सत्यमेव जयते

मंत्री
भारी उद्योग एवं लोक उद्यम
भारत सरकार नई दिल्ली–110 011
MINISTER OF
HEAVY INDUSTRIES & PUBLIC ENTERPRISES
GOVERNMENT OF INDIA
NEW DELHI-110 011

Foreword

The Public Enterprises Survey (2009-10) is the 50th Survey in the series and marks the Golden Jubilee year of its publication. The Survey provides the consolidated report on the performance of all the CPSEs. During 2009-10, the net profit of (158) profit making CPSEs crossed the one lakh crore landmark with an aggregate net profit of Rs.1,08,435 crore. The losses of (59) loss making CPSEs also increased from Rs.14,621 crore in 2008-09 to Rs.15,842 crore during the survey year.

2. The fiscal year (2009-10) was challenging for CPSEs as the total turnover declined by 3 percent, against a growth in turnover of 16 per cent in 2008-09 and a growth of 14 per cent in 2007-08. The global slowdown impacted CPSEs, especially so, in the petroleum and the steel sectors. CPSEs insulated from such influences, however, like electricity (power generation and transmission) showed a robust growth during the year.

3. In view of the overall improvement in the Indian economy, the CPSEs stand to gain. They are involved in the diverse sectors of manufacturing, mining, electricity, construction and services. The CPSEs are, however, no longer operating in a protected economy and are faced with intense competition in the market. They need to, therefore, benchmark their performance with the best in the industry.

4. Aggregate investment in CPSEs has been increasing over the years. Total investment (equity plus long term loans) in CPSEs, went up from Rs.5,13,532 crore as on 31.3.2009 to Rs.5,79,920 crore, on 31.3.2010, showing a growth of 12.93 per cent. As on 31.3.2010, there were 94 mega projects (costing Rs.1000 crores and above) and 44 major projects (costing Rs.100 to Rs.1000 crores) under implementation by CPSEs.

5. The stocks of CPSEs are the preferred stocks in the capital market. Encouraged by this market perception, more and more CPSEs are raising capital. Response to the Initial Public Offering (IPO) of Coal India in the current year has been overwhelming; it has been acclaimed as India's largest IPO and is being considered as a game changer.

6. I congratulate Secretary, Department of Public Enterprises and his team of officers & staff for bringing out this comprehensive survey.

(Praful Patel)

Ferbruary, 2011
New Delhi

सत्यमेव जयते

राज्य मंत्री
भारी उद्योग एवं लोक उद्यम मंत्रालय
भारत सरकार नई दिल्ली–110 011
MINISTER OF STATE
HEAVY INDUSTRIES & PUBLIC ENTERPRISES
GOVERNMENT OF INDIA
NEW DELHI-110 011

Preface

The Estimates Committee (2nd Lok Sabha), in their 73rd Report (1959-60) had recommended that in addition to the individual annual report of each enterprise laid on the Table of both the Houses of Parliament, a separate comprehensive report should be submitted to the Parliament indicating the Government's total appraisal of the working of public enterprises.

2. The first Annual Report (Public Enterprises Survey) was, accordingly, prepared by the erstwhile Bureau of Public Enterprises (now Department of Public Enterprises) in 1960-61 giving a consolidated picture of the performance of the Central Public Sector Enterprises (CPSEs). Public Enterprises Survey (2009-10) is the 50th in the series and marks the Golden Jubilee year of its publication.

3. The CPSEs are technologically complex organizations employing a large workforce, and engaged in diverse sectors of the economy. These companies are, moreover, spread over the length and breadth of the country, fulfilling various macro-economic objectives.

4. Although few in number, the 217 operating CPSEs are the leading companies of India. They have been contributing to the maintenance of low prices in the domestic economy, acting as model employers and growing without much financial support from the state. The (Indian) CPSEs have thus a unique place amongst the State Owned Enterprises (SOEs) of the world and have been so recognized.

5. The Department of Public Enterprises acknowledges the cooperation extended by all the Ministries / Departments (Government of India) and their respective CPSEs in providing financial and other data for the preparation of the Survey (2009-10). I also take this opportunity to place on record the efforts put in by Secretary, Departrment of Public Enterprises and all his officers & staff of the Department in preparing this Survey.

(A. Sai Prathap)

February, 2011
New Delhi

सत्यमेव जयते

भारत सरकार
लोक उद्यम विभाग
भारी उद्योग एवं लोक उद्यम मंत्रालय
GOVERNMENT OF INDIA
DEPARTMENT OF PUBLIC ENTERPRISES
MINISTRY OF HEAVY INDUSTRIES &
PUBLIC ENTERPRISES

Introduction

भास्कर चटर्जी
Bhaskar Chatterjee, I.A.S.
SECRETARY

The Department of Public Enterprises (DPE) under the Ministry of Heavy Industries and Public Enterprises is the nodal Department in the Government of India to provide, inter-alia, an overview on the financial and physical performance of Central Public Sector Enterprises (CPSEs). This is done through the Public Enterprises Survey, which is a consolidated report on the performance of all CPSEs. As directed by the Estimates Committee (2nd Lok Sabha), moreover, the Survey is laid in the Parliament every year.

2. Besides Statutory Corporations, the CPSEs comprise those Government Companies (defined under Section 617 of Companies Act, 1956) wherein more than 50% equity is held by the Central Government. The subsidiaries of these companies are also categorized as CPSEs. The Survey, however, does not cover departmentally run public enterprises, banking institutions and enterprises wherein Central Government equity is less than or equal to 50%.

3. The Public Enterprises (PE) Survey 2009-10 is the 50th Report in the series. The basic data for the Public Enterprises Survey is compiled based on the Annual Reports/Accounts of individual enterprises, for the financial year 2009-10, as well as the information provided by these enterprises in the detailed data sheet / questionnaire developed by the Department. The data so compiled have been analyzed and presented in two separate volumes (i.e. Vol.I & II). While **Volume-I** contains a macro appraisal of the performance of CPSEs in terms of broad aggregates of physical and financial parameters, **Volume-II** contains enterprise-wise and cognate group wise summarized balance sheet, summarized profit and loss account and important management ratios alongwith the analysis of the performance of individual enterprises.

4. While Volume-1 contains a macro appraisal of the performance of CPSEs in terms of broad aggregates of physical and financial parameters, Volume-II contains enterprise-wise and cognate group wise summarized balance sheet, summarized profit and loss account and important management ratios alongwith the analysis of the performance of individual enterprises.

5. There were altogether 249 CPSEs (excluding 7 Insurance Companies) as on 31.3.2010, against 246 CPSEs in 2008-09. During 2009-10, ten enterprises were either closed or merged with their holding company or changed their public sector character on formation of joint ventures with less than 51% equity holding or on account of transfer of ownership to private sector (arising from such a decision by the Government or closed down by the Registrar of Companies or closed by the Board Directors of the holding company.

6. The ten enterprises which have not been covered in Public Enterprises Survey (2009-10) are IL Power Electronics Ltd. (winding up by the notice of Registrar of Companies Rajasthan), Instrumentation Control Valves Ltd. and Instrumentation Digital Control Ltd. (winding up by the order of Department of Heavy Industries), East-North Interconnection Company Ltd., North Karanpura Transmission Company Ltd. and Talcher-II Transmission Company Ltd. (transferred to M/S Reliance Power Transmission Ltd.), Bharat Refractories Ltd. (merged with the holding company / SAIL), Indian Oil Technologies Ltd. (winding up by the Board of IOC), IAL Airport Services Ltd. (Board of Directors decided to strike off the name of the company from the Registrar of Companies) and Bokaro-Kodarmma-Maithon Transmission Company Ltd. (dissolved by the Registrar of Companies).

7. Thirteen (13) new public sector enterprises, namely, Loktak Downstream Hydroelectric Corporation Ltd., Raichur Sholapur Transmission Company Ltd., IRCON Infrastructure & Services Ltd., Power System Operation Corporation Ltd., MNH Shakti Ltd., MJSJ Coal Ltd., Tatiya Andhra Mega Power Ltd., Bhopal Dhule Transmission Company ltd., Jabalpur Transmission Company Ltd., HPCL Biofuels Ltd., Eastern Investment Ltd., Orissa Mineral Development Company Ltd. and Bisra Stone Lime Company Ltd. have been added to the list of CPSEs during the year. Out of these thirteen enterprises, 3 CPSEs namely, Eastern Investment Ltd., Orissa Mineral Development Company Ltd. and Bisra Stone Lime Company Ltd. are in operation and the remaining10 are yet to commence their commercial operations.

8. Bharat Petro Resources Ltd., GAIL Gas Ltd. and REC Transmission Projects Company Ltd., which were shown as 'Under Construction category' (in the PE Survey 2008-09) became operative during the year.

9. Akaltara Power Ltd. and Satluj Jal Vidyut Nigam Ltd have changed their names as Chhattisgarh Surguja Power Ltd. and SJVN Ltd. respectively.

10. The present Survey, moreover, incorporates audited figures in respect of CPSEs whose accounts were treated as provisional in the Public Enterprises Survey, 2008-09. The figures relating to 2008-09 as appeared in the last year's Survey have, therefore, undergone revision.

11. The status of 256 enterprises (including 7 Insurance Companies) discussed in this Survey as working under different Ministries/Departments is shown below:

S.No.	Categories	No. of Enterprises (as on 31.3.2010)
1.	Operating Enterprises	217
2.	Enterprises which are yet to commence commercial operation	32
3.	Insurance Companies	7
	Total :	256

12. Ministry/Department-wise, sectoral/group-wise and State-wise (as per their Registered Offices), separate lists of CPSEs are given in appendices I, II, and III respectively at the end of this Volume. Appendix IV contains the list of CPSEs whose data are provisional as their audited accounts for the financial year 2009-10 were not ready.

13. We are grateful to all the Ministries/Departments for making available the relevant information relating to CPSEs, such as, Pricing Policy, market share and proposals for restructuring of CPSEs etc. The cooperation extended by all the CPSEs vis-à-vis submission of requisite data is duly acknowledged.

14. I would also like to put on record the efforts put in by all the officers and staff of the Department and the Public Enterprises Division of NIC(Government of india) in preparing the Survey. The overall supervision in this endeavour was provided by the Economic Adviser (Department of Public Enterprises).

15. The Survey is available on the DPE website www.dpe.nic.in . Suggestions to improve the Public Enterprises Survey are welcome.

(Bhaskar Chatterjee)

February, 2011
New Delhi

Chapter-1

Performance Overview

Public sector enterprises have been set up to achieve higher economic growth, to develop infrastructure, to augment goods and services in short supply and to maintain low and stable prices.

While there were only 5 Central Public Sector Enterprises (CPSEs) with a total investment of ₹29 crore on the eve of the First Five Year Plan, there were 249 CPSEs (excluding 7 Insurance Companies) as on 31st March, 2010 with a total investment of ₹579920 crore.

A large number of CPSEs have been set up as Greenfield projects consequent to the initiatives taken during the various Five Year Plans (Annex 1.1). CPSEs, such as National Textile Corporation, Bridge & Roof Co. (India) Ltd, Burn Standard Company Ltd.,Tyre Corporation of india Ltd and Hooghly Dock and Port Engineeres Ltd have, however, been taken over from the private sector on their falling sick. Companies, such as, Indian Petrochemicals Corporation Ltd., Modern Food Industries Ltd., Hindustan Zinc Ltd., Bharat Aluminum Company, Maruti Udyog Ltd., on the other hand, which were earlier CPSEs, ceased to be so after their 'privatization'.

Along with other public sector majors, such as, State Bank of India in the banking sector, Life Insurance Corporation in the insurance sector, Indian Railways in transportation, the CPSEs are the leading companies of India with significant market-shares in sectors such as petroleum products, (eg. ONGC, GAIL and Indian Oil Corporation), mining (eg. Coal India Ltd. and NMDC), power generation (eg. NTPC and NHPC), power transmission (e.g.,Power Grid Corporation Ltd.), nuclear energy (eg. Nuclear Power Corporation of India Ltd.), heavy engineering (eg. BHEL), aviation industry (eg.Hindustan Aeronautics Ltd. and NACIL), storage and public distribution system (eg. Food Corporation of India and Central Warehousing Corporation), shipping and trading (eg. Shipping Corporation of India Ltd, and State Trading Corporation Ltd.) and telecommunication (eg. BSNL and MTNL).

With economic liberalization post-1991, sectors that were exclusive preserve of the public sector enterprises were opened to the private sector. The CPSEs, therefore, are faced with competition from both the domestic private sector companies (some of which have grown very fast) and the large multi-national corporations (MNCs). The monopoly market conditions have given way to 'oligopoly' and 'competitive market' conditions and there is intense competition in the market. The market share of CPSEs in industries, such as, telecom, oil refinery, coal, power, steel and transpotation has declined over the years.

1.1 Indian Economy (2009-10) and CPSEs

As against the GDP growth of 11.8 per cent (at current market price) in 2009-10, the aggregate turnover of all the CPSEs decreased by 2.87 per cent. The decline in turnover was mainly on account of reduction in sale of refined petroleum (₹74,150 crore), steel (₹4,536 crore), fertilizer (₹2,516 crore) and telecom sectors (₹1,495 crore). The aggregate turnover of CPSEs declined from ₹1271529 crore in 2008-09 to ₹1235060 crore in 2009-10 or by ₹36469 crore. There were however, some industries, which showed increase in turnover during this period, such as, coal, heavy engineering, transpotation, power generation, trading & marketing and conumer goods. Profits & losses of the different CPSEs did not necessarily correspond to increase or decrease in turnover, as several factors came into play like however higher input costs, lower/higher prices, of goods and services increase in wages and salaries and exchange rate fluctuations etc. Major highlights of performance of all CPSEs for the year 2009-10 are given in Box 1.

Macro view of the performance of CPSEs during the last ten years is shown in Box 2. The overall profit of all CPSEs stood at ₹92593 crore during 2009-10. The dividend declared by the profit making CPSEs stood at ₹33223 crore. The CPSEs earned foreign exchange equal ₹77745 crore during the year as compared to ₹74206 crore in 2008-09.

Box - 1

Highlights

- Total paid up capital in 249 CPSEs as on 31.3.2010 stood at ₹148367 crore compared to ₹138734 crore as on 31.3. 2009 (246 CPSEs), showing a growth of 6.94%.
- Total investment (equity plus long term loans) in all CPSEs stood at ₹ 579920 crore as on 31.3.2010 compared to ₹513532 crore as on 31.3.2009, recording a growth of 12.93%.
- Capital Employed (net block plus working capital) in all CPSEs stood at ₹910120 crore as on 31.3.2010 compared to ₹793240 crore as on 31.3.2009, showing a growth of 14.73%.
- Total turnover of all CPSEs during 2009-10 was ₹1235060 crore compared to ₹1271529 crore in the previous year, showing a reduction of 2.87%.
- Total income of all CPSEs during 2009-10 stood at ₹1264523 crore compared to ₹1309639 crore in 2008-09, showing a reduction of 3.44%.
- Profit of profit making CPSEs stood at ₹108435 crore during 2009-10 compared to ₹98488 crore in 2008-09, showing a growth of 10.10%.
- Loss of loss incurring CPSEs stood at ₹15842 crore in 2009-10 compared to ₹14621 crore in 2008-09, showing an increase in loss by 8.35%.
- Overall net profit of all 217 CPSEs during 2009-10 stood at ₹92593 crore compared to ₹83867 crore during 2008-09, showing an increase of 10.40%.
- Reserves & Surplus of all CPSEs went up from ₹536212 crore in 2008-09 to ₹605648 core in 2009-10, showing an increase by 12.95%.
- Net worth of all CPSEs went up from ₹587286 crore in 2008-09 to ₹660245 crore in 2009-10, registering a growth of 12.42%.
- Contribution of CPSEs to Central Exchequer by way of excise duty, customs duty, corporate tax, interest on Central Government loans, dividend and other duties and taxes declined from ₹151543 crore in 2008-09 to ₹139830 crore in 2009-10, showing a decrease of 7.73%.
- Foreign exchange earnings through exports of goods and services increased from ₹74206 crore in 2008-09 to ₹77745 crore in 2009-10, showing a growth of 4.77%.
- Foreign exchange outgo on imports and royalty, know-how, consultancy, interest and other expenditure decreased from ₹433332 crore in 2008-09 to ₹420477 crore in 2009-10, showing a reduction of 2.97%.
- CPSEs employed 14.91 lakh people (excluding casual workers) in 2009-10 compared to 15.34 lakh in 2008-09, showing a decrease in employees by 2.80%.
- Salary and wages went up in all CPSEs from ₹83045 crore in 2008-09 to ₹90863 crore in 2009-10, showing a growth of 9.41%.
- Total Market Capitalisation (M_Cap) of 43 listed CPSEs, based on the stock price in Mumbai Stock Exchange, increased from ₹813530 crore as on 31.03.2009 to ₹1426212 crore as on 31.03.2010. Market Capitalisation of CPSEs during this period, therefore, increased by 75.31%
- M_Cap of CPSEs as per cent of BSE M_Cap decreased from 26.36% as on 31.3.2009 to 23.13% as on 31.3.2010.

Box - 2
Macro View 0f Performance 0f Central Public Sector Enterprises

(₹ in crore)

Particulars	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
No. of operating Enterprises	234	231	226	230	227	226	217	214	213	217
Capital employed	331372	389934	417160	452336	504407	585484	661338	724009	792232	908842
Turnover	458237	478731	572833	630704	744307	837295	964890	1096308	1271529	1235060
Total Income	479838	498315	548912	613706	734944	829873	970356	1102772	1309639	1264523
Net Worth	171406	225472	241846	291828	341595	397275	454134	518485	583144	653801
Profit before dep, Int, tax & EP (PBDITEP)	69287	89550	101691	127320	142554	150262	177990	195049	186836	211011
Depreciation	20520	26360	28247	31251	33147	34848	33141	36668	36780	41595
DRE/Prel. Exps. Written Off	-	-	905	1025	986	992	5841	5802	7661	9570
Profit before int., tax & EP (PBITEP)	48767	63190	72539	95039	108420	114422	139008	152579	142395	159846
Interest	23800	24957	23921	23835	22869	23708	27481	32126	39300	35720
Profit before Tax & EP (PBTEP)	24967	38233	48618	71144	85550	90714	111527	120453	103095	124126
Tax provisions	9314	12255	17499	22134	21662	24370	34352	40749	33828	40007
Net Profit before EP	-	-	31119	49010	63889	66344	77175	79704	69267	84119
Net Extra Ordi. Items & Prior Period AdJ.	-	-	-1225	-3933	-1075	-3192	-3880	- 1570	-14600	-8474
Profit of profit making CPSEs	28494	36432	43316	61606	74432	76382	89581	91577	98488	108435
Loss of loss incurring CPSEs	12841	10454	10972	8522	9003	6845	8526	10303	14621	15842
Profit making CPSEs (No.)	123	120	119	139	143	160	154	160	158	158
Loss Incurring CPSEs (No.)	110	109	105	89	73	63	61	54	55	59
CPSEs Making no profit/loss	1	2	2	2	-	1	1	-	-	-
Operating CPSEs not furnished information (No.)	-	-	-	-	-	2	1	-	-	-
Dividend	8260	8068	13769	15288	20718	22886	26819	28123	25501	33223
Dividend tax	842	8	1193	1961	2852	3215	4107	4722	4132	5151
Retained profit	6551	17902	17382	35835	41394	43435	50129	48429	54233	54220

1.2 Profitability Ratios

Box-3 below shows the different financial ratios vis-a-vis the aggregate performance of CPSEs for the last ten years. A perusal of profit related ratios shows a general improvement in profitability of CPSEs over the years (Box -3/Fig 1.1). In comparison to 2008-09, however, while the profitability ratios in terms of 'net profit to capital employed' and 'net profit to net worth' has shown a decline, 'net profit to turnover' and 'dividend payout' have increased in 2009-10. The ratio of 'sales to capital employed', however, came down in 2009-10 over the previous year (2008-09).

Box - 3

Financial Ratio

(₹ in crore)

Particulars	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Sales to Capital employed	138.28	122.77	137.32	139.43	147.56	143.01	145.90	151.28	160.30	135.70
PBDITEP to Capital employed	20.91	22.97	24.38	28.15	28.26	25.66	26.91	26.91	23.55	23.18
PBTEP to Net worth	14.57	16.96	20.10	24.38	25.04	22.83	24.56	23.12	17.55	18.80
PBDITEP to Turnover	15.12	18.71	17.75	20.19	19.15	17.95	18.45	17.79	14.67	17.09
PBITEP to Capital employed	14.72	16.21	17.39	21.01	21.49	19.54	21.02	21.05	17.95	17.56
PBITEP to Turnover	10.64	13.20	12.66	15.07	14.57	13.67	14.41	13.92	11.18	12.94
PBTEP to Turnover	5.45	7.99	8.49	11.28	11.49	10.83	11.56	10.99	08.09	10.05
Net Profit to Turnover	3.42	5.43	5.65	8.40	8.73	8.30	8.40	7.41	6.59	7.50
Net Profit to Capital Employed	4.72	6.66	7.75	11.71	12.88	11.88	12.26	11.21	10.57	10.17
Net Profit to Net Worth	9.13	11.52	13.37	18.16	19.02	17.50	17.85	15.60	14.28	14.02
Dividend payout	52.77	31.06	42.57	28.85	31.89	32.91	33.09	35.33	31.06	36.16
Tax Provision to PBTEP	37.31	32.05	35.99	31.11	25.32	26.86	30.80	33.83	32.81	32.23
Interest to Gross Profit	34.35	27.87	23.52	18.72	16.04	15.78	19.77	21.06	27.60	22.35

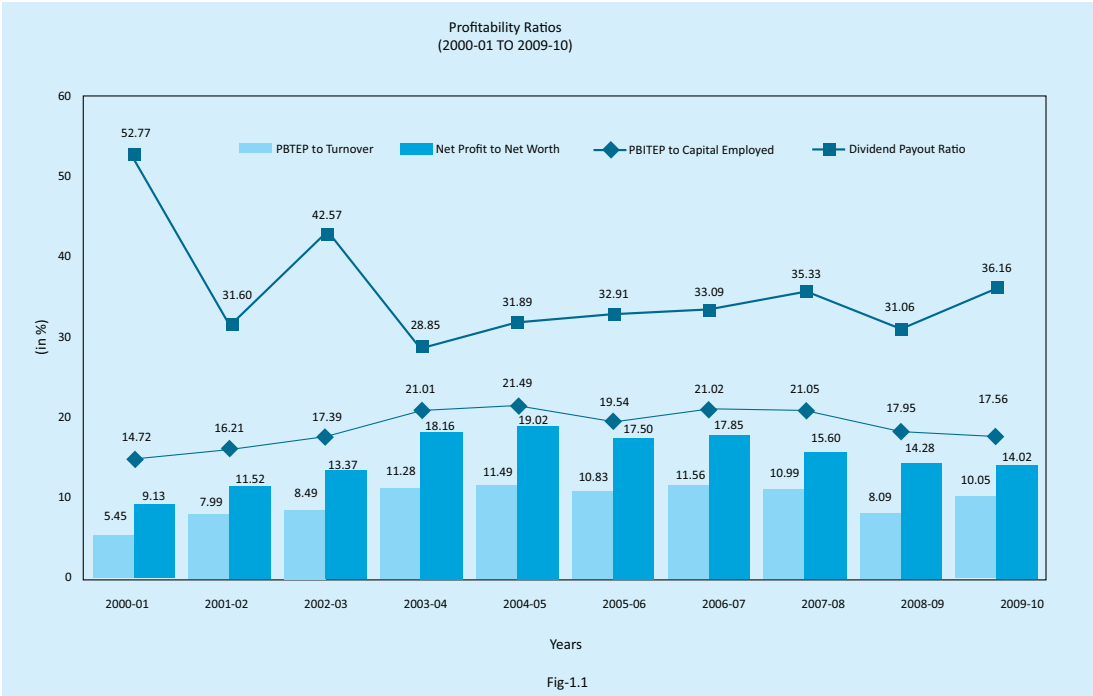

Fig-1.1

The interest burden on CPSEs measured as 'interest to gross profit' shows a decline upto 2005-06. Subsequently, it has shown an upward trend up to 2008-09 after which it declined again in 2009-10 The 'interest to gross profit' ratio has accordingly come down to 22.35 per cent in 2009-10 from 27.60 per cent in 2008-09 (Fig 1.2).

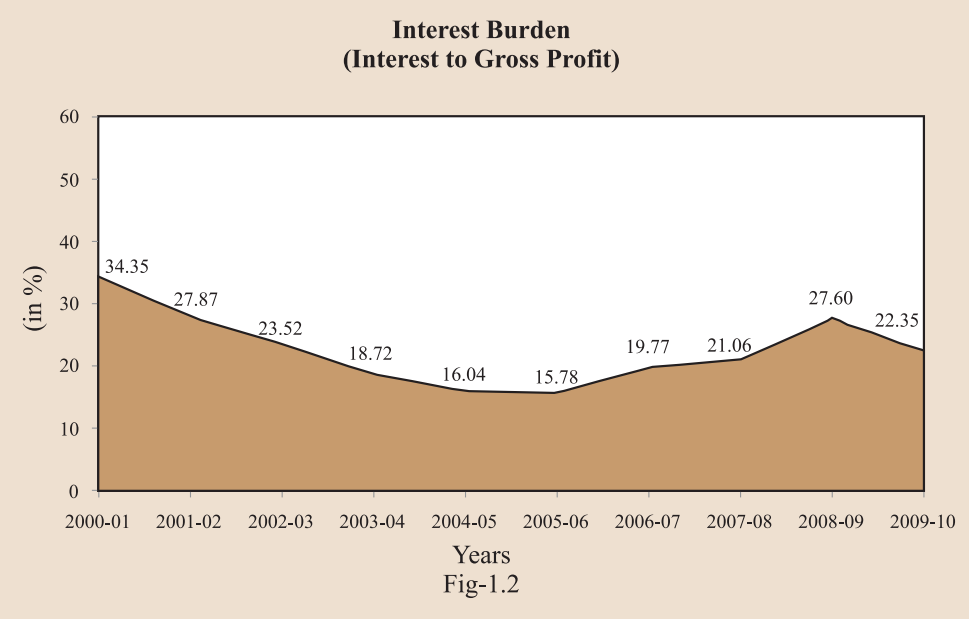

Fig-1.2

In terms of 'effective tax rate', the tax burden on CPSEs that improved significantly in 2004-05 and 2005-06 got worse in 2006-07 and 2007-08 and slightly improved in 2009-10 (Fig 1.3).

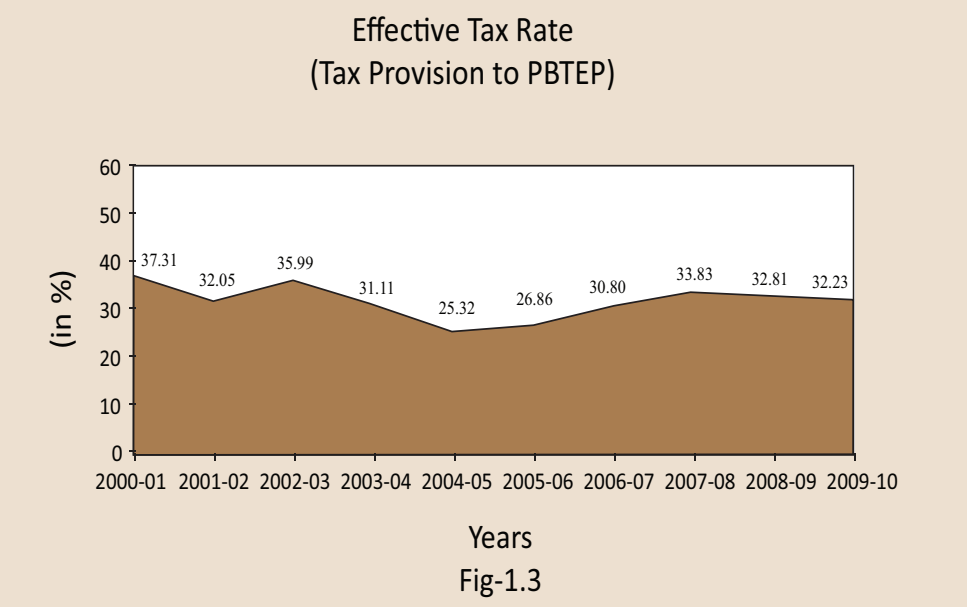

Fig-1.3

1.3 Aggregate Balance Sheet of CPSEs

Table 1.1 below provides information on 'sources of funds' and 'application of funds', in CPSEs, at the aggregate level, during the last three years. There was further improvement in 2009-10 as the funds available to CPSEs went up to ₹1411440 crore in 2009-10 from the earlier levels of ₹1279447 crore in 2008-09 and ₹1122680 crore in 2007-08. While 'reserves and surplus' showed an increase of 12.95 per cent, 'long term loans' increased by 15.67 per cent during 2009-10 over 2008-09. In absolute terms, 'reserves and surplus' went up to ₹605648 crore in 2009-10 from the earlier levels of ₹536212 crore in 2008-09 and ₹485540 crore in 2007-08. Long term loans went up to ₹429804 crore in 2009-10 from the earlier levels of ₹371576 crore in 2008-09 and ₹321232 crore in 2007-08.

In terms of 'application of funds', there was a growth of 14.19 per cent in 'gross block' and an increase of 11.94 per cent in 'net current assets' in 2009-10 over 2008-09. 'Capital-Work-in Progress' has had the highest increase of 22.17% under 'application of funds', followed by 'Net Block '(17.38%). Financial Investments (of CPSEs), Deferred Revenue Expenditure and Deferred Tax Assets declined in 2009-10 in comparison to the previous year by 10.98%, 4.46% and 12.49% respectively. During 2009-10, the accumulated loss of lossmaking CPSEs increased by the 5.51% in comparison to the previous year. There has, however, been very little change during the three years in terms of the shares of each of the broad categories under 'application of funds' (Table-1.1).

Table 1.1

Aggregate Balance Sheet of Public Sector Enterprises			
			(₹ in crore)
Particulars	**2009-10**	**2008-09**	**2007-08**
Sources of Funds			
(i) Share holders fund (a+b+c)	755763.19	678168.69	619862.01
a. Paid-up Capital	148367.06	138734.40	131231.63
b. Share application Money	1748.42	3222.01	3090.26
c. Reserves & Surplus	605647.71	536212.28	485540.12
(ii) Long Term Loans	429804.04	371576.04	321232.14
(iii) Deferred Tax Liability	48392.40	49201.20	47820.91
(IV) Other Funds	177480.03	180500.80	133764.58
Total (i+ii+iii+iv)	**1411439.66**	**1279446.73**	**1122679.64**
Application of Funds			
(i) Gross Block	930907.54	815249.32	749780.74
(ii) Less: Depreciation	452491.40	407654.13	371625.33
(iii) Net Block	478416.14	407595.19	378155.41
(iv) Capital Work In Progress	199034.12	162918.03	112459.64
(v) Investments (Financial)	199662.46	224286.86	181569.18
(vi) Net Current Assets	431703.80	385644.98	346541.11
(vii) Deferred Revenue Expenditure	3529.74	3694.62	2409.10
(viii) Deferred Tax Asset	7104.92	8118.79	5015.25
(ix) Profit & Loss Account (DR)	91988.48	87188.26	96529.95
Total (iii to ix)	**1411439.66**	**1279446.73**	**1122679.64**

Note: DR= Debit Balance /Accumulated losses from previous year.

1.4 Investment Pattern in terms of Gross Block

In terms of gross block, the share of 'manufacturing' CPSEs in aggregate investment of all CPSEs during 2009-10 was the highest at 27.11 percent followed by 'electricity' (25.02%), 'services' (24.54%) and 'mining' (22.76%). In terms of growth in investment over the previous year, the highest growth (other than CPSEs under construction) was registered by 'services' sector (23.05%), followed by 'manufacturing' (16.64%), 'mining' (11.32%) and 'electricity' (10.56%). The overall growth in investment in CPSEs, in terms of 'gross block', stood at 15.52 per cent in 2009-10 over the previous year. (Table 1.2/Fig. 1.4)

Table 1.2

Pattern of investment in terms of Gross Block
(2008-09 and 2009-10)

(₹ in crore)

S. No.	Sector	Investment in terms of Gross Block as on		Growth rate over the previous year	Gross block as % of total (as on 31.3.10)
		13.3.2010	31.3.2009		
(1)	(2)	(3)	(4)	(5)	(6)
1.	Agriculture	110	102	7.84	0.01
2.	Mining	257173	231031	11.32	22.76
3.	Manufacturing	306289	262587	16.64	27.11
4.	Electricity	282738	255728	10.56	25.02
5.	Services	277301	225353	23.05	24.54
6.	CPSEs yet to Commence Operations	6331	3366	88.09	0.56
Total		**1129942**	**978167**	**15.52**	**100.00**

1.4.1 Financial Investment in CPSEs

Financial investment (equity plus long term loans) in all 249 CPSEs as on 31.3.2010 stood ₹579920 crore compared to ₹513532 crore in the previous year showing an increase by ₹66388 crore or a growth of 12.93 percent. Table 1.3/Fig1.4 below shows the sector-wise and cognate group-wise cumulative investment in CPSEs as on 31.3.2009 and 31.3.2010. In terms of share in total investment, the electricity sector CPSEs claimed the highest share in financial investment (37.36%) as on 31.3.2010. This was followed by 'service' sector (36.57%), manufacturing (17.35) and 'mining' (7.62%) sectors.

Fig 1.4 below provides a comparative picture of the respective shares of the different sectors in financial investment and gross block. Broadly, it shows that the shares of CPSEs in the gross block under 'mining' and 'manufacturing' sectors increased over the years vis-a-vis their respective shares in the financial investment/ initial investment. The respective shares of CPSEs in the gross block under 'electricity' and 'services' sectors, on the other hand, declined over the years vis-a-vis their respective shares in the financial investment/ initial investment (in CPSEs).

Table1.3

Financial Investment in CPSEs as on 31.3.2010

(₹ in crore)

S. No.	Sector/ Cognate Group	Cumulative Net Investment as on		Investment during 2009-10	Share in total (cumulative) investment as on 31.3.10 (in%)
		13.3.2010	31.3.2009		
(1)	(2)	(3)	(4)	(5)	(6)
1.	Agriculture	160.71	256.51	-95.80	0.03
2.	Mining	44177.70	41216.93	2960.77	7.62
3.	Manufacturing	100602.22	93923.88	6678.34	17.35
4.	Electricity	216645.09	187475.11	29169.98	37.36
5.	Services	212082.97	186985.56	25097.41	36.57
6.	Under Construction	6250.83	3674.46	2576.37	1.07
	Total	**1129942**	**978167**	**15.52**	**100.00**

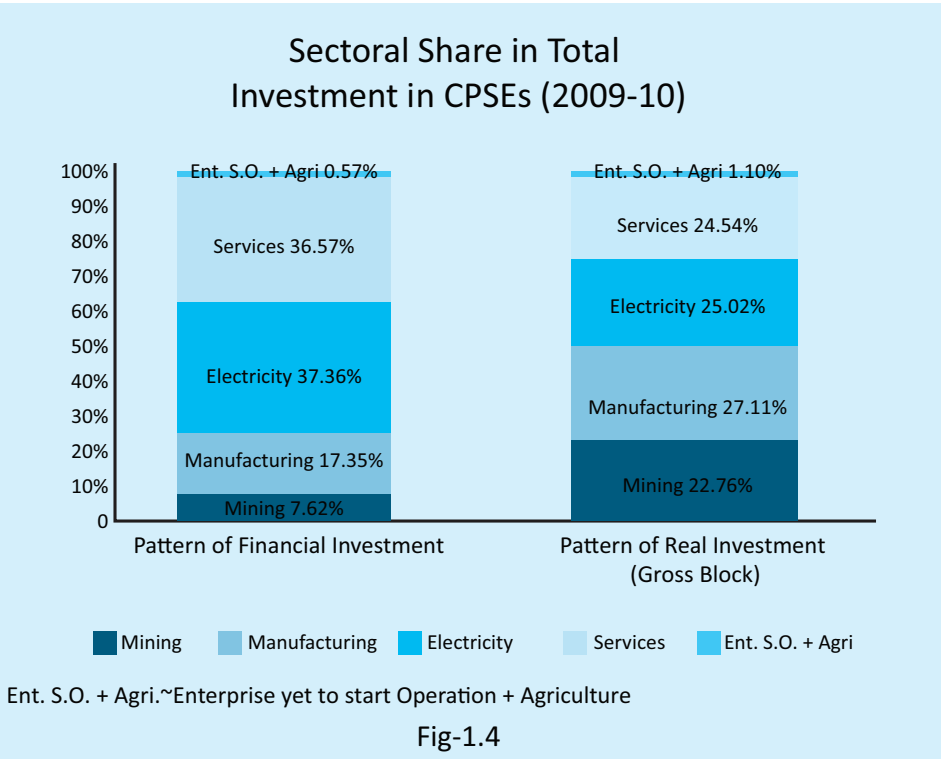

Fig-1.4

1.4.2 Top Ten Enterprises in terms of Gross Block

Gross block in top ten enterprises amounted to ₹7,79,960 crore as on 31.3.2010. This was equal to 69.03 percent of the total gross block in all CPSEs. Oil & Natural Gas Corporation Limited, Bharat Sanchar Nigam Ltd. and NTPC Ltd are the top three CPSEs amongst the top ten CPSEs in terms of gross block during the year 2009-10 (Table 1.4). The share of these 3 Central Public Sector Enterprises alone was 38.69% of the total gross block of all the CPSEs as on 31.3.2010.

Table 1.4

Gross Block in Top Ten Enterprises, as on 31.3.2010

(₹ in crore)

S. No.	CPSEs	Investment in terms of Gross Block*	Share in total Gross Block %)
(1)	(2)	(3)	(4)
1.	Oil & Natural Gas Corporation Ltd.	171656	15.19
2.	Bharat Sanchar Nigam Ltd.	166514	14.74
3.	NTPC Ltd.	98954	8.76
4.	Indian Oil Corporation Ltd.	93358	8.26
5.	Power Grid Corporation of India Ltd.	63625	5.63
6.	Steel Authority of India Ltd.	50422	4.46
7.	Nuclear Power Corporation of India Ltd.	35343	3.13
8.	NHPC Ltd.	35328	3.13
9.	National Aviation Company of India Ltd.	35307	3.12
10.	Mahanagar Telephone Nigam Ltd.	29453	2.61
	Total Top Ten (CPSEs)	**779960**	**69.03**
	Total Gross Block	**1129942**	**100.00**

1.5 Turnover in CPSEs

The turnover of CPSEs (at the aggregate level) decreased by 2.87 per cent in 2009-10 over 2008-09. This was also much in contrast with 15.98 percent growth in turnover achieved in 2008-09. Turnover of both manufacturing (-7.79%) and mining (-0.68%), in particular, declined significantly, during the year. (Table 1.5 & 1.6 & Fig 1.6)

Table 1.5
Group-wise Turnover of CPSEs
(2007-08 to 2009-10)

(₹ in crore)

S. No.	Sector/ Cognate Group	Turnover		
		31.3.2010	31.3.2009	31.3.2008
(1)	(2)	(3)	(4)	
I. Agriculture				
1	Agro Based Industries	762.52	456.03	332.80
Sub Total		762.52	456.03	332.80
II. Mining				
2	Coal & Lignite	48556.04	42997.93	36167.84
3	Crude Oil	72946.10	77450.16	73128.01
4	Other Minerals & Metals	15991.69	17984.60	16454.29
Sub Total		137493.83	138432.69	125750.14
III. Manufacturing				
5	Steel	55521.87	60057.57	57316.79
6	Petroleum (Refinery & Marketing)	629816.92	703966.35	600622.23
7	Fertilizers	14495.58	17011.72	11661.88
8	Chemicals & Pharmaceuticals	1390.57	1498.06	1417.60
9	Heavy Engineering	35184.78	28855.72	22229.93
10	Medium & Light Engineering	15064.96	11114.62	9844.64
11	Transportation Equipment	21077.47	16394.37	13318.55
12	Consumer Goods	4919.83	4340.73	4051.77
13	Textiles	490.28	415.40	490.29
Sub Total		777962.26	843654.54	720953.68
IV. Electricity				
14	Generation	63836.23	55832.60	49753.27
15	Transmission	13782.97	10518.89	8024.14
Sub Total		77619.20	66351.49	57777.41
V. Services				
16	Trading & Marketing	151592.46	137268.02	109388.08
17	Transport Services	27441.40	27555.50	26835.30
18	Contract & Construction Services	11861.85	9769.82	8061.32
19	Industrial Development & Tech. Consultancy Services	6554.44	5543.49	4054.32
20	Tourist Services	1021.10	1025.87	1017.60
21	Financial Services	16539.32	13765.12	11308.75
22	Telecom-munication Services	26212.09	27706.77	30828.39
Sub Total		241222.66	222634.59	191493.76
Grand Total		**1235060.47**	**1271529.34**	**1096307.79**

** Gross Block inclusive of Capital-work-in progress.*

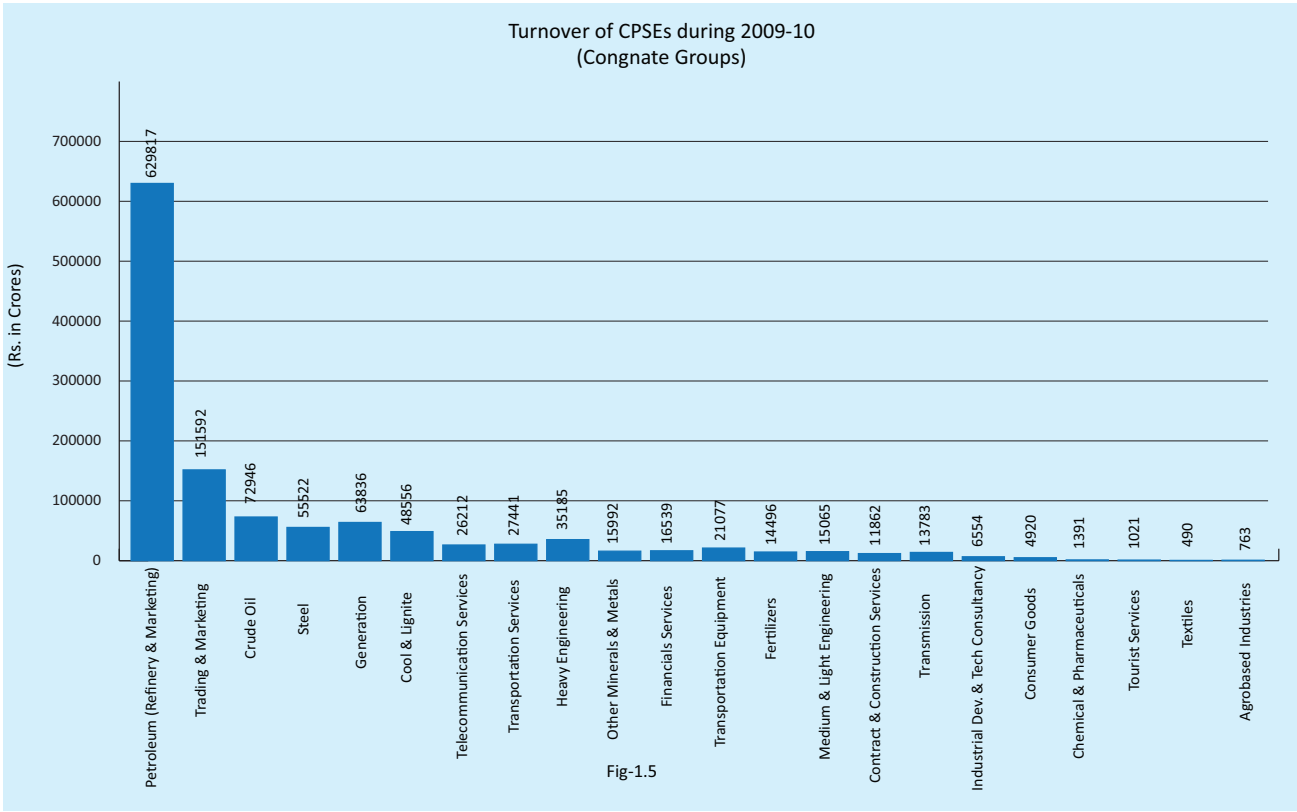

Fig-1.5

Electricity, however, continued to show a robust growth in turnover (16.98%) during the year over a growth 14.84 percent in 2008-09(Table 1.6). The services sector also continued to keep up the growth momentum at 8.35 growth in turnover. Agriculture based CPSEs, although having a much smaller share in total turnover, showed a very high growth rate of 67 percent during the year.

Table 1.6
Sector wise Growth in Turnover of CPSEs (2007-08 to 2009-10)

(in %)

Sector	2009-10	2008-09	2007-08
Agriculture	67.21	37.03	35.64
Mining	-0.68	10.09	10.92
Manufacturing	-7.79	17.02	15.67
Electricity	16.98	14.84	27.86
Services	8.35	16.26	4.73
All CPSEs	-2.87	15.98	13.62

1.5.1 Share of select items in domestic/ national production

Table 1.7 below shows the industries in which CPSEs have a major market share. The CPSEs continue to have complete monopoly in nuclear power generation. The other sectors / industries where they have a major share in domestic / national output are coal, petroleum, telecommunication, power generation and fertilizers. In comparison to 1998-99, however, the shares of CPSEs in these (select) industries have significantly come down except power generation in which the share of CPSEs increased during 2009-10.

Table 1.7
CPSEs Share in Domestic Output of select items

S. No.	Selected Item	Units	Domestic Production/ Output		Total Output by CPSEs		Share of CPSEs to Domestic Output (%)	
			1998-99	2009-10	1998-99	2009-10	1998-99	2009-10
1	**Coal**							
1.1	Hard Coal (Non-coking Coal)	Million Tonnes	253.326	487.640	223.474	395.509	88.22	81.11
1.2	Coking Coal	Million Tonnes	44.414	34.455	37.201	27.270	83.76	79.15
2	**Petroleum Products**							
2.1	Crude Oil	MMT	32.7	33.5	29.7	28.8	90.8	86.0
2.2	Natural Gas	BCM	27.4	32.8	24.5	24.7	89.4	75.3
2.3	Refineries Throughput	MMT	68.5	160.8	68.5	112.2	100.0	69.8
3	**Power Generation**							
3.1	Thermal	GWh	353662	640876	135423	264761	38	41.3
3.2	Hydro	GWh	82690	106680	25339	40887	31	38.3
3.3	Nuclear	GWh	12015	18636	12015	18636	100	100.0
4	**Telecommunication Services**							
4.1	Wired lines	Nos. (in cr.)	1.78	3.70	1.78	3.13	100	84.59
4.2	Wire Less	Nos. (in cr.)	0.09	58.43	0.09	7.45	100	12.75
5	**Fertilizers**							
5.1	Nitrogenous	Lakh MT	100.86	119.00	31.76	31.18	31.49	26.20
5.2	Phosphotic	Lakh MT	29.76	43.21	7.26	2.27	24.40	5.25

Notes:
MMT: Million Metric Tonnes, MCM: Million Cubic Metres

1.6. Aggregate Profit and Loss of CPSEs

The profit of profit making CPSEs stood at ₹1,08,435 crore in 2009-10 compared to ₹98,488 crore in 2008-09. The loss of loss making CPSEs, on the other hand, stood at ₹15842 crore in 2009-10 against ₹14621 crore in 2008-09. At the aggregate level, the overall net profit of all CPSEs (aggregate net profit-aggregate net loss) stood at ₹92,593 crore in 2009-10 compared to ₹83867 crore during 2008-09.

In terms of growth in profits over the preivous year, the best results were achieved by the 'agriculture' sector. This was followed by 23.59 per cent growth in mining, 21.90 per cent growth in electricity and 8.98 per cent growth in manufacturing sector. The services sector, on the other hand, recorded a loss of ₹2906 crore during 2009-10 as against a profit of ₹2316 crore in 2008-09. Cognate group-wise, CPSEs belonging to minerals & metals (14.39%), fertilizers (106.45%), chemicals & pharmaceuticals (19.84), consumer goods (576.64%), trading & marketing (57.80%), transportation services (10.38%) tourist services (66.48%) and telecommunication services (586.31%) recorded significant decline in their profits during the year 2009-10 (Table 1.8).

Table 1.8

Net Profit/Loss of CPSE

(₹ in crore)

S. No.	Sector/ Cognate Group	31.3.2010	31.3.2009	31.3. 2008
I. Agriculture				
1	Agro Based Industries	49.79	19.48	18.34
Sub Total		**49.79**	**19.48**	**18.34**
II. Mining				
2	Coal & Lignite	12907.91	5341.26	7495.70
3	Crude Oil	20513.48	19730.67	19340.00
4	Other Minerals & Metals	5488.78	6411.03	5898.91
Sub Total		**38910.17**	**31482.96**	**32734.61**
III. Manufacturing				
5	Steel	7616.25	7589.23	9559.74
6	Petroleum(Refinery & Marketing)	18143.15	8095.03	15341.77
7	Fertilizers	-686.00	10633.55	-2571.73
8	Chemicals & Pharmaceuticals	-631.40	-526.88	-264.53
9	Heavy Engineering	4121.16	3022.93	2604.27
10	Medium & Light Engineering	78.96	-255.85	-50.30
11	Transportation Equipment	2818.52	2352.73	2273.66
12	Consumer Goods	-612.39	128.48	-407.08
13	Textiles	6837.92	3543.90	-989.20
Sub Total		**37686.17**	**34583.12**	**25496.60**
IV. Electricity				
14	Generation	14437.99	12483.96	12276.75
15	Transmission	4414.51	2981.17	2321.28
Sub Total		**18852.70**	**15465.13**	**14598.03**
V. Services				
16	Trading & Marketing Services	407.87	966.62	778.63
17	Transport Services	-3935.52	-3565.51	620.25
18	Contract & Construction Services	440.82	290.14	243.50
19	Industrial Development & Tech. Consultancy Services	826.58	635.72	465.02
20	Tourist Services	17.83	53.19	38.81
21	Financial Services	3658.12	3047.46	2627.90
22	Telecommunication Services	-4321.20	888.56	3652.70
	Sub Total	**-2905.50**	**2316.18**	**8426.81**
	Grand Total	**92593.13**	**83866.87**	**81274.39**

1.6.1 Top Ten Profit & Loss Making CPSEs

Table 1.9 provides the list of the top ten profit making CPSEs (exclusive of Extra Ordinary Items and Prior Period adjustment). All the top ten profit making companies are, more or less, the same in 2009-10 as in 2008-09 (with rankings slightly changed) except for Power Finance Corporation that replaced the South-Eastern Coalfields Ltd. While ONGC maintained its top most rank in 2009-10, IOC Ltd. made a huge jump in profits ranking second compared to its 8th position in 2008-09. Although its total income declined during the year, it increased its net profit due mainly to reduction in expenditure.

Table 1.9
Top Ten Profit * Making CPSEs
2009-10

		(₹ in crore)
S. No	**Name of the CPSEs**	**Net profit***
(1)	**(2)**	**(3)**
1.	Oil & Natural Gas Corporation Ltd.	16785.82
2.	Indian Oil Corporation Ltd.	10321.23
3.	NTPC Ltd.	8650.37
4.	Steel Authority of India Ltd.	6731.20
5.	Bharat Heavy Electricals Ltd.	4303.38
6.	Coal India Ltd.	3779.92
7.	NMDC Ltd.	3454.54
8.	GAIL (India) Ltd.	3139.49
9.	Oil India Ltd.	2611.60
10.	Power Finance Corporation	2357.12

*Note ; *Profit before Extra Ordinary Items and Prior Period adjustment*

Table 1.10 provides the list of top ten loss making CPSEs (exclusive of Extra Ordinary Items and Prior Period adjustment). Amongst the loss making companies National Aviation Company of India Ltd., Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd. were the top three loss making enterprises during 2009-10. The top ten loss making companies covered nearly 90% of the total loss made by all the (59) CPSEs during 2009-10. The top three CPSEs namely NACIL, MTNL and BSNL alone have incurred a loss of 65% of the total loss of all CPSEs in 2009-10. Higher depreciation, increase in salary & wages and increase in other expenditure contributed to greater losses during the year.

Table 1.10
Top Ten Loss Making CPSEs
(2009-10)

		(₹ in crore)
S. No	**Name of the CPSEs**	**Net Loss***
(1)	**(2)**	**(3)**
1.	National Aviation Co. of India Ltd.	(-) 5614.29
2.	Mahanagar Telephone Nigam Ltd.	(-) 3063.78
3.	Bharat Sanchar Nigam Ltd.	(-) 1657.80
4.	Hindustan Photo Films Manufacturing Co. Ltd.	(-) 1002.98
5.	Fertilizer Corporation of India Ltd.	(-) 585.86
6.	Indian Drugs & Pharmaceuticals Ltd.	(-) 513.82
7.	Hindustan Cables Ltd.	(-) 506.05
8.	STCL Ltd.	(-) 464.11
9.	ITI Ltd.	(-) 430.04
10.	Hindustan Fertilizer Corporation Ltd.	(-) 382.44

Note ; Net Loss before Extra Ordinary Items and prior Period adjustment

1.7 Contribution to GDP

1.7.1 Gross Value Addition by CPSEs

The share of 'gross value addition' in CPSEs (net value addition + depreciation) in Gross Domestic Product (at current market price) stood at 6.30 per cent in 2009-10 against the share of 6.20 per cent in 2008-09.

1.7.2 Net Value Addition by CPSEs

In terms of net value addition (excluding depreciation), in 2009-10, the share of 'profit before Tax & EP (PBTEP)' was the highest at 35.41 per cent followed by 'salary & wages' (25.92%), indirect taxes & duties (23.70%) and interests (10.19%) (Table1.11). A comparison between the respective shares of each of these items during 2008-09 and 2009-10 shows very little change during these two years (Fig. 1.6)

Table 1.11
Components of Net Value Addition in CPSEs

(₹ in crore)

S. No.	Net Value Addition	2009-10	Share (%)	2008-09	Share (%)
(1)	(2)	(3)	(4)	(5)	(6)
1.	Profit before Tax & EP(PBTEP)	124126	35.41	103095	33.37
2.	Interest	35720	10.19	39300	12.72
3.	Indirect Taxes & Duties	83076	23.70	78419	25.38
	(net of subsidies)				
4.	Salary & Wages	90863	25.92	83045	26.88
5.	Rent, royalty and cess	16747	4.78	5113	1.65
	Total:	**350532**	**100.00**	**308972**	**100.00**

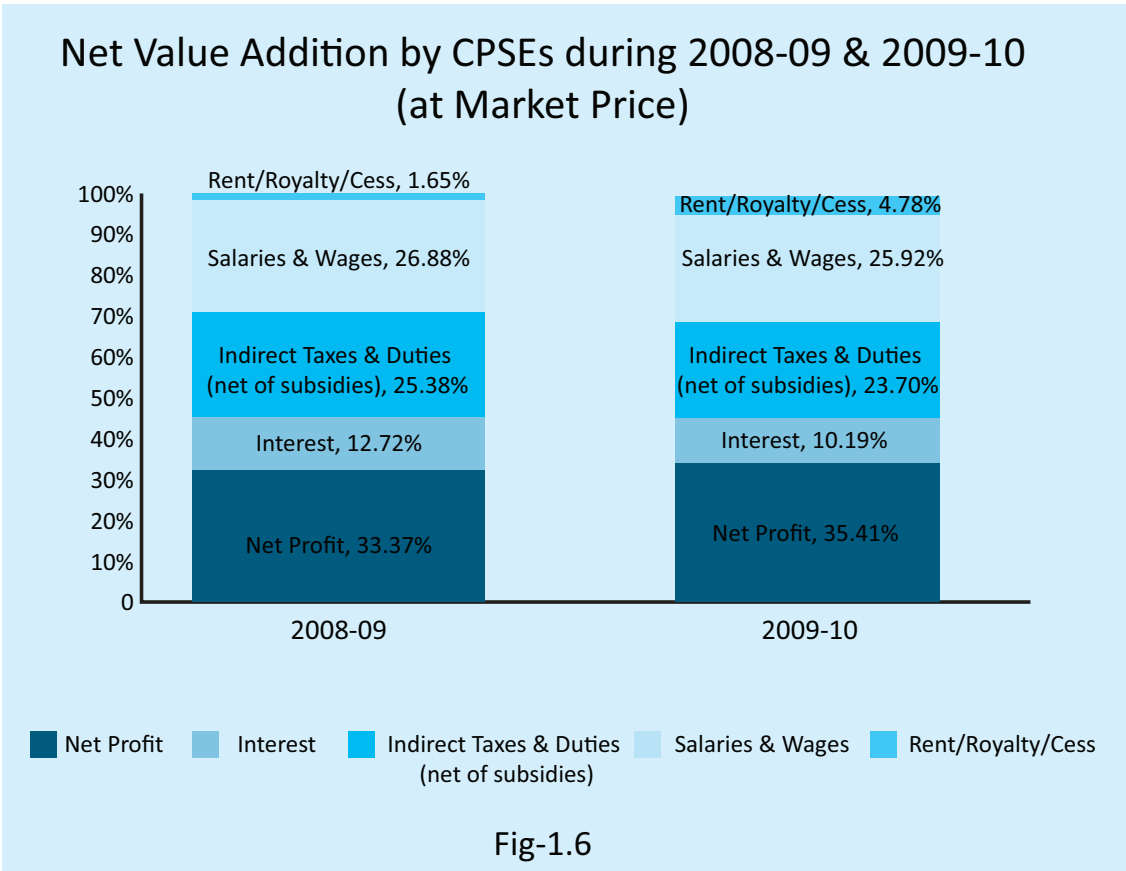

Fig-1.6

1.8 Contribution to the Central Exchequer

CPSEs contribute to the Central Exchequer by way of dividend payment, interest on government loans and payment of taxes & duties. There was, a significant decline in the total contribution of CPSEs to the Central Exchequer during the year, which came down from ₹1,51,543 crore in 2008-09 to ₹1,39,830 crore in 2009-10. This was primarily due to reduction in contribution towards 'customs duty' and 'excise duty' that came down from ₹8705 crore and ₹63262 crore in 2008-09 to ₹6903 crore and ₹52642 crore in 2009-10. There was also a decline in other duties & taxes during the year as compared to the previous year. There was, however, an increase in contribution from corporate tax, dividend payment and dividend tax (Table 1.12).

Table 1.12
Contribution to the Central Exchequer for the last 3 years

(₹ in crore)

S. No.	Particulars	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)
I. On Investment by CPSEs				
1.	Dividend	19910.59	19387.36	19423.47
2.	Interest	387.44	558.79	749.03
Total (I)		20298.03	19946.15	20172.50
II. Taxes and Duties (Central)				
1.	Excise Duty	52641.50	63261.89	68932.20
2.	Customs Duty	6903.19	8704.53	13385.59
3.	Corporate Tax	38155.49	35338.55	40670.64
4.	Dividend Tax	9524.65	4211.67	4434.41
5.	Sales Tax	2664.62	2546.79	2640.84
6.	Other Duties & Taxes	9642.41	17533.62	15757.59
	Total (II)	**119531.86**	**131597.05**	**145821.27**
	Grand Total (I+II)	**139829.89**	**151543.20**	**165993.77**

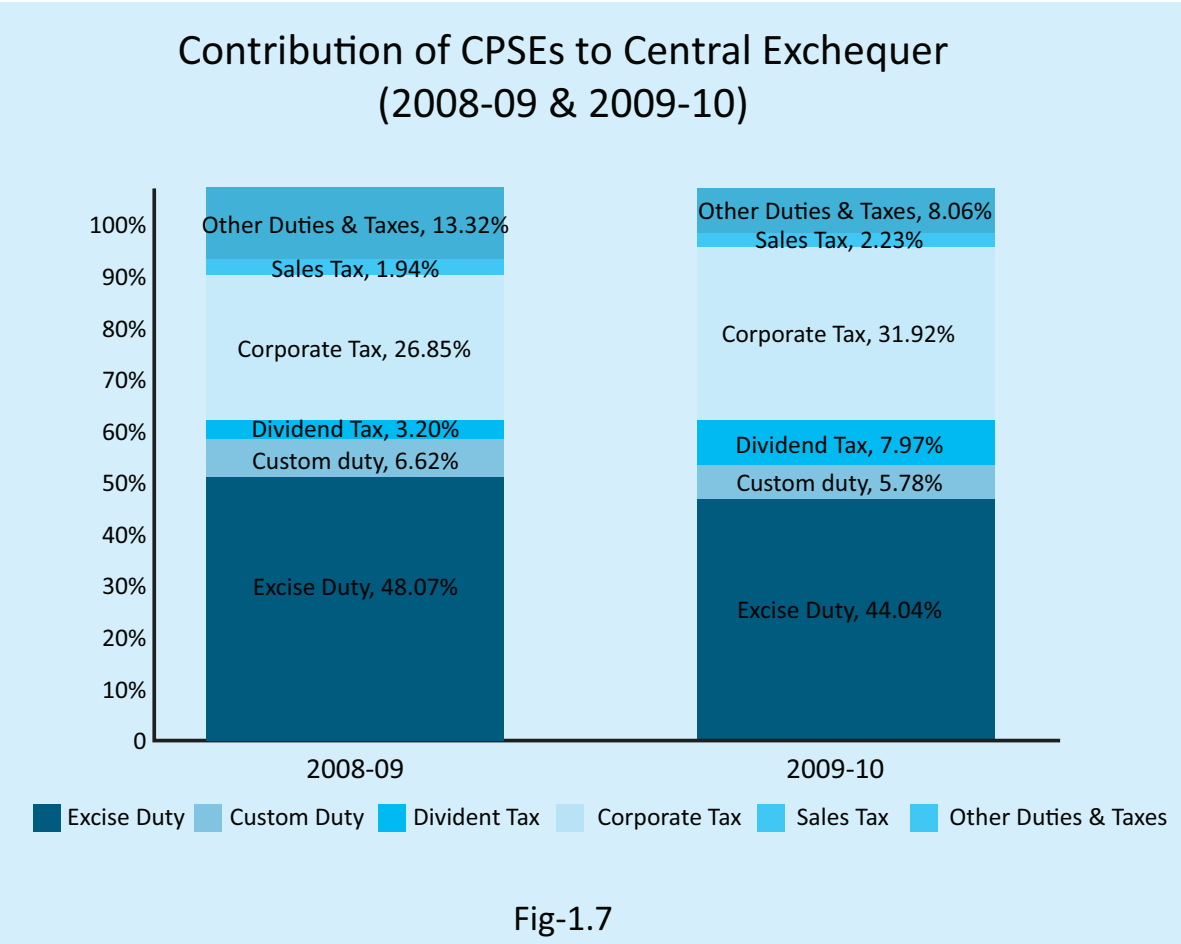

Fig-1.7

1.9 Disinvestment

The policy on 'Disinvestment in CPSEs' has evolved over the years. Disinvestment of Government equity in CPSEs began in 1991-92. The current policy on disinvestment was approved by the Government on 5th November, 2009. The objective of the disinvestment policy is to develop people's ownership of Central Public Sector Enterprises and to share in their wealth and prosperity while ensuring that Government equity does not fall below 51% and Government retains the management control.

Keeping in view the policy on disinvestment, the following approach to disinvestment in CPSEs has been adopted:

(i) Already listed profitable CPSEs (not meeting the mandatory shareholding of 10%) are to be made compliant by 'Offer for Sale' by Government or by the CPSEs through issue of fresh shares or a combination of both.

(ii) Unlisted CPSEs with no accumulated losses and having earned net profit in three preceding consecutive years are to be listed.

(iii) Follow-on public offers would be considered in respect of profitable CPSEs having 10 per cent or higher public ownership, taking into consideration the needs for capital investment of CPSEs, on a case to case basis, and Government could simultaneously or independently offer a portion of its equity shareholding in conjunction.

(iv) Disinvestment is to be considered on merits and on a case-to-case basis since each CPSE has a different equity structure, financial strength, fund requirement, sector of operation and factors that do not permit a uniform pattern of disinvestment.

1.9.1 Listing of CPSEs

There are inherent advantages in listing of shares of profitable CPSEs on the stock exchanges. Listing enhances shareholder value in CPSEs in the following ways:

(a) Higher disclosure levels brings greater transparency, equity and credibility;

(b) Enhances corporate governance on account of induction of independent directors, causes substantial accretions to management accountability and thereby improves performance;

(c) Leads to higher levels of public scrutiny, enforces ethical conduct of business and improves corporate culture; and

(d) Brings pressure on the management to perform due to raised expectations of investors (shareholders),unlocking the true value of the enterprise.

Listing of profitable CPSEs on the stock exchanges with a mandatory public ownership of at least 10% shareholding has been observed to increase significantly the value of stocks in these enterprises, and increases the value of the Government's residual shareholding and also of those held by the public post-listing. Since listing leads to greater people-ownership of CPSEs, it encourages participation and sharing the prosperity of CPSEs by the people.

1.10 Revival of Sick PSEs

The condition of sick CPSEs (i.e, CPSEs whose accumulated losses have exceeded their net worth) has been improving over the years. The number of sick CPSEs, which was 111 in March, 2003 came down to 45 in March 2010. The CPSEs were brought under the purview of Sick Industrial Companies (Special Provision) Act, 1985 (SICA) 1992. Out of the 64 CPSEs registered with Board for Industrial and Financial Reconstruction (BIFR) till 30.6.2010, the BIFR has already disposed off 47 cases of CPSEs either through sanctioning revival schemes (11 cases), or recommending winding up (21 cases) or declaring 'no longer sick' (2 cases) or dropping due to net worth becoming positive (5 cases) or dismissing the cases as non-maintainable (4 cases). The BIFR is yet to take any view on 17 cases of CPSEs.

The Government, subsequently, set up the Board for Reconstruction of Public Sector Enterprises (BRPSE) in December, 2004 to advise the Government, inter alia, on the measures to restructure/ revive, both industrial and non-industrial CPSEs. For the purpose of making reference to BRPSE, a company is considered 'sick' if it has accumulated losses in any financial year equal to 50% or more of its average net worth during 4 years immediately preceeding such financial year. The concerned administrative Ministries/ Departments are required to send proposals for reevival / restructuring of CPSEs identified as 'sick' for consideration of BRPSE. The Board is expected to make its recommendations within 2 months of the date of receipt of the complete proposal from the administrative Ministry/ Department. Loss making/sick CPSEs may also be considered by the Board, suo moto, if it is of the

opinion that revival/restructuring is necessary for checking the incipient sickness (i.e., incurring loss for two consecutive years) in the enterprise. Upto December 2010, cases of 67 sick CPSEs have been referred to BRPSE; out of which the Board has made recommendations in respect of 62 cases.

1.11 Board Structure in CPSEs

The public enterprises are categorized in four Schedules, namely, 'A', 'B', 'C' and 'D' based on various quantitative, qualitative and other factors. The pay scales of Chief Executives and of full time Functional Directors in CPSEs are determined as per the Schedule of the concerned CPSE. Proposals from various administrative Ministries/ Departments for initial categorization /upgradation of CPSEs in appropriate Schedule, personal upgradation, creation of posts in CPSEs, etc, are considered in the Department of Public Enterprises in consultation with the Public Enterprises Selection Board (PESB).

During 2009-10, 2 CPSEs were initially categorized in appropriate Schedule, 3 CPSEs were upgraded to higher Schedule and one post of Chief Executive was given higher scale of pay on personal basis. As on 31.3.2010, there were 249 CPSEs in the country. Out of the 249 CPSEs, there were 60 Schedule 'A' CPSEs, 70 Schedule 'B' CPSEs, 45 Schedule 'C' CPSEs and 5 Schedule 'D' CPSEs. The rest are covered under the uncategorized category.

1.12 Professionalization of Boards

In pursuance to the policy on public sector enterprises being followed since 1991, several measures have been taken by the Department of Public Enterprises to professionalize the Boards of public enterprises. The guidelines issued by DPE in 1992 provide for induction of outside professionals on the Boards of CPSEs as part-time non-official Directors. The number of such Directors has to be at least 1/3rd of the actual strength of the Board. In the case of listed CPSEs headed by an executive Chairman, the number of non-official Directors (Independent Directors) should be at least half the strength of the Board. The guidelines also provide that the number of Government Directors on the Boards should be not more than one-sixth of the actual strength of the Board subject to a maximum of two. Apart from this, there should be some functional Directors on each Board whose number should not exceed 50% of the actual strength of the Board

The revised guidelines provide that the number of functional Directors should not exceed 50% of the actual strength of the Board of Directors (BOD) and the number of Government nominee Directors on the BOD should not exceed two. In the case of listed CPSEs with an Executive Chairman, the guidelines provide that the number of non-official Directors shall be atleast 50% of the Board Members. In the case of CPSEs with a Non-executive Chairman, at least one-third of the Board Members will have to be non-official Directors.

The functional Directors including the Chief Executive of the CPSEs are appointed by the concerned administrative Ministries on the recommendation of the Public Enterprises Selection Board (PESB). It has been decided that candidates from State Level Public Enterprises (SLPEs) and the private sector will also be considered as non-internal candidates besides the candidates from CPSEs for selection to the post of Functional Directors in CPSEs subject to the eligibility criteria.

1.13 Wages/ Salaries and Employees Welfare

The Department of Public Enterprises (DPE) functions as the nodal Department in the Government of India, inter-alia, in respect of policy relating to wage settlements of unionized employees, pay revision of non-unionized supervisors and executives holding posts below the Board level and executives at the Board level in CPSEs. The CPSEs are largely following the Industrial Dearness Allowance (IDA) pattern scales of pay. In some cases, Central Dearness Allowance (CDA) pattern scales of pay is also being followed in the CPSEs.

1.13.1 Industrial Dearness Allowance (IDA)

The Government policy relating to pay scales and pay pattern is broadly that all employees of the CPSEs should be on IDA pattern and related scales of pay. Instructions had been issued to all the administrative Ministries by DPE in July, 1981 and July, 1984 that as and when a new CPSE is created or established, IDA pattern and related scales of pay should be adopted ab-initio. Vide DPE O.M. dated 10.08.2009, it was reiterated and emphasized that 'appointments' including 'promotion' on or after 01.01.1989 in CDA scales of pay has to be in IDA scales of pay. There are 249 CPSEs (excluding Banks, Insurance Companies) under the administrative control of the Central Government as on 31.3.2010. They employed approximately 14.91 lakh workmen, clerical staff and executives as on 31.3.2010. Out of this, around 96 % of the workmen and executives are on IDA pattern and related scales of pay.

The last pay revision for the IDA executives and non-unionized supervisors was done w.e.f 1.1.97 for a period of ten years based on the recommendations of Justice Mohan Committee (1st Pay Revision Committee). The duration of this pay revision was for 10 years i.e. upto 31.12.2006. The Second Pay Revision Committee (2nd PRC), headed by Justice M. Jagannadha Rao, was constituted vide the Government of India Resolution dated 30.11.2006. The Government, after due consideration of the

Table 1.15
Employment and Average Annual Emoluments

Year	No. of Employees (in lakh)	Average Annual per capita emoluments (₹)
(1)	(2)	(3)
2003-04	17.62	248481
2004-05	17.00	286112
2005-06	16.49	284123
2006-07	16.14	398496
2007-08	15.65	410898
2008-09	15.33	541716
2009-10	14.91	609816

recommendations of the 2nd Pay Revision Committee issued orders on 26.11.2008 and 09.02.2009 for the pay revision of Board level and below Board level executives (inclding non-unionized supervisors).

1.13.2 Central Dearness Allowance (CDA)

The DPE vide its OM dated 14.10.2008 and 20.1.2009, has revised the pay scales of the employees of CPSEs following CDA pattern w.e.f. 01.01.2006, based on Government decision in respect of Central Government employees. The benefit of pay revision was allowed only to the employees of those CPSEs which are not loss making and are in a position to absorb the additional expenditure on account of pay revision from their own resources without any budgetary support from the Government. It has also been indicated that the Board of Directors would consider the proposal of pay revision of all the employees in the CPSE, keeping in mind the affordability and capacity of the CPSE to pay and submit a proposal to its Administrative Ministry/Department, which will approve the proposal with the concurrence of its Financial Adviser. Vide DPE O.M. dated. 20.1.2009 guidelines on revised allowances for these employees have also been issued.

1.14 Employment

As on 31.3.2010, the 249 CPSEs employed approximately 14.91 lakh people (excluding casual workers). One-fourth of the manpower was in managerial and supervisory cadres. The CPSEs have thus a highly skilled workforce, which is one of their basic strengths. The CPSEs, in turn, provide lifetime employment to their employees. The details of employment in CPSEs vis-a-vis per capita emoluments are given in Table 1.15 below.

1.15 Voluntary Retirement Scheme (VRS)

The CPSEs operate under dynamic market conditions; while some of them may face shortage of people, the others may have excess manpower. The Government, therefore, initiated a Voluntary Retirement Scheme (VRS) to help rationalise their manpower. The basic parameters of the model Voluntary Retirement Scheme (VRS) which were notified by the Government vide Department of Public Enterprises' OM dated 5.10.1988 and 6.1.1989 were in force since 1988 till April, 2000. The Government modified the scheme and introduced a new scheme of VRS on 5.5.2000 and again on 6.11.2001. As per available information, about 3.54 lakh employees opted for Voluntary Retirement Scheme (VRS) from 1988 till 31.3.2010.

1.16 Counseling, Retraining and Redeployment (CRR)

Counseling, Retraining and Redeployment (CRR) is an attempt to retrain the VRS optees to enable them to remain productive partners in the society. Accordingly, the National Renewal Fund (NRF), established in February 1992, aimed to cover both the expenses of VRS and the expenditure on retraining of retrenched workers in the organized sector.

The main elements of the CRR programme are Counselling, Retraining and Redeployment. Counselling helps the rationalized employees to absorb the shock of leaving the organization, to properly manage their funds including compensation and to motivate them to face the challenges and to re-join the productive process. Similarly, retraining strengthens their skill/expertise. Selected training institutes impart need-based training of 30 days / 45 days / 60 days modules. The retraining leads to redeployment mostly through self-employment. Presently, the objective is to maximize the rate of

self-employment. The Nodal Agencies, therefore, provide need-based support, linkage with credit institutions and continuously follow up with the retrained personnel.

The Nodal Training Agencies are required to counsel VRS optees, impart training and reorientation programme, develop curriculum /materials, prepare feasibility report market survey, post training follow up, interface with credit institutions, support in self-employment, regular liaison with CPSEs, convene meetings of the Coordination Committee etc.

1.17 Memorandum of Understanding

The Memorandum of Understanding (MoU), as applicable to public sector enterprises, is a negotiated document between the government and the management of the enterprise specifying clearly the objectives of the agreement and the obligations of both the parties. MoU is aimed at providing greater autonomy to public sector enterprises vis-à-vis the control of the government. The main purpose of the MoU system is to ensure a level playing field to the public sector enterprises vis-à-vis the private corporate sector. The 'management' of the enterprise is, nevertheless, made accountable to the government through promise for performance or 'performance contract'. The government, nevertheless, continues to have control over these enterprises through setting targets in the beginning of the year and by 'performance evaluation' at the end of the year.

Performance evaluation is done based on the comparison between the actual achievements and the annual targets agreed upon between the government and the CPSE. The targets constitute of both financial and non-financial parameters with different weights assigned to the different parameters. In order to distinguish 'excellent' from 'poor', moreover, performance during the year is measured on a 5-point scale.Table -1.15 provides a summary of the performance of MoU signing CPSEs as reflected in their MoU rating during the last five years.

Table: 1.15
Summary of the performance of MoU signing CPSEs

Rating	2005-06	2006-07	2007-08	2008-09	2009-10
(1)	(2)	(3)			
Excellent	49	46	55	47	73
Very Good	32	37	34	34	30
Good	15	13	15	25	20
Fair	06	06	08	17	20
Poor	00	00	00	01	01
Total	102	102	112	124	144

1.18 Market Capitalisation of CPSEs Stocks

There were 46 CPSEs listed on the stock exchanges of India as on 31.03.2010; 3 CPSEs were, however, not being traded during 2009-10. Bongaigaon Refinery Ltd merged with Indian Oil Corporation Ltd. during the year. Oil India Ltd. and NHPC Ltd. were listed during the year 2009-10. There are stocks of 43 CPSEs, which were being traded on the stock exchanges of India as on 31.3.2010.

The total market capitalization of the 41 CPSEs based on stock prices on Mumbai Stock Exchange as on 31.03.2009 stood at ₹ 813530 crore. Market capitalization of the 43 CPSEs as on 31.03.2010 (including OIL, NHPC and HFI), on the other hand, stood at ₹1426212 crore. There was, therefore, an increase in market capitalization of CPSEs on the Mumbai Stock Exchange by 75.31% (₹ 612682 crore) as on 31.03.2010. During this period, the market capitalization of Mumbai Stock Exchange increased by 99.79% and Sensex increased by 80.54%. Market Capitalization (M_Cap) of all listed CPSEs as a percentage of BSE M_Cap, therefore, decreased from 26.36% as on 31.03.2009 to 23.13% as on 31.3.2010. A table showing closing price of listed CPSEs on Mumbai Stock Exchange as on 31.3.2009 and 31.3.2010 (as well as M_Cap on these dates) is given at Annex 1.2.

Sl. No.	CPSE	Year of Incorporation	Holding/ Subsidiary Company
Prior to Five Year Plan (1919-50)			
1	BIECCO LAWRIE & CO. LTD. *	1919	H
2	BALMER LAWRIE & CO. LTD. *	1924	S
3	MAZAGON DOCK LTD.	1934	H
4	FERTILIZERS & CHEMICALS (TRAVANCORE) LTD.	1943	H
5	NEPA LTD.	1947	H
6	I T I LTD.	1950	H
7	INDIAN RARE EARTHS LTD.	1950	H
First Five Year Plan (1951-55)			
1	HINDUSTAN SHIPYARD LTD.	1952	H
2	HMT LTD.	1953	H
3	HINDUSTAN PREFAB LTD.	1953	H
4	NATIONAL RESEARCH DEVELOPMENT CORPN.	1953	H
5	BHARAT ELECTRONICS LTD.	1954	H
6	HINDUSTAN ANTIBIOTICS LTD.	1954	H
7	HINDUSTAN INSECTICIDES LTD.	1954	H
8	NATIONAL SMALL INDUSTRIES CORPN. LTD.	1955	H
Second Five Year Plan (1956-60)			
1	NEYVELI LIGNITE CORPN. LTD.	1956	H
2	STATE TRADING CORPN. OF INDIA LTD.	1956	H
3	OIL & NATURAL GAS CORPORATION LTD.	1956	H
4	EXPORT CREDIT GUARANTEE CORPN.OF INDIA LTD.	1957	H
5	CENTRAL WAREHOUSING CORPN.	1957	H
6	NATIONAL PROJECTS CONSTRUCTION CORPN. LTD.	1957	H
7	HEAVY ENGINEERING CORPN. LTD.	1958	H
8	NMDC Ltd.	1958	H
9	HINDUSTAN SALTS LTD.	1959	H
10	HINDUSTAN ORGANIC CHEMICALS LTD.	1960	H
11	GARDEN REACH SHIPBUILDERS & ENGINEERS LTD.	1960	H
12	HINDUSTAN PHOTO FILMS MANUFACTURING CO. LTD.	1960	H
13	TUNGABHADRA STEEL PRODUCTS LTD.	1960	H
14	NATIONAL BLDG. CONSTN. CORPN. LTD.	1960	H
Third Five Year Plan (1960-65)			
1	FERTILIZER CORPN. OF INDIA LTD.	1961	H
2	INDIAN DRUGS & PHARMACEUTICALS LTD.	1961	H
3	SHIPPING CORPORATION OF INDIA LTD.	1961	H
4	HANDICRAFTS & HANDLOOM EXPORTS CORP. OF INDIA LTD.	1962	H
5	NATIONAL SEEDS CORPN. LTD.	1963	H
6	M M T C LTD.	1963	H
7	BEML LTD.	1964	H

8	HINDUSTAN AERONAUTICS LTD.	1964	H
9	BHARAT HEAVY ELECTRICALS LTD.	1964	H
10	INSTRUMENTATION LTD.	1964	H
11	SAMBHAR SALTS LTD.	1964	S
12	INDIAN OIL CORPORATION LTD.	1964	H
13	HINDUSTAN STEELWORKS COSTN. LTD.	1964	H
14	M S T C LTD.	1964	H
15	FOOD CORPN. OF INDIA	1965	H
16	CEMENT CORPN. OF INDIA LTD.	1965	H
17	TRIVENI STRUCTURALS LTD.	1965	H
18	CHENNAI PETROLEUM CORPORATION LTD.	1965	S
19	ENGINEERS INDIA LTD.	1965	H
20	ONGC VIDESH LTD.	1965	S
Annual Plans (1966-68)			
1	MADRAS FERTILIZERS LTD.	1966	H
2	HLL LIFECARE LTD.	1966	H
3	BHARAT HEAVY PLATE & VESSELS LTD.	1966	S
4	INDIA TOURISM DEV. CORPN. LTD.	1966	H
5	GOA SHIPYARD LTD.	1967	H
6	HINDUSTAN COPPER LTD.	1967	H
7	CENTRAL INLAND WATER TRANSPORT CORPN. LTD. *	1967	H
8	ELECTRONICS CORPN. OF INDIA LTD.	1967	H
9	URANIUM CORPORATION OF INDIA LTD.	1967	H
10	NATIONAL TEXTILE CORPN. LTD. *	1968	H
Fourth Five Year Plan (1969-73)			
1	RURAL ELECTRIFICATION CORPN. LTD.	1969	H
2	STATE FARMS CORPORATION OF INDIA LTD.	1969	H
3	WAPCOS LTD.	1969	H
4	BHARAT DYNAMICS LTD.	1970	H
5	BHARAT PUMPS & COMPRESSORS LTD.	1970	H
6	ENGINEERING PROJECTS (INDIA) LTD.	1970	H
7	HINDUSTAN PAPER CORPORATION LTD.	1970	H
8	HOUSING & URBAN DEV. CORPN. LTD.	1970	H
9	COTTON CORPN. OF INDIA LTD.	1970	H
10	HOTEL CORPN. OF INDIA LTD.	1971	S
11	JUTE CORPN. OF INDIA LTD.	1971	H
12	NAGALAND PULP & PAPER COMPANY LTD.	1971	S
13	P E C LTD.	1971	H
14	AIR INDIA CHARTERS LTD.	1972	S
15	BHARAT COKING COAL LTD.	1972	S
16	BRIDGE & ROOF CO.(INDIA) LTD. *	1972	H
17	COCHIN SHIPYARD LTD.	1972	H
18	HINDUSTAN CABLES LTD.	1972	H
19	MINERAL EXPLORATION CORPN. LTD.	1972	H

20	RICHARDSON & CRUDDAS(1972) LTD. *	1972	H
21	SCOOTERS INDIA LTD.	1972	H
22	ARTIFICIAL LIMBS MFG. CORPN. OF INDIA	1973	H
23	COAL INDIA LTD.	1973	H
24	MECON LTD.	1973	H
25	MISHRA DHATU NIGAM LTD.	1973	H
26	STEEL AUTHORITY OF INDIA LTD.	1973	H
Fifth Five Year Plan (1974-78)			
1	NATIONAL FERTILIZERS LTD.	1974	H
2	RITES LTD.	1974	H
3	CENTRAL ELECTRONICS LTD.	1974	H
4	MAHARASHTRA ELEKTROSMELT LTD.	1974	S
5	CENTRAL COALFIELDS LTD.	1975	S
6	CENTRAL MINE PLANNING & DESIGN INSTITUTE LTD.	1975	S
7	EASTERN COALFIELDS LTD.	1975	S
8	WESTERN COALFIELDS LTD.	1975	S
9	HMT (INTERNATIONAL) LTD.	1975	S
10	NATIONAL FILM DEV. CORPN. LTD.	1975	H
11	NHPC LTD.	1975	H
12	NTPC LTD.	1975	H
13	INDIA TRADE PROMOTION ORGANISATION	1976	H
14	BRAITHWAITE & CO. LTD. *	1976	S
15	BURN STANDARD COMPANY LTD. *	1976	S
16	BHARAT PETROLEUM CORPN. LTD.	1976	H
17	HINDUSTAN PETROLEUM CORPN. LTD.	1976	H
18	NORTH EASTERN ELECTRIC POWER CORPORATION LTD.	1976	H
19	IRCON INTERNATIONAL LTD.	1976	H
20	KIOCL LTD.	1976	H
21	CENTRAL COTTAGE INDUSTRIES CORPN. OF INDIA LTD.	1976	H
22	NORTH EASTERN HANDICRAFTS & HANDLOOM DEV. CORPN. LTD	1977	H
23	ANDAMAN & NICOBAR ISL. FOREST & PLANT.DEV.CORP.LTD	1977	H
24	DREDGING CORPN. OF INDIA LTD.	1977	H
25	MANGANESE ORE(INDIA) LTD.	1977	H
26	HINDUSTAN FERTILIZER CORPN. LTD.	1978	H
27	PROJECTS & DEVELOPMENT INDIA LTD.	1978	H
28	RASHTRIYA CHEMICALS AND FERTILIZERS LTD.	1978	H
29	RAJASTHAN DRUGS & PHARMACEUTICALS LTD.	1978	S
30	TELECOMMUNICATIONS CONSULTANTS (INDIA) LTD.	1978	H
31	BHARAT WAGON & ENGG. CO. LTD. *	1978	H
32	SPONGE IRON INDIA LTD.	1978	H

Annual Plan (1979-80)			
1	ORISSA DRUGS & CHEMICALS LTD.	1979	S
2	INDIAN MEDICINES & PHARMACEUTICAL CORPN. LTD.	1979	H
3	ANDREW YULE & COMPANY LTD. *	1979	H
4	HOOGHLY PRINTING COMPANY LTD. *	1979	S
5	FERRO SCRAP NIGAM LTD.	1979	S
6	NATIONAL JUTE MANUFACTURES CORPORATION LTD.	1980	H
Sixth Five Year Plan (1980-84)			
1	BENGAL CHEMICALS & PHARMACEUTICALS LTD. *	1981	H
2	KARNATAKA ANTIBIOTICS & PHARMACEUTICALS LTD.	1981	H
3	HMT BEARINGS LTD.	1981	S
4	RAJASTHAN ELECTRONICS AND INSTRUMENTS LTD.	1981	H
5	EdCIL(India) Ltd.	1981	H
6	NATIONAL ALUMINIUM COMPANY LTD.	1981	H
7	OIL INDIA LTD.	1981	H
8	BRITISH INDIA CORPORATION LTD. *	1981	H
9	STCL LTD.	1982	S
10	NORTH EASTERN REGIONAL AGRI. MARKETING CORP.LTD.	1982	H
11	HINDUSTAN NEWSPRINT LTD.	1982	S
12	RASHTRIYA ISPAT NIGAM LTD.	1982	H
13	HINDUSTAN FLUOROCARBONS LIMITED	1983	S
14	AIRLINE ALLIED SERVICES LTD.	1983	S
15	HSCC (INDIA) LTD.	1983	H
16	NATIONAL HANDLOOM DEVELOPMENT CORPORATION LTD.	1983	H
17	RANCHI ASHOK BIHAR HOTEL CORPN. LTD.	1983	S
18	UTKAL ASHOK HOTEL CORPN. LTD.	1983	S
19	HINDUSTAN VEGETABLE OILS CORPN. LTD. *	1984	H
20	VIGNYAN INDUSTRIES LTD.	1984	S
21	BBJ CONSTRUCTION COMPANY LTD.	1984	S
22	TYRE CORPORATION OF INDIA LTD. *	1984	H
23	GAIL (INDIA) LTD.	1984	H
24	HOOGHLY DOCK AND PORT ENGINEERS LTD. *	1984	H
Seventh Five Year Plan (1985-89)			
1	PAWAN HANS HELICOPTERS LTD.	1985	H
2	NORTHERN COALFIELDS LTD.	1985	S
3	SOUTH EASTERN COALFIELDS LTD.	1985	S
4	ASSAM ASHOK HOTEL CORPN. LTD.	1985	S
5	DONYI POLO ASHOK HOTEL LTD.	1985	S
6	MADHYA PRADESH ASHOK HOTEL CORPN. LTD.	1985	S
7	MAHANAGAR TELEPHONE NIGAM LTD.	1986	H
8	BHARAT BHARI UDYOG NIGAM LTD.	1986	H
9	POWER FINANCE CORPORATION	1986	H
10	INDIAN RAILWAY FINANCE CORPORATION LTD.	1986	H
11	PONDICHERRY ASHOK HOTEL CORPN. LTD.	1986	S
12	INDIAN RENEWABLE ENERGY DEVT.AGENCY LTD.	1987	H

13	BIRDS JUTE & EXPORTS LTD. *	1987	S
14	NUCLEAR POWER CORPN. OF INDIA LTD.	1987	H
15	MANGALORE REFINERY & PETROCHEMICALS LTD.	1988	S
16	SATLUJ JAL VIDYUT NIGAM LTD.	1988	H
17	TEHRI HYDRO DEVELOPMENT CORP. LTD.	1988	H
18	CONTAINER CORPORATION OF INDIA LTD.	1988	H
19	INDIAN VACCINE CORP. LTD.	1988	H
20	POWER GRID CORPORATION OF INDIA LTD.	1989	H
21	BHARAT IMMUNOLOGICALS & BIOLOGICALS CORP. LTD.	1989	H
22	NATIONAL SCHEDULED CASTES FINANCE & DEVP. CORPN.	1989	H
23	J & K MINERAL DEVELOPMENT CORPN. LTD.	1989	S
Annual Plan (1990-91)			
1	BEL OPTRONICS DEVICES LTD.	1990	S
2	KONKAN RAILWAY CORPORATION LTD.	1990	H
Eighth Five Year Plan (1992-96)			
1	NATIONAL BACKWARD CLASSES FINANCE & DEVP.CO.	1992	H
2	MAHANADI COALFIELDLS LTD.	1993	S
3	NUMALIGARH REFINARY LTD.	1993	S
4	ANTRIX CORPORATION LTD.	1993	H
5	BIHAR DRUGS & ORGANIC CHEMICALS LTD.	1994	S
6	IDPL (TAMILNADU) LTD.	1994	S
7	NATIONAL MINORITIES DEVP. & FINANCE CORPN.	1994	H
8	CERTIFICATION ENGINEERS INTERNATIONAL LTD.	1994	S
9	NATIONAL INFORMATICS CENTRE SERVICES INCORPORATED	1995	H
10	BROADCAST ENGG. CONSULTANTS INDIA LTD.	1995	H
11	AIRPORTS AUTHORITY OF INDIA LTD.	1996	H
Ninth Five Year Plan (1997-2001)			
1	NATIONAL HANDICAPPED FINANCE & DEVPT. CORPN.	1997	H
2	NATIONAL SAFAI KARAMCHARIS FINANCE & DEVPT. CORPN	1997	H
3	PUNJAB ASHOK HOTEL COMPANY LTD.	1998	S
4	HMT CHINAR WATCHES LTD.	1999	S
5	HMT MACHINE TOOLS LTD.	1999	S
6	HMT WATCHES LTD.	1999	S
7	INDIAN RAILWAY CATERING AND TOURISM CORPN. LTD.	1999	H
8	MUMBAI RAILWAY VIKAS CORPORATION LTD.	1999	H
9	ENNORE PORT LTD.	1999	H
10	KARNATAKA TRADE PROMOTION ORGANISATION	2000	S
11	TAMIL NADU TRADE PROMOTION ORGANISATION	2000	S
12	BHARAT SANCHAR NIGAM LTD.	2000	H
13	MILLENNIUM TELECOM LTD.	2000	S
14	NARMADA HYDROELECTRIC DEVELOPMENT CORPN. LTD.	2000	S
15	RAILTEL CORPORATION INDIA LTD.	2000	H
16	BALMER LAWRIE INVESTMENTS LTD.	2001	H
17	KUMARAKRUPPA FRONTIER HOTELS LTD.	2001	S
18	NATIONAL SCHEDULED TRIBES FINANCE & DEVP. CORPN.	2001	H

Tenth Five Year Plan (2002-2006)			
1	BRAHMAPUTRA VALLEY FERTILIZER CORPN. LTD.	2002	H
2	FCI ARAVALI GYPSUM & MINERALS (INDIA) LTD.	2003	H
3	AIR INDIA AIR TRANSPORT SERVICES LTD.	2003	S
4	NTPC ELECTRIC SUPPLY COMPANY LTD.	2003	S
5	NTPC HYDRO LTD.	2003	S
6	NTPC VIDYUT VYAPAR NIGAM LTD.	2003	S
7	RAIL VIKAS NIGAM LTD.	2003	H
8	BHARATIYA NABHIKIYA VIDYUT NIGAM LTD.	2003	H
9	SETHUSAMUDRAM CORPN. LTD.	2004	H
10	AIR INDIA ENGINEERING SERVICES LTD.	2006	S
11	NLC TAMIL NADU POWER LTD.	2006	S
12	INDIA INFRASTRUCTURE FINANCE CO. LTD.	2006	H
13	CHHATTISHGARH SURGUJA POWER LTD.	2006	S
14	SECURITY PRINTING & MINTING CORPN. INDIA LTD.	2006	H
15	BHARAT PETRO RESOURCES JPDA	2006	S
16	BHARAT PETRO RESOURCES LTD.	2006	S
17	BRAHAMPUTRA CRACKERS & POLYMER LTD.	2006	S
18	COASTAL KARNATAKA POWER LTD.	2006	S
19	COASTAL MAHARASHTRA MEGA POWER LTD.	2006	S
20	KANTI BIJLEE UTPADAN NIGAM LTD.	2006	S
21	ORISSA INTEGRATED POWER LTD.	2006	S
22	REC TRANSMISSION PROJECT CO. LTD.	2006	S
23	FRESH & HEALTHY ENTERPRISES LTD.	2006	S
Eleventh Five Year Plan (2007-2012)			
1	NATIONAL AVIATION CO. OF INDIA LTD.@	2007	H
2	CENTRAL RAILSIDE WAREHOUSING CO. LTD.	2007	S
3	BHARTIYA RAIL BIJLEE CO. LTD.	2007	S
4	COASTAL TAMIL NADU POWER LTD.	2007	S
5	REC POWER DISTRIBUTION CO. LTD.	2007	S
6	DEDICATED FRIGHT CORRIDOR CORP. OF INDIA LTD.	2007	H
7	JAGDISHPUR PAPER MILLS LTD.	2008	H
8	CREDA HPCL BIOFUEL LTD.	2008	S
9	GAIL GAS LTD.	2008	S
10	PFC CONSULTING LTD.	2008	S
11	MJSJ COAL LTD.	2009	S
12	MNH SHAKTI LTD.	2009	S
13	GHOGARPALLI INTEGRATED POWER COMPANY LTD.	2009	S
14	LOKTAK DOWNSTREAM HYDROELECTRIC CORPORATION LTD.	2009	S
15	SAKHIGOPAL INTEGRATED POWER COMPANY LTD.	2009	S
16	BHOPAL DHULE TRANSMISSION COMPANY LTD.	2010	S
17	BISRA STONE LIME COMPANY LTD.	2010	S
18	EASTERN INVESTMENT LTD.	2010	H

19	HPCL BIOFUELS LTD.	2010	S
20	IRCON INFRASTRUCTURE & SERVICES LTD.	2010	S
21	JABALPUR TRANSMISSION COMPANY LTD.	2010	S
22	ORISSA MINERAL DEVELOPMENT COMPANY LTD.	2010	S
23	POWER SYSTEM OPERATION CORPORATION LTD.	2010	S
24	RAICHUR SHOLAUR TRANSMISSION COMPANY LTD.	2010	S
25	TATIYA ANDHRA MEGA POWER LTD.	2010	S

*Note: * ~ These enterprises were originally in the private sector, and were taken over by the Government on their falling sick.*
 # ~ SAIL was originally Hindustan Steel Ltd (HSL), which was set up in 1954.
$ ~ Coal India Ltd. was originally National Coal Development Corporation(NCDC), which was set up in 1956.
@- NACIL was originally Air India and Indian Airlines, which were both created in 1953 on nationalization of Air India. Air India, in turn, was incorporated in 1932.

Annex 1.2

Growth In Market Capitalisation of listed and traded CPSEs
(2009-2010)

S. No.	CPSE	BSE Closing Market Price as on 31.03.2009	BSE Closing Market Price as on 31.03.2010	Market Capitalization as on 31.03.2009	Market Capitalization as on 31.03.2010	% Change in Market Cap.in (2010 over 2009)
		(In Rupees)		(Rs. In Crores)		
1	Andrew Yule & Co. Ltd.	22.55	43.55	639.74	1290.51	101.72
2	B E M L Ltd.	381.50	1052.05	1588.95	4381.21	175.73
3	Balmer Lawrie & Co. Ltd.	235.15	597.40	383.06	972.93	153.99
4	Balmer Lawrie Invsts. Ltd.	65.55	139.25	145.52	309.10	112.41
5	Bharat Electronics Ltd.	882.90	2190.45	7063.20	17523.60	148.10
6	Bharat Heavy Electricals Ltd.	1504.35	2385.45	73640.94	116772.55	58.57
7	Bharat Immunologicals & Biologicals Corpn. Ltd.	9.86	18.45	42.58	79.67	87.11
8	Bharat Petroleum Corpn. Ltd.	376.65	516.70	13617.40	18680.88	37.18
9	Chennai Petroleum Corpn. Ltd.	94.45	295.40	1407.31	4398.84	212.57
10	Container Corpn. Of India Ltd.	716.15	1300.25	9308.52	16901.01	81.56
11	Dredging Corpn. Of India Ltd.	228.70	607.30	640.36	1700.44	165.54
12	Engineers India Ltd.	520.55	2199.90	2923.41	12353.78	322.58
13	Fertilisers & Chemicals, Travancore Ltd.	21.85	45.30	775.17	1607.12	107.32
14	G A I L (India) Ltd.	244.25	409.80	30982.62	51982.20	67.78
15	H M T Ltd.	35.40	78.25	2691.64	5930.18	120.32
16	Hindustan Copper Ltd.	110.80	533.35	10251.44	49346.50	381.36
17	Hindustan Organic Chemicals Ltd.	18.45	37.15	124.11	250.27	101.65
18	Hindustan Petroleum Corpn. Ltd.	269.10	318.45	9112.53	10783.58	18.34
19	I T I Ltd.	16.15	46.75	465.12	1346.40	189.47
20	India Tourism Devp. Corpn. Ltd.	99.60	104.55	672.50	896.72	33.34
21	Indian Oil Corpn. Ltd.	387.35	296.75	46186.62	72049.49	56.00
22	M M T C Ltd.	14137.60	31395.70	70687.75	156978.50	122.07
23	Madras Fertilizer Ltd.	6.90	14.35	111.88	232.67	107.96
24	Mahanagar Telephone Nigam Ltd.	69.10	73.20	4353.30	4611.60	5.93
25	Maharashtra Elektrosmelt Ltd.	213.00	586.30	511.20	1407.12	175.26
26	Mangalore Refinery & Petrochemicals Ltd.	41.05	76.10	7195.65	13339.59	85.38
27	N M D C Ltd.	156.70	294.15	62126.85	116622.12	87.72
28	N T P C Ltd.	180.20	207.00	148583.19	170681.11	14.87
29	National Aluminium Co. Ltd.	214.45	406.35	13817.23	26181.52	89.48
30	National Fertilizers Ltd.	33.20	98.35	1628.73	4824.84	196.23
31	Neyveli Lignite Corpn. Ltd.	83.75	144.85	14050.82	24301.62	72.96
32	Oil & Natural Gas Corpn. Ltd.	779.70	1098.50	166767.89	234955.15	40.89
33	Power Finance Corpn. Ltd.	144.80	258.25	16619.71	29641.08	78.35
34	Power Grid Corpn. Of India Ltd.	95.65	107.15	40257.55	45097.73	12.02
35	Rashtriya Chemicals & Fertilizers Ltd.	37.65	79.50	2077.11	4385.92	111.15

36	Rural Electrification Corpn. Ltd.	96.20	249.90	8260.31	24676.60	198.74
37	Scooters India Ltd.	13.88	25.10	59.68	107.91	80.81
38	Shipping Corpn. Of India Ltd.	76.70	156.40	3247.86	6622.82	103.91
39	State Trading Corpn. Of India Ltd.	112.10	460.30	672.60	2761.80	310.62
40	Steel Authority Of India Ltd.	96.45	251.80	39837.71	104003.49	161.07
41	NHPC	-	30.50	-	37517.27	-
42	Oil India ltd.	-	1150.55	-	27665.48	-
43	Hindustan Flurocarbons Ltd.	not traded	19.90	-	39.20	-
I	**Total Market Capitalisation of CPSEs**	**--**	**--**	**813530**	**1426212**	**75.31**
II	**Total Market Capitalisation of BSE**	**--**	**--**	**3086075**	**6165619**	**99.79**
III	**BSE Sensex**	**--**	**--**	**9708.5**	**17527.77**	**80.54**
IV	**Market Cap. of CPSEs as % of BSE Market Cap.**	**--**	**--**	**26.36**	**23.13**	**-12.25**

Note: Hindustan Photofilm Corporation Ltd. , IRCON International, and KIOCL have no trading.

Chapter-2

Investment In Central Public Sector Enterprises

The aggregate real investment in Central Public Sector Enterprises (CPSEs) measured in terms of 'gross block' went up from ₹978167 crore in 2008-09 to ₹1129942 crore in 2009-10, showing an increase of ₹151775 crore or a growth of 15.52 percent over the previous year. In terms of share in 'gross fixed capital formation' (GFCF) of the country, moreover, the share of gross block in CPSEs, show an increase over the previous year. The share of gross block of CPSEs as per cent of GFCF in the economy went up from 6.31 percent in 2008-09 to 7.61 percent during 2009-10 and (Table 2.1).

Table 2.1
Growth in real investment / Gross Block

Year	Accumulated Gross Block @ in CPSEs (₹ crore)	Gross Block during the year (₹ crore)	Growth over the previous year (in %)	GFCF^, in the economy during the year * (₹ crore)	Gross Block in CPSEs, as % of GFCF (3)/(5)*100
1	2	3	4	5	6
2002-03	525301	34903	7.12	584366	5.97
2003-04	596727	71426	13.60	687150	10.39
2004-05	649245	52519	8.80	896774	5.86
2005-06	715108	65863	10.14	1109160	5.94
2006-07	782668	67560	9.45	1343843	5.03
2007-08	862240	79563	10.17	1630513	4.88
2008-09	978167	115927	13.45	1838499	6.31
2009-10	1129942	151775	15.52	1993347	7.61

Note: @including capital work in progress; ^ Gross Fixed Capital Formation.
** Source Central Statistical Organisation.*

2.2 Growth in Financial Investment

The aggregate financial investment in CPSEs (comprising paid-up share capital, share application money pending allotment and long term loans) grew from ₹29 crore in 5 enterprises in 1951-52 to ₹579920 crore in 249 enterprises in 2009-10. (Table 2.2). The financial investment in CPSEs during 2009-10 over 2008-09 increased by ₹66388 crore or by 12.93%.

Table 2.2
Growth in (Financial) Investment #

Particulars	Total Investment (₹ in crore)	Enterprises (Nos.)
1	2	3
At the commencement of the Ist Five Year Plan (1.4.1951)	29	5
At the commencement of the 2nd Five Year Plan (1.4.1956)	81	21
At the commencement of the 3rd Five Year Plan (1.4.1961)	948	47
At the end of 3rd Five Year Plan (31.3.1966)	2410	73
At the commencement of the 4th Five Year Plan (1.4.1969)	3897	84
At the commencement of the 5th Five Year Plan (1.4.1974)	6237	122
At the end of 5th Five Year Plan (31.3.1979)	15534	169
At the commencement of the 6th Five Year Plan (1.4.1980)	18150	179

At the commencement of the 7th Five Year Plan (1.4.1985)	42673	215
At the end of 7th Five Year Plan (31.3.1990)	99329	244
At the commencement of the 8th Five Year Plan (1.4.1992)	135445	246
At the end of 8th Five Year Plan (31.3.1997)	213610	242
At the end of 9th Five Year Plan (31.3.2002)	324614	240
At the end of 10th Five Year Plan(31.3.2007)	420771	245
At the end of first year of Eleventh Five Year Plan (31.3.2008)	455554	242
At the end of second year of Eleventh Five Year Plan (31.3.2009)	513532	246
At the end of third year of Eleventh Five Year Plan (31.3.2010)	579920	249

Note: # As in the Balance Sheet.

2.3 Components of Financial Investment

The structure of financial investment in CPSEs has been changing over the years (Table 2.3). While the share of 'paid-up capital' in total (financial) investment was 32.57 percent during 2002-03, it declined to 25.58 percent in 2009-10. The share of 'long-term loans', on the other hand, went up from 66.56 percent in 2002-03 to 74.12 percent in 2009-10 (Table 2.3).

Table 2.3
Components of Financial Investment

(₹ in crore)

Year ending	Paid-up Capital	Application Share money	Long term loans	Investment (3+4+5)
1	2	3	4	5
As on 31.3.2003	109306	2933	223408	335647
	(32.57)	(0.87)	(66.56)	(100)
As on 31.3.2004	111874	7087	231033	349994
	(31.96)	(2.02)	(66.01)	(100)
As on 31.3.2005	117551	6494	233894	357939
	(32.84)	(1.81)	(65.34)	(100)
As on 31.3.2006	120844	6204	276658	403706
	(1.54)	(29.93)	(68.53)	(100)
As on 31.3.2007	125323	6306	288847	420476
	(29.80)	(1.50)	(68.70)	(100)
As on 31.3.2008	131232	3090	321232	455554
	(34.71)	(6.78)	(70.51)	(100)
As on 31.3.2009	138734	3222	371576	513532
	(27.02)	(0.62)	(72.36)	(100)
As on 31.3.2010	148367	1749	429804	579920
	(25.58)	(0.30)	(74.12)	(100)

2.4. Sources of Financial Investment

While the Central Government continues to have the majority equity holding in CPSEs (91.22%), investment in terms of both equity and long term loans has been forthcoming from other parties as well, such as, the financial institutions, banks, private parties (both India and foreign), State Governments and holding companies. A perusal of 'sources of investment' over the years, moreover shows a significant change in the investment pattern of CPSEs during 2004-05 to 2009-10 Table 2.4. Whereas the share of the Central Government in total (financial) investment both equity and long term loans, stood at 37.78 per cent in 2004-05, it declined to 26.97 per cent in 2009-10. The share of financial institutions /banks (and 'others'), on

the other hand, that was 39.89 per cent in 2004-05 has gone up to 58.80 per cent in 2009-10. In a way this shows the greater confidence of FIs and banks in the CPSEs. The share of 'foreign parties' in total financial investment has shown a reduction from 7.23 per cent in 2004-05 to 8.77 per cent in 2009-10. The share of 'State governments' in total financial investment has shown a marginal decline from 0.65 percent in 2004-05 to 0.69 percent in 2009-10 (Table 2.4).

Table 2.4
Sources of Investment

(₹ in crore)

Items	Central Govt.	State Govt.	Holding Company	Foreign Parties	FI/Banks & Others	Share Appl. Money (pending allotment)	Total
1	2	3	4	5	6	7	8
As on 31.3.2005							
Equity (E)	98377	3113	11391	1421	3248	-	
Loan (L)	36848	266	28591	28550	139639	-	
E+L	135225	3379	39982	29971	142787	6494	357939
% of Total (E+L)	37.78	0.94	11.17	8.37	39.89	1.81	100.00
As on 31.3.2006							
Equity (E)	101350	3353	11152	1514	3475	-	
Loan (L)	45763	288	32040	27547	171019	-	
E+L	147113	3641	43192	29061	174494	6204	403706
% of Total (E+L)							
As on 31.3.2007							
Equity (E)	93874	3438	11449	1733	14829	-	
Loan (L)	46381	117	19067	35163	188414	-	
E+L	140255	3555	30516	36896	203243	6306	420771
% of Total(E+L)	33.33	0.84	7.25	8.77	48.31	1.50	100.00
As on 31.3.2008							
Equity (E)	110470	3544	11213	1627	4378	-	
Loan (L)	51535	230	16409	32935	220123	-	
E+L	162005	3774	27622	34562	224501	3090	455554
% of Total (E+L)	35.56	0.83	6.06	7.59	49.28	0.68	100.00
As on 31.3.2009							
Equity (E)	117319	3441	11701	1332	4941	-	
Loan (L)	40563	92	20782	43710	266429	-	
(E+L)	157882	3533	32483	45042	271370	3222	513532
%of total (E+L)	30.74	0.69	6.33	8.77	52.84	0.63	(100.00)
As on 31.3.2010							
Equity (E)	122201	3657	13487	1416	7606	-	
Loan (L)	34229	92	21588	40515	333380	-	
(E+L)	156430	3749	35075	41931	340986	1749	579920
%of total (E+L)	26.97	0.65	6.05	7.23	58.80	0.30	(100.00)

2.5 Plan investment in CPSEs

A good deal of investment in CPSEs in recent years has been made from internal resources (IR). Plan outlay in CPSEs, constituting internal resources (IR), extra-budgetary resources (EBR) and Budgetary Support (BS) showed a continuous increase in absolute terms. Plan outlay in CPSEs, has gone up up from ₹59189.79 crore in 2002-03 to ₹155072.74 crore in 2009-10 (Table 2.5). The respective shares of IR and Budgetary Supprt, EBR and Budgetary Support have, nevertheless, undergone a change. The share of IR has declined from 55.51 per cent and 8.98 per cent of plan outlay in 2002-03 respectively to 54.80 per cent and 2.88 per cent respectively in 2009-10. The share of extra budgetary resources, however, went up from 35.51 percent in 2002-03 to 42.32 percent in 2009-10 (Table 2.5).

Table 2.5
Plan Investment in CPSEs
(2002-03 to 2009-10)

(₹ in crore)

Year	Internal Resources	Extra Budgetary Resources	Budgetary Support	Plan Outlay
2002-03	32858.83	21017.05	5313.91	59189.79
	(55.51)	(35.51)	(8.98)	(100)
2003-04	31103.29	26855.66	5014.46	62973.41
	(50.89)	(41.07)	(8.04)	(100)
2004-05	32222.46	26006.52	5090.24	63319.22
	(50.89)	(41.07)	(8.04)	(100)
2005-06	42143.53	35723.30	4271.70	82138.53
	(51.31)	(43.49)	(5.20)	(100)
2006-07	58981.57	32676.47	5263.76	96921.80
	(60.85)	(33.71)	(5.43)	(100)
2007-08	68140.97	38692.82	2745.80	109579.59
	(62.18)	(35.31)	(2.51)	(100)
2008-09	72815.68	75807.99	1629.64	132253.31
	(55.06)	(43.71)	(1.23)	(100)
2009-10	84980.15	65633.85	4458.75	155072.75
	(54.80)	(42.32)	(2.88)	(100)

2.5.1 Internal Resources (IR) of CPSEs

A perusal of different components of Internal Resources (IR), moreover, shows that the share of 'retained profit' has been showing a big increase during this period. It went up from ₹ 27176.50 crores in 2002-03 to ₹70061.30 crore in 2009-10 (Table 2.6). In terms of respective shares of the different components of IR, namely, 'depreciation' and 'deferred revenue preliminary expenses' as well, there has been a significant change. Whereas the share of 'depreciation' in IR declined from 48.79 per cent in 2002-03 to 26.52 per cent in 2009-10, the share of 'DRE' in IR went up from 1.14 per cent in 2002-03 to 8.84 per cent in 2009-10 (Table 2.6).

Table 2.6
Internal Resources (IR) of CPSEs
(2002-03 to 2009-10)

(₹ in crore)

Year	Depreciation	DRE written off	Retained Profit	Total
2002-03	26477.41	619.18	27176.50	54273.09
	(48.79)	(1.14)	(50.07)	(100.00)
2003-04	30526.72	769.15	44116.90	75412.77
	(40.48)	(1.02)	(58.50)	(100.00)
2004-05	32477.42	537.60	50847.60	83862.62
	(38.73)	(0.64)	(60.63)	(100.00)
2005-06	34540.93	797.93	50248.20	85587.06
	(40.36)	(0.93)	(58.71)	(100.00)
2006-07	32013.20	5475.33	58713.84	96202.27
	(33.28)	(6.69)	(61.03)	(100.00)
2007-08	35436.51	5653.54	58731.80	99821.85
	(35.51)	(5.65)	(58.84)	(100.00)
2008-09	34432.79	7516.89	68854.43	110804.11
	(31.08)	(6.78)	(62.14)	(100.00)
2009-10	28746.32	9575.56	70061.30	108383.18
	(26.52)	(8.84)	(64.64)	(100.00)

2.6 Pattern of Investment

Table 2.7 below shows cognate group-wise aggregate real investment in CPSEs in terms of gross block, during the last two years. The share of 'manufacturing' CPSEs in gross block, stood at 27.11 percent and was the highest followed by 'electricity' (25.02%), 'services' (24.54%) and 'mining' (22.76%). In terms of growth in investment over the previous year, the highest growth (other than CPSEs under construction) was registered by 'services' sector (23.05%), followed by 'manufacturing' (16.64%), 'mining' (11.32%) and 'electricity' (10.56%). The overall growth in investment in CPSEs, in terms of 'gross block', stood at 15.52 per cent in 2009-10 over the previous year. (Table 2.7)

Table 2.7
Pattern of investment in terms of Gross Block
(2008-09 and 2009-10)

(₹ in crore)

Sl.	Sector	Investment in terms of Gross Block as on		Growth rate over the previous year	Gross block as % of total (as on 31.3.10)
		31.3.2010	31.3.2009		
1	2	3	4	5	6
1.	Agriculture	110	102	7.84	0.01
2.	Mining	257173	231031	11.32	22.76
3.	Manufacturing	306289	262587	16.64	27.11
4.	Electricity	282738	255728	10.56	25.02
5.	Services	277301	225353	23.05	24.54
6.	CPSEs yet to Commence Operations	6331	3366	88.09	0.56
	Total	1129942	978167	15.52	100.00

1.4.1 Top Ten Enterprises in terms of Gross Block

Gross block in top ten enterprises amounted to ₹7,79,960 crore as on 31.3.2010. This was equal to 69.03 percent of the total gross block in all CPSEs. Oil & Natural Gas Corporation Limited, Bharat Sanchar Nigam Ltd. and NTPC Ltd were the top three CPSEs amongst the top ten CPSEs in terms of gross block during the year 2009-10 (Table 2.8). The share of these 3 CPSEs alone was 38.69% of the total gross block (of all the CPSEs) as on 31.3.2010.

Table 2.8

Gross Block in Top Ten Enterprises, as on 31.3.2010

(₹ in crore)

Sl.	CPSEs	Investment in terms of Gross Block*	Share in total Gross Block(%)
1	2	3	4
1.	Oil & Natural Gas Corporation Ltd.	171656	15.19
2.	Bharat Sanchar Nigam Ltd.	166514	14.74
3.	NTPC Ltd.	98954	8.76
4.	Indian Oil Corporation Ltd.	93358	8.26
5.	Power Grid Corporation of India Ltd.	63625	5.63
6.	Steel Authority of India Ltd.	50422	4.46
7.	Nuclear Power Corporation of India Ltd.	35343	3.13
8.	NHPC Ltd.	35328	3.13
9.	National Aviation Company of India Ltd.	35307	3.12
10.	Mahanagar Telephone Nigam Ltd.	29453	2.61
	Total Top Ten (CPSEs)	**779960**	**69.03**
	Total Gross Block	**1129942**	**100.00**

** Gross Block inclusive of Capital-work-in progress.*

2.7 State-wise distribution of gross block

The state wise distribution of 'gross block' shows a significant change over the years (Table 2.9). A comparison of percentage share of different states over the years shows that the states of Bihar (21.91 percent), M.P. (13.04 percent), West Bengal (6.71 percent) and Orissa (5.65 percent) which claimed the largest share in investment until 1977 lost ground to the other states, such as, Maharashtra (16.71 percent), Tamilnadu, (7.40 percent), A.P. (7.03 percent), U.P (6.46 percent) by 2010. This change has occurred gradually, but is significant. In good measure, this has happened mainly on account of higher investments in recent years in oil exploration (e.g. Mumbai High), power projects and telecommunications vis-a-vis investments in steel, heavy engineering and coal mining made in the earlier years. Some differences have also occurred due to bifurcation of states like Bihar into Bihar and Jharkhand, Madhya Pradesh into Madhya Pradesh and Chhattisgarh and Uttar Pradesh into Uttar Pradesh and Uttranchal and also on account of closing down of some CPSEs (and conversion of other CPSE into Joint Ventures with private companies). In absolute terms, however, there has been generally on increase in investments in CPSEs located in different states. The state wise investment in terms of gross block is shown in Table 2.9 below.

Table 2.9

State-Wise Distribution of Gross Block

(₹ in crore)

Sl. No.	State / Union Territory	Gross Block ₹ in crore				% share of total Gross Block			
		1977	1987	1997	2010	1977	1987	1997	2010
1.	Andhra Pradesh	390.70	6761.52	19486.16	79459.24	3.41	9.94	6.85	7.03
2.	Arunachal Pradesh	-	-	1489.20	3240.90	0.00	0.00	0.52	0.29
3.	Assam	312.90	3808.72	12448.89	52748.28	2.73	5.60	4.38	4.67
4.	Bihar	2509.10	6969.2	19982.51	29148.38	21.91	10.24	7.03	2.58
5.	Chhattisgarh				38584.17	-	-	-	3.41
6.	Delhi	400.70	1928.48	15014.81	42029.12	3.50	2.83	5.28	3.72
7.	Goa	3.30	35.27	144.57	1427.16	0.03	0.05	0.05	0.13
8.	Gujarat	523.40	3197.79	20092.87	61576.26	4.57	4.70	7.07	5.45
9.	Haryana	142.70	649.69	4352.25	37378.49	1.25	0.95	1.53	3.31
10.	Himachal Pradesh	11.80	527.43	4720.54	28350.25	0.10	0.78	1.66	2.51
11.	Jammu & Kashmir	5.70	117.84	6413.36	16162.18	0.05	0.17	2.26	1.43
12.	Jharkhand	-	-	-	30460.94	-	-	-	2.70
13.	Karnataka	268.20	1721.52	6439.48	40846.02	2.34	2.53	2.26	3.62
14.	Kerala	274.10	1074.44	3991.76	26601.98	2.39	1.58	1.40	2.36
15.	Madhya Pradesh	1492.70	8571.69	21503.52	46546.29	13.04	12.60	7.56	4.12
16.	Maharashtra	630.30	10905.09	54854.07	188850.84	5.50	16.02	19.29	16.71
17.	Manipur	-	139.68	148.31	381.50	0.00	0.21	0.05	0.04
18.	Meghalaya	-	4.27	53.43	319.54	0.00	0.01	0.02	0.03
19.	Mizoram	-	-	30.03	407.50	-	-	0.01	0.04
20.	Nagaland	-	78.17	465.36	1139.46	0.00	0.11	0.16	0.10
21.	Orissa	646.50	4637.65	17101.40	48010.81	5.65	6.81	6.01	4.25
22.	Punjab	197.80	641.02	2077.85	12914.23	1.73	0.94	0.73	1.14
23.	Rajasthan	227.10	780.95	6065.94	25438.13	1.98	1.15	2.13	2.25
24.	Sikkim		0.55	241.13	3448.08	0.00	0.00	0.08	0.31
25.	Tamilnadu	466.90	3018.82	13539.28	83576.62	4.08	4.44	4.76	7.40
26.	Tripura		160.83	830.54	2598.32	0.00	0.24	0.29	0.23
27.	Uttar Pradesh	376.20	3913.96	20767.92	72992.09	3.29	5.75	7.30	6.46
28.	Uttaranchal	-	-	-	20963.39	-	-	-	1.86
29.	West Bengal	768.30	4524.94	18677.33	55704.42	6.71	6.65	6.57	4.93
30.	Andaman & Nicobar Islands	-	9.89	27.10	325.46	0.00	0.01	0.01	0.03
31.	Chandigarh	-	4.06	289.30	256.85	0.00	0.01	0.10	0.02
32.	Pondicherry	-	8.53	30.40	332.20	0.00	0.01	0.01	0.03
33.	Others and unallocated	1802.80	3859.87	13082.21	77721.85	15.74	5.67	4.60	6.88
	Total :	**11451.20**	**68051.87**	**284361.52**	**1129941.66**	**100.00**	**100.00**	**100.00**	**100.00**

** As on 31st March of each financial year.*

Chapter-3

Pricing Policy in CPSEs

Price is one of the most important elements of a commercial enterprise. It determines the company's positioning, profitability and the market share. Pricing strategy, in turn, involves estimation of cost, analysis of competitor's price, determination of demand and finally selection of the appropriate price.

Prices of 'manufactured products' and 'services' are observed to be determined / administered by firms based on the average/marginal cost of production and the mark-up over and above the cost to accommodate profits. The margin of 'mark-up', in turn, depends on the competitiveness or the degree of monopoly and the elasticity of demand and brand value in the market. Given the elasticity of demand for the product, a monopolist is able to charge a higher mark-up (10 to 40%) compared to a competitive market scenario; the mark-up being the difference between the average revenue and the marginal cost per unit of output. The prices of 'primary commodities' like agricultural products and minerals, on the other hand, is determined by the market forces of demand and supply.

In a monopoly market, a public sector enterprise can fix the price that maximizes the mark- up as well as the gross profits. That may not happen, however, if the government intervenes to moderate the price and reduce the mark-up in the interest of consumers and user industries/sectors. A good many Central Public Sector Enterprises (CPSEs) in India are charging prices below average/marginal cost, and the government has been subsidising these prices in the interest of consumers. CPSEs, in these sectors, have been a very important vehicle of the Government in achieving the objective of keeping the prices low.

In general, the governments fix/administer the price of goods and services produced by public sector enterprises based on the following principles:

(a) true costs (fixed and variable cost) of goods and services plus a reasonable return on investment,

(b) cross-subsidization between one group and another or between one sector and another,

(c) differential price norm for peak and off-peak demand,

(d) below cost to stimulate demand under conditions of excess/unutilized capacity,

(e) lower price for giving incentive to encourage consumption (e.g. fertilizer consumption) and higher price as disincentive to discourage consumption (e.g. petroleum products),

(f) different prices/multi-tariffs to include discounts on purchases of larger volumes.

Prices of goods and services produced by public sector enterprises in India, for long, have been determined by the Government under the policy regime of ' controlled prices', or following the Administered Price Mechanism (APM). The APM, in most cases, has been governed by the cost of production (plus a reasonable return on investment). The Government obtained the cost estimates either from 'the management' of the company or from 'an expert body'. In the case of CPSEs in the 'core sectors', the Government has relied upon the Bureau of Industrial Costs and Prices (merged in 1999 with the Tariff Commission, Ministry of Commerce and Industry) for cost estimates and the consequent recommendations made by them on (fair) prices of goods and services of these enterprises. Other than the Tariff Commission, there have been other agencies like the office of Chief Adviser (Cost), Department of Economic Affairs, Ministry of Finance and the Central Negotiation Committee, Ministry of Defence, which have been fixing the price of select goods and services.

In the wake of post-1991 economic liberalization, furthermore, industries in the 'core sector' are no more the exclusive preserve of the public sector. Consequently, a good many CPSEs have ceased to be monopolies and they face competition in the market both from private players (within the country) and from imports. APM has been gradually dismantled in these sectors, and the CPSEs have been given the independence to fix the prices on their own. The Government, however, continues to be sensitive to the needs of the poor and the impact of rise in output prices in the core sector on the Wholesale Price Index (WPI). Any rise in price levels of these products that is not acceptable to the Government is moderated through a combination of measures, such as, lowering of customs duties, excise and sales tax, administrative control on prices and grant of subsidies etc.

Since the late 1990s, moreover, the Government has come to rely increasingly on various price regulatory commissions/authorities for regulating prices in the best interests of both the consumers and the producers. The writ of these regulatory commissions extends to both the public sector and the private

Table 3.1
Pricing Policy, Market structure and CPSEs

Sl No.	Pricing Policy	Market structure	CPSEs
1.	Cost Plus Price*	Monopsony	HAL, Mezagon Dock Ltd., Goa Shipyard Ltd., BHEL, BEML, BEL, Electronics Corporation of India Ltd.
2.	A.P.M./ / Notified Price **	(a) Monopoly	Coal India Ltd. (for core sectors), Indian Oil, ONGC, HPCL (for refined oil), Central Warehousing Corporation, NPCI Ltd.
		(b) Monopolistic Competition	ALIMCO, Hndustan Insecticides Ltd., IDPL (for scheduled drugs)
3.	Demand & Supply	Perfect Competition (in international market)	Coal India Ltd. (buyers other than core sectors), Indian Oil (for imported crude oil), SAIL, NMDC, NALCO, Hindustan Copper Ltd.
4.	Competition Based Price	(a)Oligopoly (in the domestic market)	Air India, BSNL, MTNL, HLL Life Care, ITDC.
		(b) Monopolistic Competition	National Textile Corporation, HMT, Hindustan Salts Ltd., CCI, MIDHANI
5.	Negotiated Price	Monopolistic Competition	BEML, WAPCOS Ltd., EIL, MECON, HSCL, NBCC, Tyre Corporation of India Ltd.
6.	Subsidised Price	(a) Monopoly	FCI, ONGC, Indian Oil, HPCL, CWC, HIL, NSIFDC, IFDC, NMDFC, NSE, FACT
		(b) Monopolistic Competition	EIL, MECON,HSCL, NBCC

*Note: * This is mostly in response to Request for Price (RFP) issued to CPSEs selected on nomination basis, for defence/power sector procurements,.*
*** Prices in, such cases, are often below the average cost.*

sector enterprises. The price regulatory commissions have been prescribing 'the tariff ceiling', which provides scope for competition. Prices are reviewed, from time to time, and are revised in the light of new technological possibilities and higher / lower input costs. The CPSEs have often played an eminent role in giving competition to the private players, and have brought down prices.

A combination of factors comes into play in the determination of prices in the different CPSEs. The paragraphs below briefly discuss the pricing system in respect of products in sectors where CPSEs are major players, and which touch the lives of a large majority of people.

3.1 Coal

The Central Government was empowered under the Colliery Control Order, 1945 read with the Essential Commodities Act, 1955 to fix the grade- wise and colliery wise prices of coal. Pricing of all grades of coal was fully deregulated after the Colliery Control Order, 2000 was notified with effect from 1st January, 2000 superseding the Colliery Control Order, 1945. Accordingly, the coal companies are free to fix grade-wise prices for coal produced by them on their own based on cost of production, landed cost of imported coal as well as demand and supply scenario. There has been four revisions in coal prices since the deregulation in year 2000, the last being in October 2009.

Although the Ministry of Coal no longer sets the prices of various grades of domestic coal, the prices have been fixed by the coal companies from time to time under the guidance of the Ministry, this being a primary produce. In view of perpetual demand, both in the domestic and the international markets, there is very little price elasticity of coal. The power sector consumes nearly 75% of the domestic coal produce for the generation of electricity.

In view of the substantial impact of salary revision which hit the bottom line of the coal major Coal India Ltd. (accounting for more than 80% of the country's coal reserves), the Government of India allowed an average price hike of 11% w.e.f. 16th October 2009.

The Tariff Commission is, furthermore, examining the extant pricing policy for coal for the power sector and is expected to also suggest modalities for pricing of coal for other sectors. The Planning Commission, at the same time, is exploring the possibility of market-determined pricing.

Since 2004–05, Coal India Ltd. and its subsidiaries have started selling part of their production under e-auction scheme to the intending buyers (both traders and consumers), who purchase coal to meet their long term needs. The floor price for such sale of coal under e-auction was kept at 120% of the notified price. The sale of coal under e-auction scheme has had to be discontinued soon after as per directives of the Supreme Court. Sale of coal under e-auction has been replaced by e-price booking whereby the prices have been fixed by the Board of Directors (Coal India) at 130% of the notified price for all intending buyers, barring National Consumers Co-operative Federation (NCCF) and the state undertakings in respect of which price is fixed at 120% of the notified price. Sale of coal to user industries in the core sector is at the notified price only.

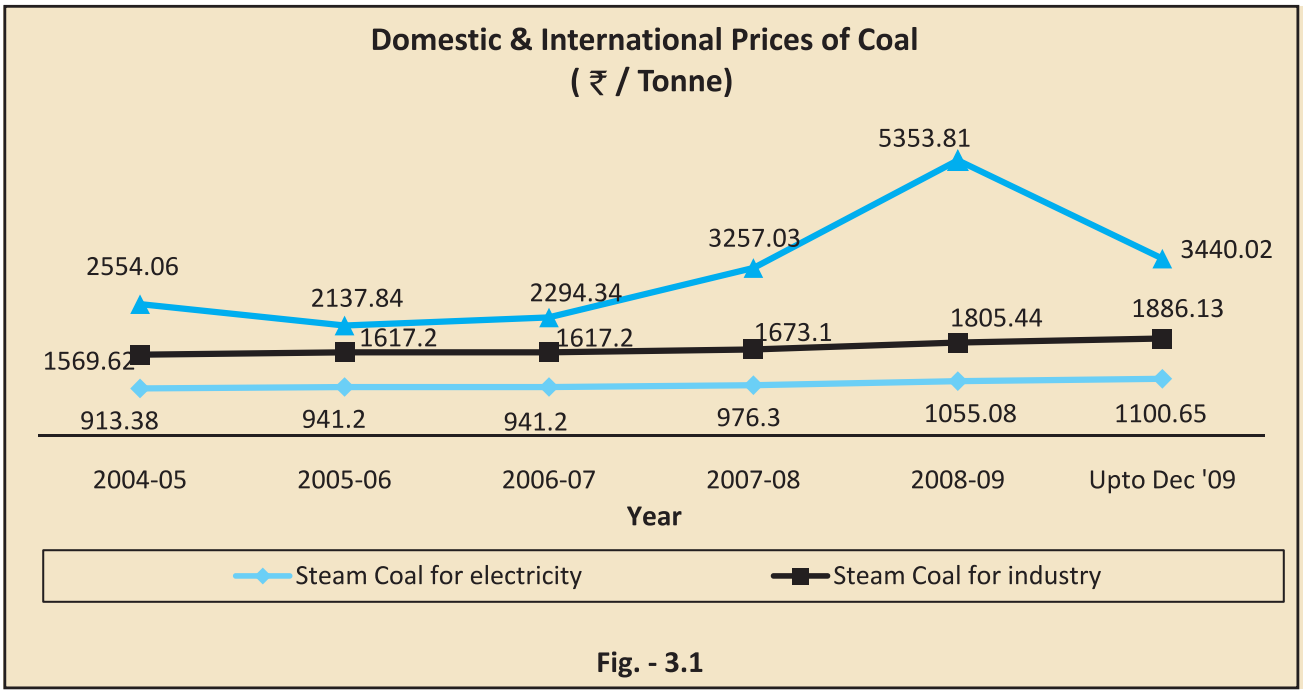

Fig. - 3.1

Source: CMIE (Estimated)

3.1.1 International Price of Coal

Fig. 3.1 above provides a comparison between the domestic price of steam coal for industry, steam coal for electricity and the international (f.o.b) price of coal (Newcastle) during the period 2004–05 to 2009-10 (upto Dec. '09). While the domestic prices were very close to international prices during 2004–05 to 2006–07, the international price of coal has moved down significantly since 2009-10 (upto Dec. '09).

The recent hike in international price appears to be mainly driven by demand. The public sector coal companies, however, continue to maintain marginal increase in the domestic market. Prices are largely in sync with the cost of production and the transportation and handling charges; the latter forming a significant proportion of the total cost.

3.2 Petroleum and Gas

With the changeover from price being determined based on Administered Price Mechanism (APM) to market-determined pricing w.e.f 1.4.2002, the oil marketing companies (OMC) are fixing the prices of petroleum products after taking into account the prevalent international oil prices. About 80% of crude oil processed by the domestic refineries is imported to service domestic demand. As the cost of crude, besides taxes, constitutes a substantive part of cost of the final products, international oil prices become the determining factors for pricing of domestic petroleum products.

International oil prices have been rising continuously since 2004. Each year, annual oil prices in international markets have averaged more than those prevailing during the previous year. The Indian basket of crude oil that averaged about $ 23/bbl at the time of dismantling of APM in March 2002 went up to $79.25/bbl during 2007–08. It touched an all-time high of $142.04/bbl on 3.7.2008; while averaging out at $83.57 for the full year of 2007–08. The average price of Indian basket of crude oil during the current year of 2010-11 (upto 5.10.2010) stood at $ 75.58 bbl.

3.2.1 Trend of International Oil Prices

The trend of the international prices of crude oil and petroleum products during the period 2002–03 to October 2010, is given in Fig. 3.2 & Fig. 3.3 below :

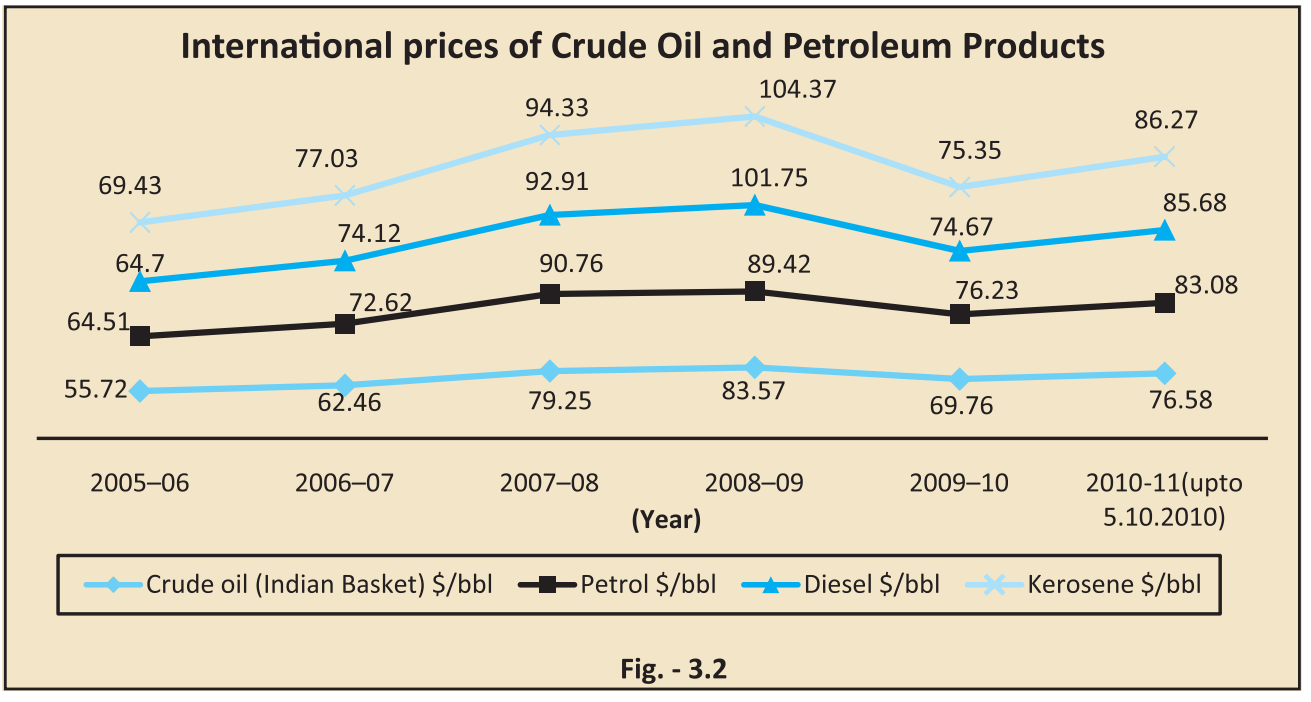

Fig. - 3.2

Source: Ministry of Petroleum & Natural Gas

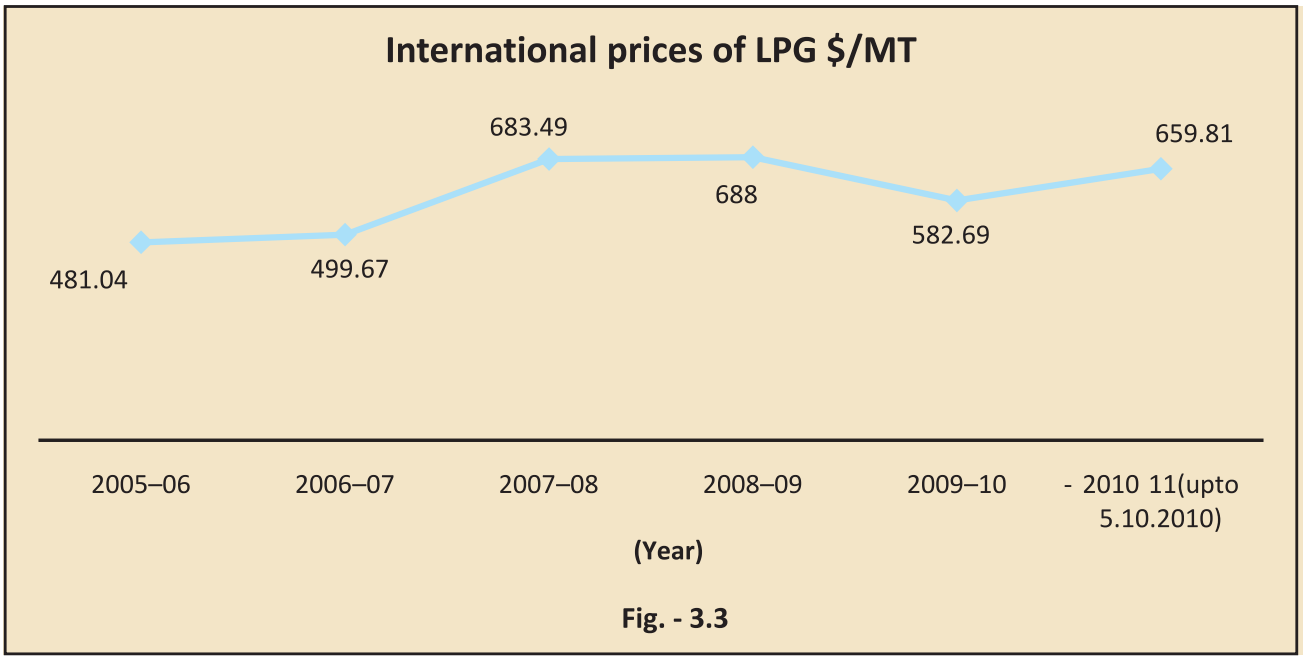

Fig. - 3.3

Source: Ministry of Petroleum & Natural Gas

3.2.2 Pricing of petrol and diesel post APM

Oil Marketing Companies (OMCs) procure petrol and diesel from refineries as per their agreements. The basic ex-storage selling prices of petrol and diesel are uniform at all refinery locations throughout the country. The Government allowed OMCs to revise retail prices within a band of +/-10% of the mean of rolling average of last 12 months and of last 3 months international C&F (cost and freight) prices. In case of breach in this band, the matter is to be taken up with the Ministry of Finance, Government of India for adjustment of excise duty rates. Prices, based on this system, was revised for the first time effective 1st August 2004 leading to price increase of ₹ 1.10/ltr and ₹ 1.42/ltr for petrol and diesel respectively.

The price band mechanism could not, however, be implemented on fortnightly basis due to steep increase in international prices. The Government took back control of price setting for petrol and diesel as per the band mechanism, and restrained the 'pass through' of the international prices to domestic consumers.

The Government subsequently changed the pricing of petrol and diesel to trade parity basis in June 2006 on recommendations of the Rangarajan Committee. The principle of trade parity pricing was to be applied to the refinery gate price. Accordingly, the OMCs pay trade parity price (weighted average of import parity price and export parity price in the ratio of 80:20) to refineries when they buy petrol and diesel, and import parity price to refineries for PDS Kerosene and domestic LPG.

The retail selling price of petrol, diesel and domestic LPG for the consumers is calculated by taking into account the following elements:

- Basic price at refinery level (based on international prices)
- Marketing cost and return on capital
- State specific irrecoverable levies
- Excise duty at applicable rates
- Inland freight up to depot/LPG bottling plant
- Delivery charges from depot to Retail Pump Outlet / LPG Distributor
- Value Added Tax (State Tax) and other local levies
- Dealers/LPG Distributors commission

The difference between the required price based on trade parity/import parity and actual selling price realized (excluding taxes, dealer commission) represents the under-recoveries of oil companies. Due to the incessant increase in the international oil prices, the gap between the input price and the retail prices of the sensitive petroleum products has been widening. In order to provide some relief to the OMCs, the Government announced the following measures w.e.f 5.6.2008:

(a) Increase the retail selling price of Petrol by ₹ 5/litre, Diesel bt ₹ 3/litre and Domestic LPG by ₹ 50/ cylinder.

(b) Reduction in Customs duty on crude from 5% to nil and on MS and HSD from 7.5% to 2.5% and on other products like ATF from 10% to 5%

(c) Reduction in Excise duty by Re. 1/litre on unbranded MS and HSD.

3.2.3 Recommendations of the Expert Group

The Government had constituted an expert group under the Chairmanship of Dr. Kirit S. Parikh to examine the current pricing policy of the four sensitive petroleum products viz. Petrol, Diesel, PDS Kerosene and Domestic LPG. The Group had to make recommendation for a viable and sustainable pricing policy for these products. The Expert Group submitted its report on 3rd February 2010.

Based on the recommendation of the Expert Group and the decisions taken in the meeting of the Empowered Group of Ministers (EGoM) on 25.06.2010, the Government has implemented the following effective from 26.06.2010:

(a) The price of Petrol, both at the Refinery Gate and the Retail Level, has been made market determined.

(b) The price of Diesel has also been made market determined, both at the Refinery Gate and the Retail Level. However, at the first instance the Retail Selling Price (RSP) of Diesel has been increased by ₹ 2 / litre at Delhi with corresponding increases in the rest of the country.

(c) The RSPs of PDS Kerosene and Domestic LPG have been increased by ₹ 3/litre and ₹ 35/ cylinder at Delhi with corresponding increases in the rest of the country.

3.2.4 PDS Kerosene and Domestic LPG

While dismantling the Administered Pricing Mechanism (APM) for major petroleum products w.e.f 1.4.2002, the Government decided that the subsidies on PDS Kerosene and Domestic LPG, in the Post-APM era starting from 1.4.2002 will be on a specified flat rate basis for each depot/bottling Plant and will be met from the Union budget. After providing for the aforesaid subsidy, the retail prices were to vary as per changes in the international oil prices. These subsidies were to be phased out in three to five years. However, the Government has extended the Scheme till 31st March 2014. The subsidies were based on international prices of Kerosene and LPG prevailing in Arab Gulf market during the month of March 2002, i.e. $23.65 per barrel and $194 per MT respectively.

It was decided that the subsidy per selling unit for any depot / bottling plant effective 01.04.2002 shall be frozen and remain unchanged for the financial year 2002-03. The subsidy admissible under this scheme for 2003-04 was at 2/3rd level of the rates allowed during 2002-03. The subsidy admissible for 2004-05, 2005-06 amd 2006-07 was at one-third (1/3rd) level of the rates of subsidy for 2002-03 (average rate of subsidy on domestic LPG cylinder is ₹22.58 / cylinder and on PDS Kerosene is 82 paise per litre) will be allowed till 31.3.2010. The details of the fiscal subsidy paid on PDS Kerosene and Domestic LPG under the PDS Kerosene and Domestic LPG Subsidy Scheme, 2002 during the last three years are shown in Table 3.2:

Table 3.2
PDS Kerosene & Domestic LPG (₹ Crore)

Sl No.	Year	Fiscal subsidy	Freight Subsidy
1.	2007-08	2641	28.27
2.	2008-09	2688	22.22
3.	2009-10	2770	21.95

3.2.4.1 Freight Subsidy (For Far Flung Areas)

For supplies and sales of products (i.e. PDS Kerosene and Domestic LPG) in the notified far flung areas, freight subsidy is being provided to the OMCs. The subsidy for the year 2004-05 to 2009-10 was paid at 1/3rd level of the rates for 2002-03. The Government has extended the Subsidy Scheme till 31st March, 2014 at 1/3rd level of the rates for 2002-03. The actual payments released under this scheme since 2007-08 are shown in Table 3.2 above.

3.2.5 Under recoveries of OMCs

Despite the increase in the international prices, since 2004–05, the selling prices of petrol and diesel were not revised in the domestic market by the OMC's in tune with the increase in international prices. The Government directed the oil PSEs to moderate the price increase in petrol and diesel besides maintaining prices of subsidized products. This resulted in under-recoveries to the OMCs as they paid the applicable import parity/trade parity prices to the refineries but could not recover their dues from retail prices of products. The gap between the retail prices based on trade parity/import parity pricing principles and the actual retail prices have resulted in huge under-recoveries to the OMCs as shown in Table 3.3 below :

Table 3.4
Under recoveries of OMCs(2004-05 to 2008-09)
(₹ Crore)

S No.	Product	2005-06	2006-07	2007-08	2008-09	2009-10
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	PDS Kerosene	14384	17883	19102	28225	17354
2.	Domestic LPG	10246	10701	15523	17600	14257
3.	Petrol	2723	2027	7332	5181	5151
4.	Diesel	12647	18776	35166	52286	9279
	Total	**40000**	**49387**	**77123**	**103292**	**46051**

3.2.6 Oil Bonds and Upstream Assistance

Passing on the entire impact of the steep increase in the oil prices to the consumers would have resulted in sharp increase in the domestic prices to unaffordable levels. It was, therefore, decided that the burden of increase in international price of oil be shared by all the stakeholders, namely, the Government, the upstream oil companies, the oil marketing companies (OMC's) and the consumers. The Government decided to share its burden through issue of oil bonds to OMCs, which amounted to ₹ 26,000 crore in 2009-10, ₹ 71292 crore in 2008–09, ₹ 35290 crore in 2007–08, ₹ 24121 crore in 2006–07 and ₹ 11500 crore in 2005–06. Despite this sharing of the financial burden by the Government through issue of oil bonds and the upstream oil companies (viz. ONGC, OIL & GAIL) there still remained a gap (of under recoveries), which has had to be absorbed by the public sector OMCs.

3.2.7 Measures to control impact of high international prices

The Government , on its part, has taken a number of measures to rationalize taxes and duties on petrol and diesel to keep the consumer prices of these sensitive petroleum products reasonable limits. The details of rationalisation in duties on sensitive petroleum products since June 2004 are mentioned below:

(a) Reduction in customs duties since 2004–05 :

i. Customs duty on petrol was reduced from15% in August 2004 to 2.50% in June 2008.

ii. Customs duty on diesel was reduced from15% in August 2004 to 2.50% in June 2008.

iii. Customs duty on domestic LPG was reduced from 5% in August 2004 to NIL in March 2005.

iv. Customs duty on PDS Kerosene was reduced from 5% in August 2004 to NIL in March 2005.

v. Customs duty on crude was reduced from 10% in August 2004 to NIL in June 2008.

(b) Reduction in excise duties since 2004–05 :

i. Excise duty on petrol was reduced from 26% (ad valorem) plus ₹7.50 per litre (specific) in June 2004 to ₹ 13.35 per litre (specific) in June 2008.

ii. Excise duty on diesel was reduced from 11% (ad valorem) plus ₹1.50 per litre (specific) in June 2004 to ₹3.60 per litre (specific) in June 2008.

iii. Excise duty on domestic LPG was reduced from 8% (ad valorem) in June 2004 to NIL in March 2005.

iv. Excise duty on PDS Kerosene was reduced from 16% (ad valorem) in June 2004 to NIL in March 2005.

(c) LPG as "Declared Goods":

LPG (Domestic) became "Declared Goods" under CST Act and the maximum sales tax/VAT rate of 4% effective 19.4.06 was introduced across all states/Union Territories. This reduced the rates of sales tax levied by most of the States at the rate of 12.5%.

(d) Reduction in VAT by State Governments since 5th June 2008.

In order to cushion the burden of the recent price hike on petrol and diesel with effect from 5th June 2008, several State Governments like West Bengal, Bihar, Maharashtra, Gujarat, Uttar Pradesh, Kerala, Goa, Assam, Tamil Nadu (only on Diesel), Uttaranchal, Haryana (only on diesel), Jharkhand (only on diesel) and Chandigarh (only on petrol) had reduced the sales tax. State Governments of Maharashtra, Goa, Gujarat, Haryana, Chandigarh, Uttaranchal and Uttar Pradesh have reduced the VAT on LPG to (nil). State governments of Delhi and Andhra Pradesh have provided state subsidy on Domestic LPG.

3.3 Power

The Electricity Regulatory Commission Act was enacted in 1998 for creation of Regulatory Commissions at the Centre and in the States with powers, inter-alia, to regulate/ determine power tariffs. The Central Government accordingly created the Central Electricity Regulatory Commission (CERC) to regulate/ determine power tariffs of CPSEs engaged in generation and inter-state transmission of power. CERC also issues order on Availability Based Tariff (ABT) for ensuring grid discipline.

The power sector reforms in recent years further necessitated the enactment of the (new_ Electricity Act, 2003, repealing the ERC Act, 1998. The regulatory powers of CERC constituted under the ERC Act, 1998 have been retained in respect of regulation/determination of tariff for CPSEs involved in generation and inter transmission of power. The provisions of the Electricity Act, 2003, furthermore, serve to consolidate the different laws relating to generation, transmission, distribution, trading and use of electricity. The Act is aimed at taking measures conducive to the development of the electricity industry, promoting competition therein, protecting interest of the consumers (and supply of electricity to all areas), rationalization of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal as well as for matters connected therewith or incidental thereto.

Under Section 178 of the Electricity Act,2003, the CERC regulates/determines tariff of CPSEs engaged in generation and inter-state transmission of power. In compliance with Section 3 of the Electricity Act 2003, the Central Government notified the National Electricity Policy (NEP) in February, 2005. In continuation to NEP, furthermore, the Central Government notified the Tariff Policy on 6.1.2006.

As per the Electricity Act, 2003, the Regulatory Commission is to be guided by the Tariff Policy of the Government of India for determining the tariff applicable to generating companies and for transmission. It also requires regulators to continue with the systems of setting norms for operations which would provide incentive for efficiency in operations.

The tariff for electricity supplied from the CPSEs, thereofre, is determined by the CERC based on the CERC (Terms and Conditions of Tariff) Regulations, 2004. The tariff for electricity consists of the following elements:

(a) Capacity charges comprising the following :

(i) Return on Equity – presently 14% post-tax return is allowed,

(ii) Interest on loans – interest including foreign exchange variation on interest and loan repayment is allowed,

(iii) Depreciation – 90% recovery of cost spread over asset life,

(iv) Advance against depreciation – allowed for the purpose of loan repayment,

(v) Interest on working capital – paid on normative basis.

Full capacity charges are recovered at 80% availability and pro-rata recovery below 80%. For scheduled generation above 80%, plant load factor incentive @ Re. 0.25 /unit is allowed.

(b) Energy charges are levied on scheduled energy based on actual landed cost of fuel with normative operating parameters.

(c) Payment of Taxes, duties, and other levies,

- Tax on Income derived from generation of electricity by CPSEs is computed as an expense and is recovered from bulk power customers.
- Statutory taxes, levies, duties, royalty, cess or any other imposition by Central/State Governments/ local bodies/authorities on generation of electricity (including auxiliary consumption or any other type of consumption including water, power, etc) are borne by consumers.
- There is no subsidy incorporated in the calculation of power tariff.

In furtherance of the objectives of the Electricity Act, 2003, the Rural Electricity Policy was also announced by the Government of India in August, 2006.

The pricing policy of nuclear power in the country and the associated tariffs are regulated by the Government of India in accordance with the provisions of the Atomic Energy Act, 1962.

3.4 Steel

The Indian steel industry was one of the first few major sectors to be comprehensively deregulated as part of the general economic reforms. The erstwhile regime of controls was wholly dismantled in 1992 through the following policy changes :

(a) Prices and distribution (with the exception of a few strategic areas like SSIC) were freed,

(b) Trade barriers came down with reduction in tariff rates and removal of physical restrictions (canalizing and licensing) on imports and exports,

(c) Freight ceilings replaced freight equalization,

(d) FDI in Iron & Steel was granted through the automatic route,

(e) Technology imports were made easier, and

(f) Capacity controls and reservation on the BF- BOF sectors were withdrawn.

Steel pricing was, therefore, deregulated and prices came to be determined through competition in the market. The Ministry of Steel has, nonetheless, constituted a 'Steel Price Monitoring Committee' (SPMC). The Committee seeks to provide an interface between the producers and consumers of steel. The objective of the Committee is to keep a watch on the price movement. The Committee functions as a watchdog and ensures that a free and fair environment prevails in the market. The selling prices of steel and steel products are, inter alia, based on the following factors:

(a) demand and supply position,

(b) competitor pricing,

(c) landed cost of imports,

(d) levels of Inventory,

(e) freight from producing point to consuming point,

(f) market position for customers' end products.

3.4.1 International Price of Steel

Fig. 3.3 & 3.4 provide a comparison between domestic and international price of steel during the period 2004–05 to 2009–10. While the domestic prices of steel were higher than the international prices until 2007–08, the international prices of steel (CR coils) overtook domestic prices in 2008–09. The inernational prices of steel declined in 2009-10 putting down the domestic price of steel. In the case of HR coils, however, the international price of steel went up in 2007-08, and continues to be higher than the domestic prices during both 2008-09 and 2009-10.

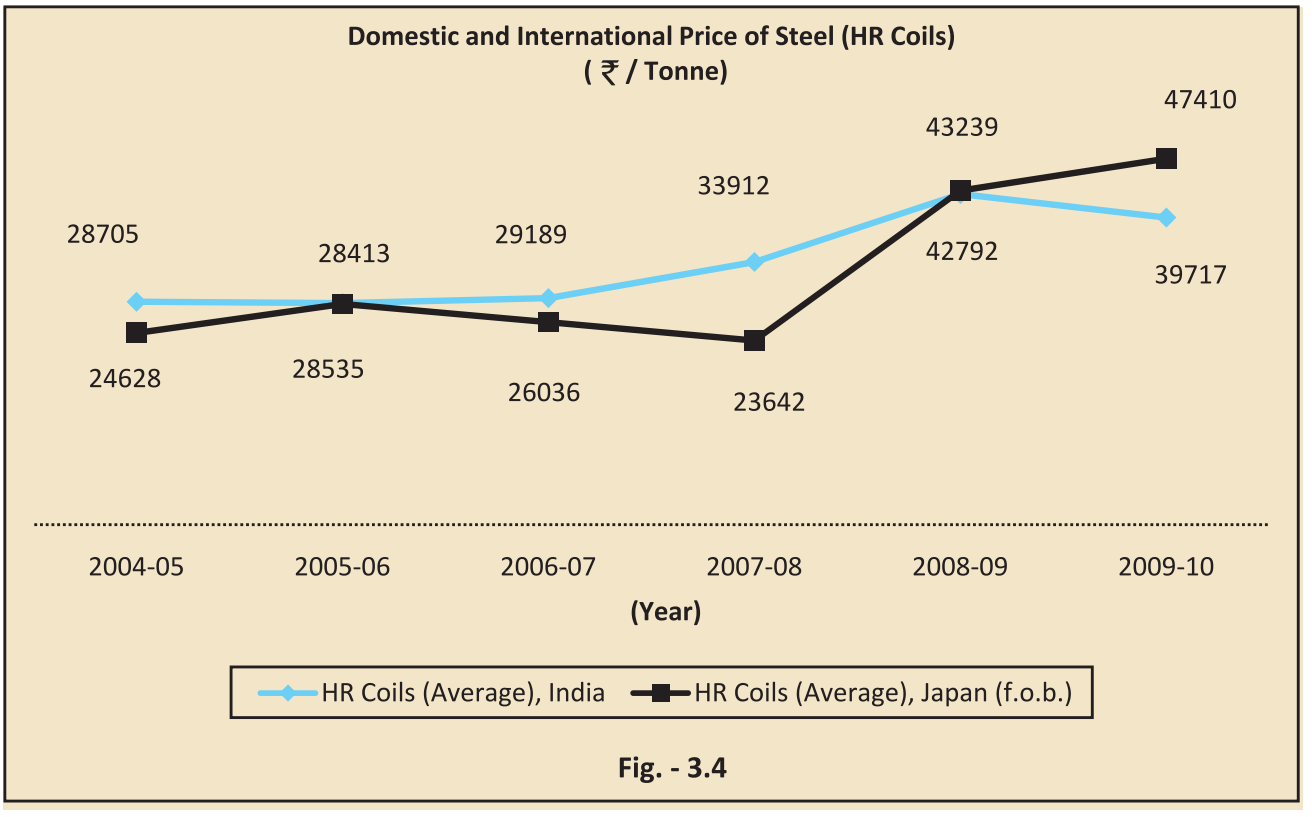

Fig. - 3.4

Source: CMIE (Estimated)

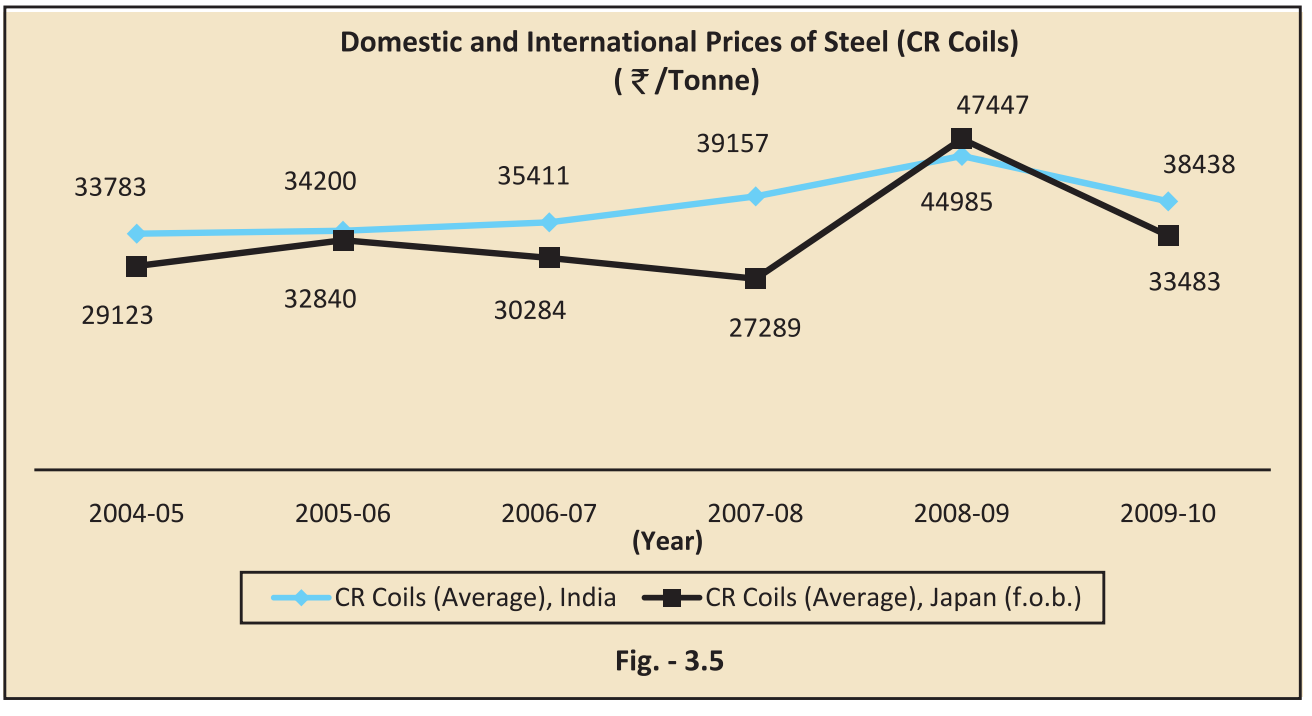

Fig. - 3.5

Source: CMIE (Estimated)

3.5 Fertilizers

Urea is the main nitrogenous fertilizer constituting about 60% of the total fertilizer consumption in the country. The market share of CPSEs in the area of fertilizer sector is a little more than 20%. Fertilizer is covered under statutory price (and partial distribution) control and is sold to the farmers at the notified sale price. All varieties of fertilizers, except Urea, were removed from price and distribution control in August, 1992. The Government of India, however, indicates the maximum retail price (MRP) in respect of major phosphatic and potassic fertilizers, namely, Di- Ammonium Phosphate (DAP), Muriate of Potash (MOP) and 11 grades of Complex Fertilizers. The MRPs for Single Super Phosphate (SSP) are indicated by the respective State Governments.

The statutorily notified sale price of urea and indicative MRPs of decontrolled phosphatic and potassic fertilizers are generally less than the cost of production of these fertilizers. The difference between the normative cost of production and the selling price/MRP is paid as subsidy/concession to the manufacturers. As the consumer prices of both indigenous and imported fertilizers are fixed uniformly, financial support (being the difference between the cost of import and marketing/distribution and MRP) is also given on imported phosphatic and potassic fertilizers by the Government in the form of subsidy.

3.5.1 Retention Price Scheme (RPS)

Until 31st March, 2003, fertilizer subsidy to urea manufacturers was being regulated in terms of the provisions of the Retention Price Scheme (RPS). Under RPS, the difference between retention price (cost of production as assessed by the Government plus 12% post tax return on net worth) and the MRP to be paid by the farmers was reimbursed as subsidy to the urea units. Under the RPS, retention price used to be determined unit-wise, which varied from unit to unit depending upon the technology, feedstock used, level of capacity utilization, power consumption and distance to be covered for sourcing of feedstock/ raw- materials etc. Although the RPS achieved its objective of increasing investment in the fertilizer industry and thereby created new capacities and enhanced fertilizer production (along with increased use of chemical fertilizers), the pricing scheme was criticized on thegrounds of being in the nature of 'cost plus' devoid of any incentives for achieving of better operational efficiency.

3.3.2 New Pricing Scheme (NPS)

A 'group based' pricing scheme, namely the New Pricing Scheme (NPS) for urea units was introduced subsequently w.e.f. 1.4.2003, replacing the erstwhile RPS. The primary goal of the NPS is to encourage efficiency based on the usage of the most efficient feedstock, state-of-the-art technology etc. NPS is being implemented in stages. Stage-I was for one year duration i.e. from 1.4.2003 to 31.3.2004. Stage-II was of two and half years' duration i.e. from 1.4.2004 to 30.9.2006. Stage-III policy of the NPS has been made effective from 1.10.2006 and will continue till 31.3.2010. The important features of the Stage-III Policy are :

(a) resumption of production by units under shutdown, and

(b) conversion of non-gas based units to NG/ LNG.

Resumption of production by urea units currently not in production, viz, RCF-Trombay-V, FACT-Cochin and Duncans Industries Limited (DIL)-Kanpur is allowed based on natural gas/LNG/CBM/ Coal gas. Upon resumption, the base concession rate of these units will be the Stage-II concession rate of the group to which they belonged, or their own concession rate updated till 31.3.2003 for all costs and thereafter adjusted for the feedstock changeover, whichever is lower.

Under the policy for 'conversion of non-gas based units to NG/LNG', all functional Naphtha and FO/LSHS based units will be converted to gas based within a period of 3 years. Thereafter, Government will not subsidize the high cost urea produced by the non-gas based urea units.

In order to provide incentives for conversion to gas, there will be no mopping up of energy efficiency for a fixed period of 5 years for Naphtha based as well as for FO/LSHS based units. Capital subsidy will be considered for FO/LSHS based units for which the Department of Fertilizers, (Government of India) will notify a separate scheme in consultation with the Department of Expenditure (DOE), Ministry of Finance.

With the projected improved availability of gas from 2009 onwards, it is expected that fresh investment in fertilizer sector will take place. The Government announced a new investment policy in September 2008 based on Import Parity Pricing (IPP) for the Urea sector to attract the necessary investment. The policy is expected to create availability of Urea at a price

lower than IPP, and through reduction in imports, is expected to bring down the import price as such.

The Government, furthermore, notified in June 2008 a farm-gate-based regulated nutrient price regime for use in the production of subsidized complex fertilizers. This will lead to decrease in existing MRPs of complex fertilizers. Under existing pricing regime, the price of nutrients in complex fertilizers were higher than the price of same nutrients in other straight fertilizers like Urea, DAP, MOP and SSP. This has led to comparatively higher usage of straight fertilizers vis-à-vis complex fertilizers, the latter being agronomically better.

In order to encourage setting up of fertilizer plants through Joint Ventures (JV) in foreign countries where gas is available in abundance and is much cheaper, such JVs for production of urea may be set up subject to the condition that the Government of India will enter into long term buy- back arrangements with these JVs. Accordingly, suitable mechanisms can be evolved for securing long term fertilizer related supplies from abroad.

3.3.4 International Price of Urea

Fig. 3.5 below provides a comparison between domestic and international prices of Urea during the period 2003–04 to 2007-08 .While the subsidized urea prices are obviously much lower, the domestic urea prices (inclusive of subsidy) have been very close to international prices.

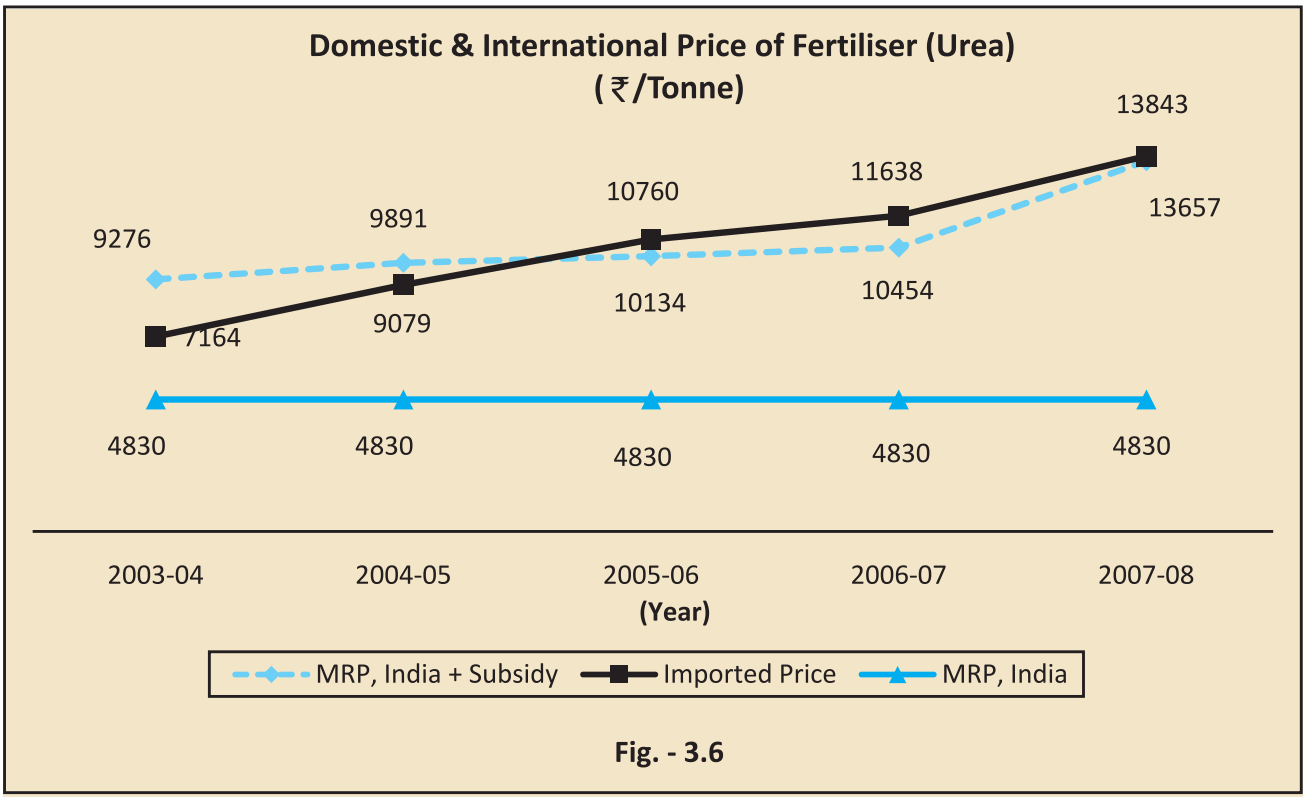

Fig. - 3.6

Source: CMIE (Estimated)

3.6 Telecommunications

Under the TRAI Act 1997, the Telecom Regulatory Authority of India (TRAI) notifies the rates at which telecommunication services within India and outside the country are to be charged. The Telecommunication Tariff Order was notified for the first time in March, 1999 by TRAI. Tariff amendment Orders are issued from time to time to reflect changes in tariff framework. The recommendations and orders issued by TRAI are binding on both public sector (MTNL and BSNL) as well as private sector telecom operators.

Currently, the tariff for telecom services is left to the discretion of telecom operators. They may decide the prices in terms of market forces, except in the areas of :

(a) rental, free call allowance and local call charges for fixed line rural subscribers,

(b) leased circuits, and

(c) national roaming services in mobile telephony.

The providers of telephone services are, moreover, free to offer various tariff plans to their subscribers. These plans may vary substantially in terms of the combinations of monthly rental, call charges

and free call allowances. These tariffs, however, have to be consistent with the regulatory principles of non-discrimination and non-predation, and in compliance of the prescribed Interconnection Usage Charges(IUC).

Wherever applicable, the following points are taken into consideration by CPSEs operating in the telecom sector for price determination a) tariff ceiling prescribed by TRAI for different services, b) tariff offered to consumers by competitors for similar services, c) customers' needs and preferences, and d) affordability of customer segments.

On account of increase in sales volumes and competition in the market, the tariff of various telecom services has been coming down drastically. The STD rate of ₹ 2.40 per minute in April 2005 for landline phones in the case of MTNL came down to ₹ 1 per minute in April 2006, and continues to be at the same price to this day. (If the STD rate was to be adjusted to match the Wholesale Price Index (WPI) during this period, the current rate would be ₹ 2.88 per minute).

3.7 Civil Aviation

Fares offered by Air India are competitive and market driven. The fares are reviewd, revised / rationalized from time to time, depending on the market scenario / reality etc. As such, if the demand is more (than the supply), the fares are higher and vice versa. Fares of competitors are, moreover, tracked on a regular basis. Consequent to the financial melt down since October, 2008, there were budget cuts by the corporates, fall in tourist arrivals and shrinkage in the domestic civil aviation sector by 10% that resulted in the indutry occupancy factor further dropping from 71% to 64%. In a bid to protect the market share, the fares of Air India have had to be lowered in tandem with the low cost carriers offering very cheap fares despite the increase in ATF prices that went up during this period-peaking in September, 2008. At the same time, Air India also offers a range of market fares depending on the kind of service; different fares are charged for First, Executive and Economy classes, and for non-stop operations / optimal schedule etc.

3.8 Pharmaceuticals

Prices of pharmaceutical products in CPSEs are fixed based on the Drugs Price Control Order (DPCO), 1995. Pharmaceutical products have been moreover, categorized as Scheduled and Non-Scheduled formulations.

3.8.1 Prices of Scheduled Pharmaceutical Products

The Maximum Retail Prices (MRP) of scheduled formulations are fixed and revised by the National Pharmaceutical Pricing Authority (NPPA), Government of India.

3.8.2 Prices of Non-scheduled Pharmaceutical Products

The prices of non-scheduled formulations are fixed by the Board of Directors of CPSEs on cost plus basis.

3.8 Agriculture Products

3.8.1 Outputs : Wheat & Paddy

The Food Corporation of India (FCI) has been intervening in the foodgrain market through price support policy for farmers and through the public distribution system for consumers. Price support policy is implemented by the FCI primarily in regard to wheat and paddy. The two main objectives of this market intervention are (a) to protect the farmers from volatility in grain markets, and (b) to correct the trade bias against agriculture vis-à-vis other sectors of the economy.

The initial recommendation in regard to procurement price is made by the Commission on Agricultural Costs and Prices (CACP) in the Ministry of Agriculture, Government of India. These prices are arrived at on the basis of cost of cultivation and several other specified factors rather than on demand-supply basis.

The distribution of foodgrains to the vulnerable sections of the population by FCI is done at Central Issue Price (CIP). Despite increase in the Minimum Support Prices for both wheat and paddy in successive years, there has been no revision of CIP of foodgrains (wheat and rice) for Below the Poverty Level (BPL) population, Above the Poverty Level (APL) population and for Antyodaya Anna Yojana (AAY) since July1,2002.

3.8.2 Inputs : HYV Seeds

National Seeds Corporation Ltd. (NSC) and State Farms Corporation of India Ltd. (SFCI) are the two CPSEs engaged in production of quality high-yield variety (HYV) seeds. The Government has not issued any direction to these PSEs on fixation of prices of seeds, which are generally determined by market forces. NSC and SFCI are engaged mainly in production of high volume of low cost seeds of

cereals and pulses and have been striving to make quality seeds available to Indian farmers at affordable prices to ensure national food security.

After globalization of the Indian economy, a number of private seed companies have entered Indian market. The Central PSEs are facing stiff competition from private sector seed companies, especially in case of hybrid seeds. In view of the above, the Government has left it entirely to the CPSEs to fix prices of their products, allowing them the freedom to maintain a balance between social objectives and commercial viability.

The Government does not provide any subsidy on seeds produced by NSC and SFCI. As regards recommendation of Price Regularity Commission, it is stated that there are no such recommendations binding on NSC/SFCI.

Seed pricing comprises of two stages i.e. (i) seed production/procurement, (ii) seed sale. Bulk of seed production, both foundation and certified, is largely arranged through regular registered contracts with seed growers.

For finalizing the sale price of hybrid/high variety seed, the main factors taken into account are:

(a) the relevant Minimum Support Price (MSP) fixed for the crop/season,

(b) the commercial produce price in the local mandis/market yards, especially in the ultimate end-use/seed sale areas,

(c) all the costs incurred in terms of processing, treatment, packing, labeling, tagging, sealing, transportation, storage, handling, losses in the process, publicity, sales promotion, interest burden, dealers discount, etc

Chapter-4

Productivity in Public Enterprises

The Central Public Sector Enterprises(CPSEs) are technologically complex identities involving large scale production and economies of scale. CPSEs in the industrial sector (manufacturing, mining and electricity), in particular, are capital intensive and are characterized by higher productivity per unit of input/hour. Productivity is, however, influenced by both endogenous and exogenous factors. While endogenous factors constitute of higher technology, better quality of labour, scale of output and good management practice, the exogenous factors comprise interest rates, tax policies, infrastructure facilities, weather conditions, law and order and the overall state of the economy.

Productivity, in turn, is the measure of efficiency in use of resources (or inputs) in the production of various goods and services. A comparison with the peer groups or over time, highlights if 'productivity' is high or low and whether there is improvement/ deterioration in condition during the period under consideration. Some of the important parameters used for measuring 'productivity' are capacity utilization, inventory in relation to sales and energy use in the enterprise. The paragraphs below discuss each of these measurements of productivity in relation to CPSEs.

4.1 Capacity Utilization

Capacity utilization in this report has been measured based on the installed/rated capacity. Wherever installed/rated capacity is not available for various reasons, the assessment of the management vis-à-vis capacity utilization in the enterprises has been accepted. In the case of multiple-product units, moreover, capacity utilizations have been worked out with reference to major products.

Table 4.1
Capacity utilization in CPSEs

S. No.	Description	2009-2010	2008-2009	2007-2008
(1)	(2)	(3)	(4)	(5)
1.	Units which have recorded 75% or more capacity utilization	50(67)	43(58)	48(62)
2.	Units which have recorded 50% or more but less than 75%	10(13)	15(20)	16(21)
3.	Units which have recorded less than 50% capacity utilization	15(20)	16(22)	13(17)
	Total	**75(100)**	**74(100)**	**77(100)**

(Figures in brackets show percentages)

Table 4.1 below shows the capacity utilization in CPSEs during the last three years. Capacity utilization in CPSEs during 2009-10 has been better than previous years. As many as 50 CPSEs out of a sample of 75 units recorded capacity utilization of 75% and more during 2009-10 as compared to 43 CPSEs out of 74 units in 2008-09 and 48 CPSEs out of 77 units in 2007-08.

The detailed enterprises-wise statement, indicating the unit-wise capacity utilization for major products during the last three years is given in the section on Statements & Appendices at the end of this Volume (Statement No.18). The paragraphs below discuss enterprise-wise rated capacity and extent of utilization, under the various cognate groups.

4.1.1 Iron & Steel

The capacity utilization in the cognate group of Iron & Steel in respect of five CPSEs, during the last 3 years, is shown below:-

- The Mishra Dhatu Nigam Ltd. produced 2429 MT of alloys during 2009-10 as against 1908 MT produced in the previous year.

Table 4.1.1
Capacity utilization in CPSEs

S.No.	CPSE	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	MishraDhatu Nigam Ltd.	Super Alloys	2729 (MT)	89	70	70
2.	Maharashtra Electrosmelt Limited	High Carbon Ferro Mangenese	50000 MT	142	138	129
		Silico Manganese	32765 MT	129	109	115
		Medium Carbon Ferro Manganese	2160 MT	74	82	90
3.	Sponge Iron India Ltd.	Sponge Iron	60,000 TPA	53	51	72
4.	Ferro Scrap Nigam Ltd.	Recovery of scrap	11.50 Lakh MT	100.43	93.42	94.53
5.	Rashtriya Ispat Nigam Ltd.	Hot metal	3.4 ml.t	115	104	115
		Liq. steel	3.0 ml.t	113	105	111
		Bars	0.71 ml.t	123	116	121
		Wire rods	0.85 ml.t	119	114	117
		Saleable steel	2.66 ml.t	119	102	116

(MT – Metric Tonne; TPA – Tonne per annum)

- Maharashtra Electrosmelt Limited produced 114816 MT of Ferro Alloys during the year 2009-10 as compared to 106192 MT during the previous year.
- Sponge Iron India Limited produced 31,845 Tonne per annum (TPA) of Sponge Iron during the year 2009-10 as compared to 30,489 Tonne per annum during the year 2008-09.
- Ferro Scrap Nigam Limited made 11.75 lakh MT of Recovery & processing of scrap from slag & handling of slag during the year 2009-10 as compared to 10.93 lakh MT in the previous year.
- The Rashtriya Ispat Nigam Ltd. produced 3.90 million tonne of hot metal, 3.40 million tonne of liquid steel, 0.87 million tonne of bars, 1.02 million tonne of wire rods and 3.17 million tonne of saleable steel during 2009-10 as against a production of 3.55 million tonne of hot metal, 3.15 million tonne of liquid steel, 0.83 million tonne of bars, 0.97 million tonne of wire rods and 2.70 million tonne of saleable steel during the previous year.

4.1.2 Minerals and Metals

The capacity utilization in respect of seven CPSEs in the cognate group of Minerals and Metals for the years 2007-08, 2008-09 and 2009-10 is shown below: -

- FCI Aravali Gypsum and Minerals India Limited excavated 723354 MT of Gypsum during the year 2009-10 as compared to 915404 MT in the previous year.

Table 4.1.2

S.No.	CPSE	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	FCI Aravali Gypsum & Minerals (India) Ltd.	Gypsum	905000 MT	80	101	105
2.	Hindustan Copper Ltd.	Wire Rod	60,000 MT	70	86	97
		Cathodes	49,500 MT	35	61	91
3.	Indian Rare Earths Ltd.	Ilmenite	5,10,000 MT	70	75	88
		Rutile	22300 MT	59	71	84
		Zircon	32500 MT	57	77	94
4.	KIOCL Limited	Iron Ore Pellets	3.5 Million Tonne	36	38	55
		Pig Iron	0.216 Million Tonne	29	55	73
5.	MOIL Limited [formerly Manganese Ore (India) Ltd.]	Elect. Mangan. Dioxide	1000 Tonnes	115	124	112
		Ferro Mangan.	10000 Tonnes	95.55	101.20	111.30
6.	NMDC Limited	Iron Ore	306.00 lakh Tonne	77.79	102.20	106.87
7.	National Aluminium Company Ltd.	Bauxite	48 lakh MT	101.64	97.92	97.60
		Alumina	15.75 lakh MT	101.05	100.10	100.03
		Aluminium	4.32 lakh MT	99.88	103.4	104.48

(MT – Metric Tonne)

- The Hindustan Copper Ltd. produced 17516 MT of cathode and 41999 MT of wire rods during 2009-10 as compared to 30036 MT of cathode and 51777 MT of wire rods during the previous year respectively.
- The Indian Rare Earths Ltd. produced 355105 MT ilmenite, 13138 MT rutile and 18553 MT zircon during the year 2009-10. The corresponding figures for the previous year were 356340, 13856 and 19392 MT respectively.
- KIOCL Limited produced 1.273 million tonne of iron ore pellets and 0.062 million tonne of pig iron during 2009-10 as compared to 1.316 million tonne of iron ore pellets and 0.118 million tonne of pig iron in 2008-09.
- MOIL Limited produced 1150 tonnes of Electrolytic Manganese Dioxide and 9555 tonnes of Ferro Manganese during the year 2009-10 as against 1240 tonnes and 10120 tonnes during the previous year.
- NMDC Limited produced 238.03 lakh tonne of Iron Ore during the year 2009-10 as compared to 285.15 lakh tonne in the previous year.
- National Aluminium Company Limited produced 48.79 lakh MT of Bauxite, 15.92 lakh MT of Alumina and 4.32 lakh MT of Aluminium during the year 2009-10. The corresponding figures for the previous year were 47.00 lakh, 15.77 lakh and 3.61 lakh MT respectively.

4.1.3 Coal And Lignite

The capacity utilization in respect of eight CPSEs in the cognate group of Coal & Lignite for the last 3 years is shown below:-

Table 4.1.3

S.No.	CPSE	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Central Coalfields Ltd.	OC Coal	91.69 M. Cum.	92.8	87.4	97.1
		UG Coal	2.332 MT	63	59	61
2.	Eastern Coalfields Ltd.	Raw Coal	28.578 MT	105.18	95.78	70.92
3.	Mahanadi Coalfields Ltd.	Coal	158.66 M.Cum.	96	86	93
4.	Northern Coalfields Ltd.	Coal	60.67 MT	77.30	81.02	85.84
5.	South Eastern Coalfields Ltd.	Coal	113.17 MT	95.44	98.33	95.90
6.	Western Coalfields Ltd.	Coal	146.403 MT	111.66	111.68	98.02
7.	Neyveli Lignite Corpn. Ltd.	Lignite	24.0 MT	92.97	88.35	89.78
8.	Coal India Limited	Coal	449.60 MT	95.92	97.96	90.94
9.	Bharat Coking Coal Ltd.	Washed Coal	11.63 MT	28.3	28.5	34.8

- Central Coalfields Limited produced 85.100 M.cum of OC Coal and 01.471 MT of UG Coal during the year 2009-10 as compared to 82.174 M.cum and 01.558 MT during the previous year.
- Eastern Coalfields Limited produced 30.06 MT of Raw Coal during the year 2009-10 as compared to 28.14 MT in the previous year.
- Mahanadi Coalfields Limited produced 104.08 MT of Coal during the year 2009-10 as compared 96.34 MT during the previous year.
- Northern Coalfields Limited produced 67.67 MT of Coal during the year 2009-10 as compared to 63.65 MT in the previous year.
- South Eastern Coalfields Limited produced 108.01 MT of Coal during the year 2009-10 as compared 101.15 MT during the previous year.
- Western Coalfields Limited produced 45.735 MT of Coal during the year 2009-10 as compared 44.700 MT during the previous year.
- The Neyveli Lignite Corporation Ltd. produced 22.338 MT of lignite during 2009-10 as compared to 21.307 MT during the previous year.
- The Coal India Limited produced 431.27 MT of Coal in 2009-10 as compared to 403.73 MT in 2008-09.
- Bharat Coking Coal Limited produced 1326.2 thousand tonne of washed coal during the year 2009-10 as compared to 1604.5 thousand tonne in the previous year.

4.1.4 Electricity

The capacity utilisation in respect of eight CPSEs in the cognate group of Electricity for the last 3 years is shown below :

Table 4.1.4

S.No.	CPSE	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	NTPC Limited	Electricity	28840 MU	90.81	91.14	92.24
2.	NHDC Limited	Electrical Energy	1520 MW	94.66	98.12	98.45
3.	Neyveli Lignite Corporation Ltd.	Power Gross (MU)	2490 MW	80.94	72.28	79.81
4.	North Eastern Electric Power Corporation Ltd.	Electricity	1130 MW	82.16	97.62	98.88
5.	Nuclear Power Corpn. of India Ltd.	Electricity	4560 MW	61	50	54
6.	Power Grid Corporation of India	Transmis-sion	75,290 MVA	99.77	99.55	99.65
7.	Satluj Jal Vidyut Nigam Ltd.	Energy	1500 MW	106.15	95.08	92.79
8.	THDC India Ltd.	Electricity	1000 MW	83.97	100.00	100.00

(MU – Million Units; MW – Million Watts; MVA – Million Volts per annum)

- NTPC Limited generated 218840 Million Units of Electricity during 2009-10 as against 206939 Million Units during the previous year.
- NHDC Limited generated 3071.22 Million Units of Electrical Energy during 2009-10 as against 2368.45 Million Units during the previous year.
- Neyveli Lignite Corporation produced 17656 Million Units of power during 2009-10 as compared to 15768 Million Units during the previous year.
- North Eastern Electric Power Corporation Ltd. generated 4549 Million Units of Electricity during 2009-10 as compared to 5405 Million Units in the previous year.
- Nuclear Power Corporation of India Ltd. generated 18831 Million Units of Electricity during 2009-10 as compared to 14927 Million Units during the previous year.
- Power Grid Corporation of India commissioned 3,842 Ckt km of Transmission line during the year 2009-10 as compared to 4,340 Ckt km in the previous year.
- The Satluj Jal Vidyut Nigam Limited generated 7018.81 Million Units of Energy during 2009-10 as against 6608.69 Million Units during the previous year.
- THDC Limited generated 2116.79 Million Units of Energy during 2009-10 as against 3164.23 Million Units during the previous year.

4.1.5 Petroleum

The capacity utilisation in respect of seven CPSEs in the cognate group of Petroleum for the last 3 years is shown below:

Table 4.1.5

S.No.	CPSE	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Bharat Petroleum Corporation Ltd.	Crude	19.5 MMT	104.6	102.3	107.4
2.	Chennai Petroleum Corporation Ltd.	Manali - Crude	9.5 MMT	100	102	103
		CBR - Crude	1.0 MMT	51	42	46
3.	Hindustan Petroleum Corporation Ltd.	Crude	14000 TMT	113	122	129
4.	Indian Oil Corporation Ltd.	Crude Oil	49700 TMT	102.0	103.3	101.1
5.	GAIL (India) Limited	LPG	1112376 MT	98.8	97.8	93.7
		Pentane + Naphtha/SBPS	193197 MT	83.3	82.8	76.9
		Polymers	410000 MT	101.8	102.45	115.1
6.	Numaligarh Refinery Limited	LPG, MS, ATF, SKO, HSD, RPC, CPC, Sulphur	3.0 MMT	87.3	75.0	85.6
7.	Mangalore Refinery Petrochemicals Limited	Crude	9690000 MT	105.73	129.89	129.48

(TMT – Thousand Metric Tonne; MMT – Million Metric Tonne; MT – Metric Tonne)

- Chennai Petroleum Corporation Ltd. achieved 10.05 MMTPA of Crude thruput during 2009-10 as against 10.12 MMTPA in the previous year.
- During 2009-10, Hindustan Petroleum Corporation Ltd. achieved 16.77 MMT thruput as against 15.81 MMT in the previous year.
- The combined throughput by the seven refineries of the Indian Oil Corporation Ltd. during the year 2009-10 was 50695.6 TMT as against the previous year's throughput of 51364.7 TMT. IOC produced 21.17 MT of HSD, 4.22 MT of SKO, 4.95 MT of MS, 1.69 MT of LPG and 2.15 MT of ATF during the year 2009-10. The corresponding figures for the year 2008-09 were 21.81 MT, 4.26 MT, 4.83 MT, 1.73 MT and 2.04 MT respectively.
- Bharat Petroleum Corporation Ltd. produced 20.4 MMT of Crude Processed during the year 2009-10 as compared to 19.9 MMT during the previous year.
- The GAIL (India) Ltd. produced 10.99 lakh MT of LPG during 2009-10 as against a production of 10.88 lakh MT during the previous year. It also produced 417186 MT polymers as compared to 420026 MT in previous year.
- NRL produced 2.619 MMT of LPG, MS, ATF, SKO, HSD, RPC, CPC & Sulphur in 2009-10 as compared to 2.251 MMT in the previous year.
- MRPL has processed 124.97 lakh MT of crude in 2009-10 as compared to 125.86 lakh MT in 2008-09. The name plate capacity is changed to 11,820,000 MT in 2009-10.

4.1.6 Fertilizers

The capacity utilization by the three CPSEs in the cognate group of Fertilizer during the last 3 years is shown below:-

Table 4.1.6

S.No.	CPSE	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Madras Fertilizers Ltd.	Ammonia	346500 MT	74.5	67.0	76.5
		Urea	486750 MT	89.6	83.4	90.5
		NPK	840000 MT	-	-	4.2
		Bio-fertilizer	250 MT	174.7	183.3	155.3
2	National Fertilizers Ltd.	Urea	3230700 MT (06-07)	102.3	103.5	101.1
3.	Rashtriya Chemicals and Fertilizers Ltd.	Thal – Urea	1706800 MT	104	112	107
		Thal – Ammonia	990000 MT	114	111	107
		Trombay – Methanol	49000 MT	89	109	127
		Trombay – Suphala	300000 MT	163	157	156
		Trombay – Ammonia-V	297000 MT	111	94	89

(MT – Metric Tonne)

- The Madras Fertilizers Ltd. produced 2.58 lakh MT ammonia, 4.36 lakh MT urea and 0.07 lakh MT NPK during 2009-10. The corresponding production figures for the previous year were 2.81 lakh MT ammonia, 4.73 lakh MT urea and 0.57 lakh MT NPK.
- The National Fertilisers Ltd. produced 33.30 lakh MT of urea during 2009-10 as against the production of 33.44 lakh MT during the previous year.
- The Rashtriya Chemicals and Fertilizers Ltd. produced 17.82 lakh MT Urea, 0.44 lakh MT Methanol and 4.90 lakh tonne Suphala during the year 2009-10 as against 19.04 lakh MT Urea, 0.54 lakh MT Methanol and 4.71 lakh tonne Suphala during the previous year.

4.1.7 Chemicals And Pharmaceuticals

The capacity utilization in respect of four CPSEs in the cognate group of Chemicals & Pharmaceuticals is shown below:-

Table 4.1.7

S.No.	Name of Enterprises	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Bharat Immunologicals and Biologicals Corporation Ltd.	Oral Polio Vaccine	600 M. Doses	0	3.2	2.1
		Zinc Dispersible Tablet	240 M. Tablets	23.3	0	0
2	Hindustan Antibiotics Ltd.	Vials	742.5 lakh	68.32	92.77	84.82
		Tablets	2400 lakh	94.05	85.68	80.95
		Capsules	2040 lakh	46.16	59.47	59.30
		I.V. Fluids	120 lakh	80.40	92.62	88.17
		Agrochem	48 lakh	126.23	121.49	108.91
3	Hindustan Fluorocarbons Ltd.	CFM-22	1265 MT	74.35	70.37	38.08
		PTFE	500 MT	17.18	4.35	22.80
4	Hindustan Salts Ltd.	Liquid Bromine	900 TPA	36	35	48
5	Indian Drugs & Pharmaceuticals Ltd.	Tablets	2961 Million nos.	23.0	31.13	42.73
		Capsules	590 Million nos.	29.0	22.34	10.36
		Liquid Orals	396 Kilo liters	56.0	19.58	24.34
		Dry Syrup	36 Lakh bottles	85.0	128.5	47.01
6	Projects & Development India Ltd.	Catalyst	1260 MT	4.69	14.44	8.33

(KL – Kilo Liters; TPA – Tonne Per Annum; MT – Metric Tonne)

doses of Oral Polio Vaccine during 2008-09, but there was no production of OPV during 2009-10.

- The Hindustan Antibiotics Ltd. produced 2257 lakh tablets, 942 lakh capsules and 96.48 lakh I.V. fluids during 2009-10. The comparative figures for the previous year were 2056 lakhs, 1213 lakhs and 111.15 lakhs respectively.
- Hindustan Fluorocarbons Ltd. produced 940.5 MT CFM-22 and 85.88 MT PTFE during 2009-10 as against the production of 890.17 MT and 21.73 MT respectively during the previous year.
- Bharat Immunologicals and Biologicals Corporation Ltd. produced 56.0 million Zinc Dispersible Tablets during the year 2009-10, but there was no production Zinc Dispersible Tablets during the previous year. It produced 19.0 million
- Hindustan Salts Ltd. produced 319 MT of liquid bromine during the year 2009-10 as against 315 MT during the previous year.
- Indian Drugs & Pharmaceuticals Ltd. produced 684.5 Million tablets, 168.3 Million capsules, 220.7 Kilo litres of liquid orals and 30.7 lakh bottles of Dry Syrup during 2009-10. The comparative figures for the previous year were 644.9 Million, 107.23 Million, 158.6 Kilo litres and 25.7 lakh bottles respectively.
- Projects & Development India Ltd. produced 59 MT Catalyst during the year 2009-10 compared to 182 MT during the previous year.

4.1.8 Heavy Engineering

The capacity utilisation in respect of six CPSEs in the cognate group of Heavy engineering for last 3 years is shown below:-

- Bharat Heavy Electricals Ltd. produced 10595 MW of turbine, 9760 MW of generator and 7.9 Lakh MT of boilers, valves & boiler auxiliaries during 2009-10 as compared to 7572 MW turbine, 7239 MW generator and 6.4 Lakh MT boilers, valves & boiler auxiliaries during the previous year.

Table 4.1.8

S.No.	CPSEs	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Bharat Heavy Electricals Limited	Turbine	10000 MW	106	76	116
		Generator	10000 MW	98	72	123
		Boilers, Valves & Boilers Aux.	417014 MT	190	153	188
		Power Transformers	20500 MVA	94	106	117
		Electrical Machines	1340 Nos.	112	101	118
2.	Bharat Heavy Plate & Vessels Limited	Process plants, Industrial Boilers, etc.	23210 MT	21.97	25.32	50.78
3.	Bharat Wagon & Engg. Co. Ltd.	Wagons	880 VUs	29	20	45
4.	Braithwaite & Co. Ltd.	Wagon	1200 VUs	83.4	52.6	49.6
		Bogie	1800 Nos.	58.6	65.2	62.8
		Coupler	1000 Nos.	23.2	32.5	28.6
		Steel Castings	3500 MT	51.0	56.9	55.8
5.	Burn Standard Co. Ltd.	Wagon	2100 VUs	38.6	37.8	51.2
		Bogie	2400 Nos.	38.4	31.8	32.9
		Coupler	2400 Nos.	5.8	17.2	46.2
		Refractory	61292 MT	217.6	155.1	174.8
6.	Tungabhadra Steel Products Ltd.	Hydro Mech. Equipments & structurals	8213 MT	1.72	1.47	1.49
		Hydel Power generation	50.09 Lakh Units	98.71	63.30	116.15

(MT – Metric Tonne; MW – Million Watt; MVA - Million Volts per annum; VUs -)

- Bharat Heavy Plate & Vessels Ltd. produced 5100 MT of Process Plants, Industrial Boilers, etc. during 2009-10 as compared to 5876 MT during the previous year.
- Bharat Wagon & Engineering Company Ltd. produced 254 VUs of Railway Wagons during the year 2009-10 as compared to 176 VUs during the previous year.
- Braithwaite & Co. Ltd. produced 1001 VUs Wagons; 1074 Bogies; 232 Couplers and 1938 MT Steel Castings during the year 2009-10. The corresponding figures during the previous year were 631 VUs, 1174 nos., 325 nos. and 1993 MT respectively.
- Burn Standard Co. Ltd. produced 810 VUs Wagons; 921 Bogies; 139 Couplers and 133386 MT Refractories during the year 2009-10. The corresponding figures during the previous year were 781 VUs, 764 nos., 413 nos. and 101749 MT respectively.

- Tungabhadra Steel Products Ltd. produced 141 MT hydro mechanical equipments & structurals and 50.244 lakh units of hydel power during the year 2009-10 as compared to 121 MT and 31.707 lakh units in the previous year.

4.1.9 Medium And Light Engineering

The capacity utilization in respect of nine CPSEs in the cognate group of Medium & Light engineering for the last 3 years is shown below: -

- The Tea Division of Andrew Yule and Co. Ltd. produced 105.52 lakh Kg of tea during the year with a capacity utilization of 94.2% as against a production and capacity utilization of 91.37 lakh Kg and 81.6% during the previous year. It produced 3,22,000 KVA transformers and 70,300 KVA regulators in 2009-10 as compared to 6,05,774 KVA transformers and 64,903 KVA regulators in 2008-09.
- Biecco Lawrie & Co. Limited produced 1403 switchgear panels and blended 1687 KL of lube oil in 2009-10 as compared to 1297 nos. and 1582 KL in the previous year.

Table 4.1.9

S.No.	CPSEs	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Andrew Yule & Co. Ltd.	Black Tea	112 lakh Kgs.	94.22	81.58	82.89
		Transformers	501500 KVA	64.40	112.00	144.00
		Regulators/ Rectifiers	255000 KVA	29.91	27.62	31.57
2.	Biecco Lawrie Limited	Control & Switchgear	... nos.	85	102	94
		Lube oil blending	10000 KL	--	17	16
3.	Bharat Pumps and Compressors Ltd.	Pumps	283 nos.	46	56	47
		Compressors	23 nos.	192	91	89
		Gas Cylinders	48000 nos.	46	27	32
4.	Central Electronics Limited	Solar PV Modules	10000 KW	20	29	28
5.	Electronics Corporation of India Ltd.	Electronic Fuzes	4 lakh nos.	87	13	--
		Energy Meters	10 lakh nos.	30	22	0
		Hybrid Micro Circuits	10 lakh nos.	19	19	18
		Electronic Voting Machines	2 lakh nos.	25	39	0
6.	HMT Machine Tools Ltd.	Machine tools & Printing	1262 nos.	46	55	62
7.	ITI Limited	OCB - 283	1000 KL	13.20	8.40	18.20
		GSM – Infra BTS	6 ML (6000 BTS)	91.83	34.05	16.50
		Optic Fibre SDH	48000 nos.	57.94	42.80	3.30
		Smart/Sim Card	12 M. nos.	34.25	119.42	64.42
8.	Rajasthan Electronics & Instruments Ltd.	Electronic Milk Analyser	4500 nos.	189.28	173.82	158.22
		SPV Modules	2000 Kwp	111.15	68.45	73.90
		Wind Power	20 lakh Kwh	77.34	75.06	57.65
9.	Richardson and Cruddas (1972) Ltd.	Fabrications	28300 MT	71	58	47
		Plant equip.	2960 MT	145	188	113
		Hand Pump	20000 nos.	2	3	5

(KL – Kilo Liters; KW – Kilo Watt; MT – Metric Tonne)

- Bharat Pumps and Compressors Ltd. produced 84 pumps and 25 compressors as against its installed capacity of 283 and 23 respectively in 2009-10. The corresponding production in the previous year was 93 and 22. It produced 23464 gas cylinders in 2009-10 as against 11770 in 2008-09.
- Central Electronics Ltd. produced 2002 KW Solar PV modules during the year 2009-10 as compared to 2906 KW during the previous year.
- Electronics Corporation of India Ltd. produced 3.49 lakh electronic fuzes; 3 lakh energy meters; 1.88 lakh hybrid micro circuits and 50,000 electronic voting machines in 2009-10. The corresponding production in the previous year was 0.52 lakh, 2.20 lakh, 1.85 lakh and 78,000 respectively.
- HMT Machine Tools Ltd. produced 580 machine tools and printing machines in 2009-10 as compared to 687 in the previous year.
- ITI Limited produced 132 KL of OCB-283; 5511 BTS of GSM-infra; 27,810 optic fibre SDH and 4.11 million nos. of Smar/Sim Card during 2009-10. The corresponding figures during the previous year was 84 KL, 2043 BTS, 20,542 and 14.33 million nos. respectively.
- Rajasthan Electronics & Instruments Ltd. produced 8518 Electronic Milk Analysers; 2223 Kwp Solar PV modules and 15.47 lakh Kwh Wind Power during the year 2009-10 as compared to 7822 electronic milk analysers; 1369 Kwp SPV and 15.01 lakh Kwh Wind Power during the previous year.
- Richardson and Cruddas has produced 20039 MT fabrications during 2009-10 against 16539 MT in the previous year.

4.1.10 Transportation Equipment

The capacity utilization in respect of five CPSEs in the cognate group of Transportation Equipment for the last 3 years is shown below:

Table 4.1.10

S.No.	CPSEs	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	BEML Ltd.	Mining & Construction, Railway & Metro and Defence products	76.02 lakh SMH	114	114	114
2	Cochin Shipyard Ltd.	Ship Building	1.50 lakh DWT	81	82	117
3	Goa Shipyard Ltd.	Shipbuilding	5.85 SSU	102.24	100.77	84.79
4	Hindustan Aeronautics Ltd.	Standard Man Hours	Lakh SMH	106	104	105
5	Hindustan Shipyard Ltd.	Shipbuilding	75250 DWT	90	85	98

(SSU – Standard Ship Unit; DWT – Dead Weight Tonnage; EFU – Effective Frigate Unit; SMH – Standard Man Hours)

- BEML Limited made combined achievement in Mining & Construction, Railway & Metro and Defence products of 86.69 lakh hours during 2009-10 as compared to 89.09 lakh hours in the previous year.
- Cochin Shipyard Ltd. built 121035 DWT of ships during the year 2009-10 as compared to 122097 DWT in the previous year. However, the output of the work done in the Indigenous Aircraft Carrier project is not measurable in DWT and therefore there is reduction in the capacity utilization for the year 2009-10.
- The Goa Shipyard Limited produced 5.98 standard ship units in 2009-10 as compared to 5.89 Standard ship units in the previous year.
- Since the product-wise information in Hindustan

Aeronautics Limited is of classified nature, the annual production is represented in terms of Standard Man Hours (SMH) in lakhs. The production during 2009-10 was 310.32 lakhs as compared to 287.22 lakhs in the previous year.

- Hindustan Shipyard Ltd. built 67,572 DWT of ships during the year 2009-10 as compared to 63,772 DWT in the previous year.

4.1.11 Consumer Goods

The capacity utilization in respect of nine CPSEs in the cognate group of Consumer Goods for the last 3 years is shown below:-

- Artificial Limbs Manufacturing Corporation of India produced 3681 nos. Mechanical Hands, 61319 nos. Axilla Crutch, 26126 nos. Wheel Chairs, 60250 nos. Tricycles and 23386 nos.

Table 4.1.11

S.No.	CPSEs	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Artificial Limbs Manufacturing Corporation of India	Mech. Hand	6300 nos.	58.43	95.76	68.33
		Axilla Crutch	62400 nos.	98.27	97.04	97.69
		Wheel Chair	30000 nos.	87.09	88.18	82.77
		Tricycle	78000 nos.	77.24	88.10	82.62
		Hearing Aid	25200 nos.	92.80	91.25	80.33
2.	Cement Corpn. of India	Cement	14.46 lakh MT	66.96	68.50	65.13
3.	HLL Lifecare Ltd. (formerly, Hindustan Latex Ltd.)	Condoms	1316 M.Pcs	100	97	80
		Blood Bags	9.63 M.Pcs	85	137	121
		Copper T	5.50 M.Pcs	74	69	51
4.	Hindustan Newsprint Ltd.	Newsprint	100000 MT	101	108	116
5.	Hindustan Paper Corpn. Ltd.	Newsprint	2 lakh MT	83.32	87.51	105.87
		Chlorine Gas (Liquified)	18150 MT	70.97	74.57	116.89
		Caustic Soda	36300 MT	49.96	52.02	66.28
		Calcium Hypochlorite	14310 MT	39.28	39.77	50.12
		Hydrochloric Acid	6600 MT	32.36	35.47	44.73
		Chlorine Dioxide	1090 MT	58.53	72.39	93.67
6.	NEPA Ltd.	Newsprint	88,000 TPA	32.30	50.81	58.44
7.	Security Printing and Minting Corpn. of India Ltd.	Coins	3840 M.Pcs	151.90	174.06	94.83
		Bank Notes	3950 M.Pcs	180	157	130
8.	Tyre Corporation of India Ltd.	Automotive Tyre	23,310 MT	9	41	76
9.	Hindustan Photofilms Mfg. Co. Ltd.	Cine Products	5.060 M. Sq.M	0.08	0.20	0.18
		X-Ray Films	12.330 M. Sq.M	6.57	6.51	3.01
		Graphic Arts	2.250 M. Sq.M	6.00	6.00	5.56

(M.Pcs – Million Pieces; MT – Metric Tonne; TPA – Tonne Per Annum)

Hearing Aids in 2009-10. The corresponding figures for the previous year were 6033, 60553, 26455, 68718 and 22995 respectively.

- The Cement Corporation of India Ltd. produced 9.68 lakh MT cement during the year 2009-10 as compared to a production of 9.56 lakh MT during the previous year.
- HLL Lifecare Ltd. (formerly Hindustan Latex Ltd.) produced 1320 million pieces of condoms during the year 2009-10 as compared to 1273 million pieces in the previous year.
- The Hindustan Newsprint Ltd. produced 100546 MT of newsprint during 2009-10 as against 108005 MT during the previous year.
- The production of writing & printing paper by Hindustan Paper Corporation Ltd. during the year 2009-10 was 166639 MT as compared to 175020 MT during the previous year.
- The NEPA Ltd. produced 28425 MT of newsprint during 2009-10 as against 44715 MT during the previous year.
- Security Printing and Minting Corporation of India Ltd. produced 5832.88 Million pieces of Coins and 7083 Million pieces of Bank Notes during the year 2009-10 as compared to 4455.90 Million pieces of Coins and 6144 Million pieces of Bank Notes during the previous year.
- Tyre Corporation of India Ltd. is doing 100% Jobbing work. Capacity Utilization depends on availability of jobbing work. Due to global economic slow down there was recession in tyre industry and company could not secure any jobbing order during the period December, 2008 to January, 2010.
- In Hindustan Photofilms Manufacturing Co. Ltd., production during the year 2009-10 was 0.814 M. Sq. M as against 0.813 M. Sq. M during the previous year.

4.1.12 Crude oil

The capacity utilisation in respect of two CPSEs in the cognate group of Crude Oil for the last 3 years is shown below:-

Table 4.1.12

S.No.	CPSEs	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Oil and Natural Gas Corporation Ltd.	Crude Oil	MMT	26.46	27.13	27.93
		Natural Gas	BCM	25.59	25.44	25.12
2.	Oil India Ltd.	Crude Oil	000KL	4072	3930	3520
		Natural Gas	MSCM	2415	2269	2341
		LPG	MT	44950	47610	48165
		Condensate	KL	35630	37182	38004

4.1.13 Textiles

The capacity utilization in respect of one enterprise in the cognate group of Textiles is shown below:-

During the year 2009-10, National Textiles Corporation Ltd. has produced 298.75 lakh kilograms of yarn and 127.32 lakh meters of cloth as compared to 281.45 lakh kilograms of yarn and 140.19 lakh meters of cloth during the previous year.

Table 4.1.13

S.No.	CPSEs	Product	Installed Capacity	Capacity Utilization (%)		
			(2009-10)	2009-10	2008-09	2007-08
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	National Textile Corporation Ltd.	Yarn	1155770 Spindles	79.39	67.49	73.10
		Cloth	1374 Looms	78.81	73.45	71.94

4.2 Inventory Management

Materials management plays a significant role in improving the operational efficiency and the profitability of an enterprise. It helps the enterprise in achieving higher return on investment through improving the cash flow position and minimizing the locked up period of working capital. Materials management, therefore, needs to be given due importance in CPSEs for performance improvement.

Table4.2.1belowshowsthatmaterialsmanagement in CPSEs has improved over the years. The inventory level, which was 72 days cost of production/turnover value as on 31.3.1997 declined to 54 days cost of production/turnover value as on 31.3.2010 (Table-4.2.1). These figures do not, however, include inventories held by Food Corporation of India, Cotton Corporation of India Ltd. and Jute Corporation of India Ltd. as these corporations derive their business income from holding of stocks / warehousing / rental income.

Table 4.2
Level of Inventories in CPSEs (1996-97 to 2009-10)

Year ending	Value of Inventory (₹ cr.)	Cost of Production/ Turnover Value (₹ cr.)	Level of Inventory * (No of days), vide Cost of Production / Turnover Value
31.3.1997	40815	206658	72
31.3.1998	41661	218940	69
31.3.1999	44404	278720	58
31.3.2000	52414	354446	54
31.3.2001	50717	425100	44
31.3.2002	52175	431362	44
31.3.2003	58282	466444	46
31.3.2004	59705	513334	42
31.3.2005	73642	626427	43
31.3.2006	90885	714841	46
31.3.2007	101527	836922	44
31.3.2008	128688	958346	49
31.3.2009	126327	1147734	40
31.3.2010	161787	1088604	54

Note.: Level of Inventory = (Value of Inventory ÷ Cost of Production/Turnover Value) x 365 days.*

An attempt has been made in the paragraphs below to present an overview of the inventory position in CPSEs during 2009-10, both cognate groupwise and company-wise. CPSEs operating in Industrial Development and Technical Consultancy Services, Tourist Services, Financial Services as well as Section 25 Companies have been excluded from this review.

4.2.1 Aggregate Analysis

Table 4.2.1 below shows the level of inventory position in CPSEs cognate groupwise during the last two years. There is an increase in the level of inventory in the Manufacturing sector from 44 days as on 31.3.2009 to 60 days as on 31.3.2010. In the case of Mining Sector the level of inventory, which was 39 days as on 31.3.2009 has gone up to 45 days as on 31.3.2010.In the case of Services Sector, as well, the level of inventory that was 26 days as on 31.3.2009 went up to 43 days as on 31.3.2010. In Electricity Sector, , however, the level of inventory that was 26 days as on 31.3.2009 has come down to 23 days as on 31.3.2010. The level of inventory also came down in the case of Agriculture sector from 109 days as on 31.3.2009 to 59 days as on 31.3.2010.

Table 4.2.1
Level of Inventories in CPSEs, Cognate Groupwise (2008-09 to 2009-10)

(₹ crore)

Cognate Group	Value of Inventory, as on 31.3.2010		Value of Inventory, as on 31.3.2009	
(a) Agriculture Sector				
1. Agro-based Industries	122.81	59	136.06	109
Total	122.81	59	136.06	109
(b) Electricity Sector				
1. Electricity Generation	4475.23	26	4355.08	28
2. Electricity Transmission	344.90	9	297.57	10
Total	**4820.13**	**23**	**4652.65**	**26**
(c) Manufacturing Sector				
1. Chemicals & Pharma-ceuticals	243.52	44	256.82	45
2. Consumer Goods	1413.29	93	1548.16	116

3. Fertilizers	1550.94	37	1661.07	33
4. Heavy Engineering	9495.29	115	8088.41	118
5. Medium & Light Engineering	4023.80	92	4128.33	121
6. Petroleum (Refinery & Mktg.)	70686.62	41	46707.41	24
7. Steel	11873.32	104	13755.68	105
8. Textiles	118.06	52	109.98	30
9. Transportation Equipment	27800.69	454	24055.93	438
Total	**127205.53**	**60**	**100311.79**	**44**
(d) Mining Sector				
1. Coal & Lignite	4395.48	43	3678.88	36
2. Crude Oil	5323.90	41	4726.16	32
3. Other Minerals & Metals	1938.66	72	2245.87	86
Total	**11658.04**	**45**	**10650.91**	**39**
(e) Services Sector				
1. Contract & Construction Services	7883.19	243	1122.91	42
2. Telecom-munication Services	5217.99	73	4764.35	63
3. Trading & Marketing Services	3631.53	15	3374.41	15
4. Transport Services	1248.12	17	1313.83	17
Total	**17980.83**	**43**	**10575.50**	**26**

There was a reduction in the level of inventory in terms of number of days in the sub- groups sectors of Agro based Industries, Electricity Generation, Electricity Transmission, Chemicals & Pharmaceuticals, Consumer Goods, Heavy Engineering, Medium & Light Engineering, Steel and Other Minerals & Metals.

The level of inventory, however, went up in sub-groups, such as, Fertilizers, Petroleum (Refinery & Marketing), Textiles, Transportation Equipments, Coal & Lignite, Crude Oil, Contract & Constructions Services and Telecommunication Services.

It remained unchanged in sub-groups, such as, Trading & Marketing Services and Transport Services. Overall, the level of inventory which was 40 days cost of production/turnover value in 2008-09 went up to 54 days cost of production/turnover value in 2009-10.

Paragraphs below discuss the inventory position in each CPSE under the different cognate groups.

4.2.2 Heavy Engineering

The value of inventory held by the eight CPSEs under this group (except the two holding companies viz. BBUNL and BYNL which do not have any inventory holding) stood at ₹9495.29 crore representing 115 days cost of production as on 31.3.2010 as against ₹8088.41 crore representing 118 days cost of production as on 31.3.2009. The value of inventory and the level of inventory for the CPSEs under Heavy Engineering during the last two years is shown in the Table 4.2.2 below:

Table 4.2.2

S. No.	Name of the Company	Value of Inventory (₹cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bharat Heavy Electricals Ltd.	9235.46	7837.02	117	119
2.	Bharat Heavy Plate & Vessels Ltd.	45.69	53.48	167	88
3.	Bharat Wagon & Engg. Co. Ltd.	7.84	6.55	73	90
4.	Braithwaite & Co. Ltd.	19.10	19.13	54	113
5.	Burn Standard Company Ltd.	22.13	43.60	23	66
6.	Heavy Engineering Corpn. Ltd.	159.31	123.06	109	110
7.	Triveni Structurals Ltd.	4.68	5.00	29	36
8.	Tungabhadra Steel Products Ltd.	0.81	0.57	10	8
	Total	**9495.29**	**8088.41**	**115**	**118**

4.2.3 Medium & Light Engineering

The value of inventory held by 21 CPSEs under this group as on 31.3.2010 stood at ₹4023.805 crore representing 92 days cost of production as compared to ₹4128.33 crore representing 121 days cost of production as on 31.3.2009. Company-wise inventory position during the last two years is shown in the Table 4.2.4 below:

Table 4.2.3

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Andrew Yule & Co. Ltd.	30.70	29.32	49	45
2.	Balmer Lawrie & Co. Ltd.	91.70	78.85	22	19
3.	Bharat Dynamics Ltd.	570.26	623.10	283	362
4.	Bharat Electronics Ltd.	2448.61	2417.91	198	206
5.	BEL Optronics Ltd,	9.75	10.56	58	103
6.	Bharat Pumps & Compressors Ltd.	67.13	65.11	104	123
7.	Biecco Lawrie Ltd.	10.70	10.70	62	79
8.	Central Electronics Ltd.	44.10	36.84	133	91
9.	Electronics Corpn. of India Ltd.	194.68	126.81	60	45
10.	Hindustan Cables Ltd.	27.64	28.05	20	23
11.	HMT Bearings Ltd.	3.21	7.52	61	154
12.	HMT Chinar Watches Ltd.	6.83	7.45	59	37
13.	HMT Ltd.	29.00	40.38	44	64
14.	HMT Machine Tools Ltd.	95.76	117.40	140	180
15.	HMT Watches Ltd.	32.31	39.37	63	82
16.	I.T.I Ltd.	284.22	403.35	19	58
17.	IDPL (Tamilnadu) Ltd.	2.05	0.15	76	9
18.	Instrumentation Ltd.	55.59	63.85	56	82
19.	Rajasthan Electronics & Instruments Ltd.	8.77	11.68	34	49
20.	Richardson & Cruddas (1972) Ltd.	3.31	4.63	11	16
21.	Vignyan Industries Ltd.	7.38	5.30	85	65
	Total	**4023.80**	**4128.33**	**92**	**121**

Of these 21 pubic enterprises, 14 could reduce the level of inventory during 2009-10 while in the case of 7 companies there has been increase in the level of inventory in comparison to the previous year.

4.2.4 Other Minerals & Metals

There were 12 companies operating in this group. The value of inventory held by these companies during the year 2009-10 stood at ₹1938.66 crore representing 72 days cost of production. At the end of 2008-09, the value of inventory stood at ₹ 2245.87 crore representing 86 days cost of production. Company-wise details are presented in the Table 4.2.4 below:

Table 4.2.4

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bisra Stone Lime Company Ltd	6.40	0.00	44	0
2.	FCI Aravali Gypum & Minerals (I) Ltd.	0.56	0.61	6	6
3.	Hindustan Copper Ltd.	253.26	259.96	78	78
4.	Indian Rare Earths Ltd.	65.73	60.62	71	71
5.	J&K Mineral Dev. Corpn. Ltd.	0.00	0.01	0	13
6.	Kudremukh Iron Ore Co. Ltd.	224.85	647.04	75	168
7.	Manganese Ore (India) Ltd.	47.54	58.36	46	49
8.	National Aluminum Co. Ltd.	944.92	841.90	79	81
9.	National Mineral Dev. Corpn. Ltd.	298.75	302.46	58	57
10.	Eastern Investment Ltd	0.00	0.00	0	0
11.	Uranium Corporation of India Ltd.	69.08	75.31	54	72
12.	Orissa Mineral Development Co. Ltd	27.57	0.00	185	0
	Total	**1938.66**	**2245.87**	**72**	**86**

Out of these 12 public enterprises, 5 CPSEs could reduce the level of inventory during 2009-10 while in the case of 3 CPSEs there has been increase in the level of inventory in comparison to the previous year. Inventory position remained unchanged in the case of 4 companies.

4.2.5 Fertilizers

There were 7 companies engaged in the production of fertilizers. The value of inventory held by them as on 31.3.2010 stood ₹1550.94 crore representing 37 days cost of production as compared to an inventory value of ₹1661.08 crore representing 33 days cost of production at the end of previous year. Company-wise analysis of inventory is given in Table 4.2.5 below:

Table 4.2.5

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Brahmaputra Valley Fertilizer Corpn.	39.72	37.30	44	36
2.	Fertilizers & Chem. (Travancore) Ltd.	575.85	412.61	89	63
3.	Fertilizer Corpn. of India Ltd.	15.56	42.29	10	20
4.	Hindustan Fertilizer Corpn. Ltd.	2.14	2.15	2	1
5.	Madras Fertilizers Ltd.	160.96	125.36	44	37
6.	National Fertilizers Ltd.	347.12	348.68	26	25
7.	Rashtriya Chemicals & Fertilizers Ltd.	409.59	692.69	28	33
	Total	**1550.94**	**1661.08**	**37**	**33**

The level of inventory decreased in the case of 2 public enterprises and increased in case of 5 public enterprises during 2009-10 .

4.2.7 Chemicals & Pharmaceuticals

The value of inventory held by 11 enterprises belonging to this group as on 31.3.2010 stood at ₹243.52 crore representing 44 days cost of production as compared to ₹256.82 crore representing 45 days cost of production as on 31.3.2009. company wise inventory position during the last two years is given in Table 4.2.6 below:-

Table 4.2.6

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bengal Chem. & Pharmaceuticals Ltd.	25.51	18.47	110	75
2.	Bharat Immunologicals & Biologicals Ltd.	2.11	1.17	94	37
3.	Hindustan Antibiotics Ltd.	22.79	40.94	50	82
4.	Hindustan Insecticides Ltd.	58.26	64.59	91	110
5.	Hindustan Flurocarbons Ltd.	18.44	10.85	295	174
6.	Hindustan Organic Chemicals Ltd.	76.26	66.96	48	38
7.	Indian Drugs & Pharmaceuticals Ltd.	6.80	14.43	4	9
8.	Indian Medicines & Pharmaceuticals Corp. Ltd.	6.81	4.92	120	130
9.	Karnataka Antibiotics & Pharma. Ltd.	18.20	26.88	36	46
10.	Orissa Drugs & Chemicals Ltd.	0.96	0.38	67	31
11.	Rajasthan Drugs & Pharm. Ltd.	7.38	7.23	33	34
	Total	**243.52**	**256.82**	**44**	**45**

Of the 11 public enterprises, 6 could reduce the level of inventory during 2009-10; while in case of 5 enterprises there has been increase in the level of inventory in comparison to the previous year.

4.2.7 Steel

The value of inventory held by 6 companies stood at ₹11873.32 crore at the end of 2009-10 as compared to ₹13755.68 cr. at the end of 2008-09. The level of inventory has come down from 105 days cost of production at the end of the previous year to 104 days cost of production at the end of 2009-10. Company-wise position is shown in Table 4.2.7 below.

The value of inventory has decreased in 3 enterprises during 2009-10 as compared to the previous year, increased in the case of 2 enterprises and remained unchanged in the case of Maharashtra Elektrosmelt Ltd in comparison to the previous year.

Table 4.2.7

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Ferro Scrap Nigam Ltd.	10.41	10.61	25	29
2.	Maharashtra Elektrosmelt Ltd.	58.19	60.52	75	75
3.	Mishra Dhatu Nigam Ltd.	320.46	298.42	370	353
4.	Rashtriya Ispat Nigam Ltd.	2451.52	3215.28	100	130
5.	Sponge Iron India Ltd.	5.28	9.66	31	65
6.	Steel Authority of India Ltd.	9027.46	10161.19	103	97
	Total	**11873.32**	**13755.68**	**104**	**105**

4.2.8 Transportation Equipment

There are nine CPSEs engaged in the production of transportation equipment. The value of inventory held by these companies stood at ₹ 27800.69 crore during the year 2009-10 as against ₹24055.93 crore during 2008-09. The level of inventory, which was 438 days cost of production at the end of previous year has gone up to 454 days cost of production at the end of 2009-10. Company-wise details are shown in Table 4.2.8 below:

Out of these nine enterprises, 5 could reduce the level of inventory during 2009-10; while it increased in

Table 4.2.8

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bharat Earth Movers Ltd.	1653.00	1620.57	178	205
2.	Cochin Shipyard Ltd.	339.28	428.13	122	137
3.	Garden Reach Shipbuilders & Engrs. Ltd.	1531.55	838.58	669	452
4.	Goa Shipyard Ltd.	363.07	302.48	175	239
5.	Hindustan Aeronautics Ltd.	13660.03	10431.18	391	326
6.	Hindustan Shipyard Ltd.	478.90	372.15	263	256
7.	Hooghly Dock & Port Engineers Ltd.	73.21	78.34	408	501
8.	Mazagon Dock Ltd.	9674.82	9964.78	1309	1458
9.	Scooters India Ltd.	26.83	19.72	59	50
	Total	**27800.69**	**24055.93**	**454**	**438**

the case of 4 enterprises during the year 2009-10 in comparison to the previous year.

4.2.9 Consumer Goods

The fourteen CPSEs under the Consumer Goods cognate group held an inventory valued at ₹1413.29 crore representing 93 days cost of production during 2009-10 as against an inventory equal to ₹1548.16 crore during the previous year representing 116 days cost of production. Company-wise position is shown in Table 4.2.9 below:

The level of inventory decreased in the case of six CPSEs during 2009-10 and increased in the case of six enterprises. In the case of Hindustan Vegetable Oils Corpn Ltd and Hooghly Priting Co. Ltd , the level of inventory remained unchanged.

Table 4.2.9

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Artificial Lims Mfg. Co. of India.	17.55	18.97	117	127
2.	Cement Corpn. of India Ltd.	123.53	113.41	144	132
3.	HLL Lifecare Ltd .	53.12	61.30	46	59
4.	Hindustan Newsprint Ltd.	61.06	144.15	74	161
5.	Hindustan Paper Corpn. Ltd.	186.11	144.21	90	75
6.	Hindustan Photo Films Manfg. Co. Ltd.	14.18	14.11	5	6
7.	Hindustan Salts Ltd	0.51	0.60	8	7
8.	Hindustan Vegetable Oils Corpn. Ltd.	1.66	1.71	24	24
9.	Hooghly Printing Co. Ltd.	0.40	0.28	16	16
10.	Nagaland Pulp & Paper Mills Ltd.	0.32	0.22	8	4
11.	NEPA Ltd.	15.76	25.65	42	62
12.	Sambhar Salts Ltd	4.57	2.45	124	58
13.	Security Printing & Minting Corpn. of India	931.09	1018.68	141	195
14.	Tyre Corpn. of India Ltd.	3.43	2.42	54	24
	Total	**1413.29**	**1548.16**	**93**	**116**

4.2.10 Petroleum (Refinery & Marketing)

There were eight companies operating in the Petroleum (Refinery & Marketing) sector as on 31.3.2010. These companies had an inventory valued at ₹ 70686.62 crore as on 31.3.2010 compared to ₹ 46707.41 at the end of the previous year. The level of inventory stood at 24 days as on 31.3.2009 as against 41 days as on 31.3.2010. Company-wise details of inventory are shown in the Table 4.2.10 below:

Table 4.2.10

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bharat Petroleum Copn. Ltd.	12028.86	6823.92	33	17
2.	Chennai Petroleum Corpn. Ltd.	4378.24	2470.28	55	25
3.	GAIL (India) Ltd.	631.70	601.41	9	9
4.	GAIL Gas Ltd	0.00	0.00	0	0
5.	Hindustan Petroleum Corpn. Ltd.	12579.22	8793.24	42	28
6.	Indian Oil Corpn. Ltd.	36404.08	25149.60	46	28
7.	Mangalore Refinery & Petrochemicals Ltd.	3114.36	1890.43	32	16
8.	Numaligarh Refinery Ltd.	1550.16	978.53	72	40
	Total	**70686.62**	**46707.41**	**41**	**24**

The value of inventory increased in the case of 6 enterprises during 2009-10 and remained unchanged in the case of one enterprise in comparison to the previous year. GAIL Gas Ltd did not hold any inventory during 2009-10.

5.2.11 Crude Oil

There were four companies operating in Crude Oil sector as on 31.3.2010. These companies had inventory valued at ₹5323.60 crore as on 31.3.2010 against ₹4726.16 crore at the end of previous year. The level of inventory stood at 32 days as on 31.3.2009 against 41 days as on 31.3.2010. Company-wise details of inventory are shown in the Table 4.2.12 below:

Table 4.2.11

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bharat Petro Recourses Ltd.	0.00	0.00	0	0
2.	Oil & Natural Gas Corpn. Ld.	4678.58	4060.67	43	33
3.	Oil India Ltd.	453.38	501.00	33	38
4.	ONGC Videsh Ltd.	191.94	164.49	23	15
	Total	**5323.90**	**4726.16**	**41**	**32**

The value of inventory increased in the case of 2 enterprises during 2009-10 and decreased in case of one enterprise in comparison to the previous year. Bharat Petro Resources Ltd did not hold any inventory during 2009-10.

4.2.12 Agro-Based Industries

The value of inventory held by 3 companies belonging to this group stood ₹122.81 crore at the end of 2009-10 against ₹136.06 crore at the end of the previous year. The level of inventory decreased to 59 days at the end of 2009-10 against 109 days at the end of previous year. Details of inventory held by these enterprises are shown in Table 4.2.12 below:

Table 4.2.12

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Andaman & Nicobar lsl. Forest & Plantation	0.69	1.72	49	130
2.	National Seeds Corpn. Ltd.	50.55	29.95	40	38
3.	State Farms Corpn. of India Ltd	71.57	104.39	89	232
	Total	**122.81**	**136.06**	**59**	**109**

Of the 3 enterprises under this group, 2 could reduce the level of inventory during 2009-10; the level of inventory increased in the case of one enterprise as compared to the previous year.

4.2.13 Coal & Lignite

The value of inventory held by 8 CPSEs belonging to this group stood at ₹4395.48 crore as on 31.3.2010 against ₹3678.88 crore at the end of previous year. The level of inventory was 43 day as on 31.3.201 compared to 36 days at the end of the previous year. Company-wise details are shown in Table 5.2.13 below:

The value of inventory increased in the case of 7 CPSEs during 2009-10 and decreased in one enterprise as compared to the previous year.

Table 4.2.13

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1	Bharat Coking Coal Ltd.	938.90	707.26	73	55
2	Central Coalfields Ltd.	1177.18	968.06	93	73
3	Coal India Ltd.	26.59	19.52	12	8
4	Eastern Coalfields Ltd.	453.36	323.83	31	21
5	Mahanadi Coalfields Ltd.	452.72	518.19	37	47
6	Northern Coalfields Ltd.	407.55	359.35	34	31
7	South Eastern Coalfields Ltd.	645.01	494.21	32	27
8	Western Coalfields Ltd.	294.17	288.46	19	18
	Total	**4395.48**	**3678.88**	**43**	**36**

4.2.14 Textiles

There were 4 CPSEs in the Textiles sector as on 31.3.2010. The value of inventory held by these companies stood ₹118.06 crore at the end of 2009-10 against an inventory of ₹109.98 crore at the end of previous year. The level of inventory was 52 days during the year 2009-10 against 30 days at the end of the previous year. Company wise details are shown in Table 4.2.14 below:

Table 4.2.14

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Birds, Jute & Exports Ltd.	0.00	0.00	0	0
2.	British India Corpn. Ltd.	9.37	12.73	71	101
3.	National Jute Manufacturers Corpn. Ltd.	0.00	0.00	0	0
4.	National Textile Corpn. Ltd.	108.69	97.25	53	49
	Total	**118.06**	**109.98**	**52**	**30**

Of the 4 CPSEs, the level of inventory increased in the case of National Textile Corporation Ltdin comparison to the previous year. Birds Jute & Exports Ltd and National Jute Manufacturers Corporation Ltd. did not hold any inventory during 2009-10. The level of inventory decreased in the case of British India Corporation Ltd.

4.2.15 Electricity Generation

The value of inventory held by nine electricity generating companies as on 31.3.2010 stood at ₹4475.23 crore as compared to ₹4355.08 crore at the end of previous year. The level of inventory stood at 26 days of turnover value as on 31.3.2010 against 28 days of turnover value as on 31.3.2009. Company wise break-up of inventory is shown in the Table 4.2.16 below:

Table 4.2.15

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	National Hydroelectric Power Corpn. Ltd.	71.15	56.71	6	8
2.	National Thermal Power Corpn. Ltd.	3347.71	3243.42	26	28
3.	North Eastern Electric Power Corpn. Ltd.	84.93	65.52	30	28
4.	Nuclear Power Corpn. of India	388.77	378.14	37	46
5.	Satluj Jal Vidyut Nigam Ltd.	58.67	55.85	12	11
6.	Narmada Hydro Electric Development Corpn.	4.02	4.42	2	2
7.	REC Power Distribution Co. Ltd.	0.00	0.00	0	0
8.	Neyveli Liginite Corpn Ltd	502.96	535.85	45	58
9.	Tehri Hydro Development Corpn. Ltd.	17.02	15.17	4	5
	Total	**4475.23**	**4355.08**	**26**	**28**

Of the 9 enterprises under this group, 5 could reduce the level of inventory during 2009-10; while in case of 2 enterprises there has been increase in the level of inventory as compared to the previous year. REC Power Distribution Co. Ltd. did not hold any inventory. The level of inventory remained unchanged in the case of Narmada Hydro Electric Development Corpn. Ltd.

4.2.16 Transport Services

There were 12 public sector enterprises operating in the transportation services sector as on 31.3.2010. Of the 12 companies, Air India Air Transport Services Ltd. did not hold any inventory. The value of inventory held by remaining 11 companies stood at ₹1248.12 crore against an inventory of ₹1313.83 crore at the end of previous year. Company-wise details are shown in Table 4.2.16 below:

Table 4.2.16

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Air India Air Transport Services Ltd.	0.00	0.00	0	0
2.	Air India Charters Ltd.	38.44	39.74	10	11
3.	Airline Allied Services Ltd.	13.20	12.49	15	19
4.	Airports Authority of India	65.42	64.81	6	6
5.	Container Corpn. of India Ltd.	6.99	5.08	1	1
6.	Dredging Corpn. of India Ltd.	89.45	81.79	51	44
7.	Ennore Port Ltd.	4.79	4.79	12	13
8.	Fresh & Healthy Enterprises Ltd.	8.77	13.14	128	137
9.	National Aviation Co. of India Ltd.	867.78	964.21	24	27
10.	Pawan Hans Helicopters Ltd.	68.69	63.04	68	76
11.	Shipping Corpn. of India Ltd.	83.21	63.34	8	6
12.	Central Inland Water Transport Corpn Ltd.	1.38	1.40	201	182
	Total	**1248.12**	**1313.83**	**17**	**17**

Out of 12 enterprises, 6 could reduce the level of inventory during 2009-10 as compared to the previous year; while in the case of 3 enterprises there has been increase in the level of inventory. The level of inventory remained unchanged in the case of 2 enterprises. No inventory was held by Air India Transport Services Ltd.

5.2.17 Trading & Marketing Services

There were 21 companies in the Trading & Marketing Services cognate group during 2009-10. (Food Corpn. of India, Cotton Corpn. of India and Jute Corpn. of India have been excluded for the purpose of this analysis, as holding of stocks is a source of rental income for these enterprises). The remaining18 companies held inventory valued at ₹3631.53 crore representing 15 days of turnover value at the end of 2009-10 against an inventory of ₹ 3374.41 crore representing 15 days of turnover value at the end of previous year. Company-wise details are shown in Table 4.218 below:

Table 4.2.17

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Antrix Corporation Ltd	0.00	0.00	0	0
2.	Central Cottage Industries Corpn.	5.39	5.39	29	29
3.	Central Railside Warehousing Co. Ltd.	0.04	0.00	0	0
4.	Central Warehousing Corpn.	6.23	46.75	3	22
5.	Handicrafts & Handlooms Exports Corpn.	23.98	3.17	6	1
6.	H.M.T. (International) Ltd.	0.52	0.01	6	0
7.	India Trade Promotion Organization	0.00	0.00	0	0
8.	Karnataka Trade Promotion Organization	0.00	0.00	0	0
9.	MMTC Ltd.	2134.83	578.53	17	6
10.	MSTC Ltd.	0.00	1.65	0	0
11.	National Handloom Development Corpn. Ltd.	3.81	1.69	1	1
12.	North Eastern Handicrafts & Handlooms Corpn. Ltd.	1.32	1.39	33	42

13.	North Eastern Regional Agri. Mark. Dev. Corpn	0.86	0.59	3	6
14.	NTPC Vidyut Vyapar Nigam Ltd.	0.06	0.17	1	1
15.	PEC Ltd.	887.37	1174.94	29	42
16.	STCL Ltd.	0.11	96.39	0	16
17.	State Trading Corpn. Ltd.	567.01	1463.74	10	27
18.	Tamilnadu Trade Promotion Organization	0.00	0.00	0	0
	Total	**3631.53**	**3374.41**	**15**	**15**

Of the 18 enterprises in this group, 6 could reduce the level of inventory during 2009-10; while in the case of 3 enterprises there has been an increase in the level of inventory. No inventory was held by Antrix Corporation Ltd, Central Railside Warehousing Co. Ltd., Tamilnadu Trade Promotion Organization, Karnataka Trade Promotion Organization, India and Trade Promotion Organisation. The level of inventor remained unchanged in case of 4 CPSEs in this group.

4.2.18 Contract & Construction Services

There were 12 CPSEs operating in the Contract & Construction Services cognate group. Of the 12 companies, Mumbai Railway Vikas Corpn. Ltd. did not hold any inventory. The value of inventory held by 11 companies in this group stood at ₹7883.19 crore as on 31.3.2010 against ₹ 1122.91 crore held at the end of previous year. The level of inventory went up from 42 days in 2008-09 to 243 days in 2009-10. Company-wise details are shown in Table 4.2.18 below:

Table 4.2.18

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	BBJ Construction Co. Ltd.	23.88	19.53	112	119
2.	Bridge & Roof Co. (India) Ltd.	471.15	425.57	148	166
3.	Hindustan Prefab Ltd.	0.50	0.41	1	1
4.	Hindustan Steelworks Constn. Ltd.	5.88	23.94	3	12
5.	IRCON (International) Ltd.	373.36	430.52	43	59
6.	Konkan Railway Corpn. Ltd.	14.04	16.05	9	10
7.	Mineral Exploration Corpn. Ltd.	5.81	5.16	17	20
8.	Mumbai Railway Vikas Corpn. Ltd.	0.00	0.00	0	0
9.	National Bldg. Constn. Corpn. Ltd.	266.64	196.02	33	35
10.	National Projects Constn. Corpn. Ltd.	3.54	3.83	1	2
11.	Projects & Development India Ltd	2.42	2.88	12	17
12.	Rail Vikas Nigam Ltd.	6715.97	0.00	1401	0
	Total	**7883.19**	**1122.91**	**243**	**42**

Of the 12 enterprises, 9 CPSEs could reduce the level of inventory during 2009-10; in the case of one enterprise, there has been increase in the level of inventory compared to the previous year. It remained unchanged in the case of Hindustan Prefab Ltd. No inventory was held by Mumbai Railway Vikas Corporation Ltd. during 2009-10.

4.2.19 Telecommunication Services

There were four CPSEs operating in this group. Millennium Telecom Ltd. did not hold any inventory during the current year. The aggregate inventory in this group stood at ₹5217.99 crore as on 31.3.2010 against ₹ 4764.35 crore at the end of the previous year. The level of inventory went up from 63 days in 2008-09 to 73 days in 2009-10. Company-wise details are shown in Table 4.2.19 below:

Table 4.2.19

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Bharat Sanchar Nigam Ltd.	5058.33	4572.58	83	73
2.	Mahanagar Telephone Nigam Ltd.	158.51	191.27	16	16
3.	Railtel Corporation India Ltd.	1.15	0.50	1	0
4.	Millennium Telecom Ltd.	0.00	0.00	0	0
	Total	**5217.99**	**4764.35**	**73**	**63**

Of the 4 CPSEs under this group, the level of inventory increased in the case of 2 enterprises during 2009-10. It remained unchanged in the case of Mahanagar Telephone Nigam Ltd. No inventory was held by Millennium Telecom Ltd.

4.2.20 Electricity Transmission

The value of inventory held by 4 electricity transmission companies as on 31.3.2010 stood at ₹344.90 crore against ₹297.57 crore at the end of the previous year. The level of inventory stood at 10 days as on 31.3.2009 against 9 days as on 31.3.2010. Company-wise breakup of inventory is shown in Table 4.2.20 below:-

Table 4.2.20

S. No.	Name of the Company	Value of Inventory (₹ cr.)		Level of Inventory (No of days) vide cost of prodn.	
		2009-10	2008-09	2009-10	2008-09
1.	Power Grid Corporation of India	344.90	297.57	18	19
2.	NTPC Electric Supply Co. Ltd.	0.00	0.00	0	0
3.	REC Transmission Project Co. Ltd	0.00	0.00	0	0
4.	Rural Electrification Corpn Ltd	0.00	0.00	0.00	0.00
	Total	**344.90**	**297.57**	**9**	**10**

Of the four CPSEs, the level of inventory decreased in the case of Power Grid Corporation of India Ltd. during the year. NTPC Electric Supply Co. Ltd., REC Transmission Project Co. Ltd and Rural Electrification Corpn. Ltd. did not hold any inventory.

4.3 Energy Conservation In CPSEs

Rapid increase in energy demand and consumption in all the sectors of the economy, consequent to high economic growth, has led to overall shortage of both peak and normal energy requirements. In this perspective, the issue of energy conservation has assumed great importance. Since CPSEs form a significant component of the Indian economy, they have a major role to play in the area of energy conservation. This is a greater wait in energy conservation to-day as creating or building additional capacity is not only capital intensive but also time consuming. Additional investment for energy conservation measures, if necessary, is more cost effective and yields results within a short period.

The cognate group-wise pattern of energy consumption is given in Annex 4.1. Energy cost as percentage of total cost is, moreever, higher in the case of fertiliser, transportation, other metals & minerals and power generation on (Annex 4.1). In absulute terms, steel and telecom sectors are also observed to be high energy consuming sector. In the light of various energy conservation measures, the energy consumption in regard to fertiliser sector declined significantly in 2009-10 in comparison to 2008-09. Energy conservation measures taken by some of the CPSEs during the year 2009-10 are given in the following paragraphs.

4.3.1 Bharat Heavy Electricals Limited (BHEL)

Energy Management is an important thrust area in BHEL. BHEL's focus on Energy Management is through the following initiatives :

- Energy Awareness – Conducting awareness programme at offices, factory, site and township.
- Energy Conservation – Identification of thrust areas for conservation of energy by arresting leakages, use of alternate fuel etc.
- Energy Efficiency – through modification of existing systems, establishment of a system for collection, analysis, and reporting on the organization's energy consumption and costs.
- Use of Renewable energy resources.

Following main activities were performed in BHEL, during the financial year 2009-10.

- National Energy Conservation Week is celebrated every year in India. Across the company, the week (14-21 December, 2009) was celebrated and various activities for awareness generation on Energy Conservation were organized.
- The meet of Nodal Officers on Energy Management was held on 21st December 2009 at the Corporate Office. Nodal Officers shared the new initiatives taken, and the best practices being followed. The group also visited "Led Expo" held at Pragati Maidan, New Delhi to see the LED lighting fitting/fixtures and exploring LED's usage for lighting applications.
- BHEL presented two case studies; on "Energy Conservation", and "Boilers etc. – Steam Systems" in one-day seminar on Energy Efficiency for PSEs organized by Department of Heavy Industry.

4.3.2 KIOCL Limited

The electricity consumption per tonne of Pellet production in kwh was lower during the year as compared to the previous year. The decrease in consumption of electricity was on account of stabilization of Pellet production during the year. The company celebrated the Energy Conservation Day on 14-12-2009 at Mangalore. Various competitions were held as a part of Energy Conservation week and prizes were distributed to the winner of various competitions conducted during the week.

4.3.3 ITI Limited

The following energy conservation measures were taken during the year by the company

- Recommendations of Bureau of Energy Efficiency has been implemented from time to time.
- Regulated operation of plants and equipments, to meet the optimum requirements.
- Monitoring of power factor at regular interval.
- Replacement of old high capacity equipments with multiple optimum size capacity energy efficient ones.
- Replace conventional electromagnetic ballast fluorescent fitting with electronic ballast fluorescent tri phosphate lamp fitting.
- Running time of various tube wells/compressors has been rationalized.
- Replacement old and less energy efficient UPS by portable small capacity UPS.
- Offloading of Central Air Conditioning plant in winter season.
- Use of timer control devices in street lighting etc.
- Diverting the load on single transformer to reduce no-load losses.
- Power factor management of power distribution.

4.3.4 Bharat Petroleum Corporation Limited (BPCL)

Energy conservation efforts received continuous focus, both in terms of improvement in operations/ maintenance as well as far development of new projects. Continuous monitoring of fuel consumption and hydrocarbon loss is undertaken using sophisticated instruments and data acquisition system. An elaborate energy accounting system and management information system is an important feature of the BPCL Mumbai and Kochi Refineries operation.

As a part of Oil and Gas Conservation fortnight 2010, M/s. CHT organized a detailed "Furnace Efficiency & Insulation Effectiveness" survey for BPCL Refineries along with external experts. In addition, various awareness programe on the Oil Conservation theme were conducted, both inside & outside the refineries, including free PUC check up for vehicles.

(i) Mumbai Refinery

The following energy conservation and loss control measures were adopted during the year 2009-10 which have resulted in significant fuel savings.

- High emissivity ceramic coating was applied to process heater tubes and refractory walls of the new Crude Unit and Vacuum Unit furnaces (F 101 & 102) during March 2009 shutdown to achieve better heat absorption in the radiant section and fuel saving.
- Special type insulation was installed on bare hot tubes of the furnace.
- Foam / chemical cleaning of air fin coolers in the new Crude Unit complex and C3C4 Unit to improve performance.
- "Chemical decontamination" technique was adopted for the first time in the refinery during turnaround. This helps in improved heat exchanger cleaning and neater decontamination for carrying out plant jobs.
- During turnaround, services of the combustion technology expert from M/s. Ham worthy Combustion Global Solutions was obtained, to get suggestions for adopting the best practices leading to improved efficiency of the furnace.
- Replacement of air pre-heater in CDU 2 furnace for improved heat recovery.
- Installation of step-less control in the Make-Up-Gas Compressor (MUG) of the Hydrocracker Unit to reduce power consumption.
- Modification in LOBS plant to warn up feed pump – fuel saving by reducing furnace load.
- Processing of the hydrogen rich Catalytic Reformer Unit (CRU) off gas in the Hydrocracker Unit PSA system and new Hydrogen Unit to reduce overall Naphtha consumption for hydrogen generation.
- "Dry ice blast" cleaning of the convection section of heaters to improve efficiency.
- Stopping of Naphtha fuel pumps in CPP – LNG replacing Naphtha fuel in Gas Turbines.
- Chemical cleaning of HVU heater process tubes during shutdown to improve heat absorption.
- Impellor trimming of VDU pump for power saving.
- Use of energy saving CFL lamps.
- Energy saving device/torroidal core transformers for energy saving in lighting circuits.
- Installation of capacitor banks to maximize power factor.
- A comprehensive survey on the "Instrument Air Supply System" was carried out to identify and rectify instrument air leaks.
- A survey of "Fuel oil line insulation effectiveness' was carried out to improve the fuel oil temperature for better viscosity at burners.
- Maximization of crude throughput in modern highly efficient Integrated Crude & Vacuum Unit.
- Antifoulant chemical injection in all Crude and Vacuum units.
- Injection of fire side chemical additive in HVU / CRU Heater.
- Regular cleaning of preheat exchangers of process units.
- Reduction of slops by tighter operational control.
- Continuous monitoring and control of all parameters of Furnaces and Boilers.
- Continuous monitoring and control of flare.
- Regular steam insulation and steam leak surveys.
- Replacement of insulation for various steam headers.
- Replacement leaky steam traps & regular attending to steam leaks. Replacement leaky steam traps & regular attending to steam leaks.

(ii) Kochi Refinery

The following energy conservation and loss control measures were adopted during the year 2009-10, resulting in significant fuel savings.

- Commissioning of HP and MP steam turbine for cooling water pump in DHDS.
- LP Steam extraction from recycle gas compressor in DHDS.
- DEA flow optimization in fuel gas Amine Absorption Unit.
- Cascade control for reboilers in Aromatic Recovery Unit.
- Automatic Combustion Control for DHDS change heater.
- LP steam air pre-heater for crude charge heaters.

- FRP blades for air-fin fans in crude unit.
- Stopping of one feed water pump of boiler UB8/9.
- Variable Speed Drives on-site trial runs conducted for 16 pumps in Kochi Refinery.
- Energy Audit on Air conditioning systems conducted.
- Functioning of ENCON Clubs in Schools & Colleges revitalized with the number of ENCON Clubs increasing from 25 to 50.

4.3.5 Neyveli Lignite Corporation Ltd. (NLC)

The following energy conservation measures taken during the year:

- Detailed energy audit was conducted in Unit-2 (210 MW) & Station auxiliaries in TPS-I Expansion and the recommendation are being implemented in a phased manner.
- 1000 LPD Solar Water Heater is installed for steam cooking in TPS-I Expansion.
- In all the new machines and drive heads for the Mine-ii Expansion, Programmable Logic Control Systems are used instead of the conventional contactors. Control circuits and variable voltage and variable frequency systems speed control techniques for all main motor loads have been introduced to save considerable energy.
- In vulcanizing division in Mines the conveyor belt joints are being carried out using ceramic heater plates instead of the conventional heater plates which consume only 50% of energy compared to the conventional one.
- As a part of energy conservation measures in TPS-II one stage of Condensate Extraction Pump in three units (4,5&6) of Stage-II was reduced after studying the techno economical feasibility. As a result of this stage reduction, about 87 KW of power in each Condensate Extraction Pump is being saved which helps to earn revenue of about ₹40 lakh per year without any appreciable modification cost.
- Installation of timer switches, replacement of conventional Sodium Vapour Lamps with Compact Fluorescent Lamps, replacement of conventional energy meters with electronic energy meters are being done in plants and township which save lot of energy.

4.3.6 National Fertilizers Limited (Nfl)

The company is committed to latest energy conservation measures on every possible front. Few of the major energy conservation measures undertaken during the year are as follows :

- Energy Saving Project (ESP) of Ammonia Plant along with capacity augmentation of Urea plant in Vijaipur I has been undertaken at a cost of ₹ 325 crore. The projects are expected to be commissioned by August 2011. Energy savings to the tune of 0.12 GCal/mt of urea is foreseen in addition to increase in production by 16%.
- Capacity augmentation project of Vijaipur II unit has been undertaken at a cost of ₹ 438 crore. The project is expected to be commissioned by September 2011. In addition to increase in production by 23% and energy savings to the tune of 0.04 GCal/MT of Urea.
- Project for installation of Carbon Dioxide Recovery (CDR) plant in Vijaipur I has been initiated at an estimated cost of ₹131 crore. Project is expected to be commissioned by November 2011. This will not only help in the augmentation of production of Urea, but also reduce emission of Green House gases.
- Vijaipur scheme is under implementation for utilization off gases from MP inert washing columns in urea plant as fuel in CPP boilers. This will save equivalent energy in terms of fuel gas.

4.3.7 Hindustan Petroleum Corporation Limited

Mumbai and Visakh Refineries accorded highest priority to energy conservation (encon) and have undertaken several Encon measures by operational improvements and implementing of Encon projects. Various Encon measures undertaken during 2009-10 are as follows:

(i) Mumbai Refinery

- Mumbai Refinery achieved the lowest ever specific Energy Consumption (MBN) of 88.7 during the year as against 89.0 of last year.
- Started receiving Reliquefied Natural Gas (RLNG) through GAIL receiving station / pipeline as a result of which all GTGs and other furnaces were switched to Gas. This has helped in reduction of emission levels and saving of internal fuel cost of Refinery.
- Achieved 100% Gas firing in GTG's which has reduced specific energy consumption from 0.40 to 0.35.

• Carried out online chemical cleaning of furnaces to bring down the Bridge Wall Temperature (BWT), Stack temperature and to improve furnace efficiency.

• Improved DHDS furnace preheats temperature by installing the additional exchanger in raw Diesel pre heat circuit.

• Commissioned propane Gas recovery system in Lube Refinery, first stage (wax recovery circuit) by in house modification.

• Carried out Leak Detection Survey for fugitive emission benchmarking in Refinery process units. Leaks identified and being attended.

• Observed Oil & Gas Conservation Fortnight from 15th – 31st January, 2010 to generate mass awareness amongst the public for conservation of petroleum products. During the fortnight, several activities were organized inside and outside the Refinery.

(ii) Visakh Refinery

• Carried out periodic steam leak/steam trap survey during the year by engaging external agency using ultrasonic detector and visual methods. The repairs of identified leaks were arrested.

• Carried out compressed air leak survey by appointing external agency by using ultrasonic detector. The repairs of identified leaks were attended.

• Carried out online furnace cleaning by using solid spray resulting in reduced stack temperatures and increased heater efficiencies.

• Commissioned new CO boiler FS fan turbine to motor auto cut in facility for continuous running of turbine in place of motor, thereby avoiding venting of turbine steam.

• Commissioned Demulsifier injection facility to crude receipt line to reduce sediment (BS&W) to crude feeding units.

• Commissioned Antifoulant chemical injection facilities to SR preheat exchanger in CDU-3 to reduce fouling of exchangers.

• Identified fouled preheat exchangers by Heat 4N software and cleaning was carried out for sustaining preheat temperature in CDUs.

• Commissioned Automatic blow down facility for steam drum in Hydrogen unit resulting in energy saving due to controlled blow down.

• Oil and Gas conservation fortnight was observed in Visakh Refinery from 15th – 31st January, 2010. Various mass awareness activities were carried out on the occasion amongst public for conservation of petroleum products. During the fortnight, several activities like Furnace / boilers efficiency, insulation effectiveness. Encon slogan contest in English, Hindi and Telugu were organized inside & outside the Refinery.

• Implement automatic air/fuel ratio control (for 11-F-01 & 42-F-01).

• Automatic control system to minimize LPG vaporization.

4.3.8 BML Limited

The company continues to give emphasis on conservation of energy. The efficiency of energy utilization is closely monitored to attain a higher level of effective conservation. Some of the measures adopted during the year for energy conservation have been as mentioned below:-

• The centralized compressed air system was decentralized by providing two new compressors and also air leak was arrested permanently.

• Provided one float switch to control hot water pumps to operate at high and low in the engine testing water cooling tower.

• Introduction of 2 nos. 5000 liters capacity solar water heating system in Workers Canteen for preheating of water at 60 degrees centigrade.

• Replacement of Inverter welding sets (18KW) in place of old type Kirloskar make Motor Generator welding set of 30 KW

• Introduction of 150 W metal halide high bay fitting for street light in place of 800W HPMV lamp at various places in the Unit premises.

• Introduction of LED type DSL power supply indication lamps for EOT cranes and panel indication lamp in place of incandescent lamp.

4.3.9 Rashtriya Chemicals & Fertilizers Limited

The company undertook several steps for conserving energy. These include several modifications in the plants which have resulted in significant reduction in the energy consumption. Some of the measures undertaken are as follows:

(i) Thal Unit

Several measures have been undertaken in Thal Unit such as, replacement of synthesis gas compressor turbine rotor has enabled saving 18.47 MT/Hr. HP Steam corresponding to 0.11 MKcal /MT of Ammonia. Zirconium coating of primary Reformer line II and Super heater II furnaces, re-routing of off-gas generated in urea plant to steam generation plant as fuel, providing sparger to recover ammonia loss through vent stack, replacement of conventional spacer in cooling water tower fan with light weight carbon composite fibre spacer, are some of the measures under taken in Thal unit which resulted in considerable saving in energy.

(ii) Trombay Unit

In Trombay unit also several such measures as : provision of capacitor banks on 11 KV system fed from Ammonia-1, high capacity C.W pump for methyl Ammine Plant, installation of new surface condenser for Ammonium Nitrate in ANP plant, replacing 3 no. of 37 KW motor with energy efficient motors in waster treatment plant and several other measures resulted in energy saving.

4.3.10 Mahanadi Coalfields Limited (MCL)

The following steps were taken for reduction of consumption of fuel and lubricants by the company:

- Periodical overhaul of engines & regular checking of filters, hoses and tyre pressure.
- Maintenance of haul roads.
- Periodical maintenance of batteries and regular checking of self starters.

4.3.11Cochin Shipyard Limited (CSL)

The following steps were taken by CSL in respect of energy conservation:

- Leakages in the compressed air distribution system and other industrial gas lines are regularly monitored and rectified.
- Renewal of damaged pipes in phased manner.
- Portable compressors were installed at various load centers to provide compressed air at desired pressure, thereby eliminating pressure loss in lines and optimizing the usage of main air compressors, which are major energy consumers.
- Procurement and installation of energy efficient (star rated) water coolers and A/C units as replacement of damaged ones.
- Installation of 10 Nos. high mast lighting system using new generation luminaries with specialized optics for improving general yard lighting, especially from heightened level security scenario. These are provided with dual timer control for switching of 40% lamps after peak working hours from energy conservation angle coupled with optimizing the usage of street lighting.
- Provided safety relays at the primary side of welding sets for controlling the switching ON of the sets thereby eliminating the no load losses and ensuring safety of operating personnel.
- Rain water harvesting for industrial purposes thereby reducing the use of metered water and operation of water pumps.
- Limiting the long travel operation and also making use of pallets for handling group materials and thereby optimizing energy consumption for cranes.
- Optimizing use of lights/fans/A/C units.
- Switching off power supply to the areas where there is no emergency requirement during lunch interval.
- Power factor is continuously monitored & maintained near to unity pf.
- Optimized loading of DGs.
- Displayed energy saving stickers. Conducted seminars and quiz competitions for inculcating awareness among employees for energy conservation at optimum use of electric power.
- Modified the cooling water circulating system of Main Air compressors.
- Replaced old reciprocating water cooled main air compressor with new centrifugal air compressor.
- Replacement of 2 Nos. old oil cooled power transformers with dry type transformers thereby the no load losses can be reduced and also the efficiency can be improved.
- Providing turbine ventilators in local substations and shops in the yard.
- Installation of energy meters for individual offices for monitoring and control of electrical energy.
- Innovative methods of energy conservation measures are being identified and action is on for implementing the same.

• Guidelines issued from GOI from time to time have been complied with.

4.3.12 Hindustan Copper Limited (Hcl)

HCL continued to give priority to energy conservation measures at various stages of process from mining of ore to extraction of copper metal. Special efforts were made in making the operations energy efficient.

4.3.13 S J V N Limited

The following steps were taken by SJVN in respect of energy conservation:

• To meet the requirement of water in its township and offices, in place of electric driven pumps, Gravity water supply scheme utilizing the seepage water in the Value House Chamber, Jhanri was introduced, which resulted in energy saving to the tune of 6.57 lac units per year amounting to ₹30 lacs approx.

• Energy audit through Bureau of Energy Efficiency to identify more energy conservation measures is in process. Replacement of incandescent lamps with CFL lamps/energy efficient tubes at offices/township is a continuous process.

4.3.14 Security Printing And Minting Corporation Of India Limited - (Spmcil)

In pursuance to the Government Polices and Guidelines to reduce expenditure and promote new and renewable energy resources, SPMCIL engaged National Productivity Council (NPC) to carry out an exhaustive energy audit at all Units. Majority of the recommendations have been implemented and a few are under implementation.

4.3.15 Oil And Natural Gas Corporation Limited (ONGC)

The following measures were taken towards energy conservation during the year:

• 212 energy audits were conducted during FY'10. At the same time, 468 energy audits observations were neutralized.

• Energy conservation awareness and efficient use of energy by celebrating OGCF-10 at all the locations of ONGC and carried out different activities like cycle rally, LPG Quiz programme, quiz, drawing, slogan, essay competition, Drivers awareness programmes, Nukkad Natak, exhibition, free pollution check up, street play etc.

• Trainings on energy conservation techniques were imparted at all locations of ONGC to create awareness as part of energy conservation. Total 18,350 employees attended these training programme.

• New energy efficient light sources like CFL, sodium lights, T-5 Tube lights, etc., were fitted in place of inefficient lights.

• Calendars stickers & literature on "Energy Conservation Techniques" under the campaign of "URJA UDAI" were distributed among the employees and their families for awareness.

• A conference on "Emerging Technologies and issues in LED Lamps" was jointly held with UREDA.

• Trimming/stage blanking of lean amine charge pumps at Hazira Plant helped in saving to the saving to the tune of 5 Lacs kWH of energy. This projects is registered with UNFCCC as a CDM project.

• Replaced more than 15 years old 80 diesel engines in drilling rigs by energy efficient one and achieved fuel saving and higher reliability.

• Gas flaring in ONGC has been brought down from 6% of production in 2001-02 to 2.79% in 2009-10, a reduction of 784 MMSCM per annum over 2001-02, valued at about ₹5,500 million at the gas rate of US $ 4.2/ MMBTU.

4.3.16 South Eastern Coalfields Limited (SECL)

The energy conservation measures taken by the company are as under mentioned below:

• Regular monitoring of power factor of all the connection points and installation of capacitor banks for increasing power factor and thereby improving the voltage of operation to reduce the energy consumption.

• Strata Bunkers were constructed in Hasdeo, Baikunthpur, Sohagpur and Bhatgaon Areas and re-organization of transport system in mines.

• Re-organization of load pattern and installation of demand controllers at various point of supply to reduce maximum demand.

• Installation of energy saving lamps/equipments.

• Re-organization of power supply system.

• Proper ventilation stopping were made in

underground mines.

- Re-organization of pumping system by providing proper size pipe.

4.3.17 Goa Shipyard Limited (GSL)

As a measure to conserve energy, GSL has executed various energysaving projects during the year 2009-10, some of there measures are mentioned below:

- Installation of nature switches (switches working on sun light) and timers for street light control
- Installation of energy meters in the yard
- Installation of lighting transformer for bay lighting
- Installation of wind ventilator for exhaust ventilation which work without use of electrical power.

The following further energy saving measures were initiated during 2009-10:

- Installation of 250 W lamps in Bay No.1 at lower heights to eliminate use of 400 W over head lamps.
- Installation of insulated copper conductor DSL lines with better conductivity and efficiency for EOT crane in place of bare MS angles.
- Installation of variable frequency drive for centralized compressor unit
- Replacement of asbestos roof sheds with tram translucent roof sheets for better natural illumination during day time
- Conversion of canteen waste into Biogas plant, to minimize LPG use and reduced carbon emission.

4.3.18Vignyan Industries Limited (Vil)

Energy conservation measures have resulted in better efficiency for machineries and cost reduction of the company products.

The following steps were taken by VIL in respect of energy conservation:

- Efficient utilization of Induction Furnace resulted in power consumption of 1435 Kwh per ton of castings as against the industry norm of 1500 Kwh per ton.
- Power Factor correction capacitors have been installed in I.T. loads and the plant power factory is maintained at 0.97 which has resulted in the increase in efficiency and reduction in power consumption.
- To have saving in power cost, 35.40 lakh units of power has been purchased from M/s Bhorukha Power Corporation Limited, Bangalore.
- 4 HSD is being used for Heat Treatment, ladle heating and sand drying instead of LDO. This has resulted in reduction in cost.

4.3.19 National Aluminium Company Limited (NALCO)

Energy conservation measures adopted in the different units of the Company, during 2009-10, are mentioned below:

(i) Bauxite Mines

- Replacement of DC drives of Acceleration Conveyor & Apron Feeder-1
- Modifications in two Komatsu Loaders to reduce fuel consumption: Turbo Charger, Fuel Pump & Acceleration Pedals were changed in 2007 & benefit still continues.
- Radiators of HEMM top up with mineral water

(ii) Alumina Refinery

Reduction in specific fuel oil consumption in Calcination by :

- Regular and continuous operation of Hydrate bypass system
- Maintaining the PTS in calcination for operation of fine hydrate bypass most of the time.
- Maintaining product LOI and BET at slightly higher side of the allowable range also helped in reduction of oil consumption.

Reduction in specific coal consumption in hydrate circuit by:

- Reduction in specific steam consumption in process w.r.t. hydrate production from 2.08T/T.
- Improvement in Milling system output by regular classifier cleaning and other proactive maintenance measures like time based replacement/ maintenance of critical spare parts like gearbox.
- Detailed inspection of PA fan impellers and replacement of inefficient impellers of PA fans during overhauling, thereby achieving adequate velocity profile of pulverized coal from Mill to furnace.
- Time based replacement of AH baskets which resulted in effective heat recovery from flue gas to Air, and ultimately reduction in coal consumption.

(iii) Smelter Plant

- Reduction of operating voltage in HT transformers

- Reduction of operating voltage of light feeders by reduction of off-load tap of lighting transformers in 220 KV conversion S/s and various remote substations.

- Complete stoppage of oil flow when the desired temperature is achieved from earlier practice of a minimal opening (10%) of both burners.

- Launder cover for all the launders has been provided to arrest the heat losses.

(iv) Captive Power Plant

- Replacement of normal fluorescent light fitting with T-5 fitting and electronic ballast.

- Replacement of normal choke with electronic ballast.

- CWPH fore bay & Ash water fore bay level indication has been provided in the DM Plant control room. This has avoided the over flow of water from the fore bays and saved the pump running hours.

- Running hour counters have been provided in Compressors drives to know the exact running hours. This has helped to identify if there is leakage of air from instruments. Once these leakages are attended there is saving of energy.

4.3.20 Hindustan Newsprint Limited

The following steps were taken by HNL in respect of energy conservation during the year:

- Replaced 3 Nos. 15 TR package AC system with 6 Nos. 2TR Energy efficient split AC system for DIP control room, DCS room & VFD room. Achieved 15 KW power savings and 20KL of water per hour.

- Replaced Pump and Motor with Energy Efficient types for Primary Screen Feed Pump in Chemical Pulp Mill. A Power saving of 11.1 KW was achieved.

- Insulation of GL Heater/Pipe lines to Slaker, mud washer No:2 bustle pope line and Mud mixing tank were done in Causticizing plant.

- Replaced Pump and Motor with Energy Efficient types for Purifier feed Pump in De-inking Plant. Power savings for 10.6 KW was achieved.

- Replaced 5 nos. Copper ballast with Electronic chokes.

4.3.21 Chennai Petroleum Corporation Limited

The following Energy conservation measures were taken by the company during the year:

- Installation of stepless controller in OHCU MUG compressor to reduce load on the compressor motors to the extent of 0.5 MWH.

- Conversion form LPG firing to Fuel gas firing in Pt 78 SRU incinerator.

- Optimization of Fuel gas consumption by interconnection of Ref III and Ref I and II fuel gas headers.

- Replacement of conventional tube lights with LED lights in the corridors of Process Engineering Department and Ref III.

- The following schemes are executed during the shut down of Ref III and the same will be operational after start up.

- Condensate recovery schemes in VBU and SRU.

- Modification of OBSG in Pt 206 for reduction of stack temperature and increasing steam generation.

- Conversion of DEA to MDEA in Pt 209

4.3.22 Indian Oil Corporation Limited

As a part of the continued efforts towards energy conservation, a number of Energy conversation Projects have been implemented in Refineries, resulting in savings of around 82,000 SRFT during 2009-10. Some of the major investment proposals implemented for the reduction of energy consumption are mentioned below:

- Flare gas recovery system at Barauni Refinery

- Stepless control in Make-up gas compressor of DHDT & CRU units at Barauni Refinery

- H2 recovery form CLPS off-gas of HCU at Gujarat Refinery

- Installation of second heat exchanger to recover additional heat from VDU-II tempered water for pre-heating DM water for GT-2 at Haldia Refinery

- Replacement of fouled APH in HGU-1 at Mathura Refinery

- Pre-heat improvement in CDU at Mathura Refinery

- Revamp of bitumen unit with Butrox technology

at Mathura Refinery

- Energy optimization in bitumen Blowing Unit by installing additional heat exchangers in two trains at Mathura Refinery

- Replacement of gas AC compressor with Vapour Absorption Machines in TPS, MCR & ADM Building at Panipat Refinery

- Flare gas recovery system at Bangaigaon Refinery

- Installation of Helitower in CRU

4.3.23 Balmer Lawrie & Company Limited

The Company makes continuous efforts towards conservation of energy. Some of the measures taken during the year are mentioned below:

- Specific energy consumption per unit of production was monitored regularly at all manufacturing plants and corrective actions taken as required.

- Power factor correction capacitors were instated in corporate Head office to improve power factor form 0.83 to 0.98.

- Energy efficient CFLS were installed in all floors of corporate Head office to conserve energy.

- In SBU: LC, Chennai, aluminum blades of cooling tower were replaced with FRP blades to reduce power consumption.

4.3.24 NMDC Limited

The following steps were taken by NMDC in respect of energy conservation during the year:

- NMDC has set up 10.5 MW wind energy project at Chitradurga in the State of Karnataka which was commissioned in March 2009.

- NMDC has also undertaken energy audit studies through a consultant M/s Electrical Research and Development Association, Vadodara, Gujarat who have addressed energy conservation issues of Donimalai and Bacheli Complex projects and implementation of their recommendations are in progress phase wise.

- Power factor is being maintained around 0.95 with proper demand management with static capacitor on HT and LT.

- Fluorescent lamps have been installed with electronic ballasts in the residential quarters in the townships. CFL and LED lamps are being introduced in the office premises. These practices will be continued.

- Electronic fan regulators are installed as against conventional wire-wound regulators and this will be practiced.

- Timers are provided for automatic switching off of the street lights, lights in public buildings, mine haul road lighting and equipment lighting, plant illumination etc. and their functioning is being continuously monitored.

- Overall energy consumption of township is being reduced progressively by better counseling on wastage of energy in residential as well as public buildings. This effort shall be continued.

- Left over eddy current control motors are being replaced with energy efficient motors, run through VVVF drives.

- Transparent sheets are provided on the plant buildings to have natural lighting.

- Optimum feed rate is maintained in the Downhill conveyor system to generate power and feed back into the system to reduce overall energy consumption.

4.3.25 NORTH EASTERN ELECTRIC POWER CORPORATION LIMITED

Important energy conservation measures taken by the company during the year are as under:

- Adoption on combined cycle power system for gas power station at Kathalguri incorporating Waste Heat Recovery Boilers. An average of 10% improvement in efficiency is being achieved thereby saving fuel gas in large quantity.

- Introduction of high voltage distribution system for supply of construction power in the ongoing projects.

- Based on grid demand, operation of both the reservoir under Kopili H.E Project is being made with a view to achieve optimal utilization of water.

- For Doyang Reservoir, action is being taken for raising the FRL upto 333 Meter.

4.3.26 The Fertilizers & Chemicals Travancore Limited

The following steps were taken by the company. in respect of energy conservation:

- The Raw Materials/|Utilities consumption of

the products is monitored regularly by evaluating the critical parameters. The raw material/energy efficiency is reviewed on a monthly basis to identify the weak area and rectify the short comings.

- In Cochin Division a variable speed motor for the filter feed pump in phosphoric in February 2010. This will result in considerable energy saving.

- In Petrochemical Division, CPP TG frequency kept reduced from 50 cycles/second to 49.5 cycles/second, resulting in savings of 4800 KWH per day.

- In Petrochemical Division a new cooling water pump of 680 KW capacity was procured and installed for the Hyam service in place of two 585 KW cooling water pumps. This has resulted in approximate saving in energy to the extent of 490 KWH per day.

- During annual turn-around in 2009, chilled water generated in Ammonia handling section is diverted to Benzene vent condenser in main Tank Farm. This results in an annual saving of ₹ 2 lakh in energy.

4.3.27 N H P C Limited

Energy conservation measures taken by the company during the year are mentioned bealow:

- Energy audit of Dhaulinganga & Dulhasti Power Stations, have been completed and the recommendations of CPRI to improve the energy saving are being implemented by the power stations.

- Additional Investment and proposal, if any, being implemented for reduction of consumption of energy.

- Energy audit of Teesta-V Power Station is being undertaken during the current FY 2010-11.

4.3.28Mishra Dhatu Nigam Limited

Several initiatives were taken to bring improvements in specific energy conservations during the year particularly in the matter of LPG consumption. Among them include revamping and calibration of the furnaces wherever felt necessary, periodical maintenance of refractory and burner blocks, prompt repairs to re-heating furnaces and installation of flow meters, its measurement and monitoring, use of oxygen during melting, reduction of heat cycle time, compact charging, use of proper scrap mix etc.

4.3.29H M T Limited

Some of the significant energy conservation measures undertaken by the company during the year are mentioned below:

- Create energy conservation awareness across the company for optimum use of resources in the work places.

- Daily monitoring of A class loads in each of the manufacturing units like Diesel Generators, Compressors, Power Transformers, etc.

- Use of energy efficient lighting systems like mercury vapour lamps, high power sodium vapour lamps and fluorescent tube lights with electronic ballasts.

- Use of natural lighting transparent roof sheets.

- Centralized controls for shop lighting.

- Use of power capacitors for improving power factor.

- Portable compressors are being run for Energy conservation

4.3.30Rathtriya Ispat Nigam Limited

The following measures were taken, during the year, for conservation of energy:

- Installation of VFDs (Variable Frequency Drives) in DCCP-2 lifters and all overn machines of Battery-1, 2 &3.

- Replacement of existing chillers with eco friendly and energy efficient chillers (6 nos.) in Chilled Water plant 3 and 4.

- Replacement of existing chillers with eco friendly and energy efficient chillers (5 nos.) in Chilled Water Plant-1.

- Replacement of Boiler-1 Tubular Air Heater resulting in increased BF Gas utilization.

- Installation of HEA igniters in place of conventional IFM igniters in Boiler-5.

- Installation of VVF drives for wagon tipplers (5 nos.).

- Replacement of 2 nos. of Air Recuperators at furnace-2 in LMMM.

- Replacement of incandescent/Fluorescent lamps with energy efficient tube lights all over the plant.

- Installed energy savers, timer controls for reducing electrical energy consumption.

- Installation of polycarbonate sheets (translucent sheet) to utilize day lighting at various places to reduce electricity load.

• RINL signed MoU with M/s. NEDO of Japan in May'2009 for installing 20.6 MW Waste Heat recovery system on Sinter Cooler under Green Aid plan. This project is expected to be commissioned within 34 months from the date of signing of MoU. The work on this project has been started and total scope of work has been divided in to several packages and NIT for various packages in underway.

• RIL identified CDM opportunities during expansion stage as well as existing units up-gradation for claiming carbon credits and NIT has been issued for appointing consultants. The tendering is under process.

• RINL is working towards implementing BS EN:16000 Energy Management System for improving energy efficiency in the plant.

4.4 Steps Taken For Performance Improvement

Some of the measures taken by the Government and the management of the CPSEs to improve the performance of public enterprises are as under:

(i) Strengthening of MOU system

(ii) Periodic performance review by the administrative Ministries and Inter Ministerial Committee.

(iii) Delegation of enhanced powers to Board of Directors of Maharatna, Navratna, Miniratna CPSEs and other profit making CPSEs.

(vi) Professionalisation of Board of Directors and induction of eminent persons as Independent Directors.

(v) Setting up of Board for Reconstruction of Public Sector Enterprises (BRPSE) to consider inter alia revival/restructuring of sick and loss making CPSEs

(vi) Training and human resource development.

(vii) Diversification of product-mix.

(vii) Technology upgradation, research and development.

(ix) Better house keeping and improved maintenance management practices

(x) Greater emphasis on energy conservation.

(xi) Improved inventory control.

(xii) Export promotion.

International Operations of CPSEs

The CPSEs are increasingly into 'international trade' in goods and services, which has a direct bearing on earnings and expenditure of foreign exchange. During the year 2009-10, as many as 144 CPSEs out of the 217 operating CPSEs had either foreign exchange earnings (FEE) or foreign exchange expenditure (FEE). As many as 33 CPSEs were net foreign exchange earners (Annex 5.1). Out of these 33 CPSEs, seven CPSEs, namely, National Aluminium Company Ltd., ONGC Videsh Ltd., Airports Authority of India Ltd., Bharat Heavy Electricals Ltd., Cochin Shipyard Ltd., IRCON International Ltd. and KIOCL Ltd. earned (net) foreign exchange of more than ₹ 100 crore during 2009-10.

5.1 Foreign Exchange Earnings

Table 5.1 below shows the (12) CPSEs that had gross foreign exchange earnings of more than ₹ 1000 crores, during 2009-10 and 2008-09. Out of these twelve CPSEs, BHEL, ONGC Videsh, NALCO and STCIL have been net foreign exchange earners There was more than three fold increase in the foreign exchange earnings of BHEL, which went up from ₹1785 cr. in 2008-09 to ₹8263 cr. in 2009-10. (Table-5.1). The remaining CPSEs have had foreign exchange expenditure more than their foreign-exchange earnings. This is particularly so in the case of Oil Marketing Companies (OMCs).

Table 5.1
Gross Foreign Exchange Earnings of select CPSEs
(more than ₹ 1000 crores)

(₹ in crores)

S.No.	CPSE	2009-10	2008-09	Change over the previous year (%)
1	INDIAN OIL CORPORATION LTD.	13743.45	14962.63	-8.15
2	MANGALORE REFINARY & PETROCHEMICALS LTD.	11041.89	11636.18	-5.11
3	BHARAT PETROLEUM CORPN. LTD.	10301.35	6567.42	56.86
4	BHARAT HEAVY ELECTRICALS LTD.	8263.42	1784.54	363.06
5	HINDUSTAN PETROLEUM CORPN. LTD.	6382.26	6021.26	6.00
6	ONGC VIDESH LTD.	5068.54	6473.35	-21.70
7	OIL & NATURAL GAS CORPORATION LTD.	4587.10	3432.45	33.64
8	SHIPPING CORPORATION OF INDIA LTD.	3605.42	4250.91	-15.18
9	M M T C LTD.	3247.33	4594.80	-29.33
10	NATIONAL ALUMINIUM COMPANY LTD.	2075.04	2097.32	-1.06
11	STATE TRADING CORPN. OF INDIA LTD.	1493.84	1986.50	-24.80
12	P E C LTD.	1105.82	1147.68	-3.65

Export of goods & merchandise, income from Royalty & Consultancy Services and interest earnings are the major sources of foreign exchange earnings. Export of merchandise was the major source of foreign exchange earnings in both the years 2008-09 and 2009-10. Its share in total earnings improved further from 95.13 percent (₹ 70588.40 crores) in 2008-09 to 96.51 percent (₹ 75034.17 crores) in 2009-10 (Table 5.2).

Table 5.2
Foreign Exchange Earnings of CPSEs
(2009-10 and 2008-09)

S.No.	Items	2009-10	2008-09
1	Export of Goods on FOB basis	75034.17 (96.51)	70588.40 (95.13)
2	Royalty, Know-how, Professional and Consultancy fee	1309.21 (1.68)	1295.50 (1.75)
3	Interest and Dividend	162.13 (0.21)	135.16 (0.18)
4	Other Income	1239.29 (1.59)	2186.74 (2.95)
	Grand Total (i) to (iv)	**77744.80 100.00**	**74205.80 100.00**

Note: Figure in brackets are as percentage of total

5.2 Foreign Exchange Expenditure

Table 5.3 shows the (24) CPSEs that had gross foreign exchange expenditure more than ₹ 1000 crore during 2008-09 and 2009-10. In terms of change in foreign exchange expenditure during these two years, there was a significant increase in foreign expenditure in the case of ONGC Videsh, ONGC, MMTC, HAL and Shipping Corporation of India. In the case of other CPSEs, there was a general reduction in the foreign exchange expenditure.

Table 5.3
Gross Foreign Exchange Expenditure of Select CPSEs
(more than ₹ 1000 crores)

S.No.	CPSE Name	2009-10	2008-09	Change (%)
1	INDIAN OIL CORPORATION LTD.	132895.81	149943.29	-11.37
2	BHARAT PETROLEUM CORPN. LTD.	43505.35	45261.07	-3.88
3	M M T C LTD.	40694.33	30941.17	31.52
4	HINDUSTAN PETROLEUM CORPN. LTD.	29502.37	33078.61	-10.81
5	MANGALORE REFINARY & PETROCHEMICALS LTD.	26329.72	28880.31	-8.83
6	CHENNAI PETROLEUM CORPORATION LTD.	21190.34	25112.58	-15.62
7	OIL & NATURAL GAS CORPORATION LTD.	20769.63	16500.89	25.87
8	STATE TRADING CORPN. OF INDIA LTD.	17606.74	15684.87	12.25
9	STEEL AUTHORITY OF INDIA LTD.	14142.02	13820.73	2.32
10	HINDUSTAN AERONAUTICS LTD.	10519.93	8528.85	23.35
11	P E C LTD.	8612.30	9268.40	-7.08
12	BHARAT HEAVY ELECTRICALS LTD.	7736.15	6175.18	25.28
13	NATIONAL AVIATION CO. OF INDIA LTD.	4511.38	4509.56	0.04
14	M S T C LTD.	4298.55	6598.15	-34.85
15	ONGC VIDESH LTD.	4293.29	2925.41	46.76
16	SHIPPING CORPORATION OF INDIA LTD.	3576.33	2885.8	23.93
17	RASHTRIYA ISPAT NIGAM LTD.	3565.24	4012.68	-11.15
18	GAIL (INDIA) LTD.	2163.44	2050.73	5.50
19	BHARAT ELECTRONICS LTD.	2145.74	2375.72	-9.68
20	MAZAGON DOCK LTD.	1765.54	1566.56	12.70
21	RASHTRIYA CHEMICALS AND FERTILIZERS LTD.	1583.31	1919.41	-17.51
22	HANDICRAFTS & HANDLOOM EXPORTS CORP. OF INDIA LTD.	1539.94	1595.42	-3.48
23	NTPC LTD.	1419.16	1599.58	-11.28
24	BHARAT SANCHAR NIGAM LTD.	1294.85	1247.76	3.77

The Oil Marketing Companies (IOCL, BPCL, HPCL, MRPL, CPCL, ONGC and GAIL), and others, namely, MMTC, SAIL, HAL, BHEL, RINL, SCI, BEL, MDL, RCF, HHEC, NTPC and BSNL had large gross foreign exchange expenditure during both the years of 2008-09 and 2009-10. Table 5.4 below shows the expenditure of foreign exchange under different heads of import of goods (raw material/plants & machinery), consultancy fee and other payments. Import of 'raw materials' and 'capital goods', have been the major items of foreign exchange expenditure in both the years.

Table 5.4
Items of Foreign Exchange Expenditure of all CPSEs
(2009-10 and 2008-09)

(₹ in crore)

	Particulars	2009-10	2008-09
Imports (CIF Basis)			
(a)	Raw materials/Crude oil	339435.89 (91.36)	357486.05 (93.44)
	Stores, Spares & Components	10985.47 (2.96)	10446.08 (2.73)
	Capital Goods	21118.34 (5.68)	14645.30 (3.83)
	Sub Total (a)	**371539.70 (88.36)**	**382577.43 (88.29)**
Expenditure on account of			
(b)	Royalty and Consultancy fee	12301.24 (25.14)	12215.21 (24.07)
	Interest payment	1452.94 (2.97)	2440.31 (4.81)
	Others	35182.64 (71.89)	36099.03 (71.12)
	Sub Total (b)	**48936.82 (11.64)**	**50754.55 (11.71)**
	Grand Total (a + b)	**420476.52 (100)**	**433331.98 (100)**

The share of 'raw materials' / crude oil continued to claim the largest share (around 88%) of gross foreign exchange expenditures in both the years of 2008-09 and 2009-10. Exchange rate fluctuation and change in commodity prices have been also impacting the earnings and expenditures of CPSEs.

5.3 International Finance & Investment

International finance refers mainly to external commercial borrowings and raising of resources through the equity market abroad. International investment, on the other hand, comprises off-shore investment by CPSEs through joint ventures, mergers and acquisitions and operation of Indian subsidiaries abroad. Funds raised by CPSEs in the form of secured and unsecured loans (cognate group-wise), during the year 2008-09 and 2009-10 are shown at Annex – 5.2.

5.3.1 Listing of Securities of CPSEs abroad

Indian companies, both in the public and private corporate sectors, are increasingly focusing on niche areas / newer opportunities to enhance their strengths through cross border mergers and acquisitions. There is an increasing realization among Indian companies that mere organic growth is not enough to propel them towards growth, in view of the liberalization. Several CPSEs, under different cognate groups, have either formed joint ventures or have set up subsidiaries abroad for consolidating their international operations.

5.4 International Operations of Select CPSEs

The paragraphs below discuss briefly the international operations of select CPSEs as top net foreign exchange earner or foreign exchange spender :

5.4.1 National Aluminium Company Ltd. (NALCO)

Against a foreign exchange earnings of ₹ 2075 crore during 2009-10, the foreign exchange outgo of the company was ₹ 443 crore. NALCO, therefore, had a net foreign exchange earning of ₹ 1632 crore during the year; the highest among all the CPSEs. In line with its Corporate Plan and Vision 2020, the Company is actively considering the possibilities of setting up of Aluminium Smelter Plants in countries, where power is cheaply available. The Company has opened a project office in Jakarta to expedite pre-project activities in Indonesia.

5.4.2 ONGC Videsh Limited (OVL)

Against a foreign exchange earnings of Rs. 5068 crore during 2009-10, the foreign exchange outgo of the company stood at ₹ 4293 crore. OVL, therefore, had a net foreign exchange earning of ₹ 775 crore during the year, the second highest among all the CPSEs. During the year, OVL screened many opportunities and participated in the bidding rounds. The company has been successful in winning the award of Carabobo project in Venezuela (in consortium with other Indian and International companies).

OVL has been also participating in opportunities for acquisition of oil wells, through various routes, like bidding rounds, direct negotiations, advised acquisitions etc. OVL, presently, has participation either directly or through wholly owned subsidiaries / joint venture companies in 40 exploration and production (E&P) projects in 15 countries, namely, Vietnam (3 projects), Russia (2 projects), Sudan (3 projects), Iran (1 project), Iraq (1 project), Libya (3 projects), Myanmar (5 projects), Syria (2 projects), Egypt (2 projects), Cuba (2 projects), Nigeria Sao Tome Principe JDZ (1 project), Brazil (5 projects), Nigeria (2 projects), Colombia (6 projects), and Venezuela (2 projects), and is actively seeking more opportunities across the world. Out of the 40 projects, OVL is operator in 17 projects and joint operator in 6 projects.

The overseas offices of the Company are located in Ho Chi Minh City (Vietnam), Yuzhno Sakhalinsk (Russia), Baghdad (Iraq), Tehran (Iran), Tripoli (Libya), Havana (Cuba), Caracas (Venezuela), Astana (Kazakhstan), , Bogota (Colombia). ONGC Nile Ganga BV has its registered office in Amsterdam (The Netherlands), office in Khartoum (Sudan) and its subsidiaries have offices in Rio de Janeiro (Brazil) and Nicosia (Cyprus). ONGC Narmada Limited and ONGC Amazon Alaknanda Limited have their registered offices in Lagos (Nigeria) and Hamilton (Bermuda) respectively. Jarpeno Limited has its registered office in Cyprus and its subsidiaries have offices in London (U.K), Moscow & Tomsk (Russia), Jersey, Cyprus and Kostanay (Kazhakhastan). Carabobo One AB has its registered office in Sweden.

5.4.3 Indian Oil Corporation Ltd. (IOC)

Against a foreign exchange earnings of ₹ 13,743 crore during 2009-10, the foreign exchange outgo of the company stood at ₹ 1,32,896 crore. IOC had, therefore, a net foreign exchange expenditure of ₹1,19,152 crore during the year; the highest among all the CPSEs. IOC arranged to import 47.898 million tonnes of crude oil during the year (2009-10), amounting to ₹1,16,767 crore to meet the oil requirements of the country through a carefully selected and diversified mix of supply sources.

5.4.4 MMTC Ltd (MMTC)

Against a foreign exchange earnings of ₹ 3,247 crore during 2009-10 the foreign exchange outgo of the company stood at ₹ 40,694 crore. MMTC had, therefore, a net foreign exchange expenditure of ₹37,447 crore during the year; the second highest among all the CPSEs. MMTC is the India's largest International Trading Company, and also the largest exporter of Mineral. It is also the leading exporter / importer of Agro commodities, the single largest importer / supplier of Metals including Gold & Silver and a major player in the Coal and Hydrocarbons imports by the country. The Company commands extensive market coverage in over 65 countries in Asia, Europe, Africa, Oceania and America etc.

5.4.5 State Trading Corporation Ltd. (STC)

Against a foreign exchange earnings of ₹ 1,494 crore during 2009-10 the foreign exchange outgo of the company stood at ₹ 17,607 crore. STC had, therefore, a net foreign exchange expenditure of ₹16,113 crore during the year; the seventh highest among all the CPSEs after petroleum companies. STC, a trading company, is the primary channelizing agency for meeting the demand-supply mismatch, deficits in the domestic economy. During the year, the Corporation continued its efforts to increase exports, which were severally affected due to the continuing global meltdown. Non-availability of a

number of agricultural commodities such as wheat, rice, sugar, etc. for exports due to domestic shortages, further restricted recovery in exports. Led by growth in bullion imports, moreover, the import turnover reached an all time high of ₹ 19049 crore, thereby registering a growth of 17% over the previous year. Bullion emerged as the single largest item of import constituting 54% of total import turnover by the Company.

5.4.6 Bharat Heavy Electricals Ltd. (BHEL)

Against a foreign exchange earnings of ₹ 8263 crore during 2009-10, the foreign exchange outgo of the Company stood at ₹ 7736 crore. BHEL had, therefore, a net foreign exchange earning of ₹ 527 crore during the year, the fourth highest among all the CPSEs. Bucking the uncertainties surrounding the global economic recovery, BHEL has maintained its references in more than 70 countries across the world and is poised to expand its footprints in new market segments. These references encompass almost the entire range of BHEL products and services, covering Thermal, Hydro and Gas-based turnkey power projects, Substation projects, Rehabilitation projects, besides a wide variety of products like Transformers, Compressors, Valves, Oil field equipment, Electrostatic Precipitators, Photovoltaic equipment, Insulators, Heat Exchangers, Switchgears, Castings and Forgings etc. The Company has been successful in meeting the demanding requirements of international markets in terms of complexity of work as well as technology, quality and other requirements. BHEL has proved its capability to undertake projects on a fast-track basis. The Company is taking a number of strategic business initiatives to fuel further growth in overseas business.

5.4.7 Shipping Corporation of India (SCI)

Against a foreign exchange earnings (FEE) of ₹ 3605 crore during 2009-10, the foreign exchange outgo of the company stood at ₹ 3576 crore. SCI is the eighth highest foreign exchange earner amongst all CPSEs after petroleum CPSEs. SCI also is the pioneering enterprise in its line of business, providing diversified services in almost all areas of sea transportation / management comprising, Bulk Carrier and Crude oil Tanker, Liner & Passenger Services, Lighterage and Container services, Technical and Off-Shore services etc.

Annex 5.1

Foreign Exchange Earning (FEE) & Foreign Exchange Utilization (FEU) by CPSEs

		(₹ In Lakhs)		
S.No.	CPSE	FEE	FEU	NET FEE
1	NATIONAL ALUMINIUM COMPANY LTD.	207504	44323	163181
2	ONGC VIDESH LTD.	506854	429329	77525
3	AIRPORTS AUTHORITY OF INDIA LTD.	100976	24439	76537
4	BHARAT HEAVY ELECTRICALS LTD.	826342	773615	52727
5	COCHIN SHIPYARD LTD.	66764	37524	29240
6	IRCON INTERNATIONAL LTD.	126104	99690	26414
7	KIOCL LTD.	21427	9078	12349
8	INDIAN RARE EARTHS LTD.	7867	272	7595
9	RITES LTD.	9424	2548	6876
10	COTTON CORPN. OF INDIA LTD.	5451	43	5408
11	STCL LTD.	3337	60	3277
12	SHIPPING CORPORATION OF INDIA LTD.	360542	357633	2909
13	CENTRAL COTTAGE INDUSTRIES CORPN. OF INDIA LTD.	2028	1	2027
14	HLL LIFECARE LTD.	5291	3362	1929
15	INDIAN RAILWAY CATERING AND TOURISM CORPN. LTD.	1348	29	1319
16	HMT (INTERNATIONAL) LTD.	1548	283	1265
17	EdCIL(India) Ltd.	1300	173	1127
18	INDIA TOURISM DEV. CORPN. LTD.	1509	673	836
19	KARNATAKA ANTIBIOTICS & PHARMACEUTICALS LTD.	1208	458	750
20	EXPORT CREDIT GUARANTEE CORPN.OF INDIA LTD.	935	250	685
21	NATIONAL SEEDS CORPN. LTD.	406	1	405
22	PROJECTS & DEVELOPMENT INDIA LTD.	442	50	392
23	ANTRIX CORPORATION LTD.	13229	12953	276
24	SCOOTERS INDIA LTD.	151	48	103
25	CENTRAL WAREHOUSING CORPN.	109	32	77
26	NATIONAL FILM DEV. CORPN. LTD.	126	53	73
27	ANDREW YULE & COMPANY LTD.	133	80	53
28	MAHANAGAR TELEPHONE NIGAM LTD.	30	0	30
29	WAPCOS LTD.	10868	10844	24
30	CERTIFICATION ENGINEERS INTERNATIONAL LTD.	26	9	17
31	ENGINEERING PROJECTS (INDIA) LTD.	17	4	13
32	RICHARDSON & CRUDDAS(1972) LTD.	10	0	10
33	PONDICHERRY ASHOK HOTEL CORPN. LTD.	1	0	1
34	HSCC (INDIA) LTD.	0	1	-1
35	NATIONAL HANDICAPPED FINANCE & DEVPT. CORPN.	0	2	-2
36	FCI ARAVALI GYPSUM & MINERALS (INDIA) LTD.	0	3	-3
37	MINERAL EXPLORATION CORPN. LTD.	0	3	-3
38	BBJ CONSTRUCTION COMPANY LTD.	0	4	-4
39	TAMIL NADU TRADE PROMOTION ORGANISATION	0	5	-5
40	BHARAT IMMUNOLOGICALS & BIOLOGICALS CORP. LTD.	0	6	-6
41	BHARAT BHARI UDYOG NIGAM LTD.	0	6	-6

42	MANGANESE ORE(INDIA) LTD.	0	7	-7
43	HMT BEARINGS LTD.	-7	2	-9
44	FERRO SCRAP NIGAM LTD.	0	16	-16
45	BIECCO LAWRIE & CO. LTD.	0	22	-22
46	NATIONAL RESEARCH DEVELOPMENT CORPN.	9	33	-24
47	HMT LTD.	6	41	-35
48	ARTIFICIAL LIMBS MFG. CORPN. OF INDIA	10	46	-36
49	RAIL VIKAS NIGAM LTD.	0	40	-40
50	BHARAT PETRO RESOURCES LTD.	0	46	-46
51	INDIAN RENEWABLE ENERGY DEVT.AGENCY LTD.	1252	1298	-46
52	HMT WATCHES LTD.	0	85	-85
53	HEAVY ENGINEERING CORPN. LTD.	0	93	-93
54	NORTH EASTERN ELECTRIC POWER CORPORATION LTD.	0	104	-104
55	KONKAN RAILWAY CORPORATION LTD.	0	137	-137
56	RAILTEL CORPORATION INDIA LTD.	0	144	-144
57	HINDUSTAN ANTIBIOTICS LTD.	477	637	-160
58	NEPA LTD.	0	187	-187
59	BRAITHWAITE & CO. LTD.	0	230	-230
60	NATIONAL SMALL INDUSTRIES CORPN. LTD.	28	330	-302
61	HOUSING & URBAN DEV. CORPN. LTD.	425	834	-409
62	WESTERN COALFIELDS LTD.	0	487	-487
63	HINDUSTAN INSECTICIDES LTD.	1169	1692	-523
64	BRIDGE & ROOF CO.(INDIA) LTD.	2601	3136	-535
65	BROADCAST ENGG. CONSULTANTS INDIA LTD.	39	586	-547
66	RURAL ELECTRIFICATION CORPN. LTD.	0	573	-573
67	HINDUSTAN PAPER CORPORATION LTD.	0	733	-733
68	BHARAT COKING COAL LTD.	0	738	-738
69	URANIUM CORPORATION OF INDIA LTD.	0	770	-770
70	CENTRAL ELECTRONICS LTD.	1054	1913	-859
71	MADRAS FERTILIZERS LTD.	0	862	-862
72	BRAHMAPUTRA VALLEY FERTILIZER CORPN. LTD.	2512	3550	-1038
73	CENTRAL COALFIELDS LTD.	0	1044	-1044
74	INDIA TRADE PROMOTION ORGANISATION	1286	2342	-1056
75	BHARAT HEAVY PLATE & VESSELS LTD.	0	1129	-1129
76	HINDUSTAN NEWSPRINT LTD.	19	1153	-1134
77	HINDUSTAN PHOTO FILMS MANUFACTURING CO. LTD.	0	1194	-1194
78	CENTRAL MINE PLANNING & DESIGN INSTITUTE LTD.	0	1237	-1237
79	MECON LTD.	602	1927	-1325
80	HMT MACHINE TOOLS LTD.	0	1708	-1708
81	MAHANADI COALFIELDLS LTD.	0	1813	-1813
82	RAJASTHAN ELECTRONICS AND INSTRUMENTS LTD.	14	1840	-1826
83	INSTRUMENTATION LTD.	67	1899	-1832
84	TELECOMMUNICATIONS CONSULTANTS (INDIA) LTD.	19499	21715	-2216
85	HINDUSTAN COPPER LTD.	3610	5954	-2344
86	NATIONAL FERTILIZERS LTD.	0	2495	-2495

87	INDIA INFRASTRUCTURE FINANCE CO. LTD.	293	2955	-2662
88	HINDUSTAN ORGANIC CHEMICALS LTD.	13	2807	-2794
89	EASTERN COALFIELDS LTD.	0	2927	-2927
90	PAWAN HANS HELICOPTERS LTD.	13167	16273	-3106
91	TEHRI HYDRO DEVELOPMENT CORP. LTD.	0	3181	-3181
92	BEL OPTRONICS DEVICES LTD.	803	4768	-3965
93	SJVN LTD.	4863	9007	-4144
94	BHARAT PUMPS & COMPRESSORS LTD.	0	4483	-4483
95	NATIONAL INFORMATICS CENTRE SERVICES INCORPORATED	0	4825	-4825
96	COAL INDIA LTD.	726	6085	-5359
97	CONTAINER CORPORATION OF INDIA LTD.	0	5708	-5708
98	NMDC Ltd.	7	5925	-5918
99	BHARATIYA NABHIKIYA VIDYUT NIGAM LTD.	0	6150	-6150
100	MISHRA DHATU NIGAM LTD.	0	7479	-7479
101	ENGINEERS INDIA LTD.	9993	17932	-7939
102	GOA SHIPYARD LTD.	1715	10501	-8786
103	BALMER LAWRIE & CO. LTD.	1744	13029	-11285
104	DREDGING CORPN. OF INDIA LTD.	0	12243	-12243
105	AIRLINE ALLIED SERVICES LTD.	391	17877	-17486
106	NEYVELI LIGNITE CORPN. LTD.	0	18932	-18932
107	NUMALIGARH REFINARY LTD.	0	21665	-21665
108	NORTHERN COALFIELDS LTD.	0	21712	-21712
109	INDIAN RAILWAY FINANCE CORPORATION LTD.	0	22373	-22373
110	BHARAT DYNAMICS LTD.	0	26151	-26151
111	HINDUSTAN SHIPYARD LTD.	14892	42279	-27387
112	GARDEN REACH SHIPBUILDERS & ENGINEERS LTD.	5	29431	-29426
113	NHPC LTD.	0	34812	-34812
114	ELECTRONICS CORPN. OF INDIA LTD.	104	37493	-37389
115	SOUTH EASTERN COALFIELDS LTD.	0	42927	-42927
116	OIL INDIA LTD.	19	45514	-45495
117	BEML LTD.	13391	67019	-53628
118	POWER GRID CORPORATION OF INDIA LTD.	237	70835	-70598
119	FERTILIZERS & CHEMICALS (TRAVANCORE) LTD.	9216	93069	-83853
120	NUCLEAR POWER CORPN. OF INDIA LTD.	10	84045	-84035
121	AIR INDIA CHARTERS LTD.	3871	91958	-88087
122	BHARAT SANCHAR NIGAM LTD.	20071	129485	-109414
123	SECURITY PRINTING & MINTING CORPN. INDIA LTD.	0	109872	-109872
124	NTPC LTD.	86	141916	-141830
125	HANDICRAFTS & HANDLOOM EXPORTS CORP. OF INDIA LTD.	2008	153994	-151986
126	I T I LTD.	3	153132	-153129
127	RASHTRIYA CHEMICALS AND FERTILIZERS LTD.	260	158331	-158071
128	MAZAGON DOCK LTD.	0	176554	-176554
129	BHARAT ELECTRONICS LTD.	9875	214574	-204699

130	GAIL (INDIA) LTD.	567	216344	-215777
131	RASHTRIYA ISPAT NIGAM LTD.	35173	356524	-321351
132	M S T C LTD.	21684	429855	-408171
133	NATIONAL AVIATION CO. OF INDIA LTD.	2182	451138	-448956
134	P E C LTD.	110582	861230	-750648
135	HINDUSTAN AERONAUTICS LTD.	20528	1051993	-1031465
136	STEEL AUTHORITY OF INDIA LTD.	78300	1414202	-1335902
137	MANGALORE REFINERY & PETROCHEMICALS LTD.	1104189	2632972	-1528783
138	STATE TRADING CORPN. OF INDIA LTD.	149384	1760674	-1611290
139	OIL & NATURAL GAS CORPORATION LTD.	458710	2076963	-1618253
140	CHENNAI PETROLEUM CORPORATION LTD.	0	2119034	-2119034
141	HINDUSTAN PETROLEUM CORPN. LTD.	638226	2950237	-2312011
142	BHARAT PETROLEUM CORPN. LTD.	1030135	4350535	-3320400
143	M M T C LTD.	324733	4069433	-3744700
144	INDIAN OIL CORPORATION LTD.	1374345	13289581	-11915236

Sector Wise Secured Loan and UnSecured Loan for 2009-10 and 2008-09 of Foreign Parties

		2009-10		2008-09	
S. No.	Sector / Cognate Group	Secured Loan	Un -Secured Loan	Secured Loan	Un Secured Loan
(1)	(2)	(3)	(4)	(5)	(6)
I.	**AGRICULTURE**				
1.1	AGRO BASED INDUSTRIES	0	0	0	0
	Sub Total	**0**	**0**	**0**	**0**
II	**ELECTRICITY**				
2.1	GENERATION	55522	1000359	81808	1442816
2.2	TRANSMISSION	902103	179601	877431	109468
	Sub Total	**957625**	**1179960**	**959239**	**1552284**
III	**MANUFACTURING**				
3.1	CHEMICALS & PHARMACEUTICALS	0	0	0	0
3.2	CONSUMER GOODS	0	0	0	0
3.3	FERTILIZERS	0	0	0	0
3.4	HEAVY ENGINEERING	0	0	0	0
3.5	MEDIUM & LIGHT ENGINEERING	0	0	0	0
3.6	PETROLEUM (REFINERY & MARKETING)	19752	1633333	17541	1207257
3.7	STEEL	0	181438	0	141051
3.8	TEXTILES	0	0	0	0
3.9	TRANSPORTATION EQUIPMENT	0	3204	0	3444
	Sub Total	**19752**	**1817975**	**17541**	**1351752**
IV	**MINING**				
4.1	COAL & LIGNITE	0	336182	0	401512
4.2	CRUDE OIL	0	498	0	0
4.3	OTHER MINERALS & METALS	0	0	0	0
	Sub Total	**0**	**336680**	**0**	**401512**
V	**SERVICES**				
5.1	CONTRACT & CONSTRUCTION SERVICES	0	0	0	0
5.2	FINANCIAL SERVICES	16200	962629	19777	768818
5.3	INDUSTRIAL DEVEPLOMENT & TECH. CONSULTANCY SERVICES	10000	5840	5000	6719
5.4	TELECOMMUNICATION SERVICES	0	0	0	0
5.5	TOURIST SERVICES	0	0	0	0
5.6	TRADING & MARKETING	0	0	0	0
5.7	TRANSPORT SERVICES	237936	4057	198233	4843
	Sub Total	**264136**	**972526**	**223010**	**780380**
VI	**UNDER CONSTRUCTION**				
6.1	ENTERPRISES UNDER CONSTRUCTION	0	0	0	0
	Sub Total	**0**	**0**	**0**	**0**
	Total	**1241513**	**4307141**	**1199790**	**4085928**

Chapter-6

Organizational Structure and Human Resource Management

The Central Public Sector Enterprises (CPSEs) belong to either of the two broad classifications of 'statutory corporations' or 'government companies'. While the 'corporation' form of CPSEs have their objectives and scope defined in the legislation/Act of Parliament, the 'company' form of CPSEs have their functions articulated based on the Articles of Association. These government companies are, moreover, registered with the Registrar of Companies under the Companies Act, 1956.

Most of the CPSEs are commercial enterprises. CPSEs, such as, National Film Development Corporation, National Small Industries Corporation Ltd., National Scheduled Caste Financial Corporation and Handicrafts & Handloom Export Corporation India Ltd. are, however, 'promotional' in nature. Similarly, Jute Corporation of India, Cotton Corporation of India and Food Corporation of India provide Minimum Support Price (MSP) to farmers.

The different CPSEs have been taking various HR initiatives for employee involvement, knowledge acquisition, career and succession planning etc for improving the performance in their respective enterprises. The Department of Public Enterprises (DPE), Government of India has been, furthermore, formulating guidelines in respect of organizational structure, wage and salary policy, executive development programme and corporate governance, which are applicable to all the CPSEs.

6.1 Organisational Structure of CPSEs

The Department of Public Enterprises (DPE) formulates policy guidelines on the Board structure of CPSEs and advises on the shape and size of organizational structure of these enterprises. The Central Public Sector Enterprises (CPSEs) have been categorized in four Schedules, namely, 'A', 'B', 'C' and 'D' based on various quantitative, qualitative and other factors. The quantitative factors considered are: (a) investment, (b) capital employed, (c) net sales, (d) profit before tax, (e) number of employees, (f) number of units and (g) value added per employee. The qualitative factors considered are: (a) national importance, (b) complexities of problems, (c) level of technology, (d) prospects for expansion (e) diversification of activities and of competition from other sectors, etc. Amongst 'the other factors' considered are strategic importance of the corporation to the national economy etc.. The pay scales of Chief Executives and of full time Functional Directors in CPSEs are determined as per the Schedule of the concerned CPSE.

The DPE, in consultation with Public Enterprises Selection Board (PESB) considers proposals from various administrative Ministries/ Departments for: (a) initial categorization /upgradation of CPSEs in appropriate Schedule, (b) for personal upgradation of Board level executives and for creation of Board level posts in CPSEs. During 2009-10, 2 CPSEs were upgraded to higher Schedule, 2 Chief Executives (CMDs) of CPSEs were given higher scale of pay on personal basis and 4 posts of Functional Directors were newly created. During the period from April 2010 to October 2010, furthermore, 3 CPSEs were upgraded to higher Schedule and one Chief Executive (CMD) of CPSE was given higher scale of pay on personal basis.

Out of 249 CPSEs, as on 31.10.2010, there were 60 Schedule 'A' CPSEs, 70 Schedule 'B' CPSEs, 45 Schedule 'C' CPSEs and 5 Schedule 'D' CPSEs. The remaining CPSEs belonged to the 'uncategorized' class CPSEs belonging to different schedules as shown at Annex 6.1.

6.2 Appointment of Functional Directors in CPSEs

Functional Directors including the Chief Executives / CMDs of CPSEs are appointed by the concerned Administrative Ministries/Departments on the basis of the recommendations of the Public Enterprises Selection Board (PESB). The PESB is a high powered body, constituted by the Government of India vide its Resolution dated 3.3.1987. The PESB has been set up with the objective of evolving a sound managerial policy for the Central Public Sector Enterprises and to advise the Government in particular, on appointments to their top management posts. The PESB consists of a part-time or full-time Chairperson and three full-time Members. The Chairperson and Members are persons who have had a long and distinguished career in management of public or private corporations or in public administration, and have had a proven record of achievements, preferably in the field of personnel, finance, production or marketing.

Alongwith the candidates of Central Public Sector Enterprises (CPSEs), the Government has decided that candidates from State Level Public Sector Enterprises (SLPEs) and the private sector will also be considered as non-internal candidates for selection to the post of Functional Directors in CPSEs subject to fulfilling the eligibility criteria. The Government has recently revised the procedure for obtaining CVC clearance, in respect of candidates recommended by PESB for Board level posts in CPSEs so as to reduce delays. Accordingly, it has been prescribed that CVC will directly grant its clearance (or otherwise) to the concerned Administrative Ministry/Department within 15 days of the receipt of recommendations of PESB.

6.3 Professionalization of Boards of CPSEs

In pursuance of the public sector policy being followed since 1991 several measures have been taken by the Department of Public Enterprises to professionalize the Boards of public enterprises. The guidelines issued in 1992 provide that outside professionals should be inducted on the Boards of CPSEs in the form of part-time non-official Directors and that the number of such Directors should be at least 1/3rd of the actual strength of the Board. In the case of listed CPSEs headed by executive Chairman, the number of non-official Directors (Independent Directors) should be at least half the strength of the Board. The guidelines also provide that the number of Government Directors on the Boards should be not more than one-sixth of the actual strength of the Board subject to a maximum of two. Apart from this, there should be some functional Directors on each Board whose number should not exceed 50% of the actual strength of the Board.

As regards selection and appointment of non-official Directors on the Boards of CPSEs, the following eligibility criteria is being adopted.

(i) Age- Age band should be between 45-65 years (minimum / maximum limit). This could however be relaxed for eminent professionals for reasons to be recorded, being limited to 70 years.

(ii) Qualification:- Minimum qualification for part time non official Directors would be graduate degree from a recognized university.

(iii) Experience:- Persons of eminence with proven track record from industry, business or agriculture. CMD / MD in corporate sector having turnover of ₹ 250 Crore or more. CMD/CEO and Functional Directors of Schedule 'A' CPSEs. Professor in an academic institution or professionals at the level of Directors of Institutes / Heads of Department. Retired Government officials having experience of not less than 10 years at the level of Joint Secretary or above.

The proposals for appointment of non-official Directors are initiated by the concerned Administrative Ministries / Departments. In so far as Navratna and Miniratna CPSEs are concerned, the selection of non-official Directors is made by the Search Committee consisting of Chairman (PESB), Secretary (DPE), Secretary of the administrative Ministry / Department of the CPSE, Chief Executive of the concerned CPSE and non-official Members. In the case of remaining CPSEs, (other than Navratna / Miniratna CPSEs), Public Enterprises Selection Board (PESB) makes the selection of non-official Directors. The concerned Administrative Ministry / Department appoints the non-official Directors on the basis of recommendations of Search Committee / PESB after obtaining the approval of competent authority, namely, the Appointments Committee of the Cabinet (ACC).

The Maharatna scheme provides that appointment of requisite number of non-official Directors (as per SEBI guidelines) is a pre-condition for exercise of delegated powers. The Navratna scheme provides that the Boards of these companies should be professionalized by inducting a minimum of 4 non-official Directors before their Boards can exercise the enhanced powers. Similarly, in the case of Miniratna CPSEs also the induction of a minimum of 3 non-official Directors is a pre-condition for the exercise of delegated powers under the Miniratna Scheme.

During the year, the Search Committee and Public Enterprises Selection Board have recommended the names of 58 persons for appointment as non-official Directors on the Board of various CPSEs.

The Department had submitted a Note for Appointments Committee of the Cabinet (ACC) to DOPT providing for definite time frame for appointment of requisite number of non-official Directors on the Boards of CPSEs. The decisions of ACC on the proposals contained in the Note are under implementation.

6.4 Corporate Governance in CMD/CEO and Functional Directors of Schedule 'A' CPSEs

In view of the importance of Corporate Governance principles for ensuring transparency, the Government, approved the Guidelines on Corporate Governance for CPSEs in 2007 . These guidelines for CPSEs were formulated by DPE keeping in

view the relevant laws, instructions and procedures. After approval by the Cabinet, these Guidelines, were released by the then Finance Minister on 22nd June, 2007. The Cabinet while approving the implementation of the Guidelines, for an experimental phase of one year, had directed that (a) adjustments required in the Guidelines be made in the light of the experiences gained with the approval of competent authority; and (b) mid-year progress reports in regard to Corporate Governance be submitted to the Government by the CPSEs.

Since the issue of these Guidelines in June, 2007, the CPSEs have had the opportunity to implement them, on a voluntary basis, during the whole of the financial year of 2008-09. It was, subsequently, decided to continue the Guidelines on Corporate Governance for CPSEs on a voluntary basis, in later years. After due inter-ministerial consultations, moreover, it has been decided to make the Guidelines on Corporate Governance for CPSEs mandatory. This was finally approved by the Government in March, 2010.

The Guidelines cover issues like, composition of the Board of Directors (BOD) the specialized committees of CPSE Boards, such as, the Audit Committee, the Remuneration Committee, relation with Subsidiary Companies, Disclosures required, Code of Conduct (and Ethics) for the members on BOD, Risk Management, and Financial Reporting. The Guidelines have been, furthermore, modified keeping in view the experience gained during the experimental phase of one year . The modifications include additional provisions relating to monitoring the compliance of Guidelines and formation of the Remuneration Committee. Since the concept of Corporate Governance is dynamic in nature, suitable modifications will be carried out in these Guidelines from time to time to bring them in line with the prevailing laws, Regulations, and Acts, etc.

Based on the compliance to these guidelines on Corporate Governance, the DPE grades the CPSEs, under the MOU evaluation system. In view of the importance of Corporate Governance for State Level Public Enterprises (SLPEs) as well, all the State Governments have been advised to introduce similar Guidelines in their respective SLPEs. The salient features of these guidelines are discussed below.

6.4.1. Composition of Board

The Guidelines provide that the number of functional Directors should not exceed 50% of the actual strength of the Board of Directors (BOD) and the number of Government nominee Directors on the BOD will not exceed two. In the case of listed CPSEs with an Executive Chairman, the Guidelines provide that the number of non-official Directors shall be at least 50% of the Board Members. In the case of CPSEs with a Non-executive Chairman, at least one-third of the Board Members will have to be non-official Directors. (In addition, the Government has laid down pre-defined criteria in terms of educational qualifications, age and experience in respect of persons to be considered for appointment as Non-official Directors. Relevant clauses have been incorporated in these guidelines to ensure 'independence' of Non-official Directors and to avoid potential conflict of interest). The Guidelines also provide that Directors nominated by any institution, other than public financial institution, will not be treated as Non-official Directors.

6.4.2 Board Meetings

It has been mandated that Board meetings are to be held at least once in every 3 months, and at least 4 such meetings should be held in a year. Moreover, all relevant information is required to be given by the Management of the company to the Board. Further, the Board should lay down the code of conduct for all Board members and for senior management. In this regard, a model Code has been incorporated in the Guidelines to assist the CPSEs. The Guidelines, inter alia, provide that the Board should ensure integration and alignment of risk management system. The CPSEs are also expected to undertake suitable training programmes for their new Board members.

6.4.3. Audit Committee

The Guidelines on Corporate Governance requires setting up of an Audit Committee in every Board of CPSEs, with a minimum of three Directors as its members. Further, two-thirds of the members of this Committee ought to be Independent Directors, with an Independent Director as its Chairman. The Audit Committee has extensive powers to access information on financial matters of the company. The Audit Committee, moreover, is required to meet at least 4 times in a year.

6.4.4 Subsidiary Companies

With regard to Board (of Directors) of subsidiary companies, the Guidelines provide that at least one Independent Director of 'the holding company' will be on the Board of the subsidiary company. The Audit Committee of 'the holding company' will, furthermore, review the financial statements of the subsidiary company. All significant transactions of the subsidiary companies are, furthermore, required to be brought to the attention of the Board of 'the holding company'.

6.4.5. Disclosures

The provisions on 'disclosures', under the Guidelines, require all transactions to be placed before the Audit Committee. The Guidelines mandate that while preparing the financial statements, treatment of various transactions should be as per the prescribed Accounting Standard and if there are any deviations, the same are to be explicitly mentioned. Furthermore, the Board is to be informed about the risk assessment. The senior Management is, moreover, required to make disclosures to the Board in regard to all financial and commercial transactions where they have any personal interest or where they may have a potential conflict.

6.4.6 Compliance

It has been also mandated in the Guidelines that the Annual Report of the companies should contain a separate section on Corporate Governance, with details on compliance. The CPSEs are required to obtain a certificate from the Auditors/Company Secretary regarding compliance of these Guidelines. The Chairman's speech (of the CPSE) in the AGM is also required to carry a section on compliance with Corporate Governance Guidelines, which will form part of the company's Annual Report. The CPSEs are, furthermore, required to submit quarterly compliance report to their administrative Ministries who, in turn, are required to furnish a consolidated Annual Report to DPE.

6.5 Wages & Salary Policy in CPSEs

The Department of Public Enterprises (DPE) functions as the nodal Department, inter-alia, in respect of policy relating to wage settlement of workmen, pay revision of non-unionized supervisors and executives holding posts below the Board level and at the Board level in CPSEs. The Department also renders advice to the Administrative Ministries/ Departments and the CPSEs in matters relating to the wage policy of workmen and revision in the scales of pay of the executives. The CPSEs are largely following Industrial Dearness Allowance (IDA) pattern scales of pay. In some cases Central Dearness Allowance (CDA) pattern scales of pay is followed. DPE also issues quarterly DA orders in respect of IDA employees. The DA orders for CDA employees are issued on six monthly periods.

6.5.1 Industrial Dearness Allowance (IDA)

The Government policy relating to pay scales and pay pattern in CPSEs is that all the employees should be on the IDA pattern and related scales of pay. Instructions have been issued by DPE in July, 1981 and July, 1984 to all the administrative Ministries/ Departments that as and when a new CPSE is created or established, the IDA pattern and related scales of pay should be adopted ab-initio Vide DPE O.M. dated 10.08.2009, it was, furthermore, reiterated and emphasized that 'appointments' including 'promotion' on or after 01.01.1989 in CDA scales of pay has to be in the IDA scales of pay. There are 249 CPSEs (excluding Banks, Insurance Companies) under the administrative control of the Central Government. They employ approximately 14.91 lakh workmen, clerical staff and executives. Out of this, around 96% of the workmen and executives are on IDA pattern and related scales of pay.

6.5.2. Second Pay Revision Committee

As the period of the previous pay revision was coming to a close end, the Second Pay Revision Committee (2nd PRC) headed by Mr. Justice M. Jagannadha Rao, retired judge of Supreme Court was constituted vide the Government of India Resolution dated 30.11.2006, for the revision of scales of pay of Board level and below Board level executives including non-unionized supervisors of CPSEs following Industrial Dearness Allowance(IDA) pattern scales of pay. The Government, after due consideration of the recommendations of the 2nd PRC, issued orders on 26.11.2008 and 09.02.2009, which were effective from 1.1.2007. The salient features of these orders are mentioned below:-

i) Pay scales ranging from ₹ 12,600-32,500 for E-0 grade and to ₹ 80,000-1,25000 for Chief Executives of schedule 'A' CPSEs.

ii) A uniform fitment benefit @ 30% on basic pay plus DA @ 68.8% as on 01.01.2007.

iii) Rate of increment @ 3% of basic pay.

iv) Perks and allowances upto the maximum of 50% of basic pay, with provision of 'Cafeteria Approach'.

v) PRP ranging from 40% to 200% of the basic pay.

vi) Superannuation benefit upto 30% of basic pay.

vii) Ceiling of gratuity in respect of executives and non-unionised supervisors raised to ₹ 10.00 lakh w.e.f. 01.01.2007.

viii) Implementation of Pay Revision linked to affordability of the CPSE.

ix) The CPSE concerned have to finance pay revision from their own resources and no budgetary support will be provided.

x) Constitution of an Anomalies Committee consisting of Secretaries of Department of Public Enterprises, Department of Expenditure and Department of Personnel & Training constituted to look further into specific issues/ problem that may arise in implementation of Governments orders on the recommendation of 2nd PRC.

xi) DPE will issue necessary instructions/clarifications whenever required in implementation of the decision on pay revision.

Subsequently, a Committee of Ministers headed by the Home Minister was formed to look into the demands of executives of Oil & Power Sector CPSEs. Based on the recommendations of the Committee of Ministers, the Government issued orders on 02.04.2009 to extend the following additional benefits:-

a) Benefit of merger of DA with basic pay for the purpose of fitment raising the fitment from 68.8% to 78.2%.

b) Superannuation benefit upto 30% of basic pay + DA instead of basic pay alone.

c) Limiting the expenditure on infrastructure to recurring cost of running the facilities with a ceiling of 10% of basic pay.

d) Enhanced allowances could be effective from 26.11.2008 instead of from the date of issue of Presidential Directive provided the Presidential Directive is issued within one month from 02.04.2009.

e) These benefit to be extended to all CPSEs.

6.5.3 Wage Revision for Workmen under IDA pattern

The DPE vide its O.Ms dated 9.11.2006 and 01.05.2008 has issued policy guidelines for the 7th Round of Wage Negotiations (which falls due on a general basis from 01.01.2007) with the unionized workmen of CPSEs. The guidelines are broadly similar to the earlier policy guidelines issued for the Sixth Round of Wage Negotiations. The guidelines also provide that administrative Ministries/ Departments may take a decision on a case to case basis for the periodicity of wage settlement in the CPSE below 10 years but not less than 5 years, with the approval of their Minister.

6.5.4. Pay revision of employees under CDA Pattern in CPSEs

The CDA pattern pay scales are applicable to some of the clerical staff, unionized cadres and executives of CPSEs who were on the rolls of these (69) CPSEs as on 1.1.1986 and upto 31.12.1988 and were in receipt of the CDA pattern pay scales during that time. A High Power Pay Committee (HPPC) was appointed by the Government, in pursuance of the Supreme Court directions dated 12.3.1986, which submitted its Report to the Government on 24.11.1988. Its recommendations were subsequently implemented in these CPSEs. In pursuance of the Supreme Court direction dated 3.5.1990 read with the subsequent directions dated 28.8.1991, IDA pattern and related scales of pay were introduced in these CPSEs with effect from 1.1.1989. Out of 69 CPSEs (covered under HPPC), at present there are 48 CPSEs, which are following both CDA and IDA pattern scales of pay.

DPE vide O.Ms dated 14.10.2008 and 20.01.2009 has revised pay scales and allowances of the employees of CPSEs following CDA pattern w.e.f. 01.01.2006. The benefit of pay revision was allowed to the employees of those CPSEs that are not loss making and are in a position to absorb the expenditure on account of pay revision from their own resources without any budgetary support from the Government.

6.5.5. Recommendation of Anomalies Committee

In terms of the provision of Anomalies Committee under DPE O.M. dated 26.11.2008, the Anomalies Committee considered certain issues. Based on the decision of the Committee, DPE has issued orders accordingly. The issues covered have been (i) Pay of Government Officers on deputation to CPSEs, (ii) HRA for Self Lease Accommodation in CPSEs, (iii) Medical Expenditure, (iv) Encashment of Leave and (v) Benefit of bunching of increment in CPSEs.

6.6 Voluntary Retirement Scheme (VRS)

As a result of the restructuring in some CPSEs, the Government announced the Voluntary Retirement Scheme (VRS) in October, 1988. A comprehensive package was later notified by the Department of Public Enterprises (Government of India) in May, 2000. In view of the difficulties faced by some CPSEs where the wage revision of 1992 or 1997 (as the case may be) could not be made effective, the VRS was further

liberalized through the subsequent notification of November, 2001. This notification, inter-alia, provides for 100% additional compensation for the employees where wage revision of 1992 could not be made effective. Similarly, 50% additional compensation was allowed for employees where wage revision of 1997 could not be made effective. The ex-gratia payment under VRS to employees following CDA pattern at 1986 scales of pay has been also enhanced by 50% w.e.f. 26.10.2004. These increases in VRS compensation are to be computed based on the existing pay of employees. Since the introduction of VRS in October 1988 to March 2010, approximately 3.54 lakh employees have been released under this scheme.

6.6.1 VRS in CPSEs that can support the scheme on their own

Enterprises, which are financially sound and can sustain VRS on their own, can frame their own schemes of VRS and make it attractive enough for employees to opt for it. They may offer as compensation upto 60 days salary (only Basic Pay +DA) for every completed year of service. Such compensation will, however, not exceed the salary for the balance period of the service left.

6.6.2 VRS in marginally profit or loss making/sick/ unviable CPSEs

Marginally profit /loss making CPSEs as well as sick and unviable units may adopt : (i) either the Gujarat Model, under which the compensation is computed by allowing 35 days salary for every completed year of service and 25 days for each year of the balance service left until superannuation subject to conditions that the compensation shall not exceed the sum of salary for the balance period left for superannuation, or (ii), the VRS package of Department of Heavy Industry (DHI) model, under which ex-gratia payment equivalent to 45 days emoluments (Pay + DA) for each completed year of service or the total emoluments for the balance period of service, whichever is less, is applicable. The employees who have completed not less than 30 years of service will be eligible for a maximum of 60 (sixty) months salary/wage as compensation and this will be subject to the amount not exceeding the salary/wage for the balance period of service left.

6.7 Counselling, Retraining and Redeployment (CRR)

Restructuring of enterprises often leads to downsizing and loss of jobs. Although, VRS is an attempt to mitigate the suffering from the loss of jobs, the retraining of those retrenched workers enables them to remain productive partners in the process of man-power rationalization.

Accordingly, the National Renewal Fund (NRF) established in February, 1992 aimed to cover both the expenses of VRS and to meet the expenditure on retraining of retrenched workers in the organized sector. In the wake of on-going restructuring exercises during this period, in the central enterprises, the focus was given on the needs of the CPSEs. The retraining activity was administered earlier by the Department of Industrial Policy & Promotion until 31st March,2001. The scheme for Counseling, Retraining and Redeployment (CRR) of rationalized employees of CPSEs is under implementation by DPE since 2001-02.

The scheme for Counseling, Retraining and Redeployment (CRR), inter-alia, aims for the followings:

(a) to provide opportunity for self-employment.

(b) to reorient rationalized employees through short duration programmes.

(c) to equip them for new avocations.

(d) to engage them in income generating self-employment.

(e) to help them rejoin the productive process.

The main elements of the CRR programme are Counselling, Retraining and Redeployment. Counselling helps the rationalized employees to absorb the shock of leaving the organization, to properly manage their funds including compensation and to motivate them to face the challenges and to re-join the productive process. Similarly, retraining strengthens their skill/expertise. Selected training institutes impart need-based training of 30 days / 45 days / 60 days modules. The faculty support is both internal and external, and the approach is to provide classroom lectures as well as field experience. In the process, trainees interact with experts from various fields and are being helped in preparation/finalization of project reports. The retraining should lead to redeployment mostly through self-employment. In the present scheme, the objective is to maximize the rate of self-employment. The Nodal Agencies, therefore, provide need-based support, linkage with credit institutions and continuously follow up with the retrained personnel.

In order to further broad base the coverage and re-employability, certain modifications have been brought out in the CRR scheme. Modified scheme is

being implemented from 2007-08.

For monitoring the CRR programme, the inbuilt mechanism involves field visits and inspections by the concerned officers of DPE. The Scheme also provides for periodical review.

The Nodal Training Agencies are required to counsel VRS optees, impart training and reorientation programme, develop curriculum /materials, prepare feasibility report market survey, post training follow up, interface with credit institutions, support in self-employment, regular liaison with CPSEs, convening meeting of the Coordination Committee etc.

CPSEs are the key to the success of the scheme. They are supposed to extend all possible support for the welfare of the separated employees by clearing their compensation/dues before release. Long association with employees puts CPSEs in a better position to identify their retraining needs.

A Plan Fund of ₹ 8 crore was allocated initially during 2001-02, which was enhanced to ₹ 10 crore during 2002-03 and 2003-04. The plan fund substantially increased to ₹ 30 crore during 2004-05 and 2005-06 and further enhanced to ₹ 31.50 crore during 2006-07. During 2007-08, 2008-09 and 2009-10, plan allocation was ₹ 10.00 crore, ₹ 8.70 crores and ₹7.45 crore respectively for implementation of CRR scheme. In 2009-10, 14 nodal agencies were operational with 43 Employees Assistance Centres (EACs). Year wise number of persons trained under the scheme is shown in Table 6.2 below:

Table 6.1

Year	Number of persons trained
2001-02	8064
2002-03	12066
2003-04	12134
2004-05	28003
2005-06	32158
2006-07	34398
2007-08	9728
2008-09	9772
2009-10	8506
Total	**1,54,829**

6.8. Employment Under Reserved Categories

The Personnel and Recruitment Policies in the CPSEs are formulated by the management of respective public sector enterprises. However, on matters of general importance, the policy guidelines are issued by the Government to enterprises which are to be kept in view by the latter while framing their individual corporate policies.

Besides formal Presidential Directives issued to CPSEs by the concerned administrative Ministries to ensure reservation in regard to employment for Scheduled Castes, Scheduled Tribes and Other Backward Classes (OBCs), on the same lines as applicable in Central Government Ministries/ Departments, the Department of Public Enterprises keeps a watch on the reservation policies through calling for Annual Reports from the CPSEs taking necessary follow-up action after scrutinizing these reports. A comprehensive Presidential Directive incorporating all important instructions on reservation for SCs and STs, was issued to all administrative Ministries/Departments concerned on 25th April, 1991 for formal issuance of the same to CPSEs. Necessary changes and modifications are also circulated to CPSEs through their administrative Ministries/ Departments for information and compliance.

Based on the recommendation of the Second Backward Classes Commission (Mandal Commission) and in accordance with the Supreme Court Judgement in the Indira Sawhney case, instructions were issued to CPSEs for providing reservation of 27% in vacancies in favour of Other Backward Classes (OBCs). The Department of Personnel & Training (DOPT) who formulate the policy in respect of reservation in services, have been issuing instructions from time to time on various aspects of reservation in favour of OBCs. Reservation for OBCs was made effective w.e.f. 8.9.1993. The Department of Public Enterprises (DPE) have been extending these instructions to the Public Sector Enterprises through their administrative Ministries for compliance. A comprehensive Presidential Directive incorporating all instructions was prepared by the Department of Public Enterprises and issued to all administrative Ministries vide DPE's OM dated 27th July, 1995 for formal issuance to CPSEs under their control.

Athough the administrative Ministries/ Departments concerned have been made formally responsible for implementation of these Directives, the Department of Public Enterprises also take follow-up action on the recommendations made

by the Parliamentary Committee on Welfare of Scheduled Castes and Scheduled Tribes and National Commission for SCs/STs/OBCs. The CPSEs have been advised by DPE to make vigorous efforts to wipe out the backlog vacancies so as to improve the representation of Scheduled Castes/Scheduled Tribes/ OBCs in the services, particularly in Group 'A' & 'B' posts. CPSEs have been also advised to invariably associate an officer of appropriate level belonging to SC/ST with their Departmental Promotion Committee/ Selection Board.

The present quota for providing reservation for candidates belonging to Scheduled Castes, Scheduled Tribes and OBCs where recruitment is on All-India basis (through open competition) as well as in other categories entitled to reservation of vacancies is shown in Table 6.2 below:

Table 6.2
Quota for Reservation

Category	Group 'A' & 'B'	Group 'C'	Group 'D'
Scheduled Castes	15%	15%	15%
Scheduled Tribes	7.5%	7.5%	7.5%
Other Backward Classes	27%	27%	27%
Physically Handicapped Persons	3%	3%	3%
Ex-servicemen & Dependents of those killed in action	–	14.5%	24.5%

Table 6.2
Representation of SCs/STs/OBCs in CPSEs

Group	Total No. of employees	Representation of SCs/STs			
		SCs No.	%age	STs No.	%age
As on 1.1.1980 (Based on information furnished by 177 enterprises)					
Group 'A'	93,984	2,726	2.90	623	0.66
Group 'B'	97,756	5,003	5.12	1,329	1.36
Group 'C'	12,74,581	2,30,505	18.08	98,329	7.71
Group 'D'	3,53,981	79,167	22.36	38,083	10.76
(Excluding Safai Karamcharis)					
Total	**18,20,302**	**3,17,401**	**17.44**	**1,38,364**	**7.60**
Group 'D'	36,030	23,309	64.69	1,492	4.14
(Safai Karamcharis)					
Grand Total	**18,56,332**	**3,40,710**	**18.35**	**1,39,856**	**7.53**

Group	Total No. of employees	Representation of SCs/STs				
		SCs No.	%age	STs No.	%age	OBC No.
As on 1.1.2009 (Based on information furnished by 195 Enterprises)						
Group 'A'	186056	26442	14.21	9302	4.99	16261
Group 'B'	206836	29132	14.08	11946	5.77	18402
Group 'C'	777203	155563	20.01	66725	8.58	101834
Group 'D' (Excluding Safai karamcharis)	249587	52997	21.23	29592	11.85	41313
Total	**1419682**	**264134**	**18.60**	**117565**	**8.28**	**177810**
Group 'D' (Safai karamcharis)	16945	9263	54.66	1800	10.62	988
Grand Total	**1436627**	**273397**	**19.03**	**119365**	**8.30**	**178798**

Group	Total No. of employees	Representation of SCs/STs				
		SCs No.	%age	STs No.	%age	OBC No.
As on 1.1.2010 (Based on information furnished by 206 Enterprises)						
Group 'A'	261072	40389	15.47	13993	5.35	29279
Group 'B'	208501	30560	14.65	13117	6.29	18011
Group 'C'	742516	145619	19.61	51884	6.98	71698
Group 'D' (Excluding Safai karamcharis)	221159	42733	19.32	27546	12.45	35564
Total	**1433248**	**259301**	**18.09**	**106540**	**7.43**	**154552**
Group 'D' (Safai karamcharis)	34162	11517	33.71	1462	4.27	611
Grand Total	**1467410**	**270818**	**18.45**	**108002**	**7.36**	**155163**

The representation of SCs andSTs in Group 'A' posts has been rising steadily and has increased from 2.90% and 0.66% as on 1.1.1980 to 15.47% and 5.35% respectively as on 1.1.2010. In regard to Group 'B' posts the representation of SCs and STs has risen from 5.12% and 1.36% as on 1.1.1980 to 14.65% and 6.29% respectively as on 1.1.2010 (Table 6.3). Although the overall percentage of representation of SC/ST in services is adequate, the representation in Group 'A' and Group 'B' is not yet satisfactory. This is on account of the private sector companies, which were taken over by the Government, and account for a significant percentage of total employment. These enterprises did not have any scheme of reservation for Scheduled Castes/Scheduled Tribes until they were nationalized. The shortfall in the representation of Scheduled Castes/Schedule Tribes in Group 'A' and Group 'B' posts in CPSEs has been also on account of non-availability of suitable Scheduled Castes and Scheduled Tribes candidates in the technical disciplines. Most of the CPSEs being in the manufacturing/ production sector, have preponderance of technical posts in Group 'A' and 'B' services.

The need to ensure timely filling up of reserved posts (and the backlog) has been stressed and various instructions issued from time to time. All administrative Ministries/Departments have been requested to advise the CPSEs under their administrative control to take effective steps to fill up the unfilled reserved posts in Direct Recruitments as well as in Promotions in accordance with the existing instructions. The Government have also issued necessary instructions to launch a Special Recruitment Drive to fill up the backlogs of reserved vacancies for SCs, STs & OBCs in CPSEs. DPE has also issued repeated instructions to all administrative Ministries/Departments dealing with CPSEs to fill up these vacancies at the earliest

The DPE have also extended the scheme for reservation for Ex-servicemen to the CPSEs through the administrative Ministries/ Departments, and instructions streamlining the procedure for recruitment of Ex-servicemen have been issued with a view to augment their in-take in the services of CPSEs. Such CPSEs, which are in a position to offer agencies/dealerships, have been advised to reserve quota of such agencies/dealership for allotment to Ex-servicemen.

The DPE has also issued (draft) Presidential Directive on 22.4.1991 to all the administrative Ministries/Departments concerned with the CPSEs, for employment of physically handicapped persons in CPSEs. With the enactment of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, the reservation to physically handicapped persons stood extended to identified Group 'A' and 'B' posts to be filled through Direct Recruitment. As per the Act, not less than 3% posts shall be reserved for Persons with Disabilities of which 1% each shall be reserved for persons suffering from (i) blindness or low vision (ii) hearing impairment and (iii) locomotor disability or cerebral palsy. All CPSEs have accordingly been advised to comply with the provisions of the Act.

Annex 6.1

Classification of CPSEs as on 31.3.2010

S. No.	Name of the CPSEs	SCHEDULE	Holding / Subsdiary	Maharatna / Navratna / Miniratna
1	AIRPORTS AUTHORITY OF INDIA LTD.	A	H	Miniratna-I
2	BEML LTD.	A	H	Miniratna-I
3	BHARAT BHARI UDYOG NIGAM LTD.	A	H	-
4	BHARAT ELECTRONICS LTD.	A	H	Navratna
5	BHARAT HEAVY ELECTRICALS LTD.	A	H	Navratna
6	BHARAT PETROLEUM CORPN. LTD.	A	H	Navratna
7	BHARAT SANCHAR NIGAM LTD.	A	H	Miniratna-I
8	CENTRAL WAREHOUSING CORPN.	A	H	Miniratna-I
9	COAL INDIA LTD.	A	H	Navratna
10	CONTAINER CORPORATION OF INDIA LTD.	A	H	Miniratna-I
11	DEDICATED FRIGHT CORRIDOR CORP. OF INDIA LTD.	A	H	-
12	ELECTRONICS CORPN. OF INDIA LTD.	A	H	-
13	ENGINEERS INDIA LTD.	A	H	Miniratna-I
14	FERTILIZERS & CHEMICALS (TRAVANCORE) LTD.	A	H	-
15	FOOD CORPN. OF INDIA	A	H	-
16	GAIL (INDIA) LTD.	A	H	Navratna
17	HEAVY ENGINEERING CORPN. LTD.	A	H	-
18	HINDUSTAN AERONAUTICS LTD.	A	H	Navratna
19	HINDUSTAN COPPER LTD.	A	H	Miniratna-I
20	HINDUSTAN PAPER CORPORATION LTD.	A	H	Miniratna-I
21	HINDUSTAN PETROLEUM CORPN. LTD.	A	H	Navratna
22	HMT LTD.	A	H	-
23	HOUSING & URBAN DEV. CORPN. LTD.	A	H	Miniratna-I
24	I T I LTD.	A	H	-
25	INDIAN OIL CORPORATION LTD.	A	H	Maharatna
26	IRCON INTERNATIONAL LTD.	A	H	Miniratna-I
27	KIOCL LTD.	A	H	Miniratna-I
28	KONKAN RAILWAY CORPORATION LTD.	A	H	-
29	M M T C LTD.	A	H	Miniratna-I
30	MAHANAGAR TELEPHONE NIGAM LTD.	A	H	Navratna
31	MAZAGON DOCK LTD.	A	H	Miniratna-I
32	MECON LTD.	A	H	Miniratna-II
33	MUMBAI RAILWAY VIKAS CORPORATION LTD.	A	H	-
34	NATIONAL ALUMINIUM COMPANY LTD.	A	H	Navratna
35	NATIONAL AVIATION CO. OF INDIA LTD.	A	H	-
36	NATIONAL BLDG. CONSTN. CORPN. LTD.	A	H	-
37	NATIONAL FERTILIZERS LTD.	A	H	Miniratna-I
38	NATIONAL TEXTILE CORPN. LTD.	A	H	-
39	NEYVELI LIGNITE CORPN. LTD.	A	H	Miniratna-I
40	NHPC LTD.	A	H	Miniratna-I
41	NMDC Ltd.	A	H	Navratna

42	NORTH EASTERN ELECTRIC POWER CORPORATION LTD.	A	H	-
43	NTPC LTD.	A	H	Maharatna
44	OIL & NATURAL GAS CORPORATION LTD.	A	H	Maharatna
45	OIL INDIA LTD.	A	H	Navratna
46	POWER FINANCE CORPORATION	A	H	Navratna
47	POWER GRID CORPORATION OF INDIA LTD.	A	H	Navratna
48	RAIL VIKAS NIGAM LTD.	A	H	-
49	RAILTEL CORPORATION INDIA LTD.	A	H	-
50	RASHTRIYA CHEMICALS AND FERTILIZERS LTD.	A	H	Miniratna-I
51	RASHTRIYA ISPAT NIGAM LTD.	A	H	Miniratna-I
52	RITES LTD.	A	H	Miniratna-I
53	RURAL ELECTRIFICATION CORPN. LTD.	A	H	Navratna
54	SECURITY PRINTING & MINTING CORPN. INDIA LTD.	A	H	Miniratna-I
55	SHIPPING CORPORATION OF INDIA LTD.	A	H	Navratna
56	SJVN LTD.	A	H	Miniratna-I
57	STATE TRADING CORPN. OF INDIA LTD.	A	H	Miniratna-I
58	STEEL AUTHORITY OF INDIA LTD.	A	H	Maharatna
59	TEHRI HYDRO DEVELOPMENT CORP. LTD.	A	H	Miniratna-I
60	TELECOMMUNICATIONS CONSULTANTS (INDIA) LTD.	A	H	Miniratna-I
61	ANDREW YULE & COMPANY LTD.	B	H	-
62	BALMER LAWRIE & CO. LTD.	B	S	Miniratna-I
63	BBJ CONSTRUCTION COMPANY LTD.	B	S	-
64	BHARAT COKING COAL LTD.	B	S	-
65	BHARAT DYNAMICS LTD.	B	H	Miniratna-I
66	BHARAT HEAVY PLATE & VESSELS LTD.	B	S	-
67	BHARAT PUMPS & COMPRESSORS LTD.	B	H	-
68	BRAHAMPUTRA CRACKERS & POLYMER LTD.	B	S	-
69	BRAHMAPUTRA VALLEY FERTILIZER CORPN. LTD.	B	H	-
70	BRAITHWAITE & CO. LTD.	B	S	-
71	BRIDGE & ROOF CO.(INDIA) LTD.	B	H	-
72	BRITISH INDIA CORPORATION LTD.	B	H	-
73	BURN STANDARD COMPANY LTD.	B	S	-
74	CEMENT CORPN. OF INDIA LTD.	B	H	-
75	CENTRAL COALFIELDS LTD.	B	S	Miniratna-I
76	CENTRAL ELECTRONICS LTD.	B	H	-
77	CENTRAL MINE PLANNING & DESIGN INSTITUTE LTD.	B	S	Miniratna-II
78	CHENNAI PETROLEUM CORPORATION LTD.	B	S	Miniratna-I
79	COCHIN SHIPYARD LTD.	B	H	Miniratna-I
80	COTTON CORPN. OF INDIA LTD.	B	H	-
81	DREDGING CORPN. OF INDIA LTD.	B	H	Miniratna-I
82	EASTERN COALFIELDS LTD.	B	S	-
83	ENGINEERING PROJECTS (INDIA) LTD.	B	H	Miniratna-II
84	ENNORE PORT LTD.	B	H	Miniratna-I
85	FERTILIZER CORPN. OF INDIA LTD.	B	H	-
86	GARDEN REACH SHIPBUILDERS & ENGINEERS LTD.	B	H	Miniratna-I

87	GOA SHIPYARD LTD.	B	H	Miniratna-I
88	HANDICRAFTS & HANDLOOM EXPORTS CORP. OF INDIA LTD.	B	H	-
89	HINDUSTAN CABLES LTD.	B	H	-
90	HINDUSTAN FERTILIZER CORPN. LTD.	B	H	-
91	HINDUSTAN NEWSPRINT LTD.	B	S	Miniratna-I
92	HINDUSTAN ORGANIC CHEMICALS LTD.	B	H	-
93	HINDUSTAN SHIPYARD LTD.	B	H	-
94	HINDUSTAN STEELWORKS COSTN. LTD.	B	H	-
95	HINDUSTAN VEGETABLE OILS CORPN. LTD.	B	H	-
96	HLL LIFECARE LTD.	B	H	Miniratna-I
97	HMT (INTERNATIONAL) LTD.	B	S	Miniratna-II
98	HMT MACHINE TOOLS LTD.	B	S	-
99	HMT WATCHES LTD.	B	S	-
100	INDIA TOURISM DEV. CORPN. LTD.	B	H	Miniratna-I
101	INDIA TRADE PROMOTION ORGANISATION	B	H	Miniratna-II
102	INDIAN DRUGS & PHARMACEUTICALS LTD.	B	H	-
103	INDIAN RAILWAY CATERING AND TOURISM CORPN. LTD.	B	H	Miniratna-I
104	INDIAN RAILWAY FINANCE CORPORATION LTD.	B	H	-
105	INDIAN RARE EARTHS LTD.	B	H	-
106	INDIAN RENEWABLE ENERGY DEVT.AGENCY LTD.	B	H	-
107	INSTRUMENTATION LTD.	B	H	-
108	M S T C LTD.	B	H	Miniratna-I
109	MADRAS FERTILIZERS LTD.	B	H	-
110	MAHANADI COALFIELDLS LTD.	B	S	Miniratna-I
111	MANGALORE REFINERY & PETROCHEMICALS LTD.	B	S	Miniratna-I
112	MANGANESE ORE(INDIA) LTD.	B	H	Miniratna-I
113	MINERAL EXPLORATION CORPN. LTD.	B	H	-
114	MISHRA DHATU NIGAM LTD.	B	H	Miniratna-I
115	NATIONAL HANDLOOM DEVELOPMENT CORPORATION LTD.	B	H	-
116	NATIONAL JUTE MANUFACTURES CORPORATION LTD.	B	H	-
117	NATIONAL PROJECTS CONSTRUCTION CORPN. LTD.	B	H	-
118	NATIONAL SMALL INDUSTRIES CORPN. LTD.	B	H	-
119	NORTHERN COALFIELDS LTD.	B	S	Miniratna-I
120	NUMALIGARH REFINARY LTD.	B	S	Miniratna-I
121	ONGC VIDESH LTD.	B	S	-
122	P E C LTD.	B	H	Miniratna-II
123	PAWAN HANS HELICOPTERS LTD.	B	H	-
124	PROJECTS & DEVELOPMENT INDIA LTD.	B	H	-
125	SCOOTERS INDIA LTD.	B	H	-
126	SOUTH EASTERN COALFIELDS LTD.	B	S	Miniratna-I
127	TYRE CORPORATION OF INDIA LTD.	B	H	-
128	URANIUM CORPORATION OF INDIA LTD.	B	H	-
129	WAPCOS LTD.	B	H	Miniratna-II
130	WESTERN COALFIELDS LTD.	B	S	Miniratna-I
131	ANDAMAN & NICOBAR ISL. FOREST & PLANT.DEV.CORP.LTD	C	H	-

132	ARTIFICIAL LIMBS MFG. CORPN. OF INDIA	C	H	-
133	BENGAL CHEMICALS & PHARMACEUTICALS LTD.	C	H	-
134	BHARAT PETRO RESOURCES LTD. *	C	S	-
135	BHARAT WAGON & ENGG. CO. LTD.	C	H	-
136	BIECCO LAWRIE & CO. LTD.	C	H	-
137	BROADCAST ENGG. CONSULTANTS INDIA LTD.	C	H	Miniratna-II
138	CENTRAL COTTAGE INDUSTRIES CORPN. OF INDIA LTD.	C	H	-
139	CENTRAL INLAND WATER TRANSPORT CORPN. LTD.	C	H	-
140	CENTRAL RAILSIDE WAREHOUSING CO. LTD.	C	S	-
141	EdCIL(India) Ltd.	C	H	Miniratna-II
142	FCI ARAVALI GYPSUM & MINERALS (INDIA) LTD.	C	H	-
143	FERRO SCRAP NIGAM LTD.	C	S	Miniratna-II
144	HINDUSTAN ANTIBIOTICS LTD.	C	H	-
145	HINDUSTAN INSECTICIDES LTD.	C	H	-
146	HINDUSTAN PHOTO FILMS MANUFACTURING CO. LTD.	C	H	-
147	HINDUSTAN SALTS LTD.	C	H	-
148	HMT BEARINGS LTD.	C	S	-
149	HMT CHINAR WATCHES LTD.	C	S	-
150	HOOGHLY DOCK AND PORT ENGINEERS LTD.	C	H	-
151	HOTEL CORPN. OF INDIA LTD.	C	S	-
152	HSCC (INDIA) LTD.	C	H	Miniratna-II
153	JUTE CORPN. OF INDIA LTD.	C	H	-
154	KARNATAKA ANTIBIOTICS & PHARMACEUTICALS LTD.	C	H	-
155	NAGALAND PULP & PAPER COMPANY LTD.	C	S	-
156	NATIONAL BACKWARD CLASSES FINANCE & DEVP.CO.	C	H	-
157	NATIONAL FILM DEV. CORPN. LTD.	C	H	Miniratna-II
158	NATIONAL HANDICAPPED FINANCE & DEVPT. CORPN.	C	H	-
159	NATIONAL MINORITIES DEVP. & FINANCE CORPN.	C	H	-
160	NATIONAL RESEARCH DEVELOPMENT CORPN.	C	H	-
161	NATIONAL SAFAI KARAMCHARIS FINANCE & DEVPT. CORPN	C	H	-
162	NATIONAL SCHEDULED CASTES FINANCE & DEVP. CORPN.	C	H	-
163	NATIONAL SCHEDULED TRIBES FINANCE & DEVP. CORPN.	C	H	-
164	NATIONAL SEEDS CORPN. LTD.	C	H	-
165	NEPA LTD.	C	H	-
166	NORTH EASTERN HANDICRAFTS & HANDLOOM DEV. CORPN. LTD.	C	H	-
167	NORTH EASTERN REGIONAL AGRI. MARKETING CORP.LTD.	C	H	-
168	RAJASTHAN ELECTRONICS AND INSTRUMENTS LTD.	C	H	Miniratna-II
169	RICHARDSON & CRUDDAS(1972) LTD.	C	H	-
170	SPONGE IRON INDIA LTD.	C	H	-
171	STATE FARMS CORPORATION OF INDIA LTD.	C	H	-
172	STCL LTD.	C	S	-
173	TRIVENI STRUCTURALS LTD.	C	H	-
174	TUNGABHADRA STEEL PRODUCTS LTD.	C	H	-
175	HINDUSTAN FLUOROCARBONS LIMITED	D	S	-

176	HINDUSTAN PREFAB LTD.	D	H	-
177	INDIAN MEDICINES & PHARMACEUTICAL CORPN. LTD.	D	H	Miniratna-II
178	ORISSA DRUGS & CHEMICALS LTD.	D	S	-
179	RAJASTHAN DRUGS & PHARMACEUTICALS LTD.	D	S	-
180	AIR INDIA AIR TRANSPORT SERVICES LTD.	UC	S	-
181	AIR INDIA CHARTERS LTD.	UC	S	-
182	AIR INDIA ENGINEERING SERVICES LTD.	UC	S	-
183	AIRLINE ALLIED SERVICES LTD.	UC	S	-
184	ANTRIX CORPORATION LTD.	UC	H	-
185	ASSAM ASHOK HOTEL CORPN. LTD.	UC	S	-
186	BALMER LAWRIE INVESTMENTS LTD.	UC	H	-
187	BEL OPTRONICS DEVICES LTD.	UC	S	-
188	BHARAT IMMUNOLOGICALS & BIOLOGICALS CORP. LTD.	UC	H	-
189	BHARAT PETRO RESOURCES JPDA	UC	S	-
190	BHARATIYA NABHIKIYA VIDYUT NIGAM LTD.	UC	H	-
191	BHARTIYA RAIL BIJLEE CO. LTD.	UC	S	-
192	BHOPAL DHULE TRANSMISSION COMPANY LTD. *	UC	S	-
193	BIHAR DRUGS & ORGANIC CHEMICALS LTD.	UC	S	-
194	BIRDS JUTE & EXPORTS LTD.	UC	S	-
195	BISRA STONE LIME COMPANY LTD.	UC	S	-
196	CERTIFICATION ENGINEERS INTERNATIONAL LTD.	UC	S	-
197	CHHATTISHGARH SURGUJA POWER LTD. *	UC	S	-
198	COASTAL KARNATAKA POWER LTD. *	UC	S	-
199	COASTAL MAHARASHTRA MEGA POWER LTD. *	UC	S	-
200	COASTAL TAMIL NADU POWER LTD. *	UC	S	-
201	CREDA HPCL BIOFUEL LTD.	UC	S	-
202	DONYI POLO ASHOK HOTEL LTD.	UC	S	-
203	EASTERN INVESTMENT LTD.	UC	H	-
204	EXPORT CREDIT GUARANTEE CORPN.OF INDIA LTD.	UC	H	-
205	FRESH & HEALTHY ENTERPRISES LTD.	UC	S	-
206	GAIL GAS LTD.	UC	S	-
207	GHOGARPALLI INTEGRATED POWER COMPANY LTD. *	UC	S	-
208	HOOGHLY PRINTING COMPANY LTD.	UC	S	-
209	HPCL BIOFUELS LTD.	UC	S	-
210	IDPL (TAMILNADU) LTD.	UC	S	-
211	INDIA INFRASTRUCTURE FINANCE CO. LTD.	UC	H	-
212	INDIAN VACCINE CORP. LTD.	UC	H	-
213	IRCON INFRASTRUCTURE & SERVICES LTD.	UC	S	-
214	J & K MINERAL DEVELOPMENT CORPN. LTD.	UC	S	-
215	JABALPUR TRANSMISSION COMPANY LTD. *	UC	S	-
216	JAGDISHPUR PAPER MILLS LTD. *	UC	S	-
217	KANTI BIJLEE UTPADAN NIGAM LTD.	UC	S	-
218	KARNATAKA TRADE PROMOTION ORGANISATION	UC	S	-
219	KUMARAKRUPPA FRONTIER HOTELS LTD.	UC	S	-
220	LOKTAK DOWNSTREAM HYDROELECTRIC CORPORATION LTD.	UC	S	-

221	MADHYA PRADESH ASHOK HOTEL CORPN. LTD.	UC	S	-
222	MAHARASHTRA ELEKTROSMELT LTD.	UC	S	-
223	MILLENNIUM TELECOM LTD.	UC	S	-
224	MJSJ COAL LTD.	UC	S	-
225	MNH SHAKTI LTD.	UC	S	-
226	NARMADA HYDROELECTRIC DEVELOPMENT CORPN. LTD.	UC	S	-
227	NATIONAL INFORMATICS CENTRE SERVICES INCORPORATED	UC	H	-
228	NLC TAMIL NADU POWER LTD.	UC	S	-
229	NTPC ELECTRIC SUPPLY COMPANY LTD.	UC	S	-
230	NTPC HYDRO LTD. *	UC	S	-
231	NTPC VIDYUT VYAPAR NIGAM LTD.	UC	S	-
232	NUCLEAR POWER CORPN. OF INDIA LTD.	UC	H	-
233	ORISSA INTEGRATED POWER LTD. *	UC	S	-
234	ORISSA MINERAL DEVELOPMENT COMPANY LTD.	UC	S	-
235	PFC CONSULTING LTD.	UC	S	-
236	PONDICHERRY ASHOK HOTEL CORPN. LTD.	UC	S	-
237	POWER SYSTEM OPERATION CORPORATION LTD.	UC	S	-
238	PUNJAB ASHOK HOTEL COMPANY LTD.	UC	S	-
239	RAICHUR SHOLAUR TRANSMISSION COMPANY LTD. *	UC	S	-
240	RANCHI ASHOK BIHAR HOTEL CORPN. LTD.	UC	S	-
241	REC POWER DISTRIBUTION CO. LTD.	UC	S	-
242	REC TRANSMISSION PROJECT CO. LTD.	UC	S	-
243	SAKHIGOPAL INTEGRATED POWER COMPANY LTD. *	UC	S	-
244	SAMBHAR SALTS LTD.	UC	S	-
245	SETHUSAMUDRAM CORPN. LTD.	UC	H	-
246	TAMIL NADU TRADE PROMOTION ORGANISATION	UC	S	-
247	TATIYA ANDHRA MEGA POWER LTD. *	UC	S	-
248	UTKAL ASHOK HOTEL CORPN. LTD.	UC	S	-
249	VIGNYAN INDUSTRIES LTD.	UC	S	-

*Note : UC -Uncategorized CPSE, * Shell Companies / SPVs (Special Purpose Vechile).*
The Schedule and status of the company is as per lattest information available.

Chapter-7

Delegation of Enhanced Financial Powers to CPSEs

The Board of Directors (BOD) of a CPSE exercise the delegated powers subject to broad policy guidelines issued by the Government from time to time. Keeping in view the pledge made in the then National Common Minimum Programme (NCMP), namely, that full managerial and commercial autonomy will be devolved to successful profit making companies operating in a competitive environment, the Government reviewed the powers delegated to the Board of Directors of Navratna, Miniratna and other profit making CPSEs, and substantially enhanced the delegated powers in August 2005. The Government, furthermore, introduced the Maharatna scheme in December, 2009 with the objective to delegate enhanced powers to the Boards of identified large sized Navratna CPSEs so as to facilitate expansion of their operations, both in domestic as well as in global markets.

7.1 Maharatna Scheme

7.1.1 Delegation of powers to Maharatna CPSEs

The Maharatna CPSEs, in addition to having Navratna powers, have been delegated additional powers in areas of investment in joint ventures/ subsidiaries and of human resources development. Accordingly, the Board of Maharatna CPSEs can decide to invest ₹ 5000 crore in one project (compared to ₹ 1,000 crore for Navartna CPSEs) and create below Board level posts upto E-9 level (compared to E-6 for Navratna CPSEs) without any approval from the higher authority

7.1.2 Eligibility criteria for grant of Maharatna status:

CPSEs fulfilling the following criteria are eligible for consideration of Maharatna status:

a) Having Navratna status,

b) Listed on Indian stock exchange, with minimum prescribed public shareholding under SEBI regulations,

c) An average annual turnover during the last 3 years of more than ₹25,000 crore,

d) An average annual net worth during the last 3 years of more than ₹15,000 crore,

e) An average annual net profit after tax during the last 3 years of more than ₹5,000 crore,

f) Significant global presence or international operations.

7.1.3 Maharatna CPSEs

Until May, 2010, the Government had conferred Mahratna status to 4 CPSEs namely, (i) Indian Oil Corporation Limited, (ii) NTPC Limited, (iii) Oil & Natural Gas Corporation Limited and (iv) Steel Authority of India Limited.

7.2 Navratna scheme

Under this scheme, the Government has delegated enhanced powers to CPSEs having comparative advantage and the potential to become global players. Presently, there are 15 Navratna CPSEs as mentioned below:

(i) Bharat Electronics Limited

(ii) Bharat Heavy Electricals Limited

(iii) Bharat Petroleum Corporation Limited

(iv) Coal India Limited

(v) GAIL (India) Limited

(vi) Hindustan Aeronautics Limited

(vii) Hindustan Petroleum Corporation Limited

(viii) Mahanagar Telephone Nigam Limited

(ix) National Aluminium Company Limited

(x) NMDC Limited

(xi) Oil India Limited

(xii) Power Finance Corporation Limited

(xiii) Power Grid Corporation of India Limited

(xiv) Rural Electrification Corporation Limited

(xv) Shipping Corporation of India Limited

7.2.1 Delegation of Powers to Navratna CPSEs:

The powers delegated to the Board of Director of Navratna CPSEs are mentioned below:

(i) Capital Expenditure

The Board of Navratna CPSEs have the powers to incur capital expenditure on purchase of new items or for replacement, without any monetary ceiling.

(ii) Technology Joint Ventures and Strategic Alliances

The Navratna CPSEs have the powers to enter into technology joint ventures or strategic alliances and obtain, by purchase or other arrangements, technology and know-how.

(iii) Organizational Restructuring

The Navratna CPSEs have the powers to effect organizational restructuring including establishment of profit centers, opening of offices in India and abroad, creating new activity centres, etc.

(iv) Human Resource Management

The Navratna CPSEs have been empowered to create and wind up all posts up to E-6 level and to make all appointments up to this level. The Boards of these CPSEs have further been empowered to effect internal transfers and re-designation of posts. The Board of Directors of Navratna CPSEs have the power to further delegate the powers relating to Human Resource Management (appointments, transfer, posting, etc.) of below Board level executives to sub-committees of the Board or to executives of the CPSE, as may be decided by the Board of the CPSE.

(v) Resource Mobilization

These CPSEs have been empowered to raise debt from the domestic capital markets and to borrow from international market, subject to the condition that approval of RBI/Department of Economic Affairs, (as may be required), will be obtained through the administrative Ministry.

(vi) Joint ventures and Subsidiaries

The Navratna CPSEs have been delegated powers to establish financial joint ventures and wholly owned subsidiaries in India or abroad with the stipulation that the equity investment of the CPSE should be limited to the following: -

(i) ₹ 1000 crore in any one project,

(ii) 15% of the net worth of the CPSE in one project,

(iii) 30% of the net worth of the CPSE in all joint ventures/ subsidiaries put together.

(vii) Mergers and Acquisitions (M&A)

The Navratna CPSEs have been delegated powers for mergers and acquisitions (M&A) subject to the conditions that (i) it should be as per the growth plan and in the core area of functioning of the CPSE, (ii) conditions/limits would be as in the case of establishing joint ventures/subsidiaries, and (iii) the Cabinet Committee on Economic Affairs (CCEA)would be kept informed in case of investments abroad. Furthermore, the powers relating to M&A are to be exercised in such a manner that it should not lead to any change in the public sector character of the concerned CPSE.

(viii) Creation/Disinvestment in subsidiaries

The Navratna CPSEs have the powers to transfer assets, float fresh equity and divest shareholding in subsidiaries subject to the condition that the delegation will be in respect of subsidiaries set up by the holding company under the powers delegated to the Navratna CPSEs, and further to the proviso that the public sector character of the concerned CPSE (including the subsidiary) will not be changed without prior approval of the Government. Such Navratna CPSEs will, moreover, be required to seek Government approval before exiting from their subsidiaries.

(ix) Tours abroad of functional Directors

The Chief Executives of Navratna CPSEs have been delegated powers to approve business tours abroad of functional directors up to 5 days' duration (other than study tours, seminars, etc.) in emergency under intimation to the Secretary of the administrative Ministry.

The above mentioned delegation of powers is, however, subject to the following conditions and guidelines:

a) The proposals must be presented to the Board of Directors in writing and reasonably well in advance, with an analysis of relevant factors and quantification of the anticipated results and benefits. Risk factors, if any, must be clearly brought out.

b) The Government Directors, the Financial Directors and the concerned Functional Director(s) must be present when major

decisions are taken, especially when they pertain to investments, expenditure or organizational/ capital restructuring.

c) The decisions on such proposals should, preferably, be unanimous.

d) In the event of any decision on important matters not being unanimous, a majority decision may be taken, but at least two thirds of the Directors should be present, including those mentioned in (b) above, when such a decision is taken. The objections, dissents, the reasons for over-ruling them and those for taking the decision should be recorded in writing and minuted.

e) No financial support or contingent liability on the part of the Government should be involved.

f) These CPSEs will establish transparent and effective systems of internal monitoring, including the establishment of an Audit Committee of the Board with membership of non-official Directors.

g) All the proposals, where they pertain to capital expenditure, investment or other matters involving substantial financial or managerial commitments or where they may have a long term impact on the structure and functioning of the CPSE, should be prepared by or with the assistance of professionals and experts and should be appraised, in suitable cases, by financial institutions or reputed professional organizations with expertise in the areas. The financial appraisal should also preferably be backed by the involvement of the appraising institutions through loans or equity participation.

h) The exercise of authority to enter into technology joint ventures and strategic alliances shall be in accordance with the Government guidelines as may be issued from time to time.

i) The Boards of these CPSEs should be restructured by inducting at least four non-official Directors as the first step before the exercise of the enhanced delegation of authority.

j) These public sector enterprises shall not depend upon budgetary support or on Government guarantees. The resources for implementing their programmes should come from their internal or through other sources, including the capital markets. However, wherever Government guarantee is required under the standard stipulations of external donor agencies, the same may be obtained from the Ministry of Finance through the administrative Ministry. Such Government guarantee shall not affect the Navratna status. Further, budgetary support to implement Government sponsored projects of national interest and Government sponsored Research & Development (R&D) projects will not disqualify CPSEs from retaining their Navratna status. However, for such projects, investment decisions will be taken by the Government and not by the CPSE concerned.

7.3 Miniratna scheme

In order to make the promising profit making CPSEs more efficient and competitive, the Government decided in October 1997 to grant enhanced autonomy and delegation of financial powers to CPSEs subject to certain eligibility conditions. These CPSEs, known as Miniratnas, belong to two categories, that is, Category- I and Category-II. The eligibility conditions and criteria for category-I and category-II CPSEs are as under:

(i) Category-I CPSEs should have made profit in the last three years continuously, the pre-tax profit should have been ₹30 crores or more in at least one of the three years and should have a positive net worth.

(ii) Category-II CPSEs should have made profit for the last three years continuously and should have a positive net worth.

(iii) These CPSEs shall be eligible for enhanced delegated powers provided they have not defaulted in the repayment of loans/interest on any loans due to the Government.

(iv) These public sector enterprises shall not depend upon budgetary support or Government guarantees.

(v) The Boards of these CPSEs should be restructured by inducting at least three non-official Directors as the first step before the exercise of enhanced delegation of authority.

(vi) The administrative Ministry concerned shall decide whether a CPSE fulfilled the requirements of a Category-I/Category-II Miniratna status before the exercise of enhanced powers.

7.3.1 Delegation of Powers to Miniratna CPSEs:

The decision-making powers delegated to the Board of Directors of these Miniratna CPSEs are as follows:

(i) Capital Expenditure:

(a) For CPSEs in category I: The power to incur capital expenditure on new projects, modernization, purchase of equipment, etc., without Government approval is upto ₹ 500 crore or equal to net worth, whichever is less.

(b) For CPSEs in category II: The power to incur capital expenditure on new projects, modernization, purchase of equipment, etc., without Government approval is upto ₹ 250 crore or equal to 50% of the net worth, whichever is less.

(ii) Joint ventures and subsidiaries :

(a) Category I CPSEs: To establish joint ventures and subsidiaries in India with the stipulation that the equity investment of the CPSE in any one project should be limited to 15% of the networth of the CPSE or ₹ 500 crore, whichever is less. The overall ceiling on such investment in all projects put together is 30% of the networth of the CPSE.

(b) Category II CPSEs: To establish joint ventures and subsidiaries in India with the stipulation that the equity investment of the CPSE in any one project should be 15% of the networth of the CPSE or ₹ 250 crore, whichever is less. The overall ceiling on such investment in all projects put together is 30% of the networth of the CPSE.

(iii) Mergers and Acquisitions (M&A):

The Board of Directors of these CPSEs have the powers for mergers and acquisitions, subject to the conditions that (a) it should be as per the growth plan and in the core area of functioning of the CPSE, (b) conditions/limits would be as in the case of establishing joint ventures/subsidiaries, and (c) the Cabinet Committee on Economic Affairs (CCEA) will be kept informed in case of investments abroad. Further, the powers relating to M&A are to be exercised in such a manner that it should not lead to any change in the public sector character of the concerned CPSE.

(iv) Scheme for HRD :

The Board of Directors of these CPSEs have the power to further delegate the powers relating to Human Resource Management (appointments, transfer, posting, etc.) of below Board level executives to sub-committees of the Board or to executives of the CPSE, as may be decided by the Board of the Miniratna CPSE.

(v) Tour abroad of functional Directors:

The Chief Executive of Miniratna CPSEs have the power to approve business tours abroad of functional directors up to 5 days' duration (other than study tours, seminars, etc.) in emergency, under intimation to the Secretary of the administrative Ministry.

(vi) Technology Joint Ventures and Strategic Alliances:

The Board of Miniratna CPSEs have the power to enter into technology joint ventures, strategic alliances and to obtain technology and know-how by purchase or other arrangements, subject to Government guidelines as may be issued from time to time.

(vii) Creation/Disinvestment in subsidiaries:

The Board of these CPSEs have the power to transfer assets, float fresh equity and divest shareholding in subsidiaries subject to the condition that the delegation will be in respect of subsidiaries set up by the holding company under the powers delegated to the Miniratna CPSEs, and further to the proviso that the public sector character of the concerned CPSE (including subsidiary) would not be changed without prior approval of the Government, and that such Miniratna CPSEs will be required to seek Government approval before exiting from the subsidiaries.

The above delegation of powers is subject to similar conditions as are applicable to Navratna CPSEs

7.4 Other profit making CPSEs

Those CPSEs which have shown a profit in each of the 3 preceding accounting years and have a positive net worth are categorized as 'other profit making CPSEs'. These CPSEs have been delegated enhanced powers as mentioned below

(i) Capital Expenditure

These CPSEs have the power to incur capital expenditure up to ₹ 150 crore or equal to 50% of the net worth, whichever is less. The above delegation is subject to the following conditions:

(a) inclusion of the project in the approved Five Year Plan and Annual Plans and the outlays provided for;

(b) the required funds can be found from the internal resources (IR) of the company and extra budgetary resources (EBR) and the expenditure is incurred on schemes included in the capital budget approved by the Government.

(ii) Tours abroad of functional Directors

The Chief Executive of these CPSEs have the power to approve business tours abroad of functional directors up to 5 days' duration (other than study tours, seminars, etc.) in emergency, under intimation to the Secretary of the administrative Ministry. In all other cases including those of Chief Executive, tours abroad will continue to require the prior approval of the Minister of the Administrative Ministry/ Department.

Chapter-8

Mou System In CPSEs

The Memorandum of Understanding (MoU) as applicable to public sector enterprises is a negotiated document between the government and the management of the enterprise specifying clearly the objectives of the agreement and the obligations of both the parties. It was first introduced in France in two phases, that is, as 'contracts de programme' in 1970 and as 'contracts d' Enterprise' in 1979 consequent to the Simon Nora Committee Report (1967). The main purpose of the MoU system is to ensure a level playing field to the public sector enterprises vis-à-vis the private corporate sector.

MoU system in India was first introduced in 1986 as a result of the recommendations of the Arjun Sengupta Committee Report (1984). The Committee laid emphasis on medium term contract between the Government and the Central Public Sector Enterprises (CPSEs) and recommended a five-year agreement that may be reviewed annually. Moreover, since the CPSEs have been set up as part of the national/central plan, the Committee favoured MoUs especially in respect of CPSEs in the core sectors of steel, coal, power, petroleum, fertilizer and petro-chemicals.

8.1 Autonomy and Accountability

The 'management' of the enterprise is, nevertheless, made accountable to the government through promise for performance or 'performance contract'. The government continues to have control over these enterprises through a priori supervision through 'setting targets' in the beginning of the year and through a posteriori 'performance evaluation' at the end of the year.

In order to grant autonomy to public sector enterprises vis-à-vis control of the government, the Arjun Sengupta Committee identified three areas of Government-PSE interaction, namely (a) price fixation, (b) investment planning and (c) financial management. In regard to price fixation the Committee observed that price control/ administered price/ retention price may be retained only in areas where the nature of product so justifies. It further stated that wherever CPSEs are operating under competitive market conditions, the CPSEs should be left on their own to fix the price of their output. While fixing prices for products of CPSEs operating under monopoly conditions, these should be benchmarked with international prices. The gradual dismantling of Administered Price Mechanism (APM) since 1991 has increasingly helped these enterprises to fix the output prices on market principles.

In regard to autonomy for investment planning, greater powers were subsequently delegated to the Board of Directors as recommended by the Committee. The Board of Directors of MoU signing CPSEs can therefore sanction capital expenditure without the prior approval of the government, especially so if the required funds could be found from the internal resources of the enterprise. In regard to financial management especially with reference to 'auditing', the Arjun Sengupta Committee was of the view that subsequent to evolving of appropriate accounting standards by the Comptroller and Auditor General of India (CAG), supplementary audit by CAG for the non-core sector should be given up. In the case of the enterprises in the core sector, however, the Committee recommended that company audit by the CAG may continue.

The Committee further observed that Ministries should not interfere in areas of decision making which are within the delegated powers of CPSEs. Accordingly numerous 'administrative controls' emanating from different 'government circulars' issued over the years and pertaining to public sector enterprises were dispensed consequent to the review exercises undertaken in the Department of Public Enterprises in 1996 and in 2000.

8.2 MOU System: Process and Principles'

The process of finalizing the MoUs starts with the issue of detailed Guidelines by the Department of Public Enterprises (DPE) on the basis of which the CPSEs submit their draft MoU after getting them approved by the respective Boards and the Administrative Ministries. The draft MOUs indicate (five) performance targets on a five point scale for the ensuing financial year. These draft MoUs are then discussed, improved and finalized during the MoU negotiation meetings. The MoU negotiations are attended by the Chief Executives of the CPSEs, Senior Officers from the administrative Ministries and the representatives of the nodal Government agencies such as Planning Commission and Ministry of Statistics & Programme Implementation. The Task Force on MoU set up by DPE, moreover, provides the oversight during the MoU negotiations.

8.2.1 Task Force and Syndicates

The MoU Task Force comprise former Civil Servants, CMDs of the Public Enterprise, financial and technical professionals, Chartered Accountants and academics. They are selected by DPE. Currently, there are 67 Task Force (TF) members who are divided into sector-wise Syndicate Groups. Each Syndicate consist of 6-7 members. One of the members of the Syndicate acts as the Convener. The rich experience and knowledge of the TF members in different fields provides the necessary technical input and enables the Syndicate in fixing more realistic targets. The DPE issues the Minutes of MoU negotiation meetings to the CPSEs (and the Ministry/Department concerned) for finalizing the MoUs which are authenticated in the DPE to ensure that those are in accordance with the decisions on targets as agreed upon during the meeting. Subsequently, all MoUs have to be signed before 31st March for implementation during the succeeding financial year.

8.2.2 High Power Committee on MoU

The High Power Committee (HPC) on MoU is a Committee of Secretaries (COS) set up by the Government as the Apex Committee to assess the performance of MoU signing CPSEs with reference to the commitments made by them in the MOU and also to assess how far the Administrative Ministries/ Departments have been able to give the necessary support as committed by them in the MoU. HPC is headed by the Cabinet Secretary. Secretary, Department of Public Enterprises is the Member-Secretary of this Committee. The other members comprise, Finance Secretary, Secretary (Expenditure), Secretary (Planning Commission), Secretary(Statistics & Programme Implementation). Chairman Public Enterprises Selection Board, Chief Economic Advisor, Department of Economic Affairs, Chairman Tariff Commission and Secretary (Performance Management). The Apex Committee of Secretaries on MoU has been from time to time giving directions in regard to the determination of the principles and parameters for evaluating the performance of CPSEs.

8.3 Aims and Objectives of MoU system in CPSEs

The aims and objectives of the MoU system are broadly the followings :

(a). To improve the performance of public sector enterprises by increasing autonomy of Management of the Company.

(b). To remove the fuzziness in goals and objectives of public sector enterprises.

(c). To evaluate the performance of management through objective criteria

(d). To provide incentive for better performance in future.

The incentives under the present system take two forms, namely 'monetary' and 'non-monetary' incentives. As per the Second Pay Revision Committee recommendations (for the executives of CPSEs) vide DPE OM No. 2(70)/08-DPE (WC)-GL-XV/08 dtd. 26.11.2008, the variable Performance Related Pay (PRP) would be payable in the case of profit making CPSEs at 100 % eligibility levels if the CPSE achieves the MoU rating as "Excellent". If the CPSE's MoU is rated as "Very Good", the eligibility of PRP would be 80% of the basic pay. In respect of "Good" and "Fair" ratings, the eligibility levels would be 60% and 40% of basic pay respectively. However, there will be no PRP irrespective of the profitability of CPSE, in case it is rated as "Poor". (Moreover, 60% of the PRP will be given with the ceiling of 3 % of Profit Before Tax (PBT) earned during the year and 40 % of the PRP will come from 10% of incremental profit. Further, the PRP has been linked to the performance of the individual executives, which will be based on a robust and transparent Performance Management System). The non-monetary incentives comprise the MoU Awards. These awards are also an expression of commitment of the policy makers to the MoU system. While excellent performing CPSEs are awarded with the MoU (Excellece) Awards and Excellence Merit Certificates, the remaining excellent performing CPSEs are recognized with Excellence Merit Certificates.

8.4 MoU Targets and Performance Evaluation

Performance evaluation at the end of the year indicates the extent to which the mutually agreed Targets agreed upon at the beginning of the year were achieved by the enterprise.

8.4.1 MoU Targets

The exercise of fixing MoU targets involves the following steps:

(i) Preparation of MoU Guidelines, which are issued by DPE in the month of October/ November.

(ii) Submission of draft MoU by CPSEs through Administrative Ministry on the basis of the MoU guidelines.

(iii). Examination of draft MoUs by the MoU Division and preparation of critiques to be circulated to the Task Force Members.

(iv). Fixing of dates and venue for MoU negotiation meetings that starts from January/February.

(v). Holding the MoU negotiation meetings to finalize the MoUs in the presence of the Task Force (January – March) each year.

(vi). Preparation and circulation of the Minutes

(vii). All MoUs have to be signed before 31st March of every year.

8.4.2 Evaluation methodology

The MoU system was revamped in 1989 and further refined in 2004. Under the current MoU Guidelines, equal weights (50% + 50%) are assigned to 'financial' and 'non-financial' parameters. These are done on the lines of 'balanced score card' approach of performance evaluation. The 'financial' parameters generally relate to profit related, size related and productivity related parameters. The 'non-financial parameters' are further sub-divided into 'dynamic parameters', 'enterprise-specific parameters' and 'sector-specific parameters'. Examples of 'dynamic' parameters are project implementation, investment in R&D and extent of globalization etc. Similarly, while the 'sector-specific' parameters refer to macro-economic factors like change in demand and supply, price fluctuations, variation in interest rates etc, (that are, factors beyond the control of the management), the 'enterprise-specific' parameters relate to issues such as safety and pollution etc. Performance targets for MoUs are framed on a five point scale.

The 'composite score' is thus an index of the performance of the enterprises. The grading of the 'composite score' is done in the following manner

MoU Composite Score	Grading
1.00-1.50	Excellent
1.51-2.50	Very Good
2.51-3.50	Good
3.51-4.50	Fair
4.51-5.0	Poor

8.5 Coverage of CPSEs under the MoU system

The MoU system that was started with four CPSEs signing MoU in the year 1986-87 increased its coverage to 202 CPSEs in the year 2009-10. Table 8.1 below provides the coverage of CPSEs over the years under the MOU system.

Table 8.1
MoU signing CPSEs

Year	MoUs signed* (Nos.)	Year	MoUs signed* (Nos.)
1987-88	4	1999-2000	108
1988-89	11	2000-01	107
1989-90	18	2001-02	104
1990-91	23	2002-03	100
1991-92	72	2003-04	96
1992-93	98	2004-05	99
1993-94	101	2005-06	102
1994-95	100	2006-07	113
1995-96	104	2007-08	144
1996-97	110	2008-09	144
1997-98	108	2009–10	197
1998-99	108	2010-11	202

** Until 2008-09, only Independent/Holding Companies have been signing MoU with their respective Ministries. The Subsidiary Companies were to sign MoUs with their Holding Companies. However, from 2009-10, the Subsidiary Companies have also to sign MoUs directly with the respective Ministries.*

8.6 MoU ratings of CPSEs

MoU rating of CPSEs during the last five years is shown in the Table 8.2 below:

Table 8.2
MoU Ratings

Rating	2005-06	2006-07	2007-08	2008-09	2009-10
Excellent	49	46	55	47	73
VeryGood	32	37	34	34	30
Good	15	13	15	25	20
Fair	06	06	08	17	20
Poor	00	00	00	01	01
Total	**102**	**102**	**112**	**124**	**144**

The MoU ratings of CPSEs has improved over the years. During 2009-10, as high a 50 percent of CPSEs evaluated had a MoU rating of 'Excellent'. As many as 21 percent of CPSEs had a MoU rating of 'Very Good'. Out of the remaining CPSEs 14 percent each were rated as 'Good' and 'Fair' and only one CPSE was rated as 'Poor'.

Research and Development

Today's competitive and challenging business environment demands continuous up-gradation and development of products, processes and services for sustained growth. Research and Development (R&D) contribute substantially towards achieving these goals. R&D also enables an enterprise to phase out products considering the short product life cycle of various products, by introducing new designs, technologies, products and services.

A number of CPSEs have in-house R&D facilities. The CPSEs have also gone for sponsored research through collaboration with Universities and reputed R&D institutions. Sponsored research is cost effective and is suited to CPSEs who cannot afford to incur expenditure on in-house research. Technological collaboration with leading companies of the world has been another approach adopted by CPSEs for upgrading their technological know-how. Increased use of information technology further improved the sophistication of these facilities.

There is, also, greater awareness of Intellectual Property Rights (IPR) and 'patenting' of new knowledge gained and discoveries made in the process of R&D. The National Research Development Corporation (NRDC), a CPSE, is actively engaged in promoting, developing and commercializing technologies, knowhow, patent and processes generated through national R&D institutions, thus helping individual enterprises and institutions acquire IPR/Patents for commercial use. The main thrust of NRDC has been towards closing the gaps in the innovation chain through which ideas and inventions get converted into marketable products/services. It also propagates inventions and innovations, enabling growth of indigenous technologies and providing commercial benefits to techno-entrepreneurs through IPR assistance.

The following paragraphs explain briefly the various R&D activities being undertaken by the different CPSEs in the different cognate groups of power, chemicals & pharmaceuticals, fertilizer, medium & light engineering, petroleum, refinery, steel, transportation equipment, crude oil, other minerals & metals, contract & construction, industrial development and transport services.

9.1 Power

9.1.1 NHPC Ltd.

(a) Energy audit:

With a view to assess and optimize the power station's performance, Energy Audit is being conducted. Based on the findings of these audits and the recommendations of CPRI, energy saving mesures are under implementation in a phased manner for the audited projects of NHPC.

(b) Clean Development Mechanism:

NHPC has taken cognizance of the Clean Development Mechanism (CDM), which is one of the three flexibility mechanisms under the Kyoto Protocol (1997). Two of its hydro power projects namely, Nimoo Bazgo (3 × 15 MW) Chutak (4 × 11 MW) have been taken up for CDM benefits. The estimated annual Green House Gas emission reduction is 180074 tCO2 and 159889 tCO2 respectively on commissioning of these two projects. In the case of other hydropower projects under construction as well Carbon Credits, under CDM and under VER (Voluntary Emission Reduction) are being pursued.

(c) R&D Activities

NHPC has been engaged as the nodal agency, by the Ministry of Non-conventional Energy Sources (MNES) for the development of Geothermal Power in India. Six promising geothermal sites have been identified for development, and are at various stages of implementation. The other R&D projects under implementation are mentioned below:

(i) 3.75 MW Durgaduani Mini Tidal Power project

(ii) National R&D Project -Development of Silt Erosion Resistant Material for Turbines of Hydro Generators

(iii) Solar Power as an alternative source

(iv) Ecological Study of Teesta River

(v) Development of Geothermal Power

9.1.2 Satluj Jal Vidyut Nigam Ltd. (SJVNL)

In order to reduce silt erosion to underwater parts of turbines, several research projects have been concluded through joint venture with research organizations. An in-house HVOF (High Velocity Oxy Fuel) robotic arm facility has been established to hard coat the underwater parts.

9.1.3 NTPC Ltd. (NTPC)

NTPC established its first R&D centre in 1980. Another R&D centre was set up in Noida in 1993. While the company has focused on the one hand on application oriented R&D to meet the specific needs of power stations, it is also developing cutting edge technologies in association with organizations like BARC, CPRI, and IITs. To carry out further improvements in its R&D activities, the Indian Institute of Science (Bangalore) has been appointed as the consultants for up-gradation of the R&D centre.

9.1.4 Nuclear Power Corp. of India Ltd. (NPCIL)

R&D requirements are met through in-house efforts as well as in association with other organizations, which includes including DAE (Dept. of Atomic Energy) units and academic institutions in the country. Thrust areas for R & D are Nuclear Systems and Electronic Systems. New technologies has been assimilated and absorbed with respect to VVER, FBRs and BWRs.

9.2 Chemical & Pharmaceutical

9.2.1 Bengal Chemicals and Pharmaceuticals Ltd. (BCPL)

All formulations are developed in-house in BCPL. Assistance is, furthermore, taken from Jadavpur University (Kolkata) and Central Research Institute, Kasauli for the development of production process, serum and vaccines.

9.2.2 Hindustan Organic Chemicals Ltd. (HOCL)

The R&D division of HOCL has been developing of eco-friendly catalyst and process improvements for the production of organic chemicals. The company is also collaborating with other organizations for making re-use of spent aniline and formaldehyde catalysts, that will result in substantial savings and disposal of hazardous wastes in an eco-friendly way. It has also developed a specific fuel for ISRO.

9.3 Consumer Goods

9.3.1 Artificial Limbs Manufacturing Corporation ofIndia (ALIMCO)

The company pursued development of Modular Above Knee Prosthesis with Four Bar Linkage Knee Joint, Active Prosthetic Leg, New Child Size Tricycle and Multi Utility Battery Operated Tricycle.

9.3.2 Hindustan Newsprint Ltd. (HNL)

In order to maximize production of highyielding, disease-resistant clonal plantlets, HNL has established two mist chambers with production capacity of 6 lakh plantlets per annum; expanded the facilities like hardening units, open nursery and clonal multiplication area to cater to the increased need of mist chambers; and operationalized 3 more Quonset mist chambers of temporary nature to overcome frequent power failure.

9.3.3 Hindustan Paper Corporation Ltd (HPC)

The company engaged in R & D activities on bamboo dust based gasification plant, tissue culture based production facility for quality planting materials, alkaline sizing trial etc.

9.3.4 Security Printing and Minting Corporation of India Ltd. (SPMCIL)

BNP, Dewas has indigenized the production of quickset intaglio ink. It has introduced an in-house developed bi-fluorescent ink for Indian Passport to be used by India Security Press, Nashik which has designed and produced the first batch of E-Passport for M/o External Affairs. The company is aiming to change production patterns so as to meet the advancement of information technology.

9.4 Fertilizer

9.4.1 Fertilizers and Chemicals (Travancore) Ltd. (FACT)

The R&D Centre of the Company functions with the aim of carrying out in-depth research, to provide specialized services to other divisions of the organization, and also involved in the production of environment friendly bio-fertilizers. It has been producing three kinds of biofertilizers viz. Rhizobium, Azospirillum and Bacillus Megatherium. The other areas of research study were quality control, Zincated, Factamfos, effect of particle size of carrier material in shelf life of Bio-fertilizers, etc.

9.4.2 Rashtriya Chemicals and Fertilizers Ltd. (RCF)

R & D activities are carried out in the areas of agriculture, chemicals and poultry as discussed below:

(a) Agriculture Division:

Micronutrients, Biofertilizers and 100% soluble fertilizers have been successfully developed with reference to soil and crop requirement, and products have been commercialized. Work is in progress on development of Tablet Fertilizer in various grades, undertaking trials for coffee plants in Karnataka various other crops in Maharashtra, undertaking developmental work on Biopesticides using Karanj and Nilgudi, developing tissue culture for banana and zerbera, development of customized fertilizer for region/site & crop specific drip grades.

(b) Chemical Division:

Development of 100% Water Soluble fertilizer MAP (12:61:0) in house R&D and installation of 10 MT/Day plant by April, 2009 based on generated data from bench scale plant are in progress. Water soluble Calcium Nitrate (40%) suspension fertilizer has been prepared in R&D laboratory as value addition to by-product chalk. Further agronomical studies on efficacy and mode of application has been carried out in Konkan Krishi Vidyapeeth, Dapoli & Mahatma Phule Krishi Vidyapeeth, Rahuri for certain crops and vegetables. The results are encouraging and market potential is being studied.

(c) Chickton:

In the field of Poultry, R&D has developed Liquid Feed Acidifier which helps in reducing mortality and improves weight gain on chickens. The product is also evaluated at CARI, a National Institute for Poultry. The results are encouraging and the product is currently under market trial.

9.5 Heavy Engineering

9.5.1 Burn Standard Co. Ltd. (BSCL)

BSCL is trying to strengthen its concerned areas of operation in core competence. Salem Works is endeavouring to develop low cost Mag. Carbon Bricks and high Alumina Magnesium Carbon Bricks for ladles impact zone, low cost Magnesium Chrome Bricks for different applications and Magnesium Chrome Laddie Bricks in collaboration with CGRS and develop better quality of MCB Bricks in collaboration with RDCIS, (Ranchi). It has successfully developed 'MODII' bogie for Indian Railways and has started bulk production. The Salem Works (R&D Centre) has also developed coconut shell powder as non-cnventional fuel as furnace oil, which is expected to save more than 40% of fuel cost of shaft kilns.

9.6 Medium & Light Engg.

9.6.1 Andrew Yule & Company Ltd. (AYCL)

The company has carried out R&D activities in different areas through its Engineering Division and Electrical Division. The Engineering Division has developed high speed fans and high dynamic seal for the fan. The Electrical Division has carried ut R&D activies in the areas of (a) 12 KV20 KA / 25 KA, 1250A /800 PC VCB Products, (b) 12 KV, 1250 Amps / 200 Amps, 40 KA VCB Indoor Panel and (c) Software for switchgear manufacturing.

9.6.2 Balmer Lawrie & Co. Ltd. (BL)

R&D work has been carried out in development of lubricants, leather chemicals and industrial packaging. Based on R&D efforts in lubricants, superior performance specialities were developed for application in steel sector, railways, automobile sector etc. In leather chemicals, the thrust of development had been towards high performance fat liquors and syntans as well as on environment friendly tanning agents. In industrial packaging, re- engineering of equipment developed in-house for conical drum manufacturing was taken up.

9.6.3 Bharat Electronics Ltd. (BEL)

BEL has set up Central Research Laboratories at Bangalore and Ghaziabad for undertaking research in futuristic areas. It also works closely with DRDO Laboratories. The company is working on new technology areas, such as, frequency hopping radios, encryption, software defined radio, mobile satellite terminals, c4i systems, phased array radars, new generation sonars, and electro-optical fire control system.

9.6.4 BEL Optronic Devices Ltd. (BELOP)

The Company's in-house R&D Unit is involved in development of new Products for the Company, improving export potential, establishing modern infrastructure to achieve process consistency, yield improvement & data logging and augmentation of Test Capacity. The Company has carried out R&D activities in following Specific Areas :

(a) Development of 18 mm Aviator's Night Vision System (ANVIS) type I.I. Tube, with Anti-Veiling Glare (AVG), Glass input Window (BELOP Type XX 1400/AA Series), having Cathode Sensitivity upto 50 μA/1m, Resolution upto 57 Ip/mm, Figure of merit upto 1080.

(b) Development of the ANVIS Type Power Supply Unit has a feature of External Gain Adjustment Control (EGAC),

(c) Automation of Power Supply Test Equipment, using Data Acquisition System and Software developed on NI LabView Platform,

(d) Automation of Brake-out Process for fabrication of Multi Alkali Photocathode, and

(e) Automation of Electron Scrubbing for Micro Channel Plates.

The major Products under development are the Gated Power Supply is being developed for Auto-gated applications of I.I. Tubes. I.I. Tubes with Auto-gated Power Supply (for Day and Night applications) and for reduction of flicker in Weapon Sight applications.

9.6.5 Central Electronics Ltd. (CEL)

The company makes efforts to retain its technological leadership in the area of SPV and chosen fields of electronics through in-house R & D as well as collaboration and cooperation with DRDO and CSIR Laboratories, Universities, IITs etc. CEL has launched a project for 'Point Zone Digital Axle Counter (PZDAC) with grant provided by DSIR (Dept of Scientific and Industrial Research) and a project for production of CZT Substrates sponsored by Solid State Physics Lab (SSPL).

9.6.6 HMT Ltd.

The company has taken R&D initiative for reduction of wheelbase and improvement in Ceramic clutches. The company has also made investment for technology up-gradation in CAD/CAM facilities,testing facilities, implementation of ERP packages etc. The company has developed 75HP naturally aspirated Engine and 4902 Genset Engine. Development of 7522 HP Tractor with 4WD & constant mesh gear box are under progress.

9.6.7 HMT Watches Ltd. (HWL)

The company has established its own R&D facilities for different products to meet its needs. The focus is on progressively achieving self reliance in product technology. It has developed and launched new sub-brand HQ series watches and has introduced several new models of watches.

9.6.8 ITI Limited (ITI)

The company has undertaken R&D initiatives for Encryption-Secure Communication,Pouncing Panther, Media Secrecy Device (MSD), Flex Data Encryptor (FDE) and FAX Encryptor and Protocol Converter (for E1 to V.35). These devises are successfully inducted into customer network.

9.6.9 Vignyan Industries Ltd. (VIL)

The Company has introduced fast loop moulding system (no bake process), installation of heat treatment furnace and procurement of spectrometer. Technology has also been developed for manufacture of SG Iron.

9.7 Petroleum (Refining & Marketing)

9.7.1 Bharat Petroleum Corporation Limited(BPCL)

R&D is an integral part of BPCL's strategy for achieving sustainable growth and profitability. BPCL has three in-house R&D Centres viz. Corporate R&D Centre at Greater Noida, (UP), Product & Application Development Centre at Sewree, Mumbai (Maharashtra) and R & D Centre at Kochi Refinery (Kerala). The new products developed recently include passenger car oil, fully synthetic gear oil, customer specific metal working fluid and high performance grease etc.

9.7.2 Bongaigaon Refinery and Petrochemicals Limited (BRPL)

In collaboration with IOC (R&D) (BRPL) has carried out field trial-run in its DCU & CCU plant for production of Needle coke of improved quality. Study was carried out to optimise the yields of diesel streams from Assam crude and blend Kerosene variants to the BS-II HSD pool so as to minimise the production of non-BS-II diesel. BRPL is producing a special grade BS-II diesel having (–) 12oC pour point by using pour point depressant. Light Diesel Oil (LDO) quality has also been improved for better customer satisfaction.

9.7.3 Chennai Petroleum Corpn. Ltd. (CPCL)

The in-house R&D Centre of CPCL continues extending support to refinery operations. The high pressure hydro-treating pilot plant was upgraded through revamp of PC- PLC Control system. CPCL has

been a pioneer in introducing many new technologies and Zero Discharge Plant etc.

9.7.4 GAIL (India) Limited (GAIL)

GAIL has been carrying out R&D activities in the areas of : (a) Leak detection software development for Natural Gas pipelines, (b) Technology for Adsorptive separation of Light hydrocarbonsGas mixtures, (c) Catalyst for the conversion of Waste Plastics, LPW to Liquid Fuels, and (d) Testing of Coke inhibitors for Gas Cracker Furnaces.

9.7.5 Hindustan Petroleum Corporation Limited (HPCL)

Corporate R& D was initiated in 2006-07. The R&D efforts include study of monolithic reactor for multiphase reactions, slurry bubble column hydro dynamics, ionic liquid catalysis and hydro dynamics in packed beds, modeling of mass transfer effects in residue FCC, and in-situ sulfating on NiMo/A12O3 catalysts. The projects on alternate energies and applicative research include hydrogen production from natural gas (with IIT,Delhi) and slop cut elimination (with IIT,Kanpur).

9.7.6 Indian Oil Corporation (IOC)

The company undertakes research in various areas in its R&D Centre established in 1972 at Faridabad. It lays thrust on cutting edge technologies, keeping in view the changing/emerging needs. The Company has more than 100 patents registered in India and abroad. The technologies under these patents relate to refinery and pipelines, lube/fuel and marketing etc. The Company has taken steps towards product diversification such as biodiesel, hydrogen research, LNG, petrochemicals etc. Some of the technologies have been acquired through joint ventures.

9.7.7 Mangalore Refinery and Petrochemicals Ltd. (MRPL)

MRPL is in the process of setting up a full fledged R&D centre. This will take up projects like Corrosion monitoring and inhibition (Water and Sulfide corrosion) in Refinery, Catalyst evaluation studies, additive efficacy, and further research in bio-based fuel or additives. Specific R&D activities on crude assay, destroying odour causing phenolic compounds in spent caustic using Chlorine Dioxide, development of suitable Bio-additive for HSD etc. have been undertaken in its existing labs.

9.8 Steel

9.8.1 Mishra Dhatu Nigam Limited (MIDHANI)

Midhani is offering its core competence for manufacturing alloys tailor-made to suit the specific requirements of customers for their critical applications.

In order to improve production design and processes the Company adopted new technologies which include pack and cold rolling trials for Titan 31, process improvement in MDN 403 and 440; modification of manufacturing route of Superni 690, development of air hardening quality Armour steel etc.

9.8.2 Rashtriya Ispat Nigam Ltd. (RINL)

R&D activities are undertaken in RINL keeping in view the present & future requirements of the different plants waste management, cost reduction and environment protection. Some of the major R&D initiatives undertaken have been :

(a) Carbonization tests in Pilot coke Oven for optimization of Coal blend, and

(b) Pot sintering experiments to find out effect of Micro fines in various proportions ranging from 0 to50 percentage of Iron Ore,

9.8.3 Steel Authority of India Ltd. (SAIL)

SAIL has a well-equipped R&D Centre for Iron and Steel (RDCIS) at Ranchi, which helps to produce quality steel and develop new technologies for the steel industry. SAIL also has an in-house Centre for Engineering and Technology (CET). In the direction of environmental management as well, SAIL made a mark in solid waste management and air emissions control.

9.9 Transportation Equipment

9.9.1 Cochin Shipyard Ltd. (CSL)

In-house R&D initiatives have been undertaken by the company in the areas of welding and design. CSL has developed complete design of 1500 KW tug, 2400 KW tug and 3300 KW tug, hull model for platform supply vessels; complete production engineering design of above tugs in 3D hull and outfit modeling in Tribon, 3D hull modeling and outfit modeling of piping systems, ventilation, air-conditioning, cabling and structural items; structural drawings of ADS based on the inputs

from Navy, propulsion systems integration for the ADS project, and Aircraft Facilities Complex for ADS.

9.9.2 Goa Shipyard Limited (GSL)

All the vessels that are under construction have been designed with GSL in-house design capability. GSL has designed in-house and model tested 35 knots Fast Patrol Vessel (FPV) for Indian Coast Guard.

9.9.3 Hindustan Aeronautics Ltd. (HAL)

The major R&D programmes currently being pursued by HALare Intermediate Jet Trainer (HJT-36), Light Combat Aircraft (Tejas), Weapon System Integration (WSI) on ALH, Sea Harrier upgrade, Light Combat Helicopter and development of accessories and avionics for different aircraft/helicopters.

9.10 Coal

9.10.1 Coal India Ltd. (CIL)

The Research & Development in Coal India Ltd. are promoted through the R&D Board of CIL, which sanctions R&D projects for funding from internal resources. The thrust areas of R&D activities are categorized as Production, Productivity and Safety, Coal Beneficiation, Coal Utilization and Environment & Ecology.

9.10.2 Eastern Coalfields Ltd. (ECL)

The R&D work relating to different mines is handled centrally by CMPDI(HQ), another subsidiary of CIL at Ranchi (UK) study on latest underground mining technologies have been proposed for different mines of ECL. Efforts are being made to modernize the operation of UG mines through deployment of SDL/ LHD, Universal Drilling Machine (UDM) and Pony Belt conveyor.

9.10.3 Neyveli Lignite Corporation ltd. (NLC)

The R & D projects initiated by the company include Integrated Farming System in the mine spoils area (for their reclamation), development of high performance highways using fly ash composites, development of a process for the production of activated carbon from lignite, popularization of fly ash in agriculture and pilot plant feasibility studies for continuous production of various forms of potassium humate. The Company has already developed a process for extracting humic acid from lignite whereby lignite will have utility for growth of agriculture. Patent has been granted for this projects with a view to commercialise the process, MoU has been entered into with National Research Development Corporation New Delhi.

9.10.4 Western Coalfields Limited(WCL)

R&D studies on extraction of pillar, Wide & Stall method, design of support system, hydro-geological survey, slope stability test, controlled blasting are carried out in various mines of WCL in collaboration with different scientific and research organizations, such as, Central Mining Research Institute, National Institute of Rock Mechanics and Central Mine Planning & Design Institute

9.11 Crude Oil

9.11.1 Oil and Natural Gas Corporation Ltd. (ONGC)

ONGC's R&D infrastructure comprises of ten institutes located across India that are engaged in R&D work covering varied areas of E&P activities such as Exploration, Reservoir Management, Drilling, Production Technology and Offshore. These institutes provide essential support to keep pace with the latest developments in the technology, through procurement of state-of-the art technology, forming strategic alliances with world leaders, signing of MoUs with other R&D Institutes within India and abroad.

State of Art technologies such as Q-Marine Survey, 4D-seismic,Multi-Component Seismic Survey, GX Technology, Sea-Bed Logging, Air Borne Electro Magnetic(AEM), Multi-Transient Electro Magnetic (MTEM), Virtual Drilling Seismic Channel Capacity Upgradation have been successfully absorbed by ONGC and Technologies like 4C-4D project and Accelerated Weight Drop (AWD) are under advanced stage of induction/absorption. ONGC has also identified potential areas for gas hydrate investigation in KG offshore, Mahanadi Offshore, Adaman Offshore and West Coast Offshore in collaboration with National Institute of Oceanography, Goa.

9.11.2 Oil India Ltd. (OIL)

The company has, so far, undertaken R&D initiatives in the areas of Oil to Oil and Oil to Source correlation studies reservoir fluid identification, control of paraffin deposition in production tubing of producing wells, evaluation of alkali surfactant and polymer (asp) flooding for EOR, development of oilfield chemicals, flow assurance of barekuri- makum pipeline, studies on conversion of coal to liquid fuel and ambient air quality monitoring in OIL's operational area.

9.12 Other Mineral & Metals

9.12.1 Bharat Refractories Limited (BRL)

Through its own fully equipped laboratories is aiming to meet the challenge of upgradation of process technology in the major consuming industries. Some of the products developed through in-house R & D efforts include Mullite bricks for high capacity Blast Furnace Tap Hole, Blast Furnace, Tap Hole Mass (both Tar bonded as well as resin bonded), and Zero Cement Castable.

9.12.2 Hindustan Copper Ltd. (HCL)

HCL has undertaken a study on bio-leaching of lean grade copper core of MCP in collaboration with Institute of Minerals and Metals Technology(IMMT), Bhubaneswar. HCL has also engaged Earth Resources Technology Consultants for optimization of blasting fragmentation.

9.12.3 Indian Rare Earths Ltd. (IREL)

The R&D activities undertaken by the company has resulted in improvement in grade and recovery of the mineral products, reduction of processing cost, development of new technology and recovery of strategic products from new raw materials

9.12.4 Kudremukh Iron Ore Co. Ltd. (KIOCL)

Technological modification for use of Hematite ore for pellet making and grinding facilities are under progress in collaboration with organizations like Regional Research Laboratory (RRL), Bhubaneswar, M/s COREM, Canada, and Metchem Canada Inc, Canada. The possibility of using presser filters is being explored in order to filter the ultra fines

9.12.5 National Aluminium Co. Ltd. (NALCO)

In-house R&D activities are carried out by the company in Alumina Plant and Smelter Plant which include Laboratory scale studies on Utilization of Fly Ash, setting up of a Pilot Plant for treatment of Sodiac Condensate, characterization of Baked Anode for process monitoring, setting up Anode Bench Scale Plant facilities, study on effect of Butts content on Green Anode quality etc. Collaborative R&D activities include development of effective technology for extraction of alumina from PLK in collaboration with MISA, Mosco (Russia), development of viable Flow Sheet to recover Titanium and Iron from the plant sand of Alumina Refinery, Damanjodi (with Institute of Minerals and Materials Technology, Bhubaneswar), decontamination and recovery of Carbon Value from SPL – a pilot plant study (with IMMT); plasma smelting of Red Mud for production of Pig Iron/ Cast Iron and Alumina rich slag with IMMT, investigation and utilization of SPL as a co-fuel at CPP in collaboration (with CFRI, Dhanbad); study on impurity build-up during bauxite processing and its effect on Bayer Liquor Chemistry (with JNARDDC, Nagpur), evaluation of grain refining efficiency of commercially available grain refiner alloys with JNARDDC(Nagpur) etc.

9.12.6 National Mineral Development Corp. Ltd. (NMDC)

The R&D Centre of NMDC functions in various thrust areas, such as, upgradation of processing technology of existing process plants; development of technology for utilization of low grade minerals and mines wastes and development of value added products etc. The company has undertaken R&D activities such as (i) setting up pilot plant facilities for production of Carbon Free Sponge Iron powder and Nano Crystalline powder from Blue Dust, (ii) development of indigenous technology for production of value added products from Beach Sand, (iii) setting up of pilot plant, for commercialization of Precipitated Silica Sodium Silicate and Zeolite – A from Kimberlite, (iv) development of various grades of Ferrite powders etc.

9.13 Contract & Construction Services

9.13.1 BBJ Construction Co. Ltd. (BBJCC)

With a view to upgrade technology, the Company has absorbed the know-how of Cable Stayed and Cable Suspension Bridges. In the field of Gauge Conversion, the company developed the First Launching Method of Steel Girders, which has been successfully introduced in various bridges, in the states of Assam, Uttar Pradesh and Andhra Pradesh.

9.13.2 Bridge & Roof Co. (India) Ltd. (B&R)

R&D activities of B&R include study of the existing business scenario as well as specific area where new products and services, either by diversification or by upgradation of technology can be identified. The company has been developing new products and services in diversified areas, such as, Furnaces and Heaters, LSTK Projects, Cross-country Pipeline, Highways and Expressways, Bailey bridge, Railway Wagons, Main Boiler for Thermal Power Stations, Metro Rai, Storage Silos for Alumina, Water Supply and Sewerage Systems, Flyovers etc.

9.14 Industrial Development & Technical Consultancy Services

9.14.1 Engineers India Limited (EIL)

The R&D activities in EIL are undertaken at its R&D Centre in Gurgaon as well as in association with institutes like IIP, CHT, IOC (R&D) etc.. Two R&D projects relating to design methodology for oxygen enrichment and improved CFC based LPG treating process have been completed. The CFC technology developed in association with the R&D wing of Indian Oil Corporation Ltd. has also been granted 'patent' in the USA.

9.14.2 National Research Development Corporation (NRDC)

For the up-gradation of technology, NRDC is selecting projects every year under its programe

'Priority Projects' with the following objectives :

- Market potential, supply of technology and export potential.
- Time bound programmes,
- Quick and effective utilization of technology.

9.14.3 RITES Limited

The company believes in improving its efficiency by way of technological upgradation. Steps taken towards technology upgradation have been:

(i) design and development of Cape Gauge DMU Train sets for Angola,

(ii) design and development of Cape Gauge Self

– Propelled Accident Relief Train for Angola,

(iii) detailed proposal for development of locomotive, crash worthiness and occupied protection (crew and passengers) for Indian Railways.

9.15 Trading & Marketing Services

9.15.1 Handicrafts & Handlooms Exports Corp. India Ltd. (HHEC)

The company undertakes development of in-house samples on continuous basis and strives to ensure quality control and timely delivery. HHEC, furthermore, contributed significantly to the revival of languishing crafts through identification and development of varied craft clusters in different regions of India. It has 21 procurement centres all over India.

9.15.2 Central Warehousing Corporation

CWC is fully committed to maintain scientific preservation of goods received in the warehouses. Code of storage practices are being formulated, which help in assessment of quality, methods of preservation, stacking pattern, nature of infestation, its control measures, etc. The Corporation has evolved storage practices for 207 commodities, which include agricultural produce, industrial chemicals and other notified commodities. The Corporation is also doing various trials on new chemicals in the field of pest control to evolve effective, less toxic and economic solutions to the pest problems. Earlier, wooden crates were being used as dunnage in the warehouses. As a part of the eco-friendly approach to avoid deforestation, the Corporation has tried alternate dunnage in the form of poly pallets, flexible unbaked laminated PVC flooring, street pallets, eco wood pallets, etc. The results have been encouraging. In a bid to evolve non-chemical methods of pest control, the Corporation has done successful trials on Neem Preparation "AZADIRACHTIN" 1500 PPM, which can be fitted as part of integrated storage pest management system. R&D Division has also carried out successful trials on fumigation of high value agro products using carbon di-oxide. These non chemical methods are likely to be more eco-friendly and viable alternative in control of storage pests particularly in organic food, which cannot be treated with any other pesticide. Based on the field trials, Corporation has introduced multilayered cross-laminated fumigation covers for effective and efficient fumigation.

9.16 Transport Services

9.16.1 Shipping Corporation of India Limited

The Company has achieved the following developments after research and analysis:

(i). installation of equipments and systems on board vessels, like Inmarsat Fleet 77 for economic and speedy communication from ships to shore and vice versa using high speed data/MPDS (mobile packet data service)/ISDN lines,

(ii). installed ISDN telephones/video telephones on new vessels,

(iii). installed water ingress detection system for detection of presence of water in cargo holds on all existing bulk carriers in line with the requirement of IMO

(iv). installation of ship security alert system on applicable coastal and foreign-going vessels as per ISPS code/DGS circulars, etc.

Mega and Major Projects Under Implementation

There were altogether 1005 projects in the central sector as on 31.3.2010 of which 131 projects were mega projects (each costing ₹ 1,000 crore and above), 528 major projects (each costing between ₹ 100 crore and ₹ 1000 crore) and 346 medium projects (each costing between ₹ 20 crore and ₹ 100 crore). The estimated cost of these 1005 projects works out to be ₹ 6,91,401 crore. Based on the Status Report on Central Sector Projects (each costing ₹ 20 crore and above) brought out by the Ministry of Statistics and Programme Implementation. (MOSPI), Government of India, the total expenditure incurred on these mega and major projects till 31.3.2010 stood at ₹ 297656 crore, which is 43.05 % of the total cost.

Out of these projects in the central sector, 138 projects (costing ₹ 500 crores and above) belonged to Central Public Sector Enterprises (CPSEs). Of these 138 projects, 94 were mega projects and 44 were major projects. While the total original cost in respect of these 138 projects of CPSE was equal to ₹ 4,03,808 crore, the revised / anticipated cost stood at ₹ 4,29,045 crore.

Sector wise status of these mega and major projects of CPSEs, indicating the name of the project, location, capacity, date of approval, date of commissioning together with anticipated date of completion and cost of the project (original and anticipated) is briefly mentioned in the paragraphs below.

10.1 Nuclear Power

There were 5 projects in the Nuclear Power sector under implementation, as on 31.3.2010. All the 5 projects were in Mega category costing ₹ 500 crores and above. These projects belonged to Nuclear Power Corporation of India Limited, Uranium Corporation of India Ltd. and Bhavini Limited, (a CPSE under construction). Project wise detail is given below:-

10.1.1 Nuclear Power Corporation of India Limited (NPCL

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Kaiga Atomic Power Project 3 & 4 Units, Kaiga, Uttara Kannada, Karnataka	MW 2 x 220	5/2001	10/2009 (6/2010)	4213.00 (3282.00)
2.	Kudankulam App, Kudankulam, Tamil Nadu	MW 2 x 1000	12/2001	12/2008 (3/2011)	13171.00 (13171.00)
3.	Rajasthan Atomic Power Project 5&6, Rawat Bhata Kota, Rajasthan	MWE 2 x 220	4/2002	2/2008 (3/2010)	3072.00 (3072.00)

10.1.2 Uranium Corporation of India Limited. (UCIL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Uranium Ore Mine & Processing Plant Kadapa, Andhra Pradesh		9/2007	4/2011 (4/2011)	1106.29 (1106.29)

10.1.3 Bhavini Limited

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Prototype Fast Breeding reactor, Kalpakkam, Tamil Nadu	MWe 500	9/2003	9/2010 (9/2011)	3492.00 (5,677.00)

10.2 Coal

There were 128 projects in the Coal sector, under implementation as on 31.3.2010. Of these, 10 were in Mega category and 41 in Major category;. there were 13 projects of CPSEs costing ₹ 500 crores and above. The projects belonged to South-Eastern Coal Fields Limited, Northern Coal Fields Limited and Neyveli Lignite Corporation Ltd. Project wise detail is given below:-

10.2.1 South-Eastern Coalfields Limited (SECL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Dipka Expansion OCP, Korba, Chhatisgarh	[20 MTY]	7/2005	3/2010 (3/2014)	1,268.53 (1,943.66)
2.	Gevra Expansion OCP, Korba, Chhastisgarh	[25MTY]	7/2005	3/2010 (3/2010)	1667.55 (1667.55)
3.	Kusmunda Expansion OCP, Korba, Chhatisgarh	[20 MTY]	6/2006	3/2011 (3/2013)	737.65 (1188.31)

10.2.2 Northern Coalfields Limited (NCL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Krishnashila Singrauli, Madhya Pradesh	[4MTY]	5/2006	3/2010 (3/2013)	789.88 (741.56)
2.	Amlohri Expansion Project 4 to 10 (6 MTY), Singaruli, Madhya Pradesh	[4 to 10 MTY]	5/2006	3/2014 (3/2016)	1352.04 (1143.54)
3.	Block-B OCP NCL [3.5 MTY], Sidhi, Madhya Pradesh	[3.5 MTY]	6/2006	3/2012 (3/2013)	746.04 (437.34)
4.	Nigahi Oc Expansion Project Singrauli Sidhi, Madhya Pradesh	10 MTY TO 15 MTY,	10/2007	03/2012 (03/2012)	529.40 (259.40)

10.2.3 Neyveli Lignite Corporation Ltd. (NLC)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Expansion of Mine-II, Neyveli, Tamil Nadu	[10.5 MTPA to 15.0 MTPA 4.5 MTPA	10/2004	6/2009 (3/2010)	2161.28 (2295.93)
2.	TPS-II Expansion (1470 MW to 1970MW) (NCL) Neyveli, T.N. Tamil Nadu	[1470 MW to 1970 MW (2 x 250 MW)]	10/2004	6/2009 (6/2011)	2030.78 (2453.57)
3.	Expansion of TPS-II[[1470 MW TO 1970 MW Neyveli,Tamil Nadu	(2x250 MW)	10/2004	06/2009 (06/2011)	2,030.78 (2,453.57)
4.	Expansion of Mine-II[Nayveli,Tamil Nadu1	10.5 MTPA TO 15.0 MTPA 4.5 MTPA]	10/2004	06/2009 (02/2010)	2,161.28 (2,295.93)
5.	Barsingsar TPS of 250 MW Bikaner, Raj.Rajasthan	[MW 2 125]	12/2004	6/2009 (9/2010)	1114.18 (1626.09)
6.	Tuticorin Thermal Power Project, Tuticorin, Tamil Nadu	[1000 MW]	5/2008	8/2012 (8/2012)	4904.54 (4904.54)

10.3 Mining

There was only one project in THE mining sector as on 31.3.2010. The project belonged to National Aluminum Company Limited (NALCO). Detail of the project is given below:-

10.3.1 National Aluminum Company Limited (NALCO)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Second Phase Expansion of Captive Aluminium Smelter, Koraput, Orissa	[6300000 TPY]	10/2004	12/2008 (11/2009)	4091.51 (4091.51)

10.4 Petroleum

There were 81 projects in the Petroleum sector under implementation, as on 31.3.2010. Of these, 39 were in Mega category and 41 in Major category; there were 49 Projects of CPSEs costing ₹ 500 crores and above. All these projects belonged to BRPL, BPCL, GAIL, HPCL, IOCL and ONGC. Project wise detail is given below:-

10.4.1 Bongaingaon Refinery Petroleum Ltd. (BRPL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Diesel Hydro Treatment Project Dhaligaon, Assam	1x2.7 MMTPA	6/2006	9/2009 (6/2010)	1431.91 (1675.72)

10.4.2 Bharat Petroleum Corporation Limited (BPCL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Crude Oil Receipt Facility, Kochi Refinery, Kerala	[1 X 5 MMTPA]	4/2006	9/2009 (12/2009)	2591.80 (3941.41)
2.	Hydrocracker Revamp & Setting Maharashtra		02/2008	12/2011 (12/2011)	825.00 (825.00)
3.	Capacity exp. Cum modernisation PH-II Location: Kochi, Kerala	9.5 MMTPA	09/2009	12/2009 (02/2010)	2,591.80 (3,941.41)

10.4.3 Gas Authority of India Limited (GAIL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Chainsa-jhajjar pipe- line project Haryana	1x35 MMSCMD	11/2007	09/2009 (03/2010)	967.77 (565.00)
2.	Vijaipur-Dadri-Bawana Pipeline Project Andhra Pradesh Mumbai, Maharashtra	[78 MMSCMD]	11/2007	11/2009 (4/2010)	5,595.31 [3,860.00]
3.	Dahej-Vijaipur Pipeline Project II		11/2007	10/2010 (10/2010)	4429.38 (3000.26)
4.	Compressor Station (Vijaipur & Jhabua) Phase I & II		11/2007	10/2011 (10/2011)	1,512.00 (1,212.85)
5.	Compressor Stations (Kailaras & Chainsa)		11/2007	11/2011 (4/2011)	1,061.93 (1,061.78)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
6.	Kochi-Kanjirkod Bangalore-Mangalore Pipeline Project PHASE-I		06/2009	N.A. (12/2012)	3,032.00 (3,032.00)
7.	Dhabol-Bangalore Pipeline Project PHASE-I, Karnataka		06/2009	N.A. (12/2012)	4,543.43 (4,543.43)
8.	Jagdishpur-Haldia Pipeline Project PHASE-I, Gujarat		07/2009	01/2013 (01/2013)	7,596.18 (7,596.18)
9.	BNPL Superlines (Uttranchal & Punjab) Multi State		12/2009	05/2011 (05/2011)	540.92 (540.92)
10.	BNPL Spurline (Uttranchal & Punjab)		12/2009	N.A. (05/2011)	540.92 (540.92)
11.	Bawana Nangal Pipe Line Project Delhi		10/2010	10/2010 (10/2010)	1,816.07 (1,816.07)

10.4.4 Hindustan Petroleum Corporation Limited (HPCL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Clean Fuels Project Vizag Refinery Modernization Visakhapatnam, A.P.	8.3 MMTPA	4/2003	5/2006 (12/2009)	1635.00 (2147.79)
2.	Lube Oil Base Stock Quality up Gradation, Maharashtra	API Gr-III	10/2006	4/2009 (5/2010)	638.90 (1030.00)
3.	Resitment of Marketing Installation at Visakh, Vishakhapatnam, A.P.		1/2009	12/2011 (12/2011)	756.00 (756.00)
4.	Installation of FCCV at Mimbai Refinery	[1 X 1.46 MMTPA]	3/2007	9/2009 (6/2010)	900.47 (900.47)
5.	Single Point Mooring Project At Visakhapatnam Vizag, A.ndhra Pradesh		11/2008	N.A. (05/2010)	643.46 (643.46)
6.	Guru Govind Singh Refinary Product Evacuation Punjab	9 MMTPA	01/2009	12/2010 (12/2010)	605.40 (605.40)
7.	Diesel Hydrotreator Project At Visakh Refinery Andhra Pradesh		03/2009	09/2011 (09/2011)	3,597.00 (3,597.00)
8.	Diesel Hydrotreator Project At Mumbai Refinery Maharashtra		03/2009	09/2011 (09/2011)	3,284.00 (3,284.00)

10.4.5 Indian Oil Corporation Limited (IOCL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Inst. of Facilities for Improvement in Diesel Quality Haldia, W.B.		11/2005	4/2009 (2/2010)	1876.00 (2869.00)
2.	Panipat-Naphta Cracker Project, Haryana	[4 x 22.5 MW]	4/2006	11/2009 (3/2010)	14,439.00 (14,439.00)
3.	Expansion of Panipat Refinery Haryana	[12 to 15 MMTPA]	6/2005	12/2009 (08/2010)	1,007.83 (1,007.83)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
4.	Residue Upgradation & MS/HSD Quality Improvement Project, Gujarat	[2.1 MMTPA]	1/2007	1/2010 (6/2010)	5,693.00 (6,898.00)
5.	MSQ Upgradation Project at Panipat Refinery, Panipat, Haryana		1/2008	12/2009 (1/2010)	1131.00 (1131.00)
6.	MSQ Upgradation Project at Barauni Refinery, Barauni, Bihar		4/2008	4/2010 (6/2010)	1492.00 (1492.00)
7.	Paradeep Refinery Project, Orissa		2/2009	3/2012 (11/2012)	29777.00 (29777.00)
8.	Paradip-Raipur-Sambalpur Ranchi Pipeline Maharashtra		08/2009	09/2012 (09/2012)	1,793.00 (1,793.00)
9.	Integrated Offshore Crude Oil Handling Facilities at Paradip Maharashtra		12/2009	06/2012 (03/2012)	1492.33 (1492.33)
10.	De-Bottlenecking of SMPL Maharashtra		12/2009	N.A. (12/2012)	1,584.00 (1,584.00)

10.4.6 Oil & Natural Gas Corporation Limited (ONGC)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	C2-C3 & LPG Recovery from LNG at Dahej, Gujarat	2X4 or 5 MMTPA	12/2003	6/2006 (7/2010)	900.92 (1493.49)
2.	Heera and South Heera Redevelopment Project, Maharashtra	[10.865 MML of Oil and 2.665 BCM Gas]	9/2006	6/2010 (6/2010)	2305.30 (2305.30)
3.	Development of C-Series Fields, Maharashtra	[1514. BCM gas and 6.13 MML of Oil]	8/2006	12/2008 (10/2010)	3195.16 (2800.00)
4.	Construction of New Process Complex MHN, Maharashtra	[23 Pipeline x 14 Platforms]	1/2007	5/2010 (5/2012)	2,853.29 (6,326.40)
5.	Development of B-22 Cluster Fields, Mumbai, Maharashtra	[2,46 MMT of Oil and 6.56 BCM of Gas]	1/2007	2/2009 (4/2012)	1,552.63 (2,920.82)
6.	Development of B-193 Cluster Fields, Maharashtra	5.57 MMT of Oil and 5.12 BCM of Gas]	6/2007	3/2010 (4/2012)	3,248.78 (5,633.44)
7.	Mumbai High South Redevelopment Phase-II	346 MT	6/2007	06/2009 (04/2011)	1,252.75 (8,061.42)
8.	Development of B-46 Cluster Field Maharashtra	4.48 BCM of Gas	6/2007	7/2010 (5/2012)	1436.21 (1436.21)
9.	Construction of 12 Offshore Supply Vessels Multi State	1x346 MT	06/2007	12/2011 (12/2011)	736.65 (736.65)
10.	HEERA Reconstruction Maharashtra		05/2008	04/2010 (05/2010)	706.70 (706.70)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
11.	North Tapti Gas Field Dev. Gujarat		07/2008	03/2011 (03/2011)	589.70 (589.70)
12.	Additional Gas Processing Units At Uran Maharashtra		10/2008	12/2011 (09/2012)	1,797.35 (1,797.35)
13.	Mumbai High North Development PHASE-II Maharashtra	17.35 MMT of Oil and 2.98 BCM of Gas	01/2009	09/2012 (09/2012)	6,855.93 (6,855.93)
14.	Assam Renewal Project For Group A Assam		03/2009	03/2013 (03/2013)	2,465.15 (2,378.86)
15.	Additional Dev. Of D-1 Field[Multi State	8.296 MMT	01/2010	12/2011 (12/2011)	2,163.64 (2,163.64)
16.	Offshore Grid Interconnectivity Project in Mumbai High	81 nos. Electrical submersible pumps	01/2007	3/2010 (3/2012)	740.02 [740.02]

10.5 Power

There were 89 projects in Power sector under implementation as on 31.3.2010. Of these, 38 were in Mega category and 46 in Major category. There were 51 Projects of CPSEs costing ₹ 500 crores and above. All these projects belonged to NEEPCO, NHPC, THDC, NTPC, PGCIL and SJYNL. Project wise detail is given as under:-

10.5.1 North East Electric Power Corporation Ltd. (NEEPCO)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Kameng Hydro Electric Project 4 X 150 MW, Arunachal PR.	[MWE 4 X150 = 600]	12/2004	05/2013 (05/2013)	2496.90 (3,253.22)
2.	Pare Hydro Electric Project Arunachal Pradesh	2x110 MW	12/2008	08/2012 (08/2012)	573.99 (573.99)

10.5.2 National Hydroelectric Power Corporation (NHPC)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Loktak Downstream Hydro Electric Project 3 X 30 / 2 X 30 MW, Manipur	[MW 3 X 30)/2X33]	12/1999	6/2006 (N.A.)	578.62 (578.62)
2.	Parbati Hydro Electric Project Stage-II 4 X 200 MW, Himachal Pradesh	[MW 4 X 200]	9/2002	9/2009 (3/2013)	3919.59 (3919.59)
3.	Lower Subansiri Hydro Electric Project Arunachal Pradesh	[MW 8 X 250]	9/2003	9/2010 (12/2012)	6,285.33 [6,285.33]
4.	Sewa-II Hydro Electric Project J&K	MW 3 X 40	9/2003	09/2007 (04/2010)	665.46 (1,016.74)
5.	Tessta Low Dam Hydro Electric Project Stage-III West Bengal	[MW 4 X 33]	10/2003	03/2007 (02/2011)	768.92 (1,279.40)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
6.	Chamera Hydro Electric Project, Stage-III Himachal Pradesh	[MW 231]	8/2005	08/2010 (12/2010)	1,405.63 (1,405.63)
7.	Teesta Low Dam Hydro Electric Project Stage-IV West Bengal	[4 X 40 MW]	9/2005	09/2009 (08/2011)	1,061.38 (1,307.03)
8.	Parbati Hydro Electric Project Stage-III 4 X 130 MW, Himachal Pradesh	[520MW]	10/2005	10/2010 (06/2011)	2,304.56 (2,304.52)
9.	URI H.E.P. Stage-II (NHPC), J&K	[240 MW]	8/2005	11/2009 (02/2011)	1,729.29 (1,724.79)
10.	Chutak Hydro Electric Project 4 X 11 MW, Kargh, J&K	[44 MW]	8/2006	2/2011 (2/2011)	621.26 (621.28)
11.	Nimboo Bazgo Hydro Electric Project J & K	[3 X 15 MW]	8/2006	08/2010 (12/2010)	611.01 (611.02)
12.	KISHANGANGA HEP J & K	3x110 MW	07/2007	07/2014 (01/2016)	2,238.67 (3,642.04)

10.5.3 Tehri Hydro Development Corporation Limited (THDC)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Koteshwar Hydro Electric Project, 4 X 100 MW, Tehri, Uttaranchal	[MW 4 X100]	4/2000	4/2005 (10/2011)	1301.56 (1301.56)
2.	Tehri Pumped Storage Plant, 4 X 250 MW, Uttranchal	[1000 MW]	7/2006	7/2010 (12/2014)	1657.00 (1657.60)
3.	Vishnugad-Pipalkota Hydro Electric Project Chamoli, Uttaranchal	[444 MW]	8/2008	7/2014 [3/2015]	2491.58 (2491.58)

10.5.4 Satluj Jal Vidyut Nigam Limited (SJVNL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Rampur Hydro Electric Project 412 MW, Rampur, Himachal Pradesh	[6 X 68.87 MW]	1/2007	1/2012 (3/2012)	2047.03 (2047.03)

10.5.5 National Thermal Power Corporation (NTPC)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Koldam Hydro Electric Project, 4 x 200 MW, Bilaspur, Himachal Pr	[MW 4 x 200)	10/2002	4/2009 (12/2011)	4,527.15 (4,527.15)
2.	Sipat STPP Stage-I, 3 x 660 MW Bilaspur, Chhatishgarh	[660 MW x 3]	12/2003	12/2009 (10/2011)	8,323.39 (8,323.39)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
3.	Barh STPP, 3 x 660 MW Bihar	[MW 3 x 660]	12/2003	11/2010 (10/2013)	8692.97 (8692.97)
4.	Loharinag Pala Hydro Electric Project Uttaranchal	[4 x 150 MW]	6/2006	11/2011 (12/2012)	2895.10 (2895.10)
5.	Korba STPP Stage-III, 1 x 500 MW Madhya Pradesh	[1 x 500 MW]	8/2006	2/2010 (8/2010)	2,448.50 (2,448.49)
6.	Farakka STPP Stage-III, 1 x 500 MW Murshidabad, West Bengal	[1 x 500 MW]	7/2006	8/2010 (11/2010)	2570.44 (2570.44)
7.	National Capital Thermal Power Project Stage-II, 2 x 490 MW, Dadri, Uttar Pradesh	[2 x 490 MW]	10/2006	10/2010 (10/2010)	5135.33 (5135.33)
8.	Simhadri STPP Stage-II, Visakhapatnam Andhra Pradesh	[2 x 500 MW]	8/2007	5/2011 (5/2011)	5103.39 (5038.53)
9.	Bongaigaon Thermal Power Project Assam	3x250 MW	1/2008	7/2011 (02/2012)	4375.35 (4375.35)
10.	Mouda Stpp Nagpur, Maharashtra	500 x 2 MW	11/2007	2/2012 (8/2012)	5459.28 (5459.28)
11.	Tapovan-Vishnugad Hep Uttaranchal	(4X130MW)	11/2006	03/2013 (03/2013)	2,978.48 (2,978.48)
12.	Barh Stpp Stage -II Bihar	2x660 MW	02/2008	08/2013 (08/2013)	7,341.04 (7,341.04)
13.	Vindhyachal Sttp Stage-IV Madhya Pradesh	2x500 MW	01/2009	11/2012 (11/2012)	5,915.00 (5,915.00)
14.	Rihand Sttp STAGE-III Uttar Pradesh	2X500MW	01/2009	11/2012 (11/2012)	6,230.81 (6,230.81)

10.5.6 Power Grid Corporation of India Limited (PGCIL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹. in crore) – Original / Anticipated
1.	Transmission Sy. Associated with Barh Gener, Project (P.Gr.), Bihar	[3 x 660 MW]	12/2005	9/2009 (12/2010)	3779.46 (3779.46)
2.	Kaiga 3 x 4 Transmission System Karnataka	[759 CKM]	3/2005	12/2007 (6/2010)	596.45 (1007.16)
3.	Kundankulam-App Transmission System, Tamil Nadhu	[1838 CKM]	5/2005	11/2008 (3/2010)	1779.29 (1896.65)
4.	Eastern Region Strengthing Scheme-I, (1142 CKM) Eastern Region	[1142 Ckm]	10/2006	10/2009 (12/2010)	975.96 (975.96)
5.	Western Region System Strengthing Scheme-II, Western Region	(7075 CKM),	7/2006	7/2010 (12/2010)	5221.23 (5221.23)
6.	Northern Region System Strengthening Scheme-V (1222 CKM) Northern Region	[400 KV]	6/2006	6/2009 (3/2010)	721.25 (721.25)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
7.	Transmission System Associated with Sasan Ultra Mega Power Project Multi State	765 kv x 7 + 400 kv x 2	12/2008	12/2012 (12/2012)	7031.88 (7031.88)
8.	Transmission System Associated with Parbati-III Hep. Himachal Pr.	400 KV	07/2006	01/2010 (06/2011)	557.24 (557.25)
9.	Northern Region System Strengthening Scheme-Ix Multi State	400 KV	07/2008	07/2011 (07/2011)	525.14 (525.14)
10.	Supplementary Transmission Associated With DVC And Maithon RBC Multi State	DVC(4500MW) and Maithion RB(1000MW)	08/2008	08/2012 (08/2012	2,360.95 (2,360.95)
11.	765 KV Pooling Station & Network With Dvc And Maithob RBC Multi State	DVC(4500MW) and Maithion RB(1000MW)	08/2008	08/2012 (08/2012)	7,075.33 (7,075.33]
12.	Tr. System Associated with Mundra Ultra Mega Power Project Multi State		10/2008	10/2012 (10/2012)	4,824.12 (4,824.12)
13.	Western Region Strengthening Scheme-X Multi State	2x1500 MVA, 765 KV	02/2009	02/2012 (02/2012)	664.96 (664.96)
14.	North- East North Western Interconnector I Project Multi State	800 KV ,132 KV ,400 KV	02/2009	08/2013 (08/2013)	11,130.19 (11,130.19)
15.	765 KV System For Central Part Of Northern Grid Part-I Multi State	765 KV	02/2009	02/2012 (02/2012)	1,347.32 (1,347.32)
16.	Northern Region System Strenghtening Scheme-XVIII Multi State	400 KV	02/2009	11/2011 (11/2011)	509.66 (509.66)
17.	Northern Region System Strenghtening Scheme-XV Multi State		02/2009	11/2011 (11/2011)	520.48 (520.48)
18.	Sipat-II Supp. Trans. System Chhatisgarh	[400 KVD/C AND 765 KV]	06/2005	06/2008 (11/2009)	813.67 (777.15)
19.	Neyveli TS-II Transimission System Tamil Nadu		01/2005	12/2007 (03/2010)	691.83 (913.33)

10.6 Steel

There were 49 projects under implementation in the Steel sector as on 31.3.2010. Of these, 6 were in Mega category and 23 in Major category; there were 9 Projects of CPSEs costing ₹ 500 crores and above. The projects belonged to SAIL and RINL. Detail of the Project is given as below:-

10.6.1 Steel Authority of India Limited (SAIL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Rebuilding of Coke Oven Battery No. 1 & 2, Jharkhand		10/2007	4/2010 (4/2011)	500.90 (500.90)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
2.	Expansion of Salem Steel Plant Tamil Nadu		1/2008	3/2010 (06/2010)	1902.00 (1902.00)
3.	Expansion of IISCO Steel Plant Burnpur, WestBengal		2/2008	7/2010 (6/2011)	14443.00 (14443.00)
4.	Expansion of Rourkela Steel Plant Rourkela, Orissa		9/2008	2/2011 (3/2013)	6133.00 [8,128.00]
5.	Expansion of Bhilai Steel Plant Bhilai, Chattisgarh		9/2008	5/2011 (3/2013)	5185.00 (6146.00)
6.	Expansion of Bokaro Steel Plant Jharkhand		1/2008	12/2010 (12/2010)	3316.00 (3,534.00)
7.	Rebuilding of Coke Oven Battery No.1 & 2 of BSP Bokaro		10/2007	N.A. (04/2011)	500.90 (500.90)
8.	Upgradation of Blast Furnance No.2 (Bokaro Steel Plant) Jharkhand		10/2007	N.A. (04/2010)	892.32 (892.32)

10.6.2 Rastriya Ispat Nigam Limited (RINL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Expansion of RINL/VSP from 3 MTPY-6.3 MTPY of Liquid Steel, V'Patnam, Andhra Pradesh	[3.3 MT]	10/2005	10/2009 (6/2011)	8692.00 (12228.00)

10.7 Telecommunication

There were 49 projects under implementation in the Telecommunication sector as on 31.3.2009. Of these, 3 were in Mega category and 38 in Major category; there were 10 projects costing ₹ 500 crores and above. The projects belonged to BSNL and MTNL. Detail of the Projects is given below:-

10.7.1 Bharat Sanchar Nigam Limited (BSNL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	GSM Expansion, Ph.-IV (B), Maharashtra	13,50,000 Lines	7/2005	3/2006 N.A.	1174.75 (1174.75)
2.	GSM equipment of 3125 K Lines (2G) & 625 Lines(3G), Phase-V,1 Maharashtra	[3125K Lines]	9/2008	9/2009 (6/2010)	1799.94 (1799.94)
3.	GSM equipment of 900 K Lines (2G) & 300K Lines (3G)-Phase-V Rajasthan	[300K Lines)	6/2007	12/2008 (12/2009)	601.49 (601.49)
4.	Execution of Telecom Network Requirement of Defence Forces Multi State		05/2006	03/2009 (09/2010)	1,077.00 (1,077.00)
5.	Procurement of 10g (40 Chl) Dwdm Equipment Multi State		08/2006	03/2009 (12/2010)	590.10 (590.10)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
6.	Implementation of Ftth, The State of The Art Access Network. Procurement of Gpon Equipmant Multi State		12/2007	03/2010 (10/2010)	952.88 (952.88)
7.	Procurement of 10g 40 Chl (12 Chi Equipped) DWDM Equipment (SDCA Level) Multi State		12/2007	03/2010 (12/2010)	545.50 (545.50)
8.	GSM Equipment Of 1625k Lines(2G) & 325K Lines in M.P Ph-V.I Madhya Pradesh		06/2008	08/2009 (06/2010)	908.30 (916.70)

10.7.2 Mahanagar Telephone Nigam Limited (MTNL)

Sl No.	Project Location	Capacity	Date of approval	Date of commissioning – Original / Anticipated	Cost (₹ in crore) – Original / Anticipated
1.	Expansion of 750K GSM Lines o 2.5 GSM and Validation Equip. Delhi	(750K Lines)	2/2007	10/2007 (N.A.)	741.77 (278.16)
2.	East-West Transnission Corridor Strengthning Scheme Multi State		06/2006	06/2009 (09/2010)	803.70 (803.76)

Chapter-11

CPSEs Under Construction

There are some Central Public Sector Enterprises (CPSEs) which are at construction stage and have yet to go on regular production on a commercial scale. Many of these CPSEs are subsidiary companies with small 'authorized' and 'paid up capital' Some of these subsidiary companies are 'shell companies' which have been set up to facilitate the establishment of Ultra Mega Power Projects (UMPP) or other Projects in different parts of the country. The objective of 'shell companies' is to develop large capacities of power generation in India and to bring in the potential investors in UMPP after developing such projects to a stage having major clearances. Power Finance Corporation Limited was selected as the Nodal Agency by the Central Electricity Authority for the development of such power projects.

Other than PFC, Bharat Petroleum Corporation Ltd., NTPC Limited, Rural Electrification Corporation Limited and Hindustan Paper Corporation Ltd. have also set up 'shell companies' which work as Special Purpose Vehicle to facilitate timely completion of the projects.

As on 31.3.2010, there were altogether 32 CPSEs 'under construction' as against 33 as on 31.3.2009. While eleven CPSEs 'under construction' existing in 2008-09 have not been covered in the current financial year, same number of enterprises have been added to this list during the financial year 2009-10. The reasons for excluding eleven enterprises are mentioned below:

S. No.	Name of Enterprise	Reason for Exclusion
1.	IL Power Electronics Limited	Winding up by the notice of Registrar of Companies, Rajasthan.
2.	Instrumentation Control Valves Ltd.	Winding up by the order of Department of Heavy Industry.
3.	Instrumentation Digital Controls Ltd.	
4.	East-North Interconnection Co. Ltd.	Transferred to M/s Reliance Power Transmission Limited.
5.	North Karanpura Transmission Co. Ltd.	
6.	Talcher-II Transmission Co. Ltd.	
7.	Bokaro Kodarma Maithon Transmission Company Ltd.	Dissolved by the Registrar of the Companies.
8.	Bharat Petroresources Ltd.	Became operational in 2009-10.
9.	GAIL Gas Limited	
10.	IAL Airport Services Limited	Board of Company decided to strike off the name of the company from the Registrar of Companies.
11.	REC Transmission Projects Co. Ltd.	Became operational in 2009-10.

While the total 'authorized capital' of these 32 CPSEs stood at ₹ 16,456.60 crores, the paid up capital stood at ₹ 5,216.78 crores as on 31.3.2010. Brief detail of these enterprises showing their status, date of incorporation as well as their authorized and paid-up capital are given in the tables below:

Table 11.1
CPSEs Under Construction

					(₹ lakh)
S. No.	**CPSE**	**Status**	**Year of Incorpo-ration**	**Authorised Capital (₹ in lakh)**	**Paid–up capital (₹ in lakh**
1.	Air India Engineering Services Ltd.	Subsidiary	2006	100	5
2.	Bharat Petroresources JPDA	Subsidiary	2006	100	5
3.	Bharatiya Nabhikiya Vidyut Nigam Ltd.	Independent Company	2003	500000	270285
4.	Bharatiya Rail Bijlee Company Ltd.	Subsidiary	2007	160600	40000
5.	Bhopal Dhule Transmission Company Ltd.	Subsidiary	2010	5	5
6.	Bihar Drugs & Organic Chemicals Ltd.	Subsidiary	1994	5	3
7.	Brahmputra Cracker & Polymer Ltd.	Subsidiary	2006	120000	26337
8.	Chattisgarh Surguja Power Ltd. *	Subsidiary	2006	5	5
9.	Coastal Karnataka Power Ltd.	Subsidiary	2006	5	5
10.	Coastal Maharashtra Mega Power Ltd.	Subsidiary	2006	5	5
11.	Coastal Tamil Nadu Power Ltd.	Subsidiary	2007	5	5
12.	CREDA – HPCL Biofuel Ltd.	Subsidiary	2008	20000	1058
13.	Dedicated Freight Corridor Corporation of India Limited	Independent Company	2007	400000	35800
14.	Ghogarpalli Integrated Power Co. Ltd.	Subsidiary	2009	5	5
15.	HPCL Biofuels Ltd.	Subsidiary	2010	25000	10000
16.	Indian Vaccine Corporation Ltd.	Subsidiary	1988	5000	1879
17.	Ircon Infrastructure & Services Limited	Subsidiary	2010	1000	40
18.	Jabalpur Transmission Co. Limited	Subsidiary	2010	5	5
19.	Jagdishpur Paper Mills Ltd.	Subsidiary	2008	500	5
20.	Kanti Bijlee Utpadan Nigam Limited	Subsidiary	2006	10000	8851
21.	Loktak Downstream Hydroelectric Corporation Limited	Independent Company	2009	23000	6000
22.	MJSJ Coal Limited	Subsidiary	2009	20000	4010
23.	MNH Shakti Limited	subsidiary	2009	10000	2510
24.	NLC Tamil Nadu Power Ltd.	Subsidiary	2006	180000	30000
25.	NTPC Hydro Limited	Subsidiary	2003	50000	10080
26.	Orissa Integrated Power Limited	Subsidiary	2006	5	5
27.	Power System Operation Corporation Ltd.	Subsidiary	2010	20000	5
28.	Punjab Ashok Hotel Company Limited	Subsidiary	1998	300	250
29.	Raichur Sholaur Transmission Co. Ltd.	Subsidiary	2010	5	5
30.	Sakhigopal Integrated Power Co. Ltd.	Subsidiary	2009	5	5
31.	Sethusamudram Corporation Ltd.	Independent Company	2004	100000	74500
32.	Tatiya Andhra Mega Power Ltd.	Subsidiary	2010	5	5
	Total			**1645660**	**521678**

** During the 2009-10, the name of the company has been changed from Akaltara Power Limited to Chhattisgarh Surguja Power Limited.*

11.1 Air India Engineering Services Ltd.

Air India Engineering Service Limited (AIESL), a wholly owned subsidiary company of Air India Ltd, was incorporated on 11 March 2004. The authorized capital and paid up capital of the company as on 31.3.2010 was ₹ 1.00 crore and ₹ 0.05 crore respectively. The main objectives of the company are (i) to carry on the business and activities of providing engineering services to aircraft and the services of repairing, maintaining, servicing and refurbishing aircraft and all components and parts thereof. To carry on the business and activities of providing engineering services or aircraft engines, auxiliary power units and the services of repairing, maintaining, servicing and refurbishing aircraft engines, auxiliary power units and all parts and all components thereof and to carry on the business of providing engineering services, repairing and maintaining services of any nature for aircraft, flying machines, helicopters, dirigibles, balloons, aerial conveyances and their engines, auxiliary power units and all components and parts of any of the foregoing in any part of the world. However, pending Government approval, no business transactions has taken place till date.

11.2 Bharat Petroresources JPDA

Bharat Petroresources JPDA Limited was incorporated as a wholly owned Subsidiary company of Bharat PetroReouces Limited (BPRL). The company was formed as a Special Purpose Vehicle as required under the terms on which the Block JPDA06-103 in East Timor in the Joint Petroleum Development Area (JPDA) between East Timor and Australia, was awarded to the consortium led by Oilex Limited in which PBRL was a partner, to carry out exploration activities relating to the said block. The authorized capital and paid up capital of the company as on 31.3.2010 was ₹ 1.00 crore and ₹ 0.05 crore respectively.

The Minimum Work Programme Commitment (MWPC) in the block comprises a Primary term of exploration phase of three years which is extended upto 15.1.2011, a Secondary term of two year an a third term of another two years subsequently. The block is currently in the primary stage, which covers drilling of four wells in the said block.

In September 2009, BPRL farmed out 5% participating interest in this block to M/s Pan Pacific Petroleum (PPP), which was in line with a similar farm-out by the Operator in the block to M/s Japan Energy Corporation. This farm out was with a view to reducing the drilling risk. After the partial farm out, the company holds 20% participating interest in this block.

During the year, two wells were drilled in the block. There were indications of presence of hydrocarbon in one well, but was found sub-commercial. Currently, the technical studies are in progress. Based on the results of the already drilled two wells, the company is carrying out further technical studies on the block to identify drillable prospects for drilling the balance two commitment wells.

11.3 Bharatiya Nabhikiya Vidyut Nigam Ltd.

Bharitiya Nabhikiya Vidyut Nigam Ltd. (BHAVINI) was incorporated in October, 2003. The authorized capital and paid up capital of the company as on 31.3.2010 was ₹ 5000 crore and ₹ 2702.85 crore respectively. The Company is responsible for construction, commissioning and operation of 500 MWe Prototype Fast Breeder Reactor Project at Kalpakkam, Tamil Nadu as well as the other Fast Breeder Reactors (FBR) that may come up in future. The progress of the FBR Project at Kalpakkam is mentioned below :

- The Main Vessel with integrated core catcher and core support structure made up of 316N stainless steel with a diameter of 12.9 metre and 12.8 metre height weighing about 296 tonnes of thin walled structure is lowered into the Safety Vessel from a distance of 57 meter.
- Subsequently to erection of main vessel in Reactor Vault, Thermal Baffle made up of stainless steel 316LN with two concentric cylinder shells of diameter 12.44 metre and 12.67 metre respectively and 5 metre height weighing about 70 tonnes is also lowered into Main Vessel.
- All 4 numbers of Argon Buffer Tanks have been erected & positioned in the reactor building. The hatch block and slab at 22.5 metre and 30 metre over tank area has been completed. 280/85 tonne EOT crane grides have been erected and trolley assembly is in progress. Six out of ten numbers of roof truss have been erected over reactor containment building roof top.
- About 1293 tonnes of Sodium metal has been transferred safely in Sodium Storage Tanks and Argon Buffer Tank (ABT). The structural works of Steam Generator Building 1 and 2 have been completed up to the roof.
- The entire civil structural works for fuel building, electrical building 1 and 2 have been completed

and the erection of 6.6.KV switchgear panels, batteries have commenced. In Control Building, 4 numbers of HCR panels have been erected in position.

- Control Building structural works have been completed and 4 numbers of handling control room panels have been erected. RAD Waste Building civil works have been completed and in-situ fabrication of effluent treatment tanks have commence. SS Lining works for the cells at 30 metre have been completed.
- The construction of Diesel Generator Buildings (DGB01&2) have been completed and the 4 number of 4500 kVA Diesel Generators have been erected in position.
- Sea water outfall channel have been completed.

11.4 Bhartiya Rail Bijlee Company Limited

The company was incorporated on 22nd November, 2007 as a subsidiary company of NTPC Ltd. It is a joint venture (JV) with the Ministry of Railways. It is main objective is to undertake various activities related to setting up of the 1000 MW Coal Based Thermal Power Project (4x250 MW) at Nabinagar (Arangabad) in Bihar, and thereafter undertake Operation and Maintenance (O&M) for meeting traction and non-traction requirement of electricity of Railways and others. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 1606 crore and ₹ 400 crore respectively.

For setting up 4X250 MW Power Project at Nabinagar, Bihar, 1249.11 acres of land has been handed over by the Government of Bihar during the year 2009-10 and the cumulative land holding of the company as on 31st March 2010 is 1259.62 acres. Further requisition of Makeup water Corridor (39.3775 acre), Additional land for Ash Dyke (50.3125 acre), Left land under main plant and township area (82.7575 acre) and Left land under ash pond area (50.00 acre) i.e. approx 220 acre land requisition is pending with district administration. Further land is to be acquired for MGR corridor for which DPR is to be finalized by RITES.

Infrastructure civil works has already started and considerable progress has been achieved in site leveling job. Also construction of boundary wall, office building and store shed has been started. Main plant civil works & chimney package in which the agency has mobilized site has been awarded. Other main packages like 400 KV switchyard, power transformer, LT & HT switchgear etc have also been awarded. Balance packages are in different stage of award by our consultant NTPC limited.

As of now the schedule of Boiler Erection for Unit 1 was June 2010 as against the originally targeted for October 2008. The schedule for synchronization of first unit of 250 MW is in February 2012 which is likely to slip due to delay in land acquisition. The company has also commenced the work for the enabling township with award of construction of field hostel, township boundary wall and CISF barracks. Estimate of main township is under preparation.

11.5 Bhopal Dhule Transmission Company Limited (BDTCL)

Bhopal Dhule Transmission Company Ltd. was incorporated on 08.09.2009 as a subsidiary company of Power Finance Corporation. It is a transmission system project for 'System Strengthening for Western Region (WR)'. The project includes System Strengthening for WR (Jabalpur-Bhopal, Bhopal-Indore, Aurangabad-Dhule, Dhule-Vadodra), all 765 kV S/C lines with associated 765 kV substation at Bhopal and Dhule. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore. Request for Qualification (RfQ) for the project has been issued in March '2010. Evaluation of RfQ responses is in progress.

11.6 Bihar Drugs & Organic Chemicals Limited (BDOC)

Bihar Drugs & Organic Chemicals Limited BDOC) was set up in 1994 as a wholly owned subsidiary of the Indian Drugs & Pharmaceuticals Limited to manufacture Acetic Acid and other related products. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore and ₹0.03 crore respectively. The company's Registered and Corporate/Head Office as well as the manufacturing unit are located at Muzaffarpur, Belagarh (Bihar). There is, however, no production activity since 1996.

11.7 Brahmputra Cracker And Polymer Limited (BCPL)

Brahmputra Cracker and Polymer Limited (BCPL), was incorporated on 08.01.07 as a subsidiary of GAIL with equity participation from GAIL (70%), OIL(10%), Govt. of Assam(10%) and NRL(10%), for setting up 2,80,000 MT Gas Cracker Project at Lepetkata, District Dibrugarh, Assam. The authorized capital and paid up capital of the Company as on

31.3.2010 was ₹ 1200 crore and ₹ 263.37 crore respectively. A registered office at Guwahati and Project office at Dibrugarh has also been made operational. 100% land required for the Project has been acquired and handed over by the Government of Assam. Necessary Environmental and Pollution clearances both from State and MoEF have been obtained for the project.

Certificate of Commencement of Business for BCPL was issued by ROC, Shillong on 12.9.2007. The Gas Supply agreement with OIL and Term Sheet for Naptha supply with NRL was signed on 19.9.2007 at Dibrugarh. The gas supply agreement with ONGCL has also been signed on 15.10.2007. With the award of PMC jobs to EIL, various activates have picked up at a very fast pace. The work for topographical, geotechnical surveys and Barbed wire fencing have been completed.

The complex has been configured with a capacity of 220,000 tons per annum (TPA) of Ethylene and 60,000 tons per annum of propylene with Natural Gas and Naptha as feed stock. The products from the Petrochemical Complex shall be 22000 tons per annum (TPA) of HDPE/LLDPE, 60000 TPA of Polypropylene, 55000 TPA of Raw Pyrolysis Gasoline and 12,500 TPA of Fuel oil. Feedstock for the proposed project would be natural gas and naptha. It is envisaged that OIL will supply 6 MMSCMD of natural gas while ONGC will supply 1.35 MMSCMD upto 2011 and 1 MMSCMD from 2010 onwards while NRL will provide 1.6 lakh tonne of naptha per annum as feedstock.

11.8 Chattisgarh Surguja Power Ltd.

During the year, the name of the Company has been changed from Akaltara Power Limited to Chhattisgarh Surguja Power Limited. As a wholly owned subsidiary of Power Finance Corporation Ltd., it has been established to develop an Ultra Mega Power Project (UMPP) in the State of Chhattisgarh. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore. Govt. of Chhattisgarh has recommended the site in villages Salka and Khamaria in district Surguja. The recommended site has been cleared by CEA also. Accordingly, process for acqusuition of land has been initiated. Allocation of power from the Project was done by Ministry of Power on 3.11.2008, The beneficiaries from the Project are Govt. of Chhattisgarh (2000MW), Maharshtra (1000MW), Madhya Pradesh (425 MW), Gujarat(275 MW), Goa(200MW), Daman Diu (50MW) and Nagar Haveli(50MW). The RFQ for the Project was issued on March 15, 2010. An RfQ conference for the project was organized at New Delhi on April 9.2010. The last date for submission of response to RfQ was May 3, 2010 which was extended to September 6, 2010 and further extended upto 8.11.2010.

11.9 Coastal Karnataka Power Limited

Coastal Karnataka Power Limited was incorporated on 10th February, 2006 under the Companies Act, 1956 as a wholly owned subsidiary of Power Finance Corporation Limited for the development of Tadri Ultra Mega Power Project in the state of Karnataka. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore. The Government of Karnataka has been asked to suggest new site for the proposed Ultra Mega Power Project. Tadadi has been identidied as most suitable site for the project. Since the site for the project is yet to be finalized, project development activities are not yet started.

11.10 Coastal Maharashtra Mega Power Limited

Coastal Maharashtra Mega Power Ltd. (CMMPL), a wholly owned subsidiary, has been established by Power Finance Corporation Ltd. to facilitate the development of Ultra Mega Power Project in Maharashtra. The authorized capital and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore. State Govt. has now given consent for the site near village Munge in Tehsil Deogarh. Since the site for the project is yet to finalized, project development activities are not yet started

11.11 Coastal Tamil Nadu Power Limited

Coastal Tamil Nadu Power Ltd. (CMMPL), a wholly owned subsidiary has been established by Power Finance Corporation Ltd. to facilitate the development of Cheyyur Ultra Mega Power Project in Tamil Nadu. The authorized capital and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore. CTNPL is to undertake preliminary studies and to obtain necessary clearances for power project prior to award of the project to the successful bidder as per "Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees". Administrative sanction for the land was issued by the State Govt. on 6.7.2010. In principle approval for establishment of Capitve Port at Pannaiyur village was received from the Tamil Nadu Mantime Board on 30th September, 2009. Civil Aviation clearance has been received from Airport Authority of India (AAI) on 21st December, 2009

11.12 Creda HPCL Biofuel Limited

In pursuit of promoting alternate fuels, CREDA-HPCL Biofuel Ltd was incorporated on 14.10.2008 as a subsidiary company of Hindustan Petroleum Corporation Ltd. with equity shareholding of 74% by HPCL and 26% by Chattisgarh State Renewable Energy Development Agency (CREDA). The authorized capital and paid up capital of the Company as on 31.3.2010 was ₹ 200 crore and ₹10.58 crore respectively. CHBL would undertake cultivation of jatropha plants on 15,000 hectares of land leased by the Government of Chattisgarh. This Company is in the process of acquiring land on lease from Govermnent of Chattisgarh.. HPCL has exclusive rights on the entire produce of jatropha seeds and for producing marketing biodiesel and biproducers from the produce. CHBL has started acquisition of land for cultivation of jatropha and as of March 2010 had acquired 2,507 hectares of land. The first produce of jatropha seeds is expected during 2011 season. Acquisition of balance land is in progress and the plantation on the same will be undertaken in a phased manner over the next three to four years.

11.13 Dedicated Freight Corridor Corporation of India Ltd (DFCCIL)

DFCCIL was incorporated on 30.10.2006 and received the Certificate of Commencement of Business on 03.11.2006 from the Registrar of Companies NCT of Delhi & Haryana. DFCCIL is a Government company under the provisions of Section 617 of the Companies Act, 1956 with 100% shareholding held by Government of India. DFCCIL is a Special Purpose Vehicle created to implement the most ambitious project of Indian Railways i.e. construction, maintenance and operation of Dedicated Freight lines covering approx 3328 route kms on Eastern Corridor & Western Corridor. As on 31.3.2010, the Authorized Share Capital of the company was ₹4000 crores and the paid up Share Capital of the Company was 358.00 cores. As on date, only two corridors have been sanctioned by the Ministry for construction. However pre-feasibility studies for an additional four corridors have already been completed and Preliminary Engineering cum traffic Survey (PETS) has now been taken up. Dedicated Freight lines will not only bring in the latest maintenance & Operating technology available, but also it will increase overall productivity by segregating passenger and freight operations on the separate networks. In future DFCCIL may also facilitate development of Multimodal Logistic parks around its terminal to boost economic activist that will yield even higher level of freight traffic for Railways. Ministry of Railways advised DFCCIL that Preliminary Engineering-cum-Traffic Survey (PETS) for future dedicated heavy haul freight corridor named as East Coast Corridor (between Kharagpur-Vijaywada, length about 1100 km), North-South Corridor (between Delhi-Chennai length about 2173 Km) Southern dedicated freight Corridor (between Chennai-Goa, Length about 890 Km) and East-West corridor (Between Kolkata-Nagpur-Mumbai, length about 2000 km) may be arranged through M/s. RITEs. The work in this direction has been started. To ensure timely execution of the project, Company has been facilitating the land acquisition by Ministry in different states. Out of the total No of 54 Bridges covered under the tender design has been approved for 20 Bridges and physical work is under progress on 16 Bridges.

11.14 Ghogarpalli Integrated Power Company Ltd.

The company was incorporated on 22.5.2008 under the Companies Act, 1956 as a wholly owned subsidiary of PFC Consulting Limited (PFCCL), a wholly owned subsidiary of Power Finance Corporation Ltd., a Government of India Undertaking. The Certificate for Commencement of Business was issued on 16.4.2009. During the year PFC Consulting Limited has transferred GIPL to PFC Limited on 9.2.2010. Now, it is a wholly owned subsidiary of PFC Limited. The company is a SPV incorporated to facilitate the acquisition of land and to complete preliminary work regarding statutory clearances including that of environment, forest, CRZ etc. for the purpose of establishing ultra mega power project of 4000 MW in the State of Orissa (Project). As on 31.3.2010, the authorized share capital and the paid up capital of the Company was 0.05 cores. The Key Management Personnel of the company are employees of the Power Finance Corporation Ltd (PFC) and deployed on Part Time basis.

11.15 HPCL Biofuels Limited.

In line with Government's policy on ethanol blending, a new wholly owned subsidiary company HPCL Biofuels Ltd. (HBL) has been incorporated on October 16, 2009 to produce ethanol for blending into petrol. HBL is in the process of setting up an integrated sugar plant (3500 TCPD capacity), ethanol plant (60 KLPD capacity) & co-gen power plant (20 MW capacity), one each at Sugauli (in East Champaran District) and Lauriya (in West Champaran District) in the State of Bihar. Construction of the plants is in progress and commissioning is expected during

the crushing season starting November 2010. As on 31.3.2010, the authorized share capital and the paid up capital of the company was 250 crore and ₹ 100 cores respectively.

11.16 Indian Vaccine Corporation Ltd.

Indian Vaccines Corporation Ltd was incorporated in March 1989 as a joint venture (JV) company, promoted by Pasteu Merieux Serium & Vaccines (PMSV), France, Indian Petrochemicals Corporation Ltd (OPCL) and Department of Biotechnology (Govt of India) with a paid up capital of ₹18.78 crores, with the objective of manufacturing vaccines based on Verocell Technology to be supplied by PMSC, France. As on 31.3.2010, the Authorized Share Capital of the Company was ₹ 50.00 crores and the paid up Share Capital of the Company was 18.79 cores. The Company came into inception after a joint venture (JV) agreement was signed on 1st February, 1989. The main objective of the company was to manufacture Injectable Polio Vaccines (IPV) to be incorporated in the mass immunizations programme of Govt. of India. However, IPV was not approved by W.H.O. As a result, the project was put on "HOLD" in February 1992. The Govt. of Haryana, acquired 108.18 acres of land in Manesar for D.B.T., which was later transferred to IVCOL (after its incorporation). The construction activities started at the site thereafter. P.M.S.V. subsequently got disinterested in the project and expressed to exit the joint venture. Efforts were made to rope in 'Strategic partner' as part of the restructuring exercise. The disinvestment of IVCOL, moreover, could not be materialized. Hence, the promoters decided to lease balance 69.4 acres of land to Reliance Life Sciences Pvt Ltd (a group co. of M/ RIL) for setting up a Super Specialty Hospital and Life Science and Research and Development Centre (and other related facilities) at this site. The lease agreement in this regard has been signed on 31.10.2008.

11.17 Ircon Infrastructure & Services Limited

Ircon ISL has been set up as a wholly owned subsidiary of IRCON International Limited with the objective to (i) undertake infrastructure projects including planning, designing, development, construction, improvement, commissioning, operation, maintenance and financing of projects and various services relating thereto including marketing, collecting revenues (ii) Planning, designing, development, improvement, commissioning, operation, maintenance etc. in the field of construction of Multi Functional Complexes (MFXs), etc. to provide facilities and amenities to users of Indian Railway System. As on 31.3.2010, the Authorized Share Capital of the Company was ₹ 10.00 crores and the paid up Share Capital of the company was ₹0.40 cores respectively. IrconISL has taken up the project in association with RLDA at 24 locations spread over Indian on the basis that land is being arranged by RLDA on lease for 45 years and all investment, planning, designing, construction and operation of these Multi Functional complexes will be the responsibility of IrconISL. No money is being spent by Railways for arranging these facilities. This model has been taken up to augment the facilities at railway stations without any budgetary support from railways and this model is considered as an initiative to provide better facilities to railway users. Work has started on 4 stations and subsequently will be taken up on another 20 stations.

11.18 Jabalpur Transmission Company limited.

Jabalpur Transmission Company Limited" (JTCL), a wholly owned subsidiary of PFC Consulting Limited has been incorporated on September 8, 2009 under Companies Act, 1956 for selection of the Transmission Service Provider for the "System Strengthening common for WR and NR". The SPV has been formed to undertake preliminary survey work, identification of route, preparation of Survey Report, initiation of the process of land acquisition (if required), initiation of process of seeking forest clearance (if required). Request for Qualification (RFQ) for short listing of Bidders as Transmission Service Provider for the project has been issued on February 25, 2010 by the company. As on 31.3.2010, the Authorized Share Capital and the Paid up Share Capital of the Company was ₹0.05 cores.

11.19 Jagdishpur Paper Mills Ltd.

Jagdishpur Paper Mills is a subsidiary of Hindustan Paper Corporation Ltd. The Detailed Project report (DPR) envisages setting up of 300,000 TPA integrated paper mill with a single paper machine at Jagdishpur in Sultanpur District of Uttar Pradesh to produce value added printing and writing paper. Implementation of the project is envisaged in two phases (i) installation of paper Machine and Captive Power Plant in Phase-I and (ii) installation of Captive Pulp Mill in Phase-2. Out of the total requirement of 500 acre of land for plant facilities, colony etc., about 188 acres of land available in UPSIDC Industrial area in Jagdishpur was identified for setting up of the major plant facility. The company has obtained Certificate of Commencement of Business on December 14,

2009. As on 31.3.2010, the Authorized Share Capital and the Paid up Share Capital was ₹ 5.00 crore was ₹0.05 cores respectively.

11.20 Kanti Bijlee Utpadan Nigam Limited

Kanti Bijlee Utpadan Nigam Limited is a wholly subsidiary company of NTPC Limited. The authorized capital and paid up capital of the company as on 31.3.2010 was ₹100 crore and ₹88.51 crore respectively. The Unit 2 of Muzaffarpur Thermal Power Station (MTPS) The company has been operating after restoration and stabilization since 29.02.2008. The contract for Renovation & Modernisation (R&M) work of Boiler, Turbine, Generator & Auxiliaries (BTG Packages) for 2X110MW units of MTPS has been awarded to Bharat Heavy Electricals Limited (BHEL) and the same would be completed within 28 months from the date of award. The Board of Directors of the company has granted investment approval for expansion of existing plant by addition of 2X195 MW units on 06.03.2010. The contract for Main Plant award which includes SG with ESP and TG Package has been awarded to BHEL at a total contract price of ₹ 1076 crore. As per the work schedule, completion of first unit shall be achieved within 31 months and second unit shall be completed within 3 months thereafter. The facilities for the plant would be constructed in the land available with MTPS and as such no additional land is required for plant and township. Only 376 acres of land is required for Ash Dyke, its Corridor and Makeup Water Pump House out of which for 372.27 acres of land, application has been submitted and demand note for deposit of money is received from Government of Bihar. The company has also signed Power Purchase Agreement with Bihar State Electricity Board. However, power would be allocated by the Ministry of Power, Government of India. During the year, the power station of the company had generated 461 MU of electricity which was 104.16% over and above the generation in 2008-2009. The plant operated at an average PLF of 47.8% during the year.

11.21 Loktak Downstream Hydroelectric Corporation Limited

Loktak Downstream Hydroelectric Corporation Ltd., a joint venture between NHPC Ltd and Government of Manipur, was incorporated on 23.10.2009 under the Companies Act, 1956. As on 31.3.2010, the authorized Share Capital and the Paid up share capital was ₹ 230 crores ₹60 cores respectively. The objective/mission of the company is to plan, promote and organize an integrated and development of power in all its aspects through development of hydro-electricity in the state of Manipur in all aspects including planning, investigation, research, design and preparation of preliminary, feasibility and definite projects reports, construction, generation, operation and maintenance of power station and project, and project, transmission, distribution, trading and sale of power generated at station in accordance with the National economic policy from time to time and release of water and other needs to the State Govt. as per the agreed parameters. Its Registered office is situated at Impahal, Manipur.

11.22 MJSJ Coal Limited

MJSJ Coal Limited is a subsidiary company of Mahanadi Coalfields Limited. It has been incorporated as a joint venture company on 13.8.2008. The partners are Mahanadi Coalfields Limited having 60% shares, JSW Steel Ltd. and J.S.W energy Limited having 11% share each and Shyam Metallics & Energy Limited and Jindal Stainless Limited having 9% share each. As on 31.3.2010, the Authorized Share Capital and the Paid up Share Capital was ₹ 200 crores and ₹40.10 cores respectively. The company has been formed to operate the Gopalprasad OCP and Utkal-A of Talchar Coalfields. With capacity of 15MTY to 20MTY, the commercial production is expected during last part of the financial year 2010-11.

11.23 MNH Shakti Limited

MNH Shakti Limited is a subsidiary company of Mahanadi Coalfields Limited Neyveli. It is a Joint Venture Company with Mahanadi Coalfields Limited, Neyveli Lignite Corporation Ltd. And Hindalco Ltd. as partners for mining coal from Talabira blocks. As on 31.3.2010, the Authorized Share Capital and the Paid up Share Capital was ₹ 100 crores and ₹25.10 cores respectively. Both NLC and Hindalco hold 15 per cent stake each while MCL holds 70 per cent in this company.

11.24 NLC Tamil Nadu Power Limited

NLC Tamil Nadu Power Limited was set up as a subsidiary company of Neyveli Lignite Corporation Ltd. in 2006. It is a coal based 2 × 500 MW Power Project at Tuticorin. Unit I is to be implemented within 46 months from the date of sanction and Unit II within 51 months from the date of sanction. The authorized capital and paid up capital of the company, as on 31.3.2010 was ₹1800 crore and ₹300 crore respectively. The foundation stone of the company was laid on 28.2.2009. In respect of Main Plant packaged of Steam Generator, Turbo Generator and Electrostatic Precipitator, the contract has been

awarded to M/s. BHEL during the month of January 2009. M/s. BHEL has since commenced civil works for Boiler and ESP foundations and the supplies are also in progress. Other major contracts for this project viz. Coal Handling package, circulating water system package and Natural Draft Cooling Towers package have been awarded. Piling work for on shore and off shore conveyors in respect of Coal Handling package is under progress. In respect of other packages, award of work is under finalisation. The Project Consultancy contract has been awarded to M/s..MECON Ltd,. As regards coal handling for the project it is proposed to have a dedicated coal berth for which the work has been entrusted to Tuticorin Port Trust and the wor kis under progress. Tuticorin Port Trust has allocated 133 hectare of land required for the project, on long-term lease basis. In order to facilitate erection, relocation of sheds and rerouting of underground pipelines of other companies are in process. Coal link for the project has been established with Mahanadi Coalfi elds Ltd. In respect of main packages of Steam Generator and ESP and Turbine Generator Letter of Award has been issued to BHEL. The Civil work of the project is in process. The Project Consultancy Contract has been awarded to MECON Ltd.

11.25 NTPC Hydro Limited

NTPC Hydro Limited was incorporated in the year 2002 as a wholly owned subsidiary of NTPC Limited, with a view to develop small & medium sized Hydro Electric Projects. The authorized and paid up capital, of the company, as on 31.3.2010 was ₹ 500 crore and ₹100.80 crore. The company is presently executing two projects namely, Lata Tapovan Hydro Electric Project (171 MW), located in Chamoli District of Uttarakhand and Rammam Hydro Electric Project, Stage III (120 MW) located in Darjeeling District of West Bengal and West Sikkim District of Sikkim. Lata Tapovan HEP is being developed as a regional power station with 12% free power to the State of Uttarakhand. In respect of Lata Tapovan HEP, all requisite statutory clearances have been obtained and physical possession of land required for the project has also been obtained. Rammam HEP, Stage III, is being developed for the benefit of West Bengal and Sikkim. An interstate agreement between West Bengal and Sikkim in this regard have been signed. All requisite statutory clearances and physical possession of land has been obtained. Both the projects have been planned for implementation through EPC routes and the EPC packages are under various stages of bidding. These projects are slated for commissioning during the 12th Plan period.

11.26 Orissa Integrated Power Limited

Orissa Integrated Power Limited was set up in the year 2006 as a subsidiary company of Power Finance Corporation to develop Ultra Mega Power Projects in Orissa. The authorized and paid up capital as on 31.3.2010 was ₹ 0.05 lakh. Application for land acquisition was submitted to IDCO on 3rd June, 2009. A revised application for land acquisition was submitted to IDCO on 10th March, 2010. All the perquisites required for the publication of RFQ as per the guideline issued by Ministry of Power were completed. The Central Electricity Authority has selected the land in district Sundergarh, and requested Government of Orissa to furnish the consent letter for the selected site. An amount of ₹193.36 lacs has spent on the development of project, which, has been transferred to capital work in progress. During the year under review, the Company has, however, not started its commercial activities.

11.27 Power System Operation Corporation Ltd.

Power System Operation Corporation (POSOCO) has been incorporated as a wholly owned subsidiary of Power Grid Corporation of India to exercise supervision and control of all aspects concerning operational and manpower requirement of the Regional Load Despatch Centers (RLDCs) and National Load Despatch Centre (NLDC). POWERGRID, in terms of Section 192A (2) Companies Act, 1956 has obtained the approval of its shareholders for transfer of movable assets of (RLDCs) and (NLDC) to the company. The NLDC and RLDC have been ensuring smooth operation of the system in accordance with provisins of the Grid Code POSOCO ensures that practices related to system operation are harmonized across all RLDC and NLDC. The company has obtained the Certificate of Commencement of Business on 23.3.2010. The authorized and paid up capital of the company as on 31.3.2010 was ₹200.00 crore and ₹0.05 crore respectively. POWERGRID has identified employees of System Operation Department, NLDC and RLDCs for transfer to POSOCO on Secondment basis. POWERGRID on behalf of the company filed a petition for approval of NLDC and RLDCs Fees and Charges with Central Electricity Regulatory Commission (CERC) under CERC (fees and charges of the an other related matters) Regulation 2009 and approvals/orders are awaited.

11.28 Punjab Ashok Hotel Company Limited

Punjab Ashok Hotel Co. Ltd. is a joint venture (JV) between India Tourism Development Corporation Limited and Punjab Tourism Development Corporation Ltd. It was incorporated on 11th November, 1998. The authorized and paid up capital of the Company as on 31.3.2010 was ₹3.00 crore and ₹2.50 crore respectively. The equity contribution is in proportion of 51:49 between Indian Tourism Development Corporation and Punjab Tourism Development Corporation Limited respectively. The registered office is located in Chandigarh. The unit is located at Anandpur Sahib in the State of Punjab. The main objectives of the company are (a) to own, manage, construct-purchase and operate hotels, restaurants, motels etc and (b) to establish, manage transport unit etc. for promoting tourism in Punjab.

11.29 Raichur Sholaur Transmission Co. Ltd.

REC Transmission Projects Company Limited (RECTPCL), a wholly owned subsidiary of Rural Electrification formed a project specific Special Purpose Vehicle (SPV) namely, Raichur Sholapur Transmission Company Limited (RSTCL) to identify successful bidders through tariff based bidding process for establishment of Transmission System associated with Krishnapattam UMPP-Synchronous interconnection between Southern Region (SR) and Western Region (WR) (Part-B) Raichaur-Sholapur 765 KV S/C line-I" (Project). The authorized and paid up capital of the Company as on 31.3.2010 was ₹ 0.05 crore.

11.30 Sakhigopal Integrated Power Company Ltd

The company was incorporated on 21.5.2008 under the Companies Act, 1956 as a wholly owned subsidiary of PFC Consulting Limited (PFCCL), a Govt. of India Undertaking. Certificate for Commencement of Business was issued on 17.4.2009. During the year PFC Consulting Limited has transferred the company to Power Finance Corporation (PFC) on 9.2.2010 as per decision of Ministry of Power and now it is a wholly owned subsidiary of PFC Limited. The company is a special purpose vehicle incorporated to facilitate the acquisition of land and complete preliminary work regarding statutory clearances including that of environment, forest, CRZ etc. for the purpose of establishing ultra mega power project of 4000 MW in the state of Orissa (Project). The authorized and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore. The key Management Personnel of the Company are employees of the Power Finance Corporation Ltd (PFC)/Holding Company & PFC Consultant Ltd (a wholly owned subsidiary of PFC) and deployed on Part Time Basis. The entire expenditure on development of the Project is being incurred by Holding Company (PFCCL/PFC) from its own funds until receipt of the commitment advance from the procurers and thereafter out of Commitment Advance received from Procurers.

11.31 Sethusamudram Corporation Limited

The Sethusamudram Ship Channel project was sanctioned at a total cost of ₹2427.40 crores by the Government of India on 01.06.2005; it was inaugurated on 2.7.2005. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 1000 crore and ₹745 crore respectively. Dredging is the major component of the project, accounting for about two third of the project cost. The total length of the channel is 167 Kms. Dredging is required for a length of 89 kms in two stretches viz Adam's Bridge and Palk Strait involving a total quantity of 82.5 million cum. As per the pre-dredging and interim survey conducted during September 2009 in Palk Strait/Palk Bay area, out of total estimated quantity of 33.80 M.cum of dredging about 18.90 M.cum of dredging was completed. The dredging work at Adam's Bridge which commenced on 11.12.2006 was suspended since 17.9.2007 consequent to an interim stay by the Hon'ble Supreme Court of India and upto that date out of 48.05 M.cum of dredging about 9.52 M.cum of dredging had been completed.

11.32 Tatiya Andhra Mega Power Ltd.

Tatiya Andhra Mega Power Limited (TAMPL) has been established as a wholly owned subsidiary of Power Finance Corporation Ltd. to undertake development activities for the proposed Second UMPP in the State of Andhra Pradesh. Technical Consultancy Assignment for conducting studies at the site has been awarded to M/s. Desein Pvt. Ltd on 2nd June, 2009. The authorized and paid up capital of the company as on 31.3.2010 was ₹ 0.05 crore.

Chapter-12

Revival and Restructuring of Sick/Loss Making CPSEs

Some of the Central Public Sector Enterprises (CPSEs) have been incurring losses continuously for the last several years. The accumulated loss in many of these cases has exceeded their net worth. Sickness in CPSEs has been the continuing concern of the Government. There has, nonetheless, been significant improvement in the overall condition of these enterprises over the years. In comparison to 105 loss making CPSEs in March, 2002, there were 59 loss making CPSEs in March, 2010 (Table-12.1).

Table 12.1
Loss making CPSEs (2002–03 to 2009-10)

Year	No. of Loss making CPSEs, during the year	Aggregate Loss, during the year (₹ in crore)	No. of sick CPSEs*	No. of sick CPSEs**	Accumulated losses of sick CPSEs**
2002–03	105	10972	–	111	76721
2003–04	89	8522	–	100	73487
2004–05	73	9003	81	90	82352
2005–06	63	6845	75	81	83554
2006–07	61	8526	83	74	89064
2007–08	54	10303	78	46	72820
2008–09	55	14621	73	46	68577
2009-10	59	15842	-	45	63828

*Note: *As per the definition of BRPSE ** As per the defination of BIFR.*

12.1 Sickness in CPSEs

The reason for sickness varies from enterprise to enterprise. In some cases, the cause of sickness is historical; textile companies which were taken over from the private sector on social consideration for protecting employment of workers in early seventies could not be modernized quickly. British India Corporation, Bird Jute & Exports and NTC belong to this group. Besides these (textile) companies, there have been other enterprises that were taken over from the private sector but could not be modernized. These include engineering and refractory enterprises like Bharat Wagons & Engineering, Praga Tools, Burn Standard, Braithwaith & Co., Richardsan and Crudass Ltd., drug companies like Bengal Chemicals & Pharmaceuticals Ltd., transportation/shipping companies like Hooghly Dock & Port Engineering Ltd., Central Inland Water Transport Corporation and consumer goods companies like Tyre Corporation of India and Hooghly Printing Co. Ltd.

The other group of sick companies (other than those taken over) is green-field companies. These companies became sick over the years on account of high manpower cost, technological obsolescence and competition from the private sector. These include fertilizer companies like Fertilizer Corporation of India, Hindustan Fertilizer Corporation, Pyrites, Phosphates and Chemicals Ltd., chemicals and drugs companies like Indian Drugs & Pharmaceuticals Ltd., Hindustan Insecticides Ltd., and Hindustan Antibiotics Ltd. Some of the loss making companies, such as, Nagaland Pulp & Paper Company Ltd., Jute Corporation of India and Cotton Corporation of India have had macro-economic objectives to serve like development of backward areas, providing remunerative prices to farmers, etc.

In addition to the above reasons, the other problems common to most sick and loss making CPSEs have been lopsided debt-equity structure, weak marketing strategies and slow decision making process. Attempts have, therefore, been made to overcome "sickness" in these CPSEs through various policy initiatives. The Statement on Industrial Policy (1991), and other policy pronouncements by the Government have addressed this issue from time to time.

12.2 Strategies for revival/restructuring

Net loss in a company means excess of expenditure

(including depreciation, interest, taxes, extra ordinary items, prior period adjustments but before providing appropriations to reserves) over operating income. If, however, the enterprise incurs'cash loss', equal to 'net loss' and 'provision for depreciation', then it is usually considered a case fit for recommending for restructuring, revival or closure.

Some of the strategies adopted for restructuring / revival of sick CPSEs are mentioned below:

(i) Financial restructuring: Financial restructuring involves investment in CPSEs by the Government in the form of equity participation, providing loan (plan/non-plan) / grants and/or write-off of past losses as well as changing the debt equity ratio. Measures such as waiver of loan/interest/penal interest, conversion of loan into equity, conversion of interest including penal interest into loan, moratorium on payment of loan/ interest, Government guarantee, sale of fixed assets including excess land, sacrifices by State Government, one-time settlement with banks/financial institutions, etc.

(ii) Business restructuring: Business restructuring involves change of management, hiving off viable units from CPSEs for formation of separate company, closure of unviable units, formation of joint ventures by induction of partners capable of providing technical, financial and marketing inputs, change in product mix, improving marketing strategy, etc. on case to case basis.

(iii) Manpower rationalization: Salaries and wages are often a major component of cost for anenterprise. In order to shed excess manpower, CPSEs have often resorted to Voluntary Retirement Scheme (VRS) from time to time. In case of CPSEs found unviable and where a decision has been taken to close the unit, it is the Voluntary Separation Scheme (VSS) that is introduced. Retrenchment of employees is adopted only as the last resort and in exceptional circumstances.

Therevival packages granted by the Government has helped these enterprises in a big way in improving their conditions. Some of the sick and loss making enterprises have turned around and recorded profit during the last two years.

12.3 Sick Industrial Companies (Special Provisions) Act, 1985 (SICA)

The Sick Industrial Companies (Special Provision) Act, 1985 (SICA) brought the CPSEs under its purview in 1991 (made effective from 1992). Under the provisions of SICA, the industrial CPSEs whose accumulated losses are equal to or have exceeded their net worth, may be referred to the Board for Industrial and Financial Reconstruction (BIFR). The BIFR, , in turn, may either sanction suitable revival/ rehabilitation schemes (in case of enterprises which are viable) or recommend winding up/closure (in respect of enterprises considered unviable). During the period of the last eighteen years, that is, 1992 to 2010, 64 CPSEs have been referred to the BIFR The year-wise registration of CPSEs with BIFR is given in Table 12.2 above.

Table 12.2
Registration of CPSEs with BIFR

Year	No. of CPSEs	Year	No. of CPSEs
1992	30*	2002	3
1993	2*	2003	2
1994	4*	2004	4*
1995	1	2005	2
1996	2	2006	1
1997	3	2007	1
1998	3	2008	0
1999	3	2009	0
2000	3	2010	0
2001	2	**Total**	**64**

** This includes the subsidiaries of NTC, (which has been registered again in 2008 after merger) as well as other CPSEs, that has also merged.*

Although a total number of 64 CPSEs have been referred to BIFR (uptill 2007), there are only 45 CPSEs that are in operation. Two CPSEs, namely, Bharat Refractories and Vignyan Industries Limited and North Eastern Regional Agricultural Marketing Corporation Limited have since been declared 'No Longer Sick' by the Board. This does not include Indian Iron Steel Co. Limited and Bharat Refractories Limited as they have been merged with Steel Authority of India Limited . In addition, Bharat Immunologicals and Biologicals Corporation Limited, Hindustan Salts Limited, Maharashtra Elektrosmelt Limited, Hindustan Insecticides Limited and Hindustan Organic Chemicals Limited have been dropped from the list of 'sick industrial CPSEs' by BIFR on their net worth becoming positive. Cases of four CPSEs have been declared as 'non-maintainable' by the Board as either the matter had become time barred for reference to the Board or on account of the net worth of the CPSE becoming positive or the CPSE was found not fulfilling the conditions of being industrial company as defined under SICA or on some other grounds. Moreover, one of these companies, namely, Manipur State Drugs and Pharmaceuticals Limited

Table 12.3
Status of CPSEs registered with BIFR (as on 30.06.2010)

Sl. No.	Particulars	Number
1.	Revival Scheme sanctioned	13
2.	Draft Scheme circulated under examination / under process	6
3.	Declared no longer sick	2
4.	Dropped on net worth becoming positive	5
5.	Dismissed as non-maintainable	4
6.	Winding up recommended and closed	15
7.	Winding up recommended	6
8.	Winding up notice issued	1
9.	Sanctioned by AAIFR	1
10.	Failed and re-opened	1
11.	DRS awaited	8
12.	Deregistered with BIFR / Others	2
	Total	**64**

has been closed. The status of the 64 sick industrial CPSEs registered with BIFR as on 30.6.2010 is given at Table 12.3.

The BIFR has already disposed of 47 cases of CPSEs either through sanctioning revival schemes (13 cases), or recommending winding up (21 cases) or declaring 'no longer sick' (2 cases) or dropping due to net worth becoming positive (5 cases) or dismissing the cases as non-maintainable (4 cases) (Annex-12.1). The BIFR is yet to take any view on 14 cases of CPSEs.

The process of appointment of Official Liquidator (OL) for winding up of CPSEs by the BIFR has been slow. The process of sanctioning of revival / rehabilitation schemes has also been slow on account of involvement of multiple agencies, such as, delay in finalization of revival schemes, lack of funds, lack of adequate powers with BIFR, lack of proper monitoring of sanctioned revival schemes and delay in winding up of sick companies etc.

12.4 Board for Reconstruction of Public Sector Enterprises (BRPSE)

The Government established the Board for Reconstruction of Public Sector Enterprises (BRPSE) in December, 2004 to advise the Government, inter alia, on measures to restructure/revive, both industrial and non-industrial CPSEs. The Board comprises of Chairman in the rank of Minister of State, three non-official Members and three official Members including Secretary, Department of Expenditure, Secretary, Department of Disinvestment and Secretary, Department of Public Enterprises (DPE). In addition, Chairman, Public Enterprises Selection Board, Chairman, Standing Conference on Public Enterprises and Chairman, Oil and Natural Gas Corporation Limited are permanent invitees to the meetings of BRPSE. Secretaries to the Government of the Administrative Ministry/Department concerned with the CPSE taken up for consideration by the Board are Special Invitees. There is a full-time Secretary for BRPSE in the rank of Additional Secretary to the Government of India. The Board is located in the Department of Public Enterprises (DPE). DPE provides necessary secretarial assistance to the Board.

For the purpose of making a reference to BRPSE, a company is considered 'sick' if it has accumulated losses in any financial year equal to 50% or more of its average net worth during 4 years immediately preceding such financial year, and/or is a company within the meaning of Sick Industrial Companies (Special Provisions) Act, 1985 (SICA). The concerned Administrative Ministries/ Departments are required to send proposals of their CPSEs identified as 'sick' for consideration of BRPSE. Other loss making CPSEs may be considered by the Board either suo moto or upon reference by the administrative Ministry, if it is of the opinion that revival/restructuring is necessary for checking its incipient sickness (incurring loss for two consecutive years) and making the CPSE profitable. The Board is expected to make its recommendations within 2 months of the date of receipt of the complete proposal from the Administrative Ministry/Department.

As per the definition of sick CPSEs given above and the performance evaluation of CPSEs for 2008-09 and previous years, 73 CPSEs were referable to BRPSE. Up to September, 2010, cases of 67 sick CPSEs have been referred to BRPSE; out of which, the Board has made recommendations in respect of 62 cases. In addition, the Board has also recommended to the Government to accord "in principle" approval for rescinding of its earlier decision to close the units of Fertilizers Corporation of India (FCIL) and Hindustan Fertilizers Corporation Ltd. (HFCL) and to explore various options for their revival.

Out of these 62 cases, the Government has approved 40 revival proposals of CPSEs and winding up of 2(two) enterprises namely Bharat Opthalmic Glass Limited and Bharat Yantra Nigam Ltd. as on

30.9.2010 envisaging a total expenditure of ₹ 23612.45 crore including ₹ 3289.64 crore as cash assistance and ₹ 20322.81 crore as non-cash assistance. The enterprise-wise details of cash and non-cash assistance in respect of approved proposals are given in Annex-12.2.

Out of the 42 cases approved by the Government till September, 2010, 15 were approved during 2005-06, 11 cases were approved during 2006-07, 6 cases were approved during 2007- 08, 5 cases were approved during 2008- 09, 3 cases were approved in 2009-10 and 2 cases have been approved during

Table 12.4

Category	No. of CPSEs
1.Revival through restructuring package	25
2.Revival through joint venture / disinvestment	8
3.Revival through merger/takeover / transfer	7
4.Closure of CPSE	2
Total	**42**

20010- 11 (upto September, 2010). The approval of the Government in respect of the aforesaid 42 PSEs fall under the following broad categories.

Further, the Government has also given 'in principle approval' to explore various options for the revival of Hindustan Fertilizer Corporation Ltd. and Fertilizer Corporation of India Ltd. subject to confirmed availability of gas. The Government have established an Empowered Committee of Secretaries (ECS) with the mandate to evaluate all options of revival of closed units of FCI and HFCL, and make suitable recommendations for consideration of the Government.

The Board during the period from October,2009 to September,2010 reviewed the status of implementation of revival package sanctioned by the Government to 12 CPSEs namely (i) HMT Machine Tools Ltd., (ii) HMT Bearings Ltd., (iii) Praga Tools Ltd., (iv) Hindustan Antibiotics Ltd.(HAL), (v) Hindustan Organic Chemicals Ltd.(HOCL), (vi) Andrew Yule & Co. Ltd., (vii) Wagon & Engineering Company Ltd., (viii) Eastern Coal Fields Ltd., (ix) Central Inland Water Transport Corporation Ltd., (x) Bharat Heavy Plate and Vessels Ltd., (xi) Instrumentation Ltd. and (xii) Bharat Refractories Ltd. and also the status of its recommendations in respect of 13 CPSEs namely (i) Hindustan Cables Ltd.(HCL) (ii) Elgin Mills Company Ltd., (iii) HMT Ltd., (iv) HMT Watches Ltd., (v) HMT Chinar Watches Ltd., (vi) ITI Ltd., (vii) Indian Drugs & Pharmaceuticals Ltd. (IDPL), (viii) IDPL (Tamil Nadu) Ltd., (ix) Bihar Drugs & Organic Chemicals Ltd., (x) Hindustan Steelworks Construction Ltd. (HSCL), (xi) Hoogly Dock & Port Engineers Ltd. (HDPEL) (xii) Hindustan Fertilizers Corporation Ltd.(HFCL) and (xiii) Fertilizers Corporation of India Ltd.(FCIL)

12.5 Revival through Merger, Transfer & Takeover

The Government approved the transfer of Bharat Heavy Plates and Vessels Ltd. to BHEL on 26.11.2007 and merger of Bharat Refractories Ltd. with SAIL on 24.4.2008. The BIFR, furthermore, gave its approval for the merger of Praga Tools Ltd. with HMT Machine Tools Ltd.(w.e.f.1.4.2007). The Government also approved the transfer of Bharat Wagon & Engineering Co. Ltd. (BWEL) from D/o Heavy Industries to M/o Railways on 7.2.2008; its administrative control was transferred to Ministry of Railways on13.8.2008. The Government also approved the transfer of administrative control of Hindustan Shipyard Ltd. from M/o Shipping to M/o Defence on 24.12.2009. The Government further approved the transfer of Refractory Unit (at Salem) of Burn Standard Company Ltd.(BSCL) to SAIL under M/o Steel and the transfer of the administrative control of BSCL(excluding Refractory unit at Salem) and Braithwaite and Company Ltd. from D/o Heavy Industry to M/o Railways on 10.6.2010 .

In addition, the Government approved the revival package for Nagaland Pulp & Paper Co. Ltd. on 23.11.2006 with a total assistance of ₹ 787.54 crores (Rs. 552.44 crores cash and ₹ 235.10 crores as non-cash). The Government has also approved the second revival package for Heavy Engineering Corporation (HEC), on 4.9.2008 at a total cost of ₹ 615.43 crores (Rs. 310 crores as cash and ₹ 305.43 crores as non-cash). Similarly, the Government approved a one time interim grant of ₹ 200 crores to FACT as Non-plan funds on 7.2.2008 to enable it to sustain operations till 31.3.2008. This package is additional to the revival package approved in March, 2006. In order to revive, ITI Ltd.,furthermore,the Government have sanctioned a sum of ₹ 1427 crores (Rs. 1403 crores as cash and ₹ 24 crores as non-cash) from December, 2004 till January, 2009. Further, the Government has also approved, inter alia, ₹3000 crores towards revival of ITI Ltd on 20.2.2009. The Government have approved the second revival package for NTC for ₹6129.75 crores by way of waiver of Government of India loans and interest thereon. The Government has also approved the proposal of converting Semi-Conductor Complex Ltd. into a Society under the Department of Space on 23.2.2006. The proposal for transfer of assets, liabilities and manpower of National Instruments Ltd. (Kolkata) to Jadhavpur University, Government of West Bengal was approved on 8.2.2007. The Government has approved infusion of ₹ 800 crores by way of equity in National Aviation Corporation of India Ltd. on 18.2.2010, in view of the critical cash crunch being faced by the company. (Annex-12.3).

Details on the CPSEs Registered with BIFR as on 30.06.2010

S. No.	Case No. and year of reference	CPSE	Date of Orders
(1)	(2)	(3)	(4)
I.	**Declared 'No Longer Sick'**		
1.	512/1992	Vignyan Industries Ltd., Tarkere (Karnataka)	27.5.2003 *
2.	503/1997	North Eastern Regional Agri. Marktg. Corpn., Guwahati (Assam)	20.8.2001*
II.	**Dropped (Positive Networth)**		
3.	502/1997/ 503/1998	Bharat Immunologicals & Biologicals Corporation Limited, Buland Sahar (Uttar Pradesh)	1.8.2002
4.	502/2000	Hindustan Salts Limited, Jaipur (Rajasthan)	22.8.2005 / 15.12.2008*
5.	501/2002 / 502/2003	Maharashtra Elektrosmelt Ltd., Mumbai (Maharashtra)	27.6.2005*
6.	501/2004	Hindustan Insecticides Ltd., New Delhi (Delhi)	18.9.2007 *
7.	501/2005	Hindustan Organic Chemicals Limited, Rasayani, Raigad (Maharashtra)	21.11.2005 / 28.05.2008
III.	**Dismissed as 'Non-maintainable'**		
8.	502/1992 / 601/1998	Nagaland Pulp & Paper Co. Ltd., Mokokchung, (Nagaland)	13.11.1995 / 25.5.2007*
9.	504/1997	Manipur State Drugs & Pharmaceuticals Ltd., Imphal (Manipur) $$	17.11.1997
10.	502/2002	Central Coalfields Ltd., Ranchi (Jharkhand)	29.11.2002*
11.	517/1992/ 504/2002	Biecco Lawrie Limited, Kolkata (West Bengal) @	27.3.2003 *
IV.	**Scheme Sanctioned by AAIFR**		
12.	502/1999	Hindustan Vegetable Oils Corpn. Ltd., New Delhi (Delhi) @	7.12.2001 / 23.07.2008
V.	**Revival Scheme sanctioned**		
13.	518/1992	The British India Corpn. Ltd., Kanpur, (Uttar Pradesh) @	17.12.2002/ 29.11.2007
14.	521/1992	Projects and Development India Ltd., Dhanbad (Jharkhand)	26.3.2004 / 19.4.2006 *
15.	523/1992	Tyre Corporation of India Ltd., Kolkata (West Bengal) @	20.2.1997 / 10.3.2008 / 19.05.2009 / 21.12.2009 / 03.03.2010*
16.	528/1992	Braithwaite & Co. Ltd., Kolkata (West Bengal) @	17.10.1995 / 29.6.2006 *
17.	531/1992	National Instruments Ltd., Kolkata (West Bengal)	1.10.2002 / 13.5.2008 / 04.08.2008

18.	509/1993	Instrumentation Ltd., Kota (Rajasthan)	23.12.1998 / 24.05.2006 / 01.10.2009*
19..	507/1994	Hindustan Fluorocarbons Ltd., Hyderabad (Andhra Pradesh) @	24.7.2003*
20.	501/1996	Cement Corporation of India Ltd., New Delhi (Delhi)	05.12.2005 / 21.3.2006 / 17.06.2008*
21.	501/1997	Hindustan Antibiotics Limited, Pune (Maharashtra) $$	5.6.2007 / 14.10.2008
22.	501/1998 / 501/2000	Eastern Coalfields Limited, Burdwan (West Bengal) @	01.06.1998/ 2.11.2004 / 12.6.2007*
23.	504/1995 / 502/2001	Bharat Coking Coal Ltd., Dhanbad (Jharkhand)	11.2.2004 / 18.05.2009 / 28.10.2009*
24.	504/1995 / 502/2001	Andrew Yule and Company Ltd., Kolkata (West Bengal) @	20.8.2007/ 30.10.2007*
25.	501/2006	HMT Machine Tools Limited, Bangalore (Karnataka)	2.11.2006 / 12.6.2008

VI.	**Winding up Recommended**		
26.	507/1992	Triveni Structurals Ltd. , Allahabad (Uttar Pradesh)	5.6.2003
27.	511/1992	Heavy Engineering Corpn. Ltd., Ranchi (Jharkhand)	6.7.2004*
28.	514/1992	Orissa Drugs & Chemicals Ltd., Bhubaneswar (Orissa)	8.4.2003*
29.	515/1992	Fertilizers Corpn. of India Ltd., New Delhi (Delhi)	2.4.2004
30.	503/1995	Hindustan Photofilms Mfg. Co. Ltd., Ootacamund (Tamilnadu)	30.1.2003
31.	502/1996	Maharashtra Antibiotics & Pharma. Ltd., Nagpur (Maharashtra) $$	4.7.2000 / 16.12.2008 / 17.06.2010

	CPSEs recommended for winding up and have been 'closed' $$		
32.	505/1992	Bharat Gold Mines Ltd., Kolar Gold Fields (Karnataka)	12.6.2000
33.	506/1992	Tannery and Footwear Corporation of India Ltd., Kanpur (Uttar Pradesh)	14.2.1995
34.	508/1992	Cycle Corporation of India Limited, Kolkata (West Bengal) @	10.7.2000
35.	510/1992	Mining and Allied Machinery Corporation Ltd. , Durgapur (West Bengal)	29.6.2001
36.	513/1992	National Bicycle Corporation of India Ltd., Mumbai (Maharashtra) @	20.12.1993
37.	520/1992	Bharat Process and Mechanical Engineers Ltd., Kolkata (West Bengal) @	22.7.1996
38.	524/1992	Weighbird India Limited, Kolkata (West Bengal) @	17.2.1997
39.	526/1992	Bharat Brakes & Valves Ltd., Kolkata (West Bengal) @	27.9.2002
40.	527/1992	Cawnpore Textiles Ltd., Kanpur (Uttar Pradesh) @	19.1.1995
41.	529/1992	Smith Stanistreet & Pharmaceuticals Ltd., Kolkata (West Bengal) @	3.12.2001
42.	532/1992	Bharat Ophthalmic Glass Ltd., Durgapur (West Bengal)	19.6.2003
43.	538/1992	Bengal Immunity Limited, Kolkata (West Bengal) @	25.2.2003
44.	504/1994	Southern Pesticides Corporation Limited, Hyderabad (Andhra Pradesh)	1.11.2001
45.	506/1994	Rayrolle Burn Ltd., Kolkata (West Bengal) @	13.7.2001
46.	503/1999	Pyrites, Phosphates & Chemicals Ltd., Rohtash (Bihar)	20.11.2002

VII.	Winding up Notice Issued		
47.	503/505/2002	Hindustan Cables Ltd., Kolkata (West Bengal)	21.03.2003/ 25.07.2008

VII.	Others / Abated / Deregistered from BIFR		
48.	501/1992	Bharat Pumps & Compressors Ltd., Allahabad (Uttar Pradesh)	6.2.2007*
49.	519/1992	The Elgin Mills Co. Ltd., Kanpur (Uttar Pradesh) @ $$	13.3.2007

IX.	Declared Sick / / Under Examination / Process /		
50.	503/1992	Indian Drugs and Pharmaceuticals Limited, Gurgaon (Haryana)	28.3.2006 / 29.9.2008
51.	506/1993	National Jute Manufactures Corporation Ltd. Kolkata (West Bengal)	8.7.2004 / 24.11.2008 / 05.03.2009*
52.	588/1994	Burn Standard Co. Ltd., Kolkata (West Bengal) @	16.4.2007 / 30.9.2008 / 12.11.2009
53.	501/1999	Birds Jute and Exports Ltd., Kolkata (West Bengal) @	24.6.2004 / 07.08.2008
54.	501/2001	Bharat Wagon & Engg. Co. Limited , Patna (Bihar) @	11.2.2004 / 25.11.2008 / 24.06.2009 / 16.11.2009
55.	503/2004	Bharat Heavy Plates and Vessels Limited, Visakhapatnam (Andhra Pradesh)	6.10.2005 / 29.08.2008 / 25.03.2009

X.	Draft Revival Scheme (DRS) Awaited		
56.	504/1992	Scooters India Ltd., Lucknow (Uttar Pradesh)	1.7.2000 / 17.06.2010
57.	509/1992	Richardson & Crudass (1972) Ltd., Mumbai (Maharashtra) @	24.9.2007 / 04.09.2008 / 27.05.2009 / 10.09.2009
58.	516/1992	Hindustan Fertilizer Corpn. Ltd., New Delhi (Delhi)	1.2.2007 / 05.12.2008 / 26.03.2009 / 19.10.2009
59.	502/1998	NEPA Ltd., Nepanagar (Madhya Pradesh)	29.5.2007 / 15.05.2008 / 26.02.2009 / 11.09.2009 / 21.6.2010
60.	504/2004	ITI Limited, Bangalore (Karnataka)	3.10.2005 / 27.11.2008 / 23.02.2009 / 30.12.2009
61.	505/2004	Tungabhadra Steel Products Limited, Tungabhadra Dam (Karnataka)	4.8.2005 / 11.12.2006 / 09.03.2009 / 24.08.2009
62.	502/2005	HMT Bearings Limited, Hyderabad (Andhra Pradesh)	13.2.2006 / 23.04.2009 / 12.11.2009
63.	501/2007	Madras Fertilizer Ltd., Chennai (Tamilnadu)	02.04.2009 / 15.10.2009*

XI.	Failed & Reopened		
64.	533/1992	Bengal Chemicals & Pharmaceuticals Ltd., Kolkata (West Bengal) @	31.3.1995 / 03.02.2009

*@ Taken over PSEs (24), * Profit (after adjustments) during 2009-10 (22), $$ since closed (7), % No More a CPSE(12)*

Note : Since Mandya National Paper Mills Limited wound up, Jessop & Co. Ltd. privatized, U.P. Drugs and Pharmaceuticals Limited transferred to the U.P. Government, All 9 subsidiaries of NTC (Holding) Ltd. merged with NTC (Holding) , Indian Iron and Steel Co. Limited merged and Bharat Refractories Ltd. (BRL) with SAIL and Praga Tools Ltd. merged with HMT Ltd. These CPSEs have not been included in the list of BIFR referred CPSEs.

Cash and Non-cash Assistance approved by the Government in respect of BRPSE recommended proposals upto 30.9.2010

S. No.	Name of the CPSE	Assistance (₹ In Crores)		
		Cash #	Non-Cash @	Total
1.	Hindustan Salts Ltd.	4.28	73.30	77.58
2.	NTC including its subsidiaries	39.23	-	39.23
3.	Bridge & Roof Co. (India) Ltd.	60.00	42.92	102.92
4.	BBJ Construction Co. Ltd.		54.61	54.61
5.	HMT Bearings Ltd.	7.40	43.97	51.37
6.	Praga Tools Ltd.	5.00	209.71	214.71
7.	Braithwaite & Company Ltd.	4.00	280.21	284.21
8.	British India Corporation Ltd.	47.35	-	47.35
9.	Central Inland Water Transport Corporation Ltd.	73.60	280.00	353.60
10.	Heavy Engineering Corporation Ltd.	102.00	1116.30	1218.30
11.	Cement Corporation of India Ltd.	184.29	1267.95	1452.24
12.	Richardson & Cruddas Ltd.	-	-	-
13.	Hindustan Antibiotics Ltd.	137.59	267.57	405.16
14.	Hindustan Organic Chemicals Ltd.	250.00	NA	250.00
15.	Fertilizers & Chemicals (Travancore) Ltd.	-	670.37	670.37
16.	Tungabhadra Steel Products Ltd.	-	-	-
17.	Bharat Ophthalmic Glass Ltd. ##	9.80	--	9.80
18.	Hindustan Insecticides Ltd.	-	267.29	267.29
19.	Mineral Exploration Corporation Ltd.	-	104.64	104.64
20.	Central Electronics Ltd.	-	16.28	16.28
21.	Eastern Coal Fields Ltd.	--*	--*	---*
22.	Bharat Pumps and Compressors Ltd.	3.37$	153.15	156.52$
23.	Bengal Chemicals & Pharmaceuticals Ltd.	207.19	233.41	440.60
24.	HMT Machine Tools Ltd.	723.00	157.80	880.80
25.	MECON Ltd.	93.00**	23.08	116.08
26.	Andrew Yule & Co. Ltd.	-- &	457.14	457.14
27.	Hindustan Copper Ltd.	--	612.94	612.94
28.	Bharat Yantra Nigam Ltd.##	3.82	7.55	11.37
29.	Bharat Heavy Plate Vessels Ltd.	--	---	--$$
30.	State Forms Corporation of India Ltd.	21.21	124.42	145.63
31.	Bharat Refractories Ltd.	--	479.16	479.16
32.	Tyre Corporation of India Ltd.	--	1018.45	1018.45&&
33.	NEPA Ltd.	--	--	--@@
34.	Bharat Wagon &Engineering Company Ltd.	52.79~	258.73~	311.52~
35.	Konkan Railway Corporation Ltd.	857.05	3222.46	4079.51
36.	National Projects Construction Corporation Ltd.	--	219.43***	219.43***
37.	Instrumentation Ltd.	48.36	549.36	597.72$$$
38.	Hindustan Prefab Ltd.	--	128.00	128.00

39.	Hindustan Shipyard Ltd.	--	--	--###
40.	National Jute Manufactures Corporation Ltd.	338.15	6815.06	7153.21
41.	Burn Standard Company Ltd.	14.16&&&	1139.16	1153.32
42.	National Film Development Corporation Ltd.	3.00	28.40	31.40
	Total	**3289.64***	**20322.81***	**23612.45***

 # Cash Assistance may involve budgetary support through equity/loan/grants

@ Non-cash Assistance may involve waiver of interest, penal interest, GOI loan, Guarantee fee, conversion of loan into equity/ debentures etc.

Government have approved closure/winding up of these CPSEs

& The issue of infusion of funds by GOI or by Joint Venture or a Strategic Partner will be sorted out by M/o Finance and the M/o Heavy Industries.

** The revival plan approved by the Government inter alia envisaged non-cash assistance of `2470.77crores and waiver of service charges of `14 crores per annum from 2004-05 from Coal India Ltd.*

$ In addition ONGC and BHEL would extend cash support to the extent of `150 crores and `20 crores respectively.

*** Excludes continuation of 50% interest subsidy not exceeding `6.50 crores per annum on VRS loans*

$$ Cabinet approved "in principle" the takeover of BHPV by BHEL with the direction that the valuation of BHPV be carried out prudently on the basis of established principles and if the takeover is not found feasible, the matter be brought back before the Cabinet.

&& Parliament had approved the Tyre Corporation of India Ltd. (Disinvestment of Ownership) Bill 2007 for changing the public sector Enterprises Character of the company. Disinvestment after cleaning the balance sheet.

@@ Proposal to revive NEPA Ltd through JV route in the private sector and a Bill seeking Parliamentary approval for induction of such JV has been introduced in Parliament.

**** In addition Govt. had also approved the conversion of cumulative interest due & accrued on GOI loan as on the date of conversion into equity capital and further written down to 10% of value.*

$$$ Interest free mobilization advance of `30 crores from BHEL for technological up-gradation and diversification which would be repaid through supplies to be made to BHEL against their orders. Interest free advance of `25 crores from BHEL to ILK at the beginning of each year for the next three years from 2008-09 which will be adjusted against supplies to BHEL in the same year.

Annex-12.3

Additional assistance approved by the Government for revival/restructuring of CPSEs independent of the recommendation of BRPSE

S. No.	Name of the CPSE	Assistance (₹ In Crores)		
		Cash #	Non-Cash @	Total
1	National Instruments	--	--	--
2	Semi-Conductor Complex Ltd.	--	--	--
3	Jute Corporation of India	36.59		36.59
4*	Fertilizers & Chemicals Travancore Ltd.	200.00	–	200.00
5*	Heavy Engineering Corporation Ltd.	310.00	305.43	615.43
6	Nagaland Pulp & Paper Co. Ltd	552.44	235.10	787.54
7	ITI Ltd.	4403.00	24.00	4427.00
8*	National Textiles Corporation	--	6129.75	6129.75
9	National Aviation Co. of India Ltd.	800.00	--	800.00
	Total	**6302.03**	**6694.28**	**12996.31**

** These CPSEs are included in the list of CPSEs approved by Government on the recommendations of BRPSE.*

Chapter-13

Disinvestment and Listing on Stock Exchanges

The policy of 'disinvestment' in Central Public Sector Enterprises (CPSEs) has evolved over the years. Disinvestment of government equity in CPSEs began in 1991-92. The Industrial Policy Statement of 1991 stated that the Government would divest part of its holdings in select CPSEs. Broadly, the objectives of divestment have been to raise resources, encourage wider public participation and bring in greater market accountability. The Committee on Disinvestment of Shares in PSEs (Chairman: Dr. C. Rangarajan, April 1993), argued for substantial disinvestment. It stated that the percentage of equity to be divested could be upto 49% for industries reserved explicitly for the public sector, 26% for enterprises that had a dominant market share and upto 74% in other enterprises.The chronology of evolution of the policy on disinvestment since 1991-92 is given in Annex-13.1.

13.1 Public Sector Disinvestment Commission

From 1991-92 to 1996-97, disinvestment in CPSEs was handled by the Department of Public Enterprises (DPE). DPE vide its resolution dated 23.8.1996, constituted a Public Sector Disinvestment Commission for a period of three years with Mr. G.V. Ramakrishna as its full time Chairman. The term of the Commission was further extended till 30.11.1999. The Commission submitted its report on 58 CPSEs.

The Commission was reconstituted in July, 2001 for a period of two years with Dr. R.M. Patil as its (part time) Chairman. The term of this Commission was subsequently extended till October, 2004. The reconstituted Commission submitted its reports on 41 CPSEs, including review cases of earlier Commission's recommendations on 4 CPSEs. The term of the Commission expired on 31.10. 2004 and the Commission was wound up.

13.2. Department of Disinvestment

During 1997-98, the subject matter of 'disinvestment in CPSEs' was brought under Department of Economic Affairs (Ministry of Finance). Subsequently, the Department of Disinvestment was constituted in the Ministry of Finance in December, 1999 with the following functions assigned to it:

(i) All matters relating to disinvestment of Central Government equity from Central Public Sector Undertakings.

(ii) All matters relating to sale of Central Government equity through offer for sale or private placement in the erstwhile Central Public Sector Undertakings.*

(iii) Matters relating to Decisions on the recommendations of the Disinvestment Commission on the modalities of disinvestment, including restructuring.

(iv) Matters relating to Implementation of disinvestment decisions, including appointment of advisers, pricing of shares, and other terms and conditions of disinvestment.

(v) Disinvestment Commission.

(vi) Central Public Sector Undertaking for purposes of disinvestment of Government equity only.

(f) Financial Policy in regard to the utilization of the proceeds of disinvestment channelized into the National Investment Fund.

**Note: All other post disinvestment matters, including those relating to and arising out of the exercise of Call option by the Strategic partner in the erstwhile CPSEs, shall continue to be handled by the administrative Ministry or Department concerned, where necessary, in consultation with the Department of Disinvestment.*

13.3 Evolution of Disinvestment Policy

The policy of disinvestment has been pronounced through the statements of Finance Ministers in their Budget Speeches. The chronology of the policy on disinvestment in CPSEs since 1991-92 may be seen at Annex-13.1. The disinvestment policy can be briefly divided into three phases, viz.,

(i) 1991-92 to 1998-99: When the focus was on disinvestment of minority shareholding in favour of financial institutions.

(ii) 1992-2000 to 2003-04: When the focus was on disinvestment through strategic sale.

(iii) Since 2004-05 (Partial Disinvestment): The focus is on disinvestment of minority stakes in conjunction with issue of fresh equity by CPSEs.

13.4 Current Policy on Disinvestment

The current policy on disinvestment was approved by the Government on 5th November, 2009. The objective of the disinvestment policy is to develop

people's ownership in CPSEs and to share in their wealth and prosperity while ensuring that Government equity does not fall below 51% and Government retains the management control.

Keeping in view the policy on disinvestment, the following approach to disinvestment in CPSEs has been adopted:

(i) Already listed profitable CPSEs (not meeting the mandatory shareholding of 10%) are to be made compliant by 'Offer for Sale' by Government or by the CPSEs through issue of fresh shares or a combination of both.

(ii) Unlisted CPSEs with no accumulated losses and having earned net profit in three preceding consecutive years are to be listed.

(iii) Follow-on public offers would be considered in respect of profitable CPSEs having 10 per cent or higher public ownership, taking into consideration the needs for capital investment of CPSE, on a case to case basis. The Government could simultaneously or independently offer a portion of its equity shareholding in conjunction.

(iv) Disinvestment is to be considered on merits and on a case-to-case basis since each CPSE has a different equity structure, financial strength, fund requirement, sector of operation and factors that do not permit a uniform pattern of disinvestment.

13.5 Listing of CPSEs

There are inherent advantages in listing of shares of profitable CPSEs on the stock exchanges. Listing enhances shareholder value in CPSEs in the following ways:

(a) Higher disclosure levels bring greater transparency, equity and credibility;

(b) Enhances corporate governance on account of induction of independent directors, causes substantial accretions to management accountability and thereby improves performance;

(c) Leads to higher levels of public scrutiny, enforces ethical conduct of business and improves corporate culture;

(d) Brings pressure on the management to perform due to raised expectations of investors (shareholders), unlocking the true value of the enterprise.

Listing of profitable CPSEs on the stock exchanges with a mandatory public ownership of at least 10% shareholding has been observed to increase significantly the value of stocks in these enterprises and increases the value of the Government's residual shareholding as well as of those held by the public post-listing. The Guidelines for Listing on the Bombay Stock Exchange may be seen at Annex-13.3.

13.6 Disinvestment in CPSEs (From 2004-05 till 20th December 2010)

A brief review of disinvestment in various CPSEs, since 2004-05, is given below:

(i) National Thermal Power Corporation Limited (NTPC): NTPC Limited had proposed an Initial Public Offering (IPO) through issue of fresh equity of 5.25% of the fully diluted post issue equity of the company. Government on 12th July, 2004 approved disinvestment of 5.25% equity of NTPC out of Government's shareholding in conjunction with the IPO by the company. The IPO was completed in October 2004. An amount of ₹2684.07 crore was realized by the Government.

(ii) Maruti Udyog Limited (MUL) (Not a CPSU): Government on 2nd September, 2005 approved the proposal for disinvestment of 8% equity in Martuti Udyog Limited. In January 2006 Government sold 8% equity of the company out of its residual shareholding of 18.28% to public sector institutions and public sector banks; through a differential pricing method. Government reaslised ₹1567.60 crore from this sale. In March 2006 0.01% equity of the company was sold to the employees of the company and the Government realized an amount of ₹2.08 crore. Government on 21st December 2006 decided that the Government may disinvest its entire residual shareholding of 10.27% in Maruti Udyog Limited. The shareholding of 10.27% was disinvested in May 2007 though the differential pricing method to Indian Public Sector Financial Institutions, Public Sector Banks and Indian Mutual Funds. The Government realized ₹2277.62 crore from this disinvestment.

(iii) Power Grid Corporation of India Limited (PGCIL): Government on 8th February, 2007 approved disinvestment of 5% equity of the company out of Government's shareholding along with the fresh issue of equity of 10% of the pre-issue paid-up capital of PGCIL. The IPO was completed in October 2007 and Government realized an amount of ₹994.82 crore.

(iv) Rural Electrification Corporation Limited (REC): Government on 8th February, 2007 approved disinvestment of 10% equity of the company out of

Government's shareholding along with the fresh issue of equity of 10% of the pre-issue paid-up capital of REC. The IPO was completed in March 2008 and the Government realized an amount of ₹819.63 crore.

(v) NHPC Limited: Government on 8th February, 2007 approved disinvestment of 5% equity of the company out of Government's shareholding along with the fresh issue of equity of 10% of the pre-issue paid-up capital of NHPC Ltd. The IPO was completed in August 2009 and Government realized an amount of ₹2012.85 crore.

(vi) Oil India Limited: Government on 30th August, 2007 approved disinvestment of 10% equity of the company out of Government's shareholding along with the fresh issue of equity of 11% of the post-issue paid-up capital of Oil India Limited and Government to simultaneously disinvest 10% equity in favour of IOC, HPCL and BPCL in the ratio of 2:1:1, at the market discovered price. The IPO was completed in September 2009 and Government realized an amount of ₹2247.046 crore.

(vii) National Thermal Power Corporation Limited (NTPC): Government offered 5% pre Issue paid-up capital of NTPC Limited out of Government's shareholding through follow-on public offering in February 2010 and realized an amount of ₹8480.10 crore.

(viii) Rural Electrification Corporation Limited (REC) : Government offered 5% pre Issue paid-up capital of REC Limited out of Government's shareholding in conjunction with issue of fresh equity of 15% by the Company through a follow-on public offering in March 2010 and Government realized an amount of ₹882.52 crore.

(ix) NMDC Limited (NMDC) : Government offered 8.38% pre Issue paid-up capital of NMDC Limited out of Government's shareholding through follow-on public offering in March 2010 and realized an amount of ₹9930.42 crores.

(x) SJVN Limited (SJVNL) : Government offered 10.03% pre Issue paid-up capital of SJVN Limited out of Government's shareholding through an Initial Public Offering in May 2010 and realized an amount of ₹1062.74 crore.

(xi) Engineers India Limited (EIL): Government offered 10% pre Issue paid-up capital of Engineers India Limited out of Government's shareholding through a follow-on public offering in July 2010 and realized an amount of ₹960 crore.

(xii) Coal India Ltd. (CIL): Government offered 10% pre Issue paid-up equity capital of Coal India Ltd. out of Government's shareholding through an initial public offering (IPO) in October 2010 and realized and amount of ₹15,199 crore.

(xiii) Power Grid Corporation of India Ltd. (PGCIL): Government offered 10% pre Issue paid-up capital of Power Grid Corporation of India Limited out of Government's shareholding in conjunction with issue of fresh equity of 10% by the Company through a follow-on public offering in November 2010 and realized an amount of ₹3,721.17 crore.

(xiv) MOIL Limited (MOIL): Government offered 10% pre Issue paid-up equity capital of MOIL Ltd. out of Government's shareholding in conjunction with 5% each by Government of Maharashtra and Government of Madhya Pradesh and realized and amount of ₹618.74 crore.

(xv) Shipping Corporation of India Limited (SCIL): Government offered 10% pre Issue paid-up capital of Shipping Corporation of India Limited out of Government's shareholding in conjunction with issue of fresh equity of 10% by the Company through a follow-on public offering and realized an amount of ₹582.45 crore.

Annex-13.2 provides a summary of disinvestment proceeds since 1991-92 till 20th December, 2010.

13.7 National Investment Fund

The Government constituted a "National Investment Fund" (NIF) in January 2005, into which the realization proceeds from disinvestment of Government shareholding would be channelized. The Fund was to be maintained outside the Consolidated Fund of India. It was, furthermore, decided to use the income from the Fund for the following broad objectives: -

(a) Investment in social sector projects which promote education, health care and employment;

(b) Capital investment in select profitable and revivable Public Sector Enterprises that yield adequate returns in order to enlarge their capital base to finance expansion/ diversification.

13.7.1. Corpus of NIF

The corpus of the Fund 'as on 31.12.2010' amounts to ₹1814.45 crore being the proceeds from the disinvestment in Power Grid Corporation and Rural Electrification Corporation. The pay out on NIF was ₹84.81 crores in the first year. The pay out

received in the second year was ₹206.21 crores. The average income of first year was 8.47%. The average income of the second year was 10.02%. The average income, has therefore, been equal to 9.245% against the hurdle rate of 9.25%.

13.7.2. Use of Disinvestment proceeds

In view of the difficult economic situation arising from the global slowdown of 2008-09 and the severe drought that may affect the 11th Plan growth target, the Government decided in November 2009 to give one time exemption for utilization of proceeds from disinvestment of CPSEs for a period of three years - from April 2009 to March 2012 - and disinvestment proceeds are available during this period in full for investment in specific social sector schemes decided by the Planning Commission/Department of Expenditure. The status quo ante will, however, be restored from April 2012. The existing corpus of the NIF shall remain, however, untouched and continue to be managed by the Fund Managers under the discretionary mode of portfolio Management Scheme governed by SEBI guidelines. The disinvestment proceeds are being used for funding capital expenditure under the following social sector schemes of the Government:

(a) Mahatma Gandhi National Rural Employment Guarantee Scheme

(b) Indira Awas Yojana

(c) Rajiv Gandhi Gramin Vidyutikaran Yojana

(d) Jawaharlal Nehru National Urban Renewal Mission

(e) Accelerated Irrigation Benefits Programme

(f) Accelerated Power Development Reform Programme

Chronology of the evolution of the policy on disinvestment since 1991-92

Date	Event
1991-92 Interim Budget	Government announced its intention to divest upto 20% of Government equity in selected CPSEs in favour of public sector institutional investors.
Industrial Policy Statement dated 24.7.1991	In the case of selected enterprises, part of Government holdings in the equity share capital of the enterprises will be disinvested in order to provide further market discipline to the performance of public enterprises.
Rangarajan Committee-April,1993	It emphasized the need for substantial disinvestment and stated that while the percentage of equity to be divested should not be more than 49% for industries explicitly reserved for the public sector, it should be either 74% or 100% for others.
Budget speech-1998-1999	Government has also decided that in the generality of cases, the Government shareholding in public sector enterprises will be brought down to 26 per cent. In cases of public sector enterprises involving strategic considerations, Government will continue to retain majority holding. The interest of workers shall be protected in all cases.
Budget speech-1999-2000	Government strategy towards public sector enterprises will continue to encompass a judicious mix of strengthening strategic units, privatizing nonstrategic ones through gradual disinvestment of strategic sale and devising viable rehabilitation strategies for weak units.
Cabinet decision dated 16.3.1999	Central Public Sector Enterprises (CPSEs) have been classified into strategic and non-strategic areas for the purpose of disinvestment. Strategic CPSEs would be those in the areas of: (a) Arms and ammunitions and the allied items of defense equipment, defense air-crafts and warships; (b) Atomic energy (except in the areas related to the operation of nuclear power and applications of radiation and radio-isotopes to agriculture medicine and non-strategic industries); (c) Railway transport All other CPSEs were to be considered as nonstrategic. For the non-strategic CPSEs, it was decided that the reduction of Government stake to 26% would not be automatic. Decision in regard to the percentage of disinvestment i.e., Government's stake going down to less than 51% or to 26% would be taken on the following considerations : a) Whether the industrial sector requires the presence of the public sector as a countervailing force to prevent concentration of power in private hands; and b) Whether the industrial sector requires a proper regulatory mechanism to protect the consumer interest before Public Sector Enterprises are privatized.
Budget speech 2000 – 2001	Government announced its decision to reduce its stake in the non-strategic PSUs even below 26%, if necessary. There would be increasing emphasis on strategic sale and the entire proceeds from disinvestment/privatization would be deployed in social sector, restructuring of PSUs and retirement of public debts.
Decision dated 23.6.2000	In order to secure the presence of the public sector as a Countervailing force, the Government took the decision of not going for disinvestment of GAIL, IOC and ONGC, and retaining them as flagship companies.

Decision dated 7.9.2002	Central Public Sector Enterprises (CPSEs), Central Government owned Cooperative Societies (where Government's ownership is 51% or more) should not be permitted to participate in the disinvestment of other CPSEs as bidder. If in some specific cases any deviation from these restrictions is considered desirable in public interest, the Ministry/Department concerned may bring an appropriate proposal for consideration of the Core Group of Secretaries on Disinvestment.
Budget Speech 2003-2004	Details about the already announced Disinvestment Fund and Asset Management company, to hold residual shares post disinvestment, shall be finalized early in 2003-2004.
Budget Speech 2004-2005 (July 2004)	Disinvestment and privatization are useful economic tools. Government will selectively employ these tools, consistent with the declared policy. Government will establish a Board for Reconstruction of Public Sector Enterprises (BRPSE). The Board will advise the Government on the measures to be taken to restructure PSEs, including cases where disinvestment or closure or sale is justified. The disinvestment revenues will be part of the Consolidated Fund of India. While presenting the Budget for 2005-2006, report to the House the manner in which the said revenues have been or will be applied for specified social sector schemes.
Decision dated 27.1.2005	(i) Government decided, in principle, to list large, profitable Public Sector Enterprises (PSEs) on domestic stock exchanges and to selectively sell a minority stake in listed, profitable PSEs while retaining at least 51% of the shares along-with full management control so as not to disturb the Public Sector character of the companies. (ii) Government has also decided to constitute a "National Investment Fund" into which the realization from sale of minority shareholding of the Government in profitable PSEs would be channelized. The Fund would be maintained outside the Consolidated Fund of India. The income from the Fund would be used for the following broad investment objectives: - (a) Investment in social sector projects which promote education, healthcare and employment; (b) Capital investment in selected profitable and revivable Public Sector Enterprises that yield adequate returns in order to enlarge their capital base to finance expansion/ diversification.
Decision dated 25.11.2005	Government decided, in principle, to list large, profitable CPSEs on domestic stock exchanges and to selectively sell small portions of equity in listed, profitable CPSEs (other than the Navratnas)

Chronology of the evolution of the policy on disinvestment since 1991-92

Annex- 13.2

Year	Budgeted receipt (Rs. crore)	Receipts through sale of minority shareholding in CPSEs (Rs. crore)	Receipts through sale of majority shareholding of one CPSE to another CPSE (Rs. crore)	Receipts through Strategic sale (Rs.crore)	Receipts from other related transactions (Rs. crore)	Receipts from sale of residual shareholding in disinvested CPSEs / companies (Rs. crore)	Total receipts (Rs. crore)	Transactions
1991-92	2,500	3,037.74	-	-	-	-	**3,037.74**	Minority shares sold in Dec, 1991 and Feb, 1992 by auction method in bundles of "very good", "good" and "average" companies
1992-93	2,500	1,912.51	-	-	-	-	**1,912.51**	Shares sold separately for each company by auction method.
1993-94	3,500	-	-	-	-	-	**-**	Equity of 6 companies sold by auction method but proceeds received in 94-95.
1994-95	4,000	4,843.10	-	-	-	-	**4,843.10**	Shares sold by auction method.
1995-96	7,000	168.48	-	-	-	-	**168.48**	Shares sold by auction method.
1996-97	5,000	379.67	-	-	-	-	**379.67**	GDR -VSNL
1997-98	4,800	910.00	-	-	-	-	**910.00**	GDR -MTNL
1998-99	5,000	*5371.11	-	-	-	-	**5,371.11**	GDR-VSNL; Domestic offerings of CONCOR and GAIL; Cross purchase by 3 Oil sector companies i.e. GAIL, ONGC and IOC.
1999-00	10,000	**1479.27	-	105.45	275.42	-	**1,860.14**	GDR-GAIL; Domestic offering of VSNL; capital reduction and dividend from BALCO; Strategic sale of MFIL.
2000-01	10,000	-	1,317.23	554.03	-	-	**1,871.26**	Sale of KRL, CPCL and BRPL to CPSEs; Strategic sale of BALCO and LJMC.
2001-02	12,000	-	-	3,090.09	2,567.60	-	**5,657.69**	Strategic sale of CMC, HTL, VSNL, IBP, PPL, hotel properties of ITDC and HCI, slump sale of Hotel Centaur Juhu Beach, Mumbai and leasing of Ashok Bangalore; Special dividend from VSNL, STC and MMTC; sale of shares to VSNL employees.

2002-03	12,000	-	-	2,252.72	1,095.26	-	**3,347.98**	Strategic sale of HZL, IPCL, hotel properties of ITDC, slump sale of Centaur Hotel Mumbai Airport, Mumbai; Premium for renunciation of rights issue in favour of SMC ; Put Option of MFIL; Sale of shares to employees of HZL and CMC.
2003-04	14,500	12,741.62	-	342.06	-	2,463.73	**15,547.41**	Strategic sale of JCL; Call Option of HZL; Offer for Sale of MUL, IBP, IPCL, CMC, DCI, GAIL and ONGC; Sale of shares of ICI Ltd.
2004-05	4,000	2,700.06	-	-	64.81	-	**2,764.87**	Offer for Sale of NTPC and spill over of ONGC; sale of shares to IPCL employees.
2005-06	No target fixed	-	-	-	2.08	1,567.60	**1,569.68**	Sale of MUL shares to Indian public sector financial institutions & banks and employees
2006-07	No target fixed	-	-	-	-	-	**-**	
2007-08	No target fixed	1,814.45	-	-	-	2,366.94	**4,181.39**	Sale of MUL (Rs.2366.94 cr)shares to public sector financial institutions, public sector banks and Indian mutual funds and sale of PGCIL (Rs.994.82 cr) and REC (Rs.819.63 cr) shares through Offer for Sale.
2008-09	No target fixed	-	-	-	-	-	**-**	
2009-10	No target fixed	23,552.93	-	-	-	-	**23,552.93**	(Rs.2012.85 - NHPC, `2247.05 - OIL and NTPC - 8480.098, REC `882.52, `9330.42 NMDC,)
2010-11	40,000	22,144.21					**22,144.21**	RS.1062.74 SJVN, EIL 959.65, COAL INDIA 15199 CR; PGCIL 3721.17, MOIL 618.75; SCI 582.45
G.Total		**81,055.15**	**1,317.23**	**6,344.35**	**4,005.17**	**6,398.27**	**99,120.17**	

Guidelines for Listing

Listing means admission of securities to dealings on a recognised stock exchange. The securities may be of any public limited company, Central or State Government, quasi governmental and other financial institutions/corporations, municipalities, etc.

The objectives of listing are mainly to :

- provide liquidity to securities;
- mobilize savings for economic development;
- protect interest of investors by ensuring full disclosures.

The Bombay Stock Exchange (BSE) has a dedicated Listing Department to grant approval for listing of securities of companies in accordance with the provisions of the Securities Contracts (Regulation) Act, 1956, Securities Contracts (Regulation) Rules, 1957, Companies Act, 1956, Guidelines issued by SEBI and Rules, Bye-laws and Regulations of BSE.

BSE has set various guidelines and forms that need to be adhered to and submitted by the companies. These guidelines will help companies to expedite the fulfillment of the various formalities and disclosure requirements that are required at various stages of

- Public Issues
  - Initial Public Offering
  - Further Public Offering
- Preferential Issues
- Indian Depository Receipts
- Amalgamation
- Qualified Institutions Placements

A company intending to have its securities listed on BSE has to comply with the listing requirements prescribed by it. Some of the requirements are as under :

i Minimum Listing Requirements for New Companies
ii Minimum Listing Requirements for Companies already Listed on other Stock Exchanges
iii Minimum Requirements for Companies Delisted by BSE seeking relisting on BSE
iv Permission to Use the Name of BSE in an Issuer Company's Prospectus
v Submission of Letter of Application
vi Allotment of Securities
vii Trading Permission
viii Requirement of 1% Security
ix Payment of Listing Fees
x Compliance with the Listing Agreement
xi Cash Management Services (CMS) - Collection of Listing Fees

[I] Minimum Listing Requirements for New Companies

The following eligibility criteria have been prescribed effective August 1, 2006 for listing of companies on BSE, through Initial Public Offerings (IPOs) & Follow-on Public Offerings (FPOs):

1. Companies have been classified as large cap companies and small cap companies. A large cap company is a company with a minimum issue size of ₹ 10 crore and market capitalization of not less than ₹ 25 crore. A small cap company is a company other than a large cap company.

a. In respect of Large Cap Companies

i. The minimum post-issue paid-up capital of the applicant company (hereinafter referred to as "the Company") shall be ₹ 3 crore; and
ii. The minimum issue size shall be ₹ 10 crore; and
iii. The minimum market capitalization of the Company shall be ₹ 25 crore (market capitalization shall be calculated by multiplying the post-issue paid-up number of equity shares with the issue price).

b. In respect of Small Cap Companies

i. The minimum post-issue paid-up capital of the Company shall be ₹ 3 crore; and
ii. The minimum issue size shall be ₹ 3 crore; and
iii. The minimum market capitalization of the Company shall be ₹ 5 crore (market capitalization shall be calculated by multiplying the post-issue paid-up number of equity shares with the issue price); and
iv. The minimum income/turnover of the Company shall be ₹ 3 crore in each of the preceding three 12-months period; and
v. The minimum number of public shareholders after the issue shall be 1000.
vi. A due diligence study may be conducted by an independent team of Chartered Accountants or Merchant Bankers appointed by BSE, the cost of which will be borne by the company. The requirement of a due diligence study may be waived if a financial institution or a scheduled commercial bank has appraised the project in the preceding 12 months.

2. For all companies :

a. In respect of the requirement of paid-up capital and market capitalization, the issuers shall be required to include in the disclaimer clause forming a part of the offer document that in the event of the market capitalization (product of issue price and the post issue number of shares) requirement of BSE not being met, the securities of the issuer would not be listed on BSE.

b. The applicant, promoters and/or group companies, shall not be in default in compliance of the listing agreement.

c. The above eligibility criteria would be in addition to the conditions prescribed under SEBI

(Disclosure and Investor Protection) Guidelines, 2000.

[II] Minimum Listing Requirements for Companies already Listed on Other Stock Exchanges

The listing norms for companies already listed on other stock exchanges and seeking listing at BSE, made effective from August 6, 2002, are as under:

1. The company shall have a minimum issued and paid up equity capital of ₹ 3 crore.

2. The company shall have a profit making track record for the preceding last three years. The revenues/profits arising out of extra ordinary items or income from any source of non-recurring nature shall be excluded while calculating the profit making track record.

3. Minimum net worth shall be ₹ 20 crore (net worth includes equity capital and free reserves excluding revaluation reserves).

4. Minimum market capitalisation of the listed capital shall be at least two times of the paid up capital.

5. The company shall have a dividend paying track record for at least the last 3 consecutive years and the dividend should be at least 10% in each year.

6. Minimum 25% of the company's issued capital shall be with Non-Promoter shareholders as per Clause 35 of the Listing Agreement. Out of above Non-Promoter holding, no single shareholder shall hold more than 0.5% of the paid-up capital of the company individually or jointly with others except in case of Banks/Financial Institutions/Foreign Institutional Investors/Overseas Corporate Bodies and Non-Resident Indians.

7. The company shall have at least two years listing record with any of the Regional Stock Exchanges.

8.The company shall sign an agreement with CDSL and NSDL for demat trading.

[III] Minimum Requirements for Companies Delisted by BSE seeking Relisting on BSE

Companies delisted by BSE and seeking relisting at BSE are required to make a fresh public offer and comply with the extant guidelines of SEBI and BSE regarding initial public offerings.

[IV] Permission to Use the Name of BSE in an Issuer Company's Prospectus

Companies desiring to list their securities offered through a public issue are required to obtain prior permission of BSE to use the name of BSE in their prospectus or offer for sale documents before filing the same with the concerned office of the Registrar of Companies.

BSE has a Listing Committee , comprising of market experts, which decides upon the matter of granting permission to companies to use the name of BSE in their prospectus/offer documents. This Committee evaluates the promoters, company, project , financials, risk factors and several other aspects before taking a decision in this regard.

Decision with regard to some types/sizes of companies has been delegated to the Internal Committee of BSE.

[V] Submission of Letter of Application

As per Section 73 of the Companies Act, 1956, a company seeking listing of its securities on BSE is required to submit a Letter of Application to all the stock exchanges where it proposes to have its securities listed before filing the prospectus with the Registrar of Companies.

[VI] Allotment of Securities

As per the Listing Agreement, a company is required to complete the allotment of securities offered to the public within 30 days of the date of closure of the subscription list and approach the Designated Stock Exchange for approval of the basis of allotment.

In case of Book Building issues, allotment shall be made not later than 15 days from the closure of the issue, failing which interest at the rate of 15% shall be paid to the investors.

[VII] Trading Permission

As per SEBI Guidelines, an issuer company should complete the formalities for trading at all the stock exchanges where the securities are to be listed within 7 working days of finalization of the basis of allotment.

A company should scrupulously adhere to the time limit specified in SEBI (Disclosure and Investor Protection) Guidelines 2000 for allotment of all securities and dispatch of allotment letters/share certificates/credit in depository accounts and refund orders and for obtaining the listing permissions of all the exchanges whose names are stated in its prospectus or offer document. In the event of listing permission to a company being denied by any stock exchange where it had applied for listing of its securities, the company cannot proceed with the allotment of shares. However, the company may file an appeal before SEBI under Section 22 of the Securities Contracts (Regulation) Act, 1956.

[VIII] Requirement of 1% Security

Companies making public/rights issues are required to deposit 1% of the issue amount with the Designated Stock Exchange before the issue opens. This amount is liable to be forfeited in the event of the company not resolving the complaints of

investors regarding delay in sending refund orders/ share certificates, non-payment of commission to underwriters, brokers, etc.

[IX] Payment of Listing Fees

All companies listed on BSE are required to pay to BSE the Annual Listing Fees by 30th April of every financial year as per the Schedule of Listing Fees prescribed from time to time.

[X] Compliance with the Listing Agreement

Companies desirous of getting their securities listed at BSE are required to enter into an agreement with BSE called the Listing Agreement, under which they are required to make certain disclosures and perform certain acts, failing which the company may face some disciplinary action, including suspension/delisting of securities. As such, the Listing Agreement is of great importance and is executed under the common seal of a company. Under the Listing Agreement, a company undertakes, amongst other things, to provide facilities for prompt transfer, registration, sub-division and consolidation of securities; to give proper notice of closure of transfer books and record dates, to forward 6 copies of unabridged Annual Reports, Balance Sheets and Profit and Loss Accounts to BSE, to file shareholding patterns and financial results on a quarterly basis; to intimate promptly to the Exchange the happenings which are likely to materially affect the financial performance of the Company and its stock prices, to comply with the conditions of Corporate Governance, etc.

The Listing Department of BSE monitors the compliance by the companies with the provisions of the Listing Agreement, especially with regard to timely payment of annual listing fees, submission of results, shareholding patterns and corporate governance reports on a quarterly basis . Penal action is taken against the defaulting companies.

[XI] Cash Management Services (CMS) - Collection of Listing Fees

In order to simplify the system of payment of listing fees, BSE has entered into an arrangement with HDFC Bank for collection of listing fees from 141 locations all over the country.

Chapter-14

Performance of Public Sector Insurance Companies

Since the opening up of the insurance sector in 1999, the number of participants in the sector has been steadily going up. From six insurers in the year 2000, the number of players has gone up to 48 insurers operating in life, non-life and reinsurance segments (as on 31st March 2010). As many as eight insurance companies (life and non-life insurance) are functioning are in the public sector. These enterprises are Life Insurance Corporation of India, National Insurance Company Limited, New India Assurance Company Limited, Oriental Insurance Company Limited, United India Insurance Company Limited, General Insurance Corporation of India, Agriculture Insurance Company of India Limited and Export Credit Guarantee Corporation of India. These public sector insurers are offering a variety of insurance policies ranging from Life Insurance to Crop Insurance.

14.1 Life Insurance Corporation of India (LIC)

The Life Insurance Corporation of India (LIC) was established as a Statutory Corporation under Section 3 of the Life Insurance Act, 1956. LIC has its Central Office in Mumbai and eight Zonal Offices at Mumbai, Kolkata, Delhi, Chennai, Hyderabad, Kanpur, Bhopal and Patna.

The objectives of LIC are: (a) providing life insurance through financial cover against death or disability at a reasonable cost, (b) mobilizing people's savings through insurance-linked savings, (c) act as Trustees of the insured public in their individual and collective capacities and (d) meet the various life insurance needs of the community.

The objective of the scheme is to provide life insurance protection to the rural and urban poor below the poverty line (and marginally above the poverty line) in the age group between 18 and 59 years.

Through its International Operations, LIC covered a total number of 82794 policies and generated a total premium income equal to ₹ 839.73 crore in the year 2009-10; showing a growth rate of 31.75% in policies and 12.99% in (total) Premium Income.

The Corporation also transacts business abroad and has branch offices in Fiji, Mauritius and United Kingdom. LIC also operates in overseas Insurance Market through Joint Venture Companies namely Life Insurance Corporation (International) B.S.C.(c), registered in Bahrain; Kenindia Assurance Company Ltd., registered in Nairobi; Life Insurance Corporation (Nepal) Ltd, registered in Kathmandu in collaboration with Vishal Group Ltd. Nepal and Life Insurance Corporation (Lanka) Ltd. registered in Colombo in partnership with M/s Bartleet Transcapital Pvt. Ltd., Sri Lanka.

LIC, along with Life Insurance Corporation (International) B.S.C. (c), Bahrain, New India Assurance Company Ltd. and Al Hokair Group of Saudi Arabia have opened a Joint Venture Company namely Saudi Indian Company for Co-operative Insurance in the Kingdom of Saudi Arabia to transact both Life and Non-Life Insurance business. LIC's Representative Office in Singapore was opened on 06.11.2008, and LIC is currently in the process of establishing a Wholly- Owned Subsidiary (WOS) company there.

The Life Fund of LIC amounts to ₹ 9,99,517.59 crore as on 31.3.2010. During 2009-10, the Corporation made payments of ₹ 7,033.68 crore under Death Claim cases, ₹ 46,921.22 crore under Maturity Claims and ₹ 3,770.54 crore under Annuities. Under Varishta Pension Bima Yojana, moreover, the Corporation made payments of ₹108.51 crore under Death Claim and of ₹ 580.19 crore under Annuities.

Some of the social security of Central and State / UT Governments being administered by LIC are mentioned below.

14.1.1 Janashree Bima Yojana

The Janashree Bima Yojana(JBY) was launched in August 2000. The benefits under JBY are shown in Table 14.1 below.The Scheme has replaced Social Security Group Insurance Scheme (SSGIS) and Rural Group Life Insurance Scheme (RGLIS). The premium

Table 14.1
Benefits under Janashree Bima Yojana

S. No.		Amount
1.	On Natural Death	Rs. 30,000
2.	On Death or Total Permanent Disability, due to accident	Rs. 75,000
3.	On Partial Permanent Disability	Rs. 37,500

for the scheme is ₹ 200/- per member per annum, 50 per cent of which is met out of Social Security Fund maintained with LIC and the balance premium is borne by the member and/ or Nodal Agency. As on 31st March 2010, about 1.84 crore persons have been covered under the scheme

14.1.2 Shiksha Sahayog Yojana

The scheme was launched on 31st December 2001, with the objective to lessen the burden of parents in meeting the educational expenses of their children. It provides scholarships to students of parents living below poverty line (or marginally above poverty line) and who are covered under Janashree Bima Yojana, and are studying in 9th to 12th standard (including ITI courses). A scholarship amount of ₹ 600/- per half year, per child, is paid for a maximum period of four years, and for maximum of two children of a member covered under Janashree Bima Yojana. No premium is charged for this benefit. During the financial year 2009-2010 an amount equal to ₹ 88.90 crore was disbursed as scholarship in 913281 cases.

14.1.3 Aam Admi Bima Yojana

AAM ADMI BIMA YOJANA, a new social security scheme for rural landless household was launched on 2nd October, 2007. The benefits under this scheme are shown in Table 14.2. The head of the family or one earning member in the family in the age group between 18 to 59 years of a rural landless household is covered under this scheme. The premium equal to ₹ 200/- per person per annum, is shared equally by the Central Government and the State Government.

Table 14.2
Benefits under Aam Admi Bima Yojana

S. No.	Item	Amount
1.	On Natural Death	Rs. 30,000
2.	On Death or Total Permanent Disability due to Accident	Rs. 75,000
3.	On Partial Permanent Disability	Rs. 37,500

From the inception of the scheme and 31st march 2010, about 1,30,45,666 heads of the families of rural landless households were covered under the scheme. Scholarship of ₹ 600/- per half year is also available to the children of members of Aam Admi Bima Yojana who are studying in classes 9th to 12th (including ITI courses) as a free add on benefit. This benefit is limited to two children per family.

Table 14.3 below provides an overview of the performance of LIC ;during the year 2009-10.

Table 14.3
Performance of LIC during 2009-10

S. No.	Item	Amount
1	Individual Policies Sold (Nos. in crore)	3.88
2	Market Share in terms of number of Policy	73.02%
3	Total Premium Income (Rs. in crore)	1,85,985.91
4	Total Income (Rs. in crore)	2,98,721.55
5	Total No. of Death Claims settled (in Lacs)	8.79
6	Total No. of Maturity Claims settled (in Lacs)	206.88
7	Total No. of Agents as on 31.3.2010	14,02,807

14.2 Non Life Insurance Companies

The non-Life Insurance Companies in the public sector are National Insurance Company Ltd. (NICL), New India Assurance Company Ltd. (NIACL), Oriental Insurance Company Ltd. (OICL) and United India Insurance Company Ltd. (UIICL) providing coverage for insurances other than Life, such as, Fire, Marine (Hull & Cargo), Motor, Workmen Compensation, Personal Accident, Aviation, Engineering, Liability, Health etc. The paragraphs below briefly discuss the different policies and schemes being implemented by each of these insurance companies.

14.2.1 Universal Health Insurance Scheme (UHIS):

The Universal Health Insurance Scheme was launched in July, 2003 by the Central Government. It is operated through four public sector General Insurance Companies, namely, NICL, NIACL, OICL and UIICL. It was redesigned in July 2004, restricting it to Below Poverty Line (BPL) families only. The benefit of the scheme is available to both Individuals and Groups, belonging to BPL families (upto a limit of ₹ 30,000 Sum Insured on floater basis) and Personal Accident Benefit to the earning Head of the family for ₹ 25,000). In addition, loss of earnings to the earning head of the family / spouse is provided at the rate of ₹ 50 per day for a maximum of 15 days for the period of hospitalization. The maximum age limit is 70 years and pre-existing diseases are covered.

The policy has been extended to cover Maternity Benefit @ ₹2,500/- for normal delivery and @ ₹ 5,000 for caesarean delivery for one Child with only 12 months waiting period. The premium charged under UHIS is ₹ 300/- for an individual, ₹ 450/- for a family of five and ₹ 600 for a family of 7 members with a subsidy of ₹ 200, ₹ 300, and ₹ 400 respectively.

The overall performance of these companies during the year in terms of Gross Direct Premium Income (GDPI) and Net Incurred Claim Ratio (ICR) and Net Profit are given in Table 14.4 below:

Table 14.4
Performance of Non-Life Insurance Companies (2008-9 and 2009-10)

Company	2008-09			2009-10		
	GDPI*	ICR (%)**	Net Profit	GDPI	ICR (%)	Net Profit
NCIL	4296	93	(-)149	4646	85	220
NIACL	6456	85	224	7099	90	405
OICL	4078	95	(-)53	4855	82	(-)44
UIICL	4278	72	476	5239	79	708

**GDPI – Gross Direct Premium Income **ICR- Incurred Claim Ratio*

14.3 Indian Reinsurer: General Insurance Corporation of India (GIC)

The General Insurance Corporation of India (GIC) was set up as a Government company under the General Insurance Business (Nationalisation) Act 1972 for the purpose of superintending, controlling and carrying on the business of 'General Insurance'. The GIC was authorized to carry out the general insurance business through its four subsidiaries viz. NICL, NIACL, OICL. and UIICL. With the notification of the General Insurance Business (Nationalisation) Amendment Act 2002, the GIC was designated as the 'Indian Reinsurer' on 3.11.2000 and its supervisory role over its subsidiaries ended. The ownership of these subsidiary companies now rests with the Government of India.

General Insurance Corporation of India (GIC Re) is a leading global reinsurance and risk solution provider with its Registered Office of the Corporation is in Mumbai and liaison/area offices in New Delhi, Kolkata and Chennai to cater to the needs of clients in these metro cities. As the 'Indian Reinsurer with a global footprint', GIC Re provides reinsurance support for the 23 general insurance companies (non-life) in India. Internationally, GIC Re leads the reinsurance programmers of insurance companies in SAARC region, African countries and in the Middle East. Apart from reinsurance business, GIC Re continues to participate in the share capital of Kenindia Assurance Company Ltd (Kenya), India International Insurance Pvt. Ltd., Singapore, LIC (Mauritius) Offshore Ltd., and Asian Reinsurance Corporation, Bangkok.

GIC Re is now expanding its global presence. The Corporation expects overseas business to contribute 50% of its total revenue by the year 2010. During 2009-10, international business contributed 44% to its revenue. GIC Re has 3 overseas offices with branch offices in London and Dubai and a Representative Office in Moscow. GIC Re is also present in the Latin American market with an 'Eventual Reinsurer' status in Brazil. In the Far East GIC has established an office in Malaysia. GIC re also manages Marine Hull Pool, Indian Terrorism Insurance Pool and India Motor Thirty Party Insurance Pool for Commercial Vehicles on behalf of Indian Insurance industry.

GIC Re is financially strong as reflected by its high grade ratings from credit rating agencies, rated A-(Excellent) by A M Best & AAA (In) Bby CARE. GIC Re is also the 5th largest aviation reinsurer globally. During the year 2009-10, the net premium of the Corporation was to ₹ 8777 crores as against ₹ 7402 crores in the previous year. The net incurred claims were at ₹ 6856 crores. Profit before tax was ₹ 1290.20 crore as on 31st March 2010. The Corporation has recorded a profit after tax of ₹ 1775 crores as against ₹1407 crores in 2008-09. The total assets and networth have grown to ₹ 43,842 crore and ₹9027 crore respectively as on 31st March 2010. The present paid up capital of the Corporation is ₹ 430.00 crores.

14.4 Agriculture Insurance Company of India Limited(AICIL)

The Agriculture Insurance Company of India Limited (AICIL) was registered under the Companies

Act 1956, with equity participation from General Insurance Corporation of India (35%), NABARD (30%), and four public sector Insurance Companies (i.e., National, New India, Oriental & United India combined 30% @8.75% each). The paid up share capital of company is ₹ 200 crore against an authorized share capital of ₹ 1500 crore. It has been set up with the objective to implement various Crop Insurance Schemes and other insurance products relating to agriculture. The company has commenced its business with effect from 1.4.2003 with transfer of Crop Insurance Business from General Insurance Corporation of India.

The company enjoys the distinction of being the largest crop insurance provider in the world in terms of the number of farmers insured annually. Since the inception of the scheme and until Rabi 2009-10 about 1586 lakh farmers have been insured, covering an area of 245 million hectare for a sum insured value of ₹ 1,86,934 crore, against a premium of ₹ 5584 crore. Claims to the tune of about ₹ 20,220 crore have been reported so far benefiting nearly 445 lakh farmers. Claims are automatically calculated based on shortfall in the current season yield obtained from crop cutting experiments conducted by State Governments under General Crops Estimation Survey (GCES) as compared to threshold yield and settled through the rural banking network. The Company is making efforts to bring the remaining States/ UTs into the fold of NAIS.

The main product i.e. **"National Agricultural Insurance Scheme" (NAIS)** is being implemented from Rabi 1999-2000 season replacing Comprehensive Crop Insurance Scheme (CCIS) and is presently implemented in 25 States and 2 Union Territories. AICIL is implementing the scheme on behalf of Ministry of Agriculture. The Scheme is available to all the farmers both, loanee and non loanee irrespective of the size of their holding. The main objective of the scheme is to protect the farmers against the losses suffered due to crop failure on account of natural calamities, such as drought, flood, hailstorm, cyclone, fire, pest/ diseases, etc., so as to indemnify the losses and restore the credit worthiness of the loanee farmers for the ensuing season.

The Scheme envisages coverage of all crops including cereals, millets, pulses, oilseeds and annual commercial and horticulture crops in respect of which past yield data is available. At present 70 different Food and Oilseed crops are covered during Kharif and Rabi seasons. Among the annual commercial/ horticultural crops, sugarcane, potato, ginger, onion, turmeric, chilly, jute, tapioca, banana pineapple, brinjal, coriander, cumin, fennel, french bean, garlic, isabgul, fenugreek and tomato have been brought under insurance coverage. Flat premium rates of 3.5% of sum insured for bajra and oilseeds, 2.5% for other crops during Kharif seasons and 1.5% for wheat and 2% for other crops during Rabi seasons are charged. In case the actuarial rates are less than prescribed flat premium rates mentioned above, the lower rate is applicable for food crops and oilseeds. In case of annual commercial and horticulture crops actuarial rates are charged. At present, 10% subsidy in premium is allowed for small and marginal farmers, shared equally by central and state government. The Scheme operates on the basis of 'Area Approach' for widespread calamities.

The unit of insurance may be Gram Panchyat, Mandal, Hobli, Circle, Phirka, Block, Taluka etc., to be decided by the respective State/ UT Government. As envisaged in scheme, as many as 11 States /UTs have already lowered down the size of unit areas to Village / Gram Panchayat or equilent level in order to make the scheme more efficacious and reflective of all crop losses.

As announced in Union Budget proposal of 2007-08, a Pilot Weather Based Crop Insurance Scheme (WBCIS) has been introduced. The Scheme operates on an actuarial basis with an element of subsidy from Union and State Governments. AICIL has since implemented the scheme in various States during Kharif and Rabi seasons. WBCIS is a parametric insurance product designed to provide insurance protection to the cultivator against adverse weather incidence during the cultivation period, such as deficit & excess rainfall, frost, heat (temperature), relative humidity, wind speed etc., which are deemed to adversely impact the crop yield. Crops and 'Reference Unit Areas (RUA)' are notified before the commencement of the season by the State Govt. Each RUA is linked to a Reference Weather Station (RWS), on the basis of which payout/ claims are processed. The payouts are made on the basis of adverse variations in the current season's weather parameters as measured at Reference Weather Station (RWS). Claim under WBCIS is area based and automatic.

Besides the above, AICIL has designed various other crop insurance products to cater to the diverse needs of farming community of India. These are Apple Insurance, Bio-Fuel Insurance, Coconut Insurance, Grapes Insurance, Mango Weather Insurance, Potato Contract Farming Insurance, Pulpwood Tree Insurance, Rainfall Insurance Scheme-Coffee (RISC), Rabi Weather Insurance, Rubber Insurance and Varsha Bima/ Rainfall Insurance. While net premium of the company stood at ₹1268.51 crore in 2009-10, the net incurred claims stood at ₹1189.19 crore during the year.