Plan. The major objectives envisaged for the Tenth Plan are:

- Affordable and effective communication facilities to all citizens.
- Provision of universal service to all uncovered areas, including rural areas.
- Building a modern and efficient telecommunications infrastructure to meet the convergence of telecom, IT and the media.
- Transformation of the telecommunications sector to a greater competitive environment providing equal opportunities and level playing field for all the players.

- Strengthening research and development efforts in the country.
- Achieving efficiency and transparency in spectrum management,
- Protecting the defence and security interests of the country.
- Enabling Indian telecom companies to become truly global players.

5. Following complete opening of the sector, private sector is expected to play a major role in achieving the objectives along with the public sector. Semi-urban, rural and other uncovered areas are expected to provide bulk of the fresh demand for primary telecom services i.e fixed and cellular mobiles in the near future. Private sector need to devise appropriate strategy to meet demand in these areas as they are perceived as less remunerative. The major targets envisaged for the Tenth Plan for the telecom sector are:

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

Review of Annual Plan 2001-02

6. Automation of the process of radio frequency (RF) spectrum management including Frequency Assignments, Wireless Licenses etc. and Upgrading the Radio Monitoring Facilities is essential to meet the massive growth in the usage of RF Spectrum in the country. RF Spectrum being a scarce natural resource its effective and efficient use by massive computerization is a necessity keeping in view the requirements of modern telecommunication technologies that heavily depend upon the RF spectrum. Keeping the importance of this area in mind, a project called " Telecommunications sector Reform Technical Assistance Project" has been taken up with the assistance of World Bank. The total outlay of the project is US $ 65.11 million consisting of World Bank Component of US $ 55.73 million and Government of India component of US $ 9.38 million. The project is being implemented by Wireless Planning and Coordination Wing (WPC), Wireless Monitoring Organization (WMO), Telecom Engineering Centre (TEC), Telecom Regulatory Authority of India (TRAI), Telecom Dispute Settlement and Applate Tribunal (TDSAT) and DOT (HQs) and will be completed by the end of 2004.

7. The progress with regard to the achievement of physical targets has not been satisfactory. About 55.46 lakh new connections(77%), 9.97 lakh Tax Lines, 99020 route kms. of optical fibre cables (78.57%) and 70750 VPTs (49.13%) could be provided by the PSUs. However, the target for provision of microwave systems was over achieved by 97%. The details may be seen in Annexure -7.4.4.

8. The utilization of funds for the telecom sector as a whole is expected to fall short of the target by about 6.75%. This is reflected by the Revised Estimates of expenditure of Rs.18932.40 crore as against the outlay of Rs.20298.84 crore approved for the Annual Plan 2001-02. This is basically due to a substantial decrease in internal resources generation by telecom service providing PSUs i.e. BSNL, MTNL and VSNL. BSNL's internal resources fell short by 27%. Extra-budgetary sources were resorted to; an outlay of Rs 8290 crore was raised. A small fall in RE may be attributed to privatisation of HTL limited. A shortfall in utilization of funds is likely in Wireless Planning Cell of the Deptt. of Telecom, WMO etc. as some of the major projects failed to take off as envisaged. The details of financial performance may be seen at Annexure-7.4.3**.**

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MAJOR THRUST AREAS

Universal Service Obligation (USO)

9. Government's broad policy of taxes and regulation for the telecom sector has to be promotional in nature with a view to ensuring optimum growth in the coming years. Revenue generation should not be a major determinant of the macro policy governing the sector. Guided by this principle and keeping in line with the policy adopted by most of the progressive administrations in the world, the licence fee need to be aligned to the cost of regulation and administration of Universal Service Obligation (USO). Adequacy of funds has to be ensured for effective implementation of the Universal Service Obligation (USO). If need arises, the rates of USO levy may have to be increased suitably.

Village Public Telephones (VPTs)

10. New Telecom Policy (NTP), 1999 envisages to cover all villages with the facility of Village Public Telephones(VPTs) by 2002. About 4.68 lakh villages have been provided with a VPT as on March 2002. Necessary action needs to be taken up, both in the public and private sector to meet this target.

Spectrum Policy

11. The policy governing spectrum allocation and licencing has to be so designed that this scarce resource is used optimally and does not become a constraint for growth. Spectrum pricing need to be based on relative demand and supply in a dynamic manner and should promote introduction of spectrum efficient technology. A significant chunk of available spectrum is being used by defence, police and para-military forces. A concrete action plan needs to be put in place to upgrade and modernize the technology being used by these forces so as to ensure efficient and optimal utilization of spectrum allotted and releasing the surplus spectrum for use by civilian purposes. Necessary funds would have to made available for this purpose.

Monitorable Targets

12. Keeping in view the above objectives and targets, the major physical targets envisaged for the Annual Plan 2002-03 for the Public sector are:

- Provision of 69.83 lakh new connections including 13.43 lakh WLL lines and 31.37 lakh GSM lines ;
- 5.34 lakh new connections would be provided in the rural areas;
- Addition of 11.47 lakh TAX Lines;
- Provision of 2.18 lakh VPTs;
- Laying of 77,060 route kms. of optical fibre cables; and
- Installation of 5000 route kms. of microwave systems.

13. To implement these programmes an outlay of Rs.19,462.79 crore including a budget support of Rs.185 crore has been provided. The outlay for BSNL and MTNL amounts to Rs.18070 crore i.e. about 93% of the total outlay. The budget support earmarked is mainly for the regulatory bodies and research organizations. The privatization of the VSNL would entail upon improving the share of MTNL and BSNL increasing in the over all share of the total outlay / expenditure of the current year. The organisation-wise outlay may be seen in Annexure-7.4.3.

PSUS AND OTHER ORGANIZATIONS UNDER THE DEPTT.

Bharat Sanchar Niagam Limited (BSNL)

14. The operational network of the erstwhile Department of Telecom has been converted into a fully owned PSU called Bharat Sanchar Nigam Limited (BSNL). The company has become operational from 1.10.2000. Keeping in line with the Tenth Plan objective of providing telephones, by and large, on demand by 2002 and sustain it thereafter, the Corporation plans to continue with the established policy of rapid expansion of basic services. The Company envisages to provide 64.34 new connections during 2002-03 – about 89% of last year’s target. With a view to improving the long distance connectivity further, an enhanced target of installing 10.05 lakh additional TAX lines is envisaged for the Annual Plan 2002-03. In order to implement these and other targets / programmes, an outlay of Rs.14,076 crore comprising of an extrabudgetary resource of Rs.6383 crore has been approved for BSNL. A token budget support of Rs.1 crore has been approved for the Company. Details of physical targets may be seen in Annexure-7.4.4.

Mahanagar Telephone Nigam Limited (MTNL)

15. 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 5.49 lakh new connections has been fixed for the year 2002-03 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 1.42 TAX lines are expected to be added to the network during 2002-03. 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 Mails on Internet, provision of WILL equipments etc. To finance the various programmes of the Corporation, an outlay of Rs.3994 crore has been approved for

the Annual Plan 2002-03. Rs.1250 crore of this ambitious outlay is to be financed out of extra budgetary resources.

ITI Limited

16. 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 Rs.73.00 has been approved for the Annual Plan 2002-03. This is to be financed entirely through extra budgetary resources of Rs.150 crore.

Regulatory Bodies

17. "Telecommunications sector Reform Technical Assistance Project" taken up with the assistance of World Bank with an outlay of US $ 65.11 million consisting of World Bank Component of US $ 55.73 million and Government of India component of US $ 9.38 million would continue in the Annual Plan (2002-03). An outlay of Rs 109 crore fully funded by Budget support has been provided to Wireless Planning and Coordination Wing (WPC), Wireless Monitoring Organization (WMO), Telecom Engineering Centre (TEC), Telecom Regulatory Authority of India (TRAI), Telecom Dispute Settlement and Appellate Tribunal (TD-SAT) and DOT (HQs) for implementation of the project. During 2002-03.

C-DOT

18. C-DoT is the main public sector agency engaged in research and development activity in the Telecom sector. Its technology constitutes more than 40% of the total lines operative in Indian telecommunications network. C-Dot Switches are being exported to other countries having conditions similar to those in Indian rural areas. During Tenth Plan the thrust of C-DoT's research plan would be the development of cost effective technologies providing services and features at par with those being offered by other global players. Development of products to cater to the needs to broad band fixed and mobile subscribers access system as well as high band with backbone systems would be an important part of the strategy for the Plan. Some of the major areas of thrust to be initiated in the Annual Plan(2002-03) are :

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

19. With the carving out of BSNL as a separate corporate entity in September, 2000 plan outlay for C-DOT is required to be funded through budgetary support. An outlay of Rs.75 crore fully funded by budgetary support is earmarked for the organization for the Annual Plan 2002-03.

Policy Issues

20. Annual Plan 2002-03 would endeavour to build a modern and efficient telecom infrastructure with a view to providing world class telecommunications facilities at affordable rates, meet the needs of convergence of telecom, IT and media and universal service to all uncovered areas. To achieve the above goals, the major policy issues and action points envisaged for the Plan are :

(a) The telecom sector needs to be treated as an infrastructure sector for the next decade or so in order to achieve the targets of teledensity in line with the objectives laid out in the New Telecom Policy, 1999. This is envisaged also to help achieving substantially higher rate of growth of broad-band to meet the requirements of other sectors of the economy especially Information Technology and Entertainment. The policy governing development of rural telecom services also need to be promotional in nature with a view to boost teledensity in these areas in line with the objectives of NTP, 1999

(b) Government's broad policy of taxes and regulation for the telecom sector has to be promotional in nature with a view to ensuring optimum growth in the coming years. Revenue generation should not be a major determinant of the macro policy governing the sector. Guided by this principle and keeping in line with the policy adopted by most of the progressive administrations in the world, the licence fee need to be aligned to the cost of regulation and administration of Universal Service Obligation.

(c) Ensuring fair and timely interconnection in the multi-operator scenario is one of the major inputs for sustaining high growth. Government's intervention may be required in the form of establishing a fund to finance the requirements of capacity creation especially of incumbent operator to meet increased requirement in this regard.

7.4 (III) INFORMATION AND BROADCASTING

Overview

1. Major advances in the fields of Broadcasting, Communication and Information Technology during the last decade have had a great impact on the Information and Broadcasting sector. Many means of communication deployed in the past to reach the large segment of the population either became outdated or underwent radical technological changes, and yet goals like providing the people with development information and wholesome entertainment at a minimal cost, facilitating healthy growth and competition within the sector remained as valid as ever. This has necessitated a review of the challenges facing the sector and reworking of priorities for the Tenth Five Year Plan.

2. The activities of Information and Broadcasting (I&B) Sector cover three areas, viz., Broadcasting (DD and AIR), Information and Films with the functions of each complementing the other. Specialized media units in each of these sectors cater to the

information, education and entertainment needs of all sections of the society through Radio, Television, Films, Publication, Advertisement and traditional media like Dance and Drama. Among these, Broadcasting, i.e. All India Radio and Doordarshan, which account for over 90 percent of the Plan Outlay of the Sector, was the most affected by the technological advances. The position of Doordarshan as a monopoly broadcaster eroded with the emergence of more than 80 private channels now available in the country through cable networks. This resulted in some shift in viewership as the viewer was presented with a multiple choice of various genres of programmes such as film-based programmes, soap serials and hardcore news presentation, etc..

3. It is, however, noteworthy that both DD and AIR have made substantial progress in terms of geographical and population coverage. In case of Doordarshan, signals emanating from over 1200 terrestrial transmitters reach about 89% of the population. It has emerged as one of the largest terrestrial network in the world with nearly 400 million viewers and 3-tier primary programme service – National, Regional and Local. Doordarshan has also added a number of new Satellite TV Channels which include DD sports, DD Bharati (replacing DD News), Gyan Darshan (the educational channel) and two Regional Channels in Jammu & Kashmir and Himachal Pradesh. Further, the duration of transmission on 10 existing Regional Language Satellite Channels has been extended to 24 hours a day. AIR has emerged as one of the largest radio organizations with 208 broadcasting centres covering nearly 99% of the population spread around 90% of the geographical area. It provides news, music, spoken word and other programmes in 24 languages and 146 dialects. In the private sector also a number of FM radio channels have come up in cities like Mumbai and Kolkata and more are likely to come up during the year in other cities including Delhi.

4. The role of AIR and DD as Public Service Broadcaster makes extra demands on their financial and human resources which are not encountered by private channels. For example, the extension and improving of broadcasting services in hilly terrain and border areas where private broadcasters are not likely to operate on financial considerations, Prasar Bharati as Public Service Broadcaster has to operate the services. Besides, the past Plan expenditure on Broadcasting Sector was mainly characterized by creation of carriage infrastructure with little or no provision of funds to promote quality in the content of telecast. By very nature, the programmes of Prasar Bharati aim largely at informing and educating; even while being entertaining, they hold viewers' attention and cannot be solely revenue generating. This has necessitated appropriate strategy and fixing priorities for the Annual Plan 2002-03, the first year of the Tenth Plan.

The various policy initiatives taken by the Government are as under:

- To encourage adoption of alternative technologies that enable increased and improved access to public and private broadcasters affordable for the common man.
- To allow setting up of Low Power Community Radio Stations in FM mode by local communities and non-profit organizations such as Universities, NGOs, etc for educational, cultural and economic development of the respective communities.
- To review the DTH policy at an appropriate time, as per the requirements of the emerging scenario in the Broadcasting sector.

Review of Annual Plan 2001-02

5. An outlay of Rs. 811.40 crore was approved for the information and broadcasting sector for the Annual Plan 2001-02 comprising a Direct Budgetary Support of Rs. 340.00 crore and IEBR component of Rs. 471.40 crore. The revised estimates of 2001-02 show an outlay of Rs. 741.06 crore with a Budgetary Support of Rs. 309.64 crore and IEBR of Rs. 431.42 crore. The increase in the budgetary support from the previous year was mainly because of implementation of the special package for improving AIR and Doordarshan services in Jammu and Kashmir and special thrust for completion of ongoing schemes in the penultimate year of the Ninth Plan. Like earlier years, this year too, a shortfall is anticipated in the IEBR component of the Annual Plan. Sector-wise outlays and expenditure for the Ninth Plan can be seen at Annexure7.4.5. The physical targets and achievements of Prasar Bharati during the Annual Plan 2001-02 are shown at Annexure-7.4.7. The reason for shortfall was mainly due to delay in construction of buildings and towers, non-availability of suitable site, court cases, law and order problems, etc..

Annual Plan 2002-03

6. The approved outlay for this sector in the Annual Plan 2002-03 is Rs. 878 crore, comprising budgetary support of Rs. 415.00 crore and IEBR of Rs. 463 crore. The budgetary support includes special package for J&K to complete the spill-over schemes under the package within this financial year. Besides, consolidation of existing facilities to make them more effective, stress has also been given on improvement of TV and Radio services in the North-East States (including Sikkim) and Island territories. The sector-wise approved outlay for information & broadcasting sector for the Annual Plan 2002-03 is enclosed at Annexure7.4.6.

Thrust Areas for Annual Plan 2002-03

BROADCASTING SECTOR

Doordarshan

7. With wide ranging technological changes taking place in the sector, a need has been felt for making adequate investments to ensure TV coverage of the remaining parts of the country, quality content creation, enhancing technological upgradation and modernization through digitalization of production facilities and automation of major kendras of Prasar Bharati, to enable the public service broadcaster compete effectively with the private channels.

All India Radio

8. Medium wave transmission has reached about 99% of the population. However, due to its high quality stereophonic sound, FM broadcasting is the preferred mode of radio transmission all over the world. Therefore, emphasis has been given to encourage FM radio services for better quality of transmission and reception in metros and small cities. Thrust has also been given on strengthening and expanding reach of radio in the North-Eastern States (including Sikkim).

9. The outlay for the Broadcasting sector for 2002-03 is Rs. 823.00 crore with Rs 360 crore as budgetary support and Rs. 463.00 crore as IEBR. This includes Rs. 160.20 crore as budgetary support for the Special Packages for Jammu & Kashmir and North-Eastern States. The approved outlays for Doordarshan and All India Radio are Rs. 626.00 crore (DBS+IEBR) and Rs. 197.00 crore (DBS+IEBR) respectively. The broadcasting sector accounts for more than 90% of the total for the I&B sector.

Film Sector

10. For the Annual Plan 2002-03, the approved outlay for the Film Sector is Rs.26.00 crore. The major programmes/schemes to be undertaken during the year include production of documentary films; construction/renovation of buildings, modernization of film equipment, promoting film archival activities, development training facilities, promotion of Indian films export through festivals, modernization of regional offices under Central Board of Film Certification and creation of facilities for Childrens' Film Society in India etc.

Information Sector

11. The approved outlay for the Information Sector for 2002-03 is Rs. 29.00 crore. The thrust areas for the Annual Plan include providing facilities to PIB offices in the newly created states, construction of Soochana Bhavan and National Press Centre, modernization of Registrar of Newspapers for India offices, purchase of equipment, film/cassettes for Directorate of Field Publicity, training of manpower for developing media skill, etc..

Zero-based Budgeting

12. The Ministry of Information and Broadcasting undertook a comprehensive review of all Plan schemes based on Zero Based Budget (ZBB) methodology. The objective of this review is to ensure rationalization of programmes, convergence of similar schemes to avoid duplication and weeding out old and irrelevant schemes. As a result of ZBB exercise, 94 Ninth Plan schemes of Ministry of Information and Broadcasting have been reduced to 42 schemes in the Annual Plan 2002-03 as continuing schemes.

Issues and Strategies

13. The following strategy has been adopted with respect to broadcasting sector during the Annual Plan 2002-03:

- Completion of special package of J&K.
- Strengthening and expanding the reach of Radio & TV in North-East States (including Sikkim) and island territories.
- FM radio to be encouraged for its better sound and local network.
- Digitalization of programme production facilities and automation of major Kendras for improved performance of TV and Radio services and
- TV population to be covered preferably with multi-channel television services with quality content.

14. Though many of the media units in the Information sector were started in the early period of planning process, their role for spreading information on development policies remains as valid as ever, particularly, for the rural masses. The policy strategy for the print media has been reviewed during the Annual Plan 2002-03 and private sector is being encouraged, especially, for foreign investment in publishing newspapers and current affairs/periodicals. Besides, foreign equity in the advertisement and to facilitate publication of Indian edition of foreign technical/scientific journals, etc. have also been permitted.

15. Similarly , in the film sector, a fresh look into the role and structure of various media units is needed. However, the sector is primarily dominated by the private players and film has occupied a special place in the lives of the Indians. The sector has witnessed a phenomenal growth and it has received industry status in the Ninth Plan. It is also one of the largest employers providing directly and indirectly about five million people. Besides, film export has enhanced substantially during the last couple of years. To achieve its full potential, the following strategies have been adopted:

- To tap formal sources of finance for film making and to discourage illegal money flow form the underworld sources.
- To encourage export of Indian films in foreign markets through organizing festivals and marketing strategies.
- To develop skill through HRD Training both in public and private institutions.
- To curb on film piracy to encourage revenue
- Augment infrastructural facilities at CBFC for better monitoring and film regulations.
- The Childrens' Film Society (CFSI) should endeavour to increase production of high quality films for wider reach to the targetted audience.

Annexure 7.4.1

Annual Plan (2002-03)
Physical Performance in Postal Sector

Scheme	2000-01 Achievement	2001-02 Targets	2002-03	
			Achievement	Targets
1	2	3	4	5
Expansion of Network				
(i) PSSK	9555	2000	2402	1500
(ii) EDBOs	363	500	45	250
(iii) DSOs	52	50	51	25
Computerisation of Offices				
Pos				150
PAOs				3
Circle Offices				7
Networking HROs				
HROs				10
TMOs				15
CRCs				**20**
V-SAT System				
Customer Care Centres				**62**
Improving Ergonomics				
Modernization	**161**	**125**	**125**	**100**
SPCC				100
Mail Offices				100
Infrastructure for EDBOs	2005	2000	2000	1818
AMPCs	**2**	**2**	**2**	**1**
Mail Movement Vehicles				**7**
Premium Products				
Speed Post Booking				100
Philately				
Exhibition				25
Tools and Eqpts.				40
Training				
Group A	156	140	140	100
Inservice	2424	2500	2500	6000
Distance learning				35000
Computer Training				28000
Circle stamp Depots				**2**
International Mail Processing			**8**	
National Data Centre				**1**
Express Parcel Centres				**6**

Annexure 7.4.2

Annual Plan (2002-03)
Financing of Postal Sector

(Rs. Crore)

Scheme	2000-01 Actual	2001-02		2002-03 BE
		BE	RE	
1	2	3	4	5
Expansion of Network	8.47	15.00	16.44	3.41
Computerisation & Connectivity	26.63	21.01	32.11	38.86
Networking HROs				13.32
V-SAT System				0.75
Customer Care Centres	0.82	4.35	3.74	11.57
Improving Ergonomics				5.54
AMPCs				24.00
Mail Movement	3.97	61.77	14.82	0.30
Premium Products	4.98	4.00	3.49	2.74
Philately	1.71	1.20	1.20	0.84
Training	3.26	3.67	3.67	6.65
Buildings	25.78	24.00	23.58	28.00
Circle stamp Depots				0.26
International Mail Processing				1.26
Nastional Data Centre				5.00
R&D and Surveys				1.00
Express Parcel				0.50
E-post				0.50
E-bill Post				0.50
New products etc.				5.00
Total	**75.62**	**135.00**	**99.05**	**150.00**

Annexure 7.4.3

Annual Plan(2002-03)
Financing of Telecom Sector

(Rs. Crore)

Scheme	2000-01 Actuals	2001-02 BE	2002-03	
			RE	BE
1	2	3	4	5
BSNL	**12203.96**	**16574.00**	**16573.00**	**14076.00**
IR	11643.96	11341.00	8283.00	7692.00
Bonds	560.00	5233.00	3083.00	3502.00
Others			5207.00	2881.00
GBS				1.00
MTNL	**967.36**	**1600.00**	**1150.00**	**3994.06**
IR	967.36	1600.00	1150.00	2744.06
Bonds				1250.00
VSNL	**347.18**	**1814.66**	**945.97**	
IR	347.18	1814.66	945.97	
ITI	**24.00**	**125.00**	**125.00**	**73.00**
IR	24.00	125.00	103.00	-77.00
Bonds			22.00	150.00
HTL	**16.33**	**20.18**		
IR	14.39	12.92		
Others	1.94	7.26		
WMO	**5.27**	**10.00**	**1.35**	**2.25**
WPC	**0.83**	**95.00**	**27.33**	**101.05**
TRAI	**2.00**	**4.00**	**4.00**	**1.50**
TDSAT				**0.20**
TEC	**1.36**	**4.00**	**4.75**	**4.00**
C-DOT	**110.66**	**52.00**	**101.00**	**75.00**
Total	**13678.95**	**20298.84**	**18932.40**	**18327.06**
IR	12996.89	14893.58	10481.97	10359.06
Bonds	560.00	5233.00	3105.00	4902.00
Others	1.94	7.26	5207.00	2881.00
BS	120.12	165.00	138.43	185.00

Annexure 7.4.4

Annual Plan(2002-03)
Physical Performance in Telecom Sector

Scheme	Units	2000-01 Achievement	2001-02 Targets	2001-02 Achievement	2002-03 Targets
1	2	3	4	5	6
New Con.	**Lakh lines**	**59.25**	**72.3**	**55.46**	**69.83**
Fixed	Lakh lines				25.03
WLL	Lakh lines				13.43
GSM	Lakh lines				31.37
BSNL	**Lakh lines**	**56.29**	**68.3**	**53.21**	**64.34**
Fixed	Lakh lines				22.9
WLL	Lakh lines				11.94
GSM	Lakh lines				29.50
MTNL	**Lakh lines**	**2.96**	**4**	**2.25**	**5.49**
Fixed	Lakh lines				2.13
WLL	Lakh lines				1.49
GSM	Lakh lines				1.87
TAX	**Lakh lines**	**5.12**	**10.1**	**9.97**	**11.47**
BSNL	Lakh lines				10.05
MTNL	Lakh lines				1.42
Microwave	**000 Rms**	**21.03**	**7.5**	**14.45**	**5.00**
Optical Fib	**000 Kms**	**55.35**	**126**	**99.02**	**77.06**
VPT	**000 Nos**	**34.22**	**144**	**70.75**	**218.00**

Annexure 7.4.5

Ministry Of Information & Broadcasting
Ninth Plan And Annual Plans Expenditure

S. No.	Media Units	9th Plan Outlay (97-2002)	Approved Outlay 1997-9899	Approved Outlay 1998-99	Approved Outlay 99-2000	Approved Outlay 2000-01	Approved outlay 2001-02	Total outlay for 5 yrs. of 9th Plan (col 4-8)	Actuals 1997-98	Actuals 1998-99	Actuals 1999-2000	Actuals 2000-01	Antici-pated Expr 2001-02	Total Expr. during 9th Plan (Col.10 to 14)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
I	**Information Sector**													
	DBS	93.30	19.00	18.52	17.50	17.21	14.46	87.69	12.51	14.20	16.45	12.76	12.71	68.63
	IEBR	0	0.00	1.03	1.76	1.51	2.62	6.92	0.00	0.94	1.50	1.90	2.59	6.93
	Total I	**93.30**	**19.00**	**19.55**	**19.26**	**19.72**	**17.08**	**94.61**	**12.51**	**15.14**	**17.95**	**14.66**	**15.30**	**75.56**
II	**Film Sector**													
	DBS	137.20	33.80	34.28	30.50	38.49	32.77	169.84	28.99	21.97	26.95	30.68	21.93	130.52
	IEBR	45.50	8.20	8.70	6.10	10.70	8.62	42.32	8.23	4.71	3.48	3.50	6.50	26.42
	Total II	**182.7**	**42.00**	**42.98**	**36.60**	**49.19**	**41.39**	**212.16**	**37.22**	**26.68**	**30.43**	**34.18**	**28.43**	**156.94**
III	**Broadcas-ting Sector**													
	DBS	449.55	74.80	74.80	97.00	213.30	292.77	752.67	42.64	42.60	97.00	207.13	275.00	664.37
	IEBR	2117.50	484.00	524.60	416.52	427.14	460.16	2312.42	391.99	346.14	381.89	328.62	422.33	1870.97
	Total III	**2567.05**	**558.80**	**599.40**	**513.52**	**640.44**	**752.93**	**3065.09**	**434.63**	**388.74**	**478.89**	**535.75**	**697.33**	**2535.34**
IV	**Grand Total**													
	DBS	680.05	127.60	127.60	145.00	270.00	340.00	1010.20	84.14	78.77	140.40	250.57	309.64	863.52
	IEBR	2163.00	492.20	534.33	424.38	439.35	471.40	2361.66	400.22	351.79	386.87	334.02	431.42	1904.32
	Total I+II+III	**2843.05**	**619.80**	**661.93**	**569.38**	**709.35**	**811.40**	**3371.86**	**484.36**	**430.56**	**527.27**	**584.59**	**741.06**	**2767.84**

DBS : Direct Budgetary Support
IEBR :Internal & Extra Budgetary Resources

Annexure 7.4.6

Ministry Of Information & Broadcasting
Annual Plan 2002-03 Outlay

(Rs. In lakh)

Sl. No.	**Media Unit**	**Approved Outlay**
1	**2**	**3**
I	**INFORMATION SECTOR**	
1	PIB	1150.00
2	Publications Division	60.00
3	DAVP	300.00
4	IIMC	390.00
5	Photo Division	50.00
6	DFP	220.00
7	Song & Drama Division	200.00
8	RR&TD	10.00
9	RNI	60.00
10	PCI	20.00
	Main Sectt. Schemes	
11	Soochna Bhavan	400.00
12	Training for Human Resource Development	40.00
	Total (I)	**2900.00**
II	**FILM SECTOR**	
1	Films Division	565.00
2	NFAI	272.00
3	FTII, Pune	242.00
4	SRFTI, Kolkata	22.00
5	DFF	469.00
6	CFSI	600.00
7	CBFC	310.00
	Main Sectt. (Film Wing) Schemes	
8	Grant-in-aid to FFSI	4.00
9	Grant-in-aid to NGOs engaged in anti-piracy work/Festivals	16.00
10	Participation in Film Market in India & abroad	100.00
	Total (II)	**2600.00**

(Rs. In lakh)

Sl. No.	**Media Unit**	**Approved Outlay**
1	**2**	**3**
III	**BROADCASTING SECTOR (Prasar Bharati)**	
1	All India Radio	19700.00
	DBS	8500.00
	IEBR	11200.00
2	Doordarshan	62600.00
	DBS	27500.00
	IEBR	35100.00
	Total (III)	**82300.00**
	DBS	36000.00
	IEBR	46300.00
	GRAND TOTAL (I+II+III)	**87800.00**
	DBS	41500.00
	IEBR	46300.00

Annexure 7.4.7

Media-wise Physical targets and achievements for Annual Plan 2001-02 and targets for 2002-03

Sl. No.	Media Unit	Scheme	2001-02 Targets	Targets	2002-03 Achievements
1	**2**	**3**	**4**	**5**	**6**
1	**Doordarshan**				
		Studios	3	2	4
		HPT-DD1	18	5	14
		HPT-DD2	8	2	11
		LPT/VLPTs	65	31	50
	Doordarshan				
	(J&K Package)				
		Studios	—	—	1
		HPTs (DD1+DD2)	9	2	6
		LPTs/VLPTs	58	37	22
	DOORDARSHAN	**TOTAL**	**161**	**79**	**108**
2	**All India Radio**				
		Broadcasting Stations	—	—	1
		MW Transmitter	*33	*31	2
		SW Transmitter	—	—	1
		Studios	—	—	1
	AIR (J&K Package)				
		Broadcasting Stations	—	—	2
		MW Transmitter	10	8	2
		FM Transmitter	—	—	1
3	**All India Radio**	**TOTAL**	**43**	**39**	**10**
4	**Prasar Bharati**	**TOTAL**	**204**	**118**	**118**

* Continuing Scheme – 10 + Modernisation Scheme – 22 + New Scheme - 1

7.5 Information Technology

The Information Technology (IT) is one of the fastest growing segments of Indian industry, growing from Rs. 32,070 crore in 1997-98 to Rs. 80,884 crore in 2001-02. In terms of value of production about 92 per cent of the industry is in private sector and share of the public sector undertakings is limited to about 8 per cent. Sixty per cent (Rs. 48,134 crore in 2001-02) of the industry is accounted for by software sector and the remaining 40 per cent (Rs. 32,750 crore) by IT hardware. Since software comprises the bulk of the exports, the sector has performed exceedingly well on export's front which grew from Rs. 9,500 crore in 1997-98 to Rs. 42,371 crore in 2001-02. Performance of the industry during Ninth Plan period and targets for Annual Plan 2002-03 are given in table 7.5.1

Table 7.5.1

Production of the IT industry

(Rs. crore)

Item	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03 Target
IT Hardware	22,100	25,250	28,100	30,700	32,750	39,500
Software Exports	6,500	10,940	17,150	28,350	36,500	54,000
Domestic Software	3,470	4,950	7,200	9,400	11,634	17,000
Total	32,070	41,140	52,450	68,450	80,884	1,10,500

2. The sector has been playing a catalytic role in improving productivity of other sectors of the economy. Some of the major achievements of the sector include the development and tremendous success of the Indian software industry, development of supercomputer technologies, large-scale computerization, e-governance, modernization of communications services, increasing Internet usage, IT-based automation in various sectors like health, industry, transport, energy, etc.

Major Objectives of Tenth Five Year Plan:

3. The major objectives envisaged for the IT sector in the Tenth Five Year Plan are to:

- Ensure the sustained growth of software sector and increase India's share in the global IT market to a level of 6% against 2% at present.
- Put in place the basic policy framework for development of the hardware manufacturing industry.
- Devise appropriate policy interventions for the greater use of IT for promoting more efficient, transparent and responsive governance.
- Promote development and use of software in Indian languages.
- Take necessary steps for taking IT to the masses by making it affordable, easy to use and useful in day-to-day life.
- Put in place the required policy framework to improve the quality of manpower, skills and R&D.

Major Initiatives and Thrust Areas:

4. The major initiatives proposed to be taken in the Tenth Plan include formulation of a national hardware development policy, improving quality and productivity in software development, aggressive marketing for software export including expanding the focus to newly emerging markets in Europe, U.K., Asia Pacific, Japan etc., apart from giving priority to USA, Development and Promotion of software in Indian languages with a view to take IT to common man and increase domestic market, upgrading facilities in engineering colleges for improving quality of manpower, implement e-governance in the country in a comprehensive manner, providing Internet connectivity and e-learning tools in schools and colleges through Vidya Vahini and Gyan Vahini programmes and promoting research / innovations for rural needs through Media Lab Asia Programme.

5. The IT enabled services like Customer Interaction Services, Business Process Outsourcing (BPO), Insurance Claim Processing, Digital Content Development, Online Education, Web Services have been identified as a sources of wealth creation and employment generation. These services are estimated to provide employment to about 11 Lakh people and generate revenue of Rs.81,000 crore in the next eight years. The market for these services in 2001-02 grew to Rs.7,100 crore accounting for over 1,07,000 new jobs. Call centers alone generated about 80% of the revenue. The country offers many favorable factors like availability of talent, maximum number of ISO and CMM IV and V certified IT companies, adequate communication infrastructure, goodwill of international customers etc., for development of IT enabled services. However, their full potential can be tapped by setting up training infrastructure specially designed for these services and hassle free support by state governments and local bodies.

6. Presently there are about 300 units in electronics and Information Technology field registered with the Department of Scientific & Industrial Research. Some good institutions like Central Electronics Engineering Research Institute Pilani, Electronics Research & Development Centres, Centre for Development of Advanced Computing, Pune, Society for Applied Microwave Electronics Engineering and Research, IITs/ IISc, Optel, National Physical Laboratory, Electronics Corporation of India Ltd., etc., have made significant contribution in research the electronics and IT to their credit.

7. As per Information Technology Agreement (ITA1-WTO), the IT sector would be brought to a zero duty regime by 2005. Therefore, it has become imperative for Indian IT industry to develop technologies, products and services of international cost and quality and become global leader at least in some selected fields like software & IT services, bio-informatics, micro-electronics, cyber security, wireless technologies, high-end computing etc., The R&D model devised for pursuing R&D in the Tenth Plan is based on their strategic value and classification as Long, Medium and Short term R&D. Under this categorization the gestation periods of Long, Medium and Short term R&D Projects are 10 years, 3-6 years and 1-3 years respectively. While focus of long term R&D would be in the area of basic research like nano-technologies, bio-informatics etc., with government funds to a major extent, medium and short term R&D are envisaged to be largely funded by industry itself with the prime objective of improving product quality, reducing costs and create innovations. The Tenth Plan Working Group on IT has estimated a fund requirement of Rs.3,400 crore per year for R&D in IT during the Tenth Plan which has been proposed to be financed by the government and industry in the ratio of 80: 20.

Review of Annual Plan 2001-02

8. The year 2001-02 has been a year of turbulence, tragedy, terrorism and slow-down in the World economy. This has affected the Indian software export industry also which registered a growth of about 29 per cent in the year 2001-02 against 65 per cent in the previous year. However, with the phenomenal growth in IT Enabled services sector and by expanding markets for software exports, the industry is optimistic to grow very rapidly on domestic and international fronts in future. The software & services industry accounted for about 1.7 per cent of India's GDP during 2001-02. The Indian IT software & services exports have been over 16 per cent of total National exports in 2001-02.

9. During 2001-02, with a view to facilitate invention, refinements and extend the benefits of Information & Communication Technology (ICT) to masses, the Department of Information Technology initiated Media Lab Asia Project. Other major achievements of the year were development of 15 million electron volt linear accelerator for cancer treatment, completion of ten important R&D projects in the field of broadcasting, language engineering, railway freight information system, industrial automation, distance learning technologies, etc. under various programmes. The Standardization Testing Quality Control (STQC) Directorate of DIT certified 110 industries under various certification schemes.

10. Under disinvestments programme of Government of India, the CMC Limited a PSU was disinvested during the year.

Major Programmes in Annual Plan 2002-03

11. The Department of Information Technology (DIT) is acting as a nodal institution for the promotion of the sector, facilitating and coordinating the various initiatives of the central and state governments and the private sector. An outlay of Rs.593.58 crore with a budgetary support of Rs.470 crore has been approved for various schemes of DIT for Annual Plan 2002-03. The actual expenditures of the Department in Annual Plans 2000-01 and 2001-02 have been to the tune of Rs.305.12 crore and Rs.490 crore (Net B.S.) respectively. A list of Plan schemes of the DIT indicating approved outlays for Annual Plan 2002-03 is given in the Annexure. Some major programmes of DIT are given below:

Community Information Centres (CICs)

12. Under this project Community Information Centres (CICs) at 487 Blocks in the seven North East States and Sikkim are being set up for socio-economic development of the region. Each CIC is equipped with one server, five computers, three printers, UPS, DG set etc. The Internet connectivity is being provided through VSAT. The project has been commissioned on 15th August, 2002. These centers are envisaged to play an important role in government interface with the public, Internet access and promote IT enabled services for benefit of the community at large, besides establishing digital unite.

E-governance

13 The delivery of government services has become very user unfriendly because of too much discretion at every level, lack of transparency and cumbersome record management. E-governance denotes the application of IT to government processes in order to bring about Simple, Moral, Accountable, Responsive and Transparent (SMART) governance.

14. Though the Central and several state governments have taken some initiatives in e-governance during the Ninth Plan, these efforts have been driven primarily by individual initiatives rather than institutional thrusts and e-governance is yet to take the shape of a systematic national programme. Different levels of development, computerisation and political will necessitate the adoption of some standardized, uniform pattern in order to avoid the emergence of a digital divide between progressive states and states having less development due to various reasons.

15. So far, the programme of e-governance has largely been restricted to the efforts of the National Informatics Centre (NIC) and a few organisations. The emphasis has been on providing connectivity, networking, technology upgradation, selective delivery systems for information and services and a package of software solutions. It is now necessary to look seriously at the re-engineering of procedures and rules which form the core of any effective programme of e-governance. A comprehensive scheme to implement e-governance in the country is being formulated by Department of Information Technology and Department of Administrative Reforms.

Technology Development for Indian Languages

16. This programmes aims at development of IT tools and content in Indian languages to facilitate use of computers and other IT systems in various Indian languages. The DIT has taken up development work in this area at 13 Resource Centers at leading R&D organizations and educational institutes. Major achievement under the programme are development of multi-lingual digital libraries / dictionaries, translation support system, optical character recognition system, Text to Speech Systems and Standardization (UNICODE, XML, Lexware format, Fonts). Some of the new R&D projects initiated in the field of language engineering include localization of Linux Operating System, Indian Language Content Creation, Development of IT Terminology in Hindi, Translation Support System from English to Hindi.

Software Technology Parks in India (STPI)

17. The STPI is serving software export industry countrywide with over 30 Software Technology Parks equipped with high speed data communication and other infrastructure facilities. Software exports from member units of STPI is showing consistent growth during the last 5 years. These units exported software worth Rs.28,000 crore against total national software exports of Rs.36,500 crore in 2001-02. More than 6,900 units have been approved under the STPI scheme out of which about 3,000 units are exporting software.

Media Lab Asia

18. The Media Lab Asia project has been taken up by DIT in collaboration with the Massachusetts Institute of Technology. The objective of the project is to bridge the digital divide through development of state-of-the-art Information and communication technologies and deploying these technologies for the benefit of the citizens, especially those in the rural areas, and empowering them by creating business opportunities. The thrust areas to be taken up in the project are health, education/learning, employment and micro-entrepreneurship. During 2002-03, under exploratory phase of MLA project Research Labs at five IITs have been established and made operational. About 32 projects initiated at

these labs relates to technology development in the areas of Bits for All, World Computer, Tools for tomorrow and Digital Village.

Vidya Vahini and Gyan Vahini Programmes

19. These two programmes would be initiated on a pilot basis for providing connectivity to Government Senior Secondary Schools (Vidya Vahini) and upgradation of IT infrastructure in the higher learning institutions (Gyan Vahini) during the Tenth Plan.

Monitorable Targets / Anticipated Achievements in Annual Plan 2002-03

20. The schemes of the Department of Information Technology are broadly classified into R&D, Infrastructure, Human Resource Development and policy formulation. Among various programmes which are of continuing in nature, notable programmes likely to be completed during the year are;

- Commissioning of CICs project in North Eastern states,
- Implementing Vidya Vahini and Gyan Vahini programmes on pilot basis,
- Issuing of digital signatures,
- Setting up of Atal Bihari Vajpayee Centre for Excellence in Information and Communication Technology in Mangolia,
- Development of laser welding technology,
- Completion of exploratory phase of the Media Lab Asia project,
- Preparing action plan for implementing e-governance in the country,

21. The existing infrastructure of National Informatics Centre (NIC), Software Technology Parks, Education & Research Network (ERNET), Standardization Testing & Quality Control (STQC), etc., would be suitably augmented.

22. The Semiconductor Complex Limited, Mohali has projected to achieve a sales turnover of Rs.78.34 crore in A.P. 2002-03 against an anticipated sales of Rs.72.69 crore in 2001-02. The Company is likely to produce 8000 units of Very Large Scale Integrated (VLSI) wafers in 2002-03 against 1000 produced in 2001-02.

Zero Based Budgeting

23. The Department of Information Technology undertook a comprehensive review of all plan schemes based on Zero Based Budget (ZBB) methodology. The objective of this review is to ensure rationalization of programmes, convergence of similar schemes to avoid duplication and weeding out old and irrelevant schemes. As a result of ZBB exercise 55 Ninth Plan schemes of the DIT, have been reduced to 40 schemes in Annual Plan 2002-03.

Issues

24. A number of plans and policy measures have been implemented by the Government and private sector to boost this sector in the Ninth Plan. However, some issues given below are yet to be addressed for further development of the sector:

- Formulate a national hardware development policy and encourage global hardware majors to set up manufacturing units in India.
- A comprehensive rationalisation of tariff structure to cope with the zero duty regime on finished products that will come into place after 2005 as per ITA1-WTO agreement.
- Encourage setting up Software Technology Parks in the private sector.
- The software industry needs to move up in the value chain by developing high value products and focus of Indian industry needs to shift from providing software solutions to becoming manufacturers of packaged products.
- Make large investments in building brand equity and positioning the India brand abroad. Industry associations like NASSCOM, MAIT, ESC etc. must help SMEs in their export efforts through effective networking and meetings with potential customers.
- Promotion of software in Indian languages to increase IT penetration in the domestic market.
- Updating the syllabus of computer engineering, electronics and IT in various technical institutions in keeping with the industry's requirements. The curriculum in other branches of engineering should also be expanded to include IT subjects. Emphasis must be laid on postgraduate engineering education.
- Facilities in existing RECs and engineering colleges under deemed universities must be upgraded to IIT level so that there are at least 100 such institutions by the end of the Tenth Plan.
- 'C'-level course of DOEACC must be recognised as equivalent to M.Tech in computer engineering for all purposes.
- State governments and local bodies should support IT-enabled services industries in order to create employment opportunities.
- E-governance has been identified as priority area in the Tenth Plan and a clear roadmap to make it a national programme must be formulated without any delay.
- An action plan needs to be formulated to take up R&D in the emerging areas like bio-informatics and nano-technologies.
- Issuing digital signatures to citizens is already delayed, it must be implemented earliest as per requirement of the Information Technology Act, 2000.
- Enforcement of the IT Act to deal with cyber crimes and training law enforcing agencies to handle such crimes.

Annexure7.5.1

Department of Information Technology – Outlays for Annual Plan 2002-03

S. No.	SCHEME NUMBER / NAME	Annual Plan (2002-2003) Approved Outlays			
		Outlay	IR	EBR	Gross B.S.
1	2	3	4	5	6
	I. R&D PROGRAMMES				
1	SAMEER	22.00	2.50	7.50	12.00
2	Industrial Electronics Promotion Prog.inc. Robotics	8.24		4.74	3.50
3	Microelctronics &Nano-Tech Dev Prog - NMC	3.00			3.00
4	Technology Development Council	5.00			5.00
5	Dev. of Strategic Electronic Eqpt.	3.00			3.00
6	Electronic Component & Material Development Prog	7.05	0.45	1.50	5.10
7	C-DAC	10.00			10.00
8	Photonics/Optoelectronics	3.00			3.00
9	ERDCs	50.41	12.95	29.46	8.00
10	Electronics in Health and Bio-Informatics	5.00			5.00
11	Technology Dev. for Indian Languages	6.00			6.00
12	Development of CG Industry	2.00		1.00	1.00
13	Transport & Power Electronics	19.75		15.15	4.60
14	Centre for Liquid Crystal Research	1.70			1.70
15	IPR Promotion Programme	0.40			0.40
16	Promotion/R&D in IT/Special IT Projects	21.00			21.00
17	IT for Masses (incl Citizen Portals)	20.00			20.00
18	Media Lab. In Asia	1.00			1.00
	R&D Sub-Total	**188.55**	**15.90**	**59.35**	**113.30**
	II. Infrastructure Development				
19	ERNET	0.10			0.10
20	Vidya Vahini' & 'Gyan Vahini' Prog.	30.00			30.00
21	STQC	27.31			27.31
22	STPI & EHTP	8.00			8.00
23	IT Venture Capital	10.00			10.00
24	Electronic Governance	66.17		25.00	41.17
25	IT Bill / Certification & Network Security	5.00			5.00
26	SemiconductorLayoutDesign Act-2000	0.50			0.50
27	Community Information Centres (CIC)	20.00			20.00
	Infrastructure Sub-Total	**167.08**		**25.00**	**142.08**
	III. Human Resource Development				
28	CEDT	11.58	7.58		4.00
29	NCST	3.00			3.00
30	Software Manpower Dev./Employment Generation	6.00			6.00

S. No.	SCHEME NUMBER / NAME	Annual Plan (2002-2003)			
		Approved Outlays			
		Outlay	IR	EBR	Gross B.S.
1	2	3	4	5	6
31	Special Manpower for ASIC Design	2.00			2.00
	HRD Sub-Total	**22.58**	**7.58**		**15.00**
	IV. MISCELLANEOUS				
32	Headquarter (Secretariat & Bldg.)	10.24			10.24
33	El. for Rural/Social /Agri/Water Sector	14.00		10.00	4.00
34	Tech. Information and Forecasting	0.50			0.50
35	Electronics Industry Information Prog.	0.25			0.25
36	E-Commerce & Info-Security (incl. Smart Cards)	5.00			5.00
37	Policy Formulation & Eco Analysis in IT Sector	0.60			0.60
	Miscellaneous Total	**30.59**		**10.00**	**20.59**
	SUB-Total (I to V)	**408.80**	**23.48**	**94.35**	**290.97**
	V. PSUs				
38	Semiconductor Complex Ltd.	3.51	3.50		0.01
39	**VI. NIC**	175.02			175.02
40	**VII. ESC &** Export Market Development Prog	6.25	2.25		4.00
	Grand Total	**593.58**	**29.23**	**94.35**	**470.00**