



Annual Report 2009-10



Ministry of Heavy Industries and Public Enterprises

Government of India
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Chapter 1

Introduction

The Ministry

1.1 The Ministry, comprising the Department of Heavy Industry and the Department of Public Enterprises, functions under the charge of Cabinet Minister (Heavy Industries and Public Enterprises) who is supported by the Minister of State. The Ministry focuses on promoting the development and growth of capital goods, auto, power equipment manufacturing and engineering industry in the country, framing of policy guidelines for Central Public Sector Enterprises (CPSEs) and administration of CPSEs.

A. Department of Heavy Industry (DHI)

1.2 The Department of Heavy Industry is concerned with the development of the engineering industry viz. machine tools, heavy electrical, industrial machinery and auto industry and administers 32 operating CPSEs. The CPSEs under the Department are engaged in the manufacture of engineering/capital goods, consultancy and contracting services. The enterprises under the Department produce a wide range of products ranging from machine tools, industrial machinery, boilers, gas/steam/hydro turbines, turbo generators, electrical equipment, and railway traction equipment, pressure vessels, AC locomotives, prime movers, agricultural tractors and consumer products such as watches, paper, tyres and salt. The industries provide goods and services for almost

all sectors of the economy, including power, rail and road transport. The Ministry also looks after the Machine Building Industry and caters to the requirements of equipment for basic industries such as steel, non-ferrous metals, fertilizers, refineries, petrochemicals, shipping, paper, cement, sugar, etc. The Department supports the development of a wide range of intermediate engineering products like castings, forgings, diesel engines, industrial gears and gear boxes. The Department also administers:

- i. NATRIP Implementation Society (NATIS) set up in July 2005 for guiding the implementation of the National Automotive Testing and R & D Infrastructure Project (NATRIP),
- ii. Fluid Control Research Institute (FCRI), Palakkad, Kerala which caters to the needs of the flow industry for calibration,
- iii. Automotive Research Association of India (ARAI), Pune, Maharashtra and
- iv. Forging Industry Research Institute of India (FIRI), Pune, Maharashtra.

Allocation of Business for the Department of Heavy Industry is given at **Annexure-I**.

1.3 The Department maintains a constant dialogue with various Industry Associations and encourages initiatives for the growth of industry. The Department also assists the industry in the



achievement of their growth plans through policy initiatives, suitable interventions for restructuring of tariffs and trade, promotion of technological collaboration and up-gradation, and research & development activities etc.

1.4 The Department of Heavy Industry is headed by a Secretary to the Government of India who is assisted by a team of three Joint Secretaries, Directors/Deputy Secretaries and a Technical Wing. The Department is also supported by an Integrated Finance Wing headed by Additional Secretary and Financial Adviser. The overall sanctioned strength of the Department is 279 Officers/Staff. The organizational chart of the Department is given at **Annexure-II**.

1.5. In addition to above, the Department has appointed / designated various Nodal Officers at senior level for smooth functioning of the Department as well as for helping its staff and the public.

1.6 In a new initiative taken by the Government, the Results Framework Document has been prepared for the first time by the Department of Heavy Industry for the period January-March, 2010. This document encapsulates the vision, mission, objectives and timelines for monitoring the projects/schemes of DHI. It contains not only the agreed objectives, policies, programmes and projects but also success indicators and targets to measure progress in implementing them. It also provides an objective and fair basis to evaluate Department's overall performance at the end of the year. This has further been extended by the Department to cover all the officers of the level of Director/ Deputy Secretary and above of the Department as well as Chief Executive of CPSEs under DHI. In order to prepare the above mentioned document and to further co-ordinate, a Joint

Secretary in this Department has been designated as Nodal Officer.

1.7 A specific Action Plan for initiating certain important measures during the first 100- Days of the new Government has been drawn and follow up action is being taken.

B. Department of Public Enterprises (DPE)

1.8 In their 52nd Report, the Estimates Committee of 3rd Lok Sabha (1962-67) stressed the need for setting up a centralized coordinating unit, which could also make continuous appraisal of the performance of public enterprises. This led to the setting up of the Bureau of Public Enterprises (BPE) in 1965 under the Ministry of Finance. As a result of the reorganization of the Ministries/ Departments of the Union Government in September, 1985, BPE was made part of the Ministry of Industry. In May, 1990, BPE was made a full-fledged Department and is now known as the Department of Public Enterprises (DPE). Presently, it is a part of the Ministry of Heavy Industries & Public Enterprises.

1.9 The Department of Public Enterprises is nodal department for all Central Public Sector Enterprises (CPSEs) and formulates policy pertaining to the role of CPSEs in the economy as also lays down policy guidelines on performance improvement and evaluation, autonomy and financial delegation, personnel management and related areas for the CPSEs. It also collects, evaluates and maintains information on several areas in respect of CPSEs. DPE is the interface between the Administrative Ministries and the CPSEs.

1.10 Board for Reconstruction of Public Sector Enterprises (BRPSE) has been set up (December, 2004), under the administrative charge of the Department of Public Enterprises, to consider inter-alia, revival/restructuring



proposals of sick/loss making CPSEs and make suitable recommendations related thereto.

1.11 As per Allocation of Business Rules of the Government, the following subjects have been allocated to the Department of Public Enterprises:-

- Coordination of matters of general policy of non-financial nature affecting all public sector industrial and commercial undertakings.
- Matters relating to Memorandum of Understanding and mechanism for improving the performance of public sector undertakings.
- Matters relating to Permanent Machinery of Arbitration for the Public Sector Undertakings.
- Matters relating to Counseling, Retraining and Redeployment of rationalized employees of CPSEs.

1.12 The Department of Public Enterprises accordingly plays an important role in formulating policies relating to CPSEs and in framing different guidelines on matters relating to CPSEs. In fulfilling its role, the Department coordinates with other Ministries, CPSEs and concerned organizations. Some of the important tasks of the Department are listed below:-

- Co-ordination of matters of general policy of non-financial nature relating to public sector enterprises.
- Issue of Presidential Directives and Guidelines to public sector enterprises.
- Formulation of Policies, pertaining to public sector enterprises, in areas like board structures, personnel management,

performance improvement, financial management, wage settlement and vigilance management, etc.

- Investiture and review of Navratna/Mini Ratna status to CPSEs.
- Policy matters relating to composition of Board of Directors of CPSEs, categorization of top posts, scheduling of CPSEs.
- Notification of pay scales of Board level executives as well as below Board level personnel and unionized workers and the DA admissible thereon at periodic intervals.
- Policy relating to deputation of Government officers to public sector enterprises.
- Publication of the annual survey of CPSEs known as Public Enterprises Survey.
- Memorandum of Understanding between the public sector enterprises and the administrative Ministries/Departments.
- Policy relating to Voluntary Retirement Scheme in CPSEs.
- Matters relating to Counseling, Retraining and Redeployment Scheme (CRR) for rationalized employees of CPSEs.
- Matters relating to Board for Reconstruction of Public Sector Enterprises (BRPSE).
- Matters relating to reservation of posts in the public sector enterprises for certain classes of citizens.
- Settlement of disputes through Permanent Machinery of Arbitration (PMA) among



Public Sector Enterprises and between Public Sector Enterprises and government departments except disputes relating to tax matters.

- Matters relating to International Centre for Promotion of Enterprises (ICPE).
- Matters relating to Standing Conference of Public Enterprises (SCOPE).

- Matters relating to delegation of powers to Board of Directors.

1.13 Department of Public Enterprises is headed by a Secretary to the Government of India who is assisted by an establishment with an overall sanctioned strength of 131 officers/personnel. The organizational structure of DPE is at Appendix-I.

Department of Heavy Industry (DHI)

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Chapter 1

An Overview

Performance of Industry

- 1.1 Industrial sector registered a growth of 7.6% in the first eight months of the current year (April-November) 2009-10, against 4.1% in the corresponding period of last year. Manufacturing sector recorded a growth of 7.7% in April-November 2009-10, against 4.2% in the corresponding period of last year. The mining and electricity sector posted growth rates of 8.3% and 6.1% respectively during (April-November) 2009-10 compared to 3.4% and 2.8% registered during the corresponding period last year.
- 1.2 Capital goods sector has registered a growth of 7% during April-November 2009-10 as compared to the growth of 8.4% during corresponding period of last year. Consumer goods, Basic goods, and Intermediate goods recorded growth of 6.3%, 6.1%, and 11.4%, respectively during April-November 2009-10. The consumer durables sector recorded a growth of 21.7% in April-November 2009-10 compared to 5.1% in the corresponding period of the previous year.

INDUSTRIAL GROWTH INDICATORS					
(Growth Rate in per cent)					
Item	Weight (%)	2007-08	2008-09	Apr-Nov 2008-09	Apr-Nov 2009-10
1	2	3	4	5	6
Sectoral Growth Rates based on IIP					
Overall	100	8.5	2.8	4.1	7.6
Mining & Quarrying	10.5	5.1	2.6	3.4	8.3
Mfg.	79.4	9.0	2.8	4.2	7.7
Electricity	10.2	6.4	2.8	2.8	6.1

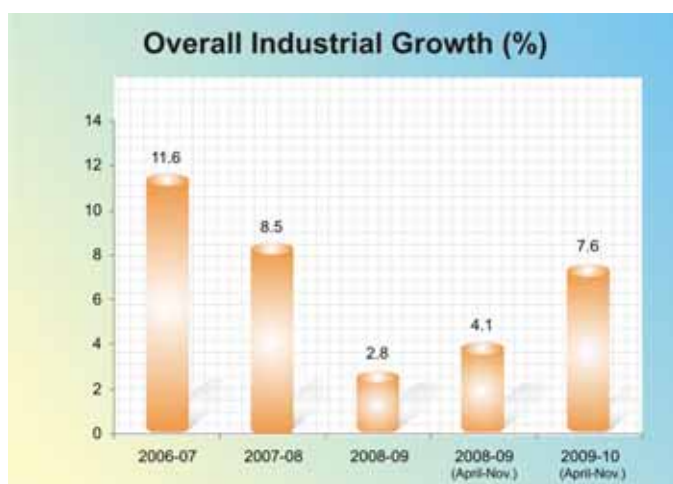
Used Based Classification					
Item	Weight (%)	2007-08	2008-09	Apr-Nov 2008-09	Apr-Nov 2009-10
Sectoral Growth Rates based on IIP					
Overall	100	8.5	2.8	4.1	7.6
Overall	100	8.5	2.8	4.1	7
Basic goods	35.6	7.0	2.6	3.6	6.1
Capital goods	9.3	18.0	7.3	8.4	7.0
Intermediate goods	26.5	9.0	-1.9	-0.7	11.4
Consumer goods	28.7	6.1	4.7	6.8	6.3
Durables	5.4	-1.0	4.5	5.1	21.7
Non-durables	23.3	8.6	4.8	7.3	1.1

Source: Central Statistical Organisation.

Production and growth rates of some of the heavy industries for the period April-November 2009-10 as compared to April-November 2008-09 are given below:

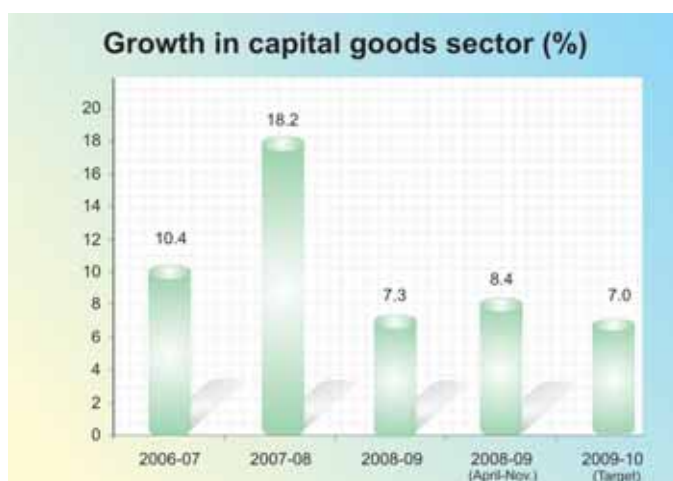
Industry	Unit	Production		Growth Rate (%)
		Apr. Nov 2008-09	Apr. Nov 2009-10	
Industrial machinery	Rs.Lakh	324487.1	436052.1	34.38
Machine Tools	Rs.Lakh	160577.2	148408	-7.58
Boilers Turbines (Steam/Hydro)	Rs.Lakh	539502.2	621715.1	15.24
Electric generators	Rs.Lakh	212057.5	246910.5	16.44
Power distribution transformers	Rs.Lakh	89995.7	113648.9	26.28
Telecommunication cables	Mill. KVA	41.05	51.16	24.62
Commercial vehicles	Mill. Mtr.	5094.7	4008.5	-21.32
Passenger cars	Numbers	311718	326577	4.77
	Numbers	1023616	1202031	17.43

Source: Department of IPP



1.3 The Department of Heavy Industry deals with the following 19 Industrial Sub-sectors of the Capital Goods Sector:

- (i) Boilers
- (ii) Cement Machinery
- (iii) Dairy Machinery
- (iv) Electrical Furnace
- (v) Freight Containers
- (vi) Material Handling Equipment
- (vii) Metallurgical Machinery
- (viii) Mining Machinery
- (ix) Machine Tools
- (x) Oil Field Equipment
- (xi) Printing Machinery
- (xii) Pulp and Paper Machinery
- (xiii) Rubber Machinery
- (xiv) Switchgear and Control Gear
- (xv) Shunting Locomotive
- (xvi) Sugar Machinery
- (xvii) Turbines & Generator Set
- (xviii) Transformers
- (xix) Textile Machinery



1.4 Measures to improve performance

Government announced three stimulus packages during the financial year 2008-09 to boost demand and industrial growth. The salient measures included in the packages are listed below:-

- (i) An across the board cut of 4% in ad-valorem Cenvat rate except for petroleum products,
- (ii) Authorizing Indian Infrastructure Finance Company Limited (IIFCL) to raise Rs. 10,000 crore to refinance bank lending for infrastructure projects,
- (iii) Extension of the DEPB Scheme till 31.12.2009; enhancement of duty drawback benefits on certain items including knitted fabrics, bicycles, agricultural hand tools and specified categories of yarn, providing pre-shipment and post-shipment credit, in rupees or dollars, to Indian exporters at competitive rate, to boost exports,
- (iv) States to be provided (as a one-time measure up to 30.06.2009 and subsequently extended till March 2010), assistance under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) for the purchase of buses for their urban transport system.
- (v) Accelerated depreciation of 50% provided for commercial vehicles to be purchased on or after 1.1.2009 up to 31.3.2009.

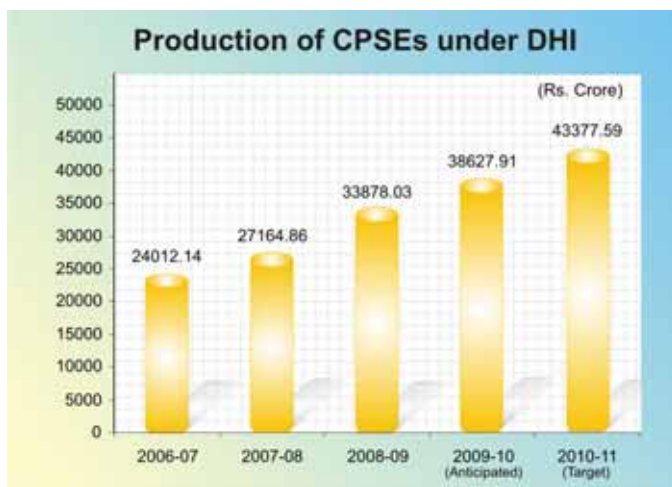
1.5 CPSEs under the Department of Heavy Industry

1.5.1 The CPSEs under the Department are engaged in manufacturing, consultancy and contracting services. There were 48 CPSEs as on 31.3.2008 under the administrative control of the Department. The merger scheme of PTL with HMT (MT) Limited was approved by BIFR on 12.6.2008. Bharat Wagon & Engineering Company Limited (BWEL) has been transferred to Ministry of Railway on 13.8.2008 and NIL has been transferred to Jadavpur University,



Kolkata on 7.1.2009. Thirteen CPSEs have either been closed or are not in operation, thus leaving the Department with 32 operating CPSEs.

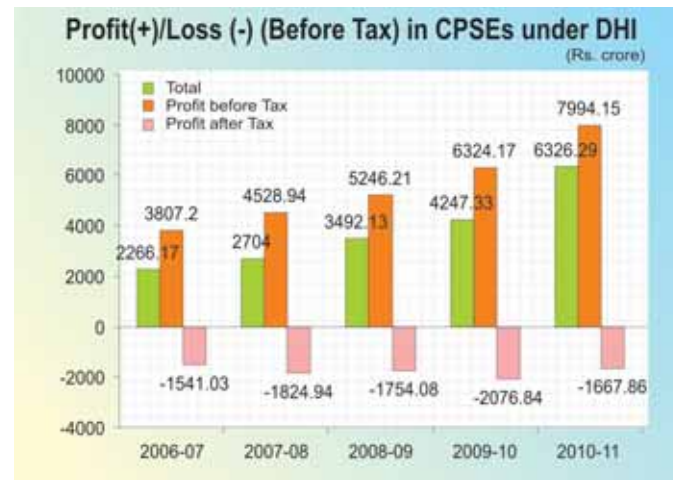
- 1.6 The total investment (Gross Block) in the 32 operating CPSEs under the Department was Rs. 11663.91 crore as on 31.3.2009 as per details given at **Annexure-III**. The total number of employees in these CPSEs is about 92341; the number of SC/ST/OBC employees is 16308, 7311 and 19310 respectively as per details at **Annexure-IV**.



- 1.7 Out of the 32 CPSEs during 2009-10, 18 are expected to make profit and the remaining 15 are expected to incur losses. However, on an aggregate basis, 32 CPSEs of DHI have shown a net profit before tax of Rs.4247 crore in 2009-10 (anticipated). The aggregate performance of these CPSEs during April-March, 2009-10 (anticipated) and targets for 2010-11 is as under:

	(Rs. crore)	
	2009-10 (Anticipated)	2010-11 (Target)
Production	38627.91	43377.59
Profit (+)/Loss(-)	4247.33	6326.29

(CPSE-wise details of production, profit/loss are enclosed at **Annexure-V & VI** respectively.)



The loss making enterprises suffer from a number of factors including poor order book, shortage of working capital, surplus manpower and obsolete plant and machinery, besides increase in the cost of inputs etc. Several of these loss making CPSEs have problems of large work force and huge overheads, far above the industry norms. In this context, salary/wage bill and social overheads as percentage of turnover are given at **Annexure-VII**.

As on 01.10.2009, the order book of CPSEs under the Department stands at Rs. 134549.5 crore. (**Annexure -VIII**).

Major exporting CPSEs are BHEL, IL, HPC and HMT; details of export performance of CPSEs under DHI are given at **Annexure-IX**. Details of Government equity, net worth and accumulated profit /loss of these CPSEs are given at **Annexure X**.

1.8 Restructuring of CPSEs

The Department undertakes and encourages restructuring of CPSEs under its administrative control in line with the overall policy of the Government. The profit making CPSEs are being strengthened by providing greater autonomy and the loss making CPSEs are being considered for revival/closure. Accordingly, a fresh look to identify companies under the department which can be restructured and revived has been undertaken in consultation with the Advisers/CPSEs. Board for Reconstruction of Public Sector Enterprises (BRPSE) has given its recommendations in all the 27 cases referred to them.



Government has given its approval for revival/restructuring plans of 15 CPSEs under DHI during 2004-09 involving fresh cash infusion of about Rs. 1500 crore. These CPSEs employ about 30,000 persons. These CPSEs are:

- (i) Bharat Pumps and Compressors Ltd. (BPCL),
- (ii) Bridge & Roof Co. Ltd. (B&R),
- (iii) Braithwaite and Company Ltd. (BCL),
- (iv) Braithwaite, Burn & Jessop Construction Co. Ltd. (BBJ),
- (v) Heavy Engineering Corporation Ltd. (HEC),
- (vi) Praga Tools Ltd. (PTL),
- (vii) Hindustan Salts Limited (HSL),
- (viii) Cement Corporation of India Ltd.(CCI),
- (ix) HMT (Bearing) Ltd. [HMT(B)],
- (x) HMT Machine Tools [HMT(MT)],
- (xi) Andrew Yule & Company Ltd. (AYCL),
- (xii) Bharat Heavy Plates & Vessels Limited (BHPV)- Taken over by BHEL on 7.5.2008.
- (xiii) Bharat Wagon & Engineering Company Ltd. (BWEL)- Transferred to Ministry of Railways on 13.8.2008.
- (xiv) Tyre Corporation of India Limited (TCIL),
- (xv) Instrumentation Limited (IL)

Besides, in case of two CPSEs, namely Bharat Ophthalmic Glass Ltd.(BOGL) and Bharat Yantra Nigam Ltd. (BYNL), closure has been approved by the Government. In case of Tungbhadra Steel Products Ltd. and Richardson & Cruddas Ltd., Government has approved for location of joint venture partner. In the case of National Instruments Ltd., Government has transferred the assets and liabilities to Jadavpur University, Kolkata. Details of financial package approved by the Government for the 15 CPSEs mentioned above are at **Annexure-XI**.

1.9 The Department provides financial support to the CPSEs under to administrative control, in consultation with the Ministry of Finance and Planning Commission, for meeting their investment needs and implementation of restructuring plans of sick/loss making CPSEs sanctioned by the Government/BIFR

1.10 Hon'ble Minister (HI&PE) Shri Vilasrao Deshmukh and Hon'ble Minister of State (HI&PE) Shri Arun Yadav held meetings with Chief Executives of the Central Public Sector Enterprises under Department of Heavy Industry and attended detailed presentation on their functioning. During these meetings, strategic options for their revival, restructuring and business promotion were discussed in detail

1.11 Plan Programmes of CPSEs

1.11.1 The plan programmes of CPSEs under DHI are mainly for NATRIP, Nagaland Pulp and Paper Mill, Modernisation scheme for Capital Goods sector, capacity augmentation, renewal and replacement needs of some of the CPSEs etc. Annual Plan 2009-10 provided a Budgetary Support of Rs. 350 crore against which an expenditure of Rs. 159.38 crore was incurred till February, 2010. For the year 2010-11, Planning Commission has approved a provision of Rs. 370 crore by way of Budgetary Support. Some of the major schemes under implementation include:

(i) National Automotive Testing and R&D Infrastructure Project (NATRIP)

Government has approved the setting up of the project NATRIP, at a cost of Rs. 1718 crore for developing testing infrastructure to support the growth of automotive industry. The project is aimed at meeting the facilities gap in regulatory and developmental requirement in the automotive industry by investment in high speed test tracks, comprehensive testing validation for emerging emission and safety norms etc. at different sites in the country. Land acquisition is progressing well at Manesar while other sites have already been taken



EFV Rally - Flag off Ceremony

possession of at Silchar, Chennai and Indore. At Pune, additional land is already available after clearance from the Forest and Environment authorities. At Rae Bareilly, the land allotment is under consideration of the State Government. The work on detailed designing of facilities in the centres is completed as per schedule and the process has been initiated for ordering of equipments and civil construction works. The Silchar – Dholchura campus is ready for commissioning with the completion of all civil works like the Facility Building and the Hill Road track at Site-I Dholchura. A state of the art “Driving Simulator” has been installed for hill area driving training. At VRDE Ahmednagar, the EMC lab facility has been set up for industry use, while the ABS brake test pad is under construction. A provision of Rs. 232.14 crore has been made for NATRIP for 2010-11 as Budgetary Support approved by the Planning Commission.

(ii) Revival of NPPC, Nagaland

Government had earlier approved the revival of NPPC at a cost of Rs. 552 crore, which is slated to increase substantially due to various reasons. Implementation of the revival scheme is in progress. Budgetary support of Rs. 22.00 crore (For North East Region) has been provided in 2010-11.

(iii) Expansion of facilities at Hindustan Newsprint Ltd. (HNL)

HNL is implementing an expansion-cum

diversification project for a capacity of 170,000 tonnes of writing and printing paper at a cost of Rs. 718 crore. The project is being funded fully from internal and extra budgetary resources.

(iv) Expansion of BHEL facilities

BHEL has embarked upon a plan of enhancing its manufacturing capacity and capability for preparing itself to meet the country's power demand, for providing “Power to all by 2012” and to contribute fully for meeting the power forecast of the 11th Plan and beyond. Towards this end, BHEL has been augmenting its capacity and capability and has already enhanced its power generating equipment manufacturing capacity from 6000 MW per annum in 1999-2000 to 10,000 MW per annum w.e.f. 1st January, 2008. This manufacturing capacity is being further enhanced to 15,000 MW per annum by the end of March, 2010 with an investment of approximately Rs. 4200 crore, which is funded entirely through internal resources. It is further planned to increase the capacity to 20,000 MW per annum by March, 2012.

(v) Support to Capital Goods Industry

The Indian Capital Goods industry experienced excellent growth during 2002- 03 to 2007-08. The capital investment made in this sector also registered a healthy CAGR of about 10% during the period 1997-2007. However, of late, the growth has slowed down considerably. The sector posted 7.0% growth in the year 2008-09 as against 18.0% in 2007-08. The industry now needs to strategize its future to maintain its growth momentum. In this regard, DHI had mandated a study done by CII and a number of its recommendations are proposed to be pursued through a modernization scheme. The scheme is intended to take some policy initiatives for development and growth of this sector. Initially, this effort would cover five major CG sectors, viz. Heavy Electrical Equipment,



Process Plant Machinery, Mining and Construction Equipment, Textile Machinery and Machine Tool industries which together account for 65% of the total capital goods production in the country. The scheme is under consideration of the Government.

1.12 Autonomy to CPSEs/Navratnas and Miniratnas

1.12.1 BHEL is a Navratna CPSE in the Department. The Board of the Company has been strengthened by induction of qualified professionals. Navratna CPSEs have been provided greater autonomy in respect of capital expenditure, formation of strategic alliance and formulation of HRD policies etc.

1.12.2 Besides BHEL, which is a Navratna Company, five CPSEs under DHI namely REIL, HNL, EPI, HPC and HMT (I) have been categorized as Miniratnas. Miniratna CPSEs have also been empowered with certain enhanced delegation.

1.13 Memorandum of Understanding (MOU)

1.13.1 With a view to giving greater autonomy to the public sector enterprises and making them accountable for achievement of their objectives, all the CPSEs under the Department signed MOUs with Government of India/ Holding companies for the year 2010- 11.

1.14 North Eastern Region

1.14.1 Out of the 32 operating Central Public Sector Enterprises under the administrative control of the Department of Heavy Industry, the following CPSEs/Units are situated in the North Eastern Region :-

- (i) Hindustan Paper Corporation Ltd. (HPC) (Nagaon & Cachar Paper Mills), Assam.
- (ii) Nagaland Pulp & Paper Company Ltd. (NPPC) ,Nagaland,

(iii) Cement Corporation of India Ltd. (CCI), (Bokajan Unit), Assam.

(iv) Andrew Yule & Company Ltd. (AYCL), (Tea Gardens), Assam.



AYCL - Tea Division

1.14.2 These CPSEs/Units are engaged in the manufacture of Paper, Cement and Tea. As per the policy of the Government, 10% of the budget of this Department is being allocated for the development of North Eastern Region. Some of the major schemes undertaken in the past include modernization of paper units of Hindustan Paper Corporation Ltd. (HPC), D.G.set for power generation and installation of overhead crane at Bokajan Unit of Cement Corporation of India Ltd. (CCI) and rejuvenation of tea plantation of Andrew Yule & Company Ltd. (AYCL) in Assam. Restructuring/revival plan of NPPC at a total cost of Rs. 552 crore was approved by the Government and further action is in progress. NPPC is now out of the purview of BIFR, following approval of the package for revival of NPPC on 27.06.2007. The Government has provided a budgetary support of Rs. 55.83 crore during the 10th Plan period for investments made in these CPSEs. Tentative budgetary support for the 11th Plan period is Rs. 314.33 crore.

1.15 Citizens Charter

The Department of Heavy Industry is committed to the goal of effective and



responsive administration. Following steps have been taken in this direction:

- (i) In an effort to streamline the system of redressal of public grievances and staff grievances, a Joint Secretary and a Director, in this Department are functioning as Joint Secretary (Public Grievances) and Director (Staff Grievances) respectively, to ensure that the grievances are redressed in time.
- (ii) In an effort towards computerization of all work in the Department, a Joint Secretary has been designated as IT Manager who is also responsible for updating the website of the Department periodically.
- (iii) A Nodal officer of the rank of Director has been designated in the Department for the redressal of grievances of Pensioners.
- (iv) For the purpose of settlement of disputes in Lok Adalat, a Nodal officer of the rank of Director has been designated in the Department in respect of officers/staff members working in the Department.
- (v) In order to create adequate awareness regarding human rights especially of female employees, Department of Heavy Industry, in accordance with the directions issued by the Government for the preservation and enforcement of rights to gender equality and justice to working women employees, a Complaints Committee has been constituted in the Department for redressal of complaints related to sexual harassment of women.
- (vi) Further, this Department actively encourages women employees to freely participate in all activities like meetings, seminars, competitions, training etc. This helps in ensuring their integration into the mainstream work force.
- (vii) In order to deal with the litigation matters and to further co-ordinate, a 'Joint Secretary in the Department has been designated as Nodal Officer to ensure that timely action is taken in such matters.
- (viii) In order to preserve the important records emanating from this Department and to co-ordinate in the related matters, a Joint Secretary in this Department has been designated as Chief Records Officer.
- (ix) An officer of the rank of Deputy Secretary has been designated as CPIO to provide information under the RTI Act.
- (x) An officer of the rank of Director in the Department has been nominated as Liaison Officer for matters relating to SCs/STs/OBCs in the Department and CPSEs under its control.
- (xi) The Annual Reports of the Department (both in English and Hindi) and other important information including initiatives and new policies are made available on the web-site of the Department, www.dhi.nic.in
- (xii) Public Sector Enterprises function under the Indian Companies Act, 1956 and the guidelines laid down by the Department of Public Enterprises.
- (xiii) Efforts are made by the CPSEs to follow the instructions issued by the Government from time to time to promote the welfare of persons with disabilities. Persons with disabilities are provided facilities like special conveyance allowance, preferential residential accommodation wherever possible, and additional amenities and facilities to enable them to discharge their duties and facilitate their integration into the mainstream workforce.

1.16 Audit observations of Comptroller & Auditor General of India (CAG)

As per the requirement stipulated by the CAG, summary of important audit observations of CAG of India on the working of the Department of Heavy Industry is given in **Annexure–XII**.

Chapter 2

CPSEs under DHI

A brief write up on the operational CPSEs under the Department is given below:

2.1 ANDREW YULE & CO. LTD. (AYCL)

The Company is engaged in the manufacture of industrial fans, tea processing machinery, industrial pollution control equipment system & allied products, circuit breakers, auto reclosures & specialized switches, contactors, starters, electromagnetic relays, transformer and switchgears etc. As on 31.12.2009, Government of India holds 92.92% of the Equity Shares in AYCL while the balance are held by financial institutions, banks and public.



AYCL, Rotor for NTPC Rihand

In the year 2009-10 AYCL concluded disinvestment of its shareholdings in Group Companies namely Phoenix Yule Ltd. and Dishergarh Power Supply Co. Ltd. Now, AYCL includes a 100% owned subsidiary namely, M/s Hooghly Printing company Ltd. and one major associate company namely, Tide Water Oil Company Ltd. In November, 2002 AYCL came under the purview of the Board for

Industrial and Financial Reconstruction (BIFR). The company was reviewed in the light of the overall policy of the Government. Accordingly, restructuring package of AYCL was approved by Cabinet on 22.2.2007 and by BIFR on 30.10.2007, which included fund infusion, waiver and various other reliefs & concessions. The company will end the year 2009-10 with a profit of Rs. 56.41 crore (prov) and Net worth of Rs. 6.74 crore (estimated).

2.2 HOOGHLY PRINTING COMPANY LTD.

The Company is 88 years old, engaged in printing business and fully equipped to handle all kinds of printing assignments like multi coloured newsletter, leaflets, folders, calendars, books etc. It is a wholly owned profit making subsidiary of AYCL. In 2009-10 the company printed a Souvenir on the occasion of the prestigious 15th Kolkata Film Festival which won appreciation from foreign delegates. The production and profit of the company in 2009-10 are expected to be Rs. 10.00 crore and 0.50 crore respectively.

2.3 BHARAT HEAVY ELECTRICALS LTD. (BHEL)

The company was established for specially catering to the power generation and transmission equipment needs of the country.

BHEL, a Navaratna Company, is the largest engineering and manufacturing enterprise of its kind in India and is one of the leading international companies in the field of power equipment manufacture, it has 15 manufacturing plants, 8 service centers and 4



power sector regional centres besides project sites and regional offices spread all over India and abroad.

The company has drawn up 'Strategic Plan 2012' for ensuring a sustainable profitable growth over the years with the objective of reaching a turnover level of Rs 45,000 crore by 2011-2012.

The growth strategies include expansion of manufacturing capacity for power generating equipment from the present 10000 MW per annum to reach 20000 MW by March 2012. Besides capacity augmentation in the areas of Thermal, Gas, Hydro and Nuclear, other major areas of investment include the facilities for Nuclear Turbines upto 700/ 1000 MW, Advanced Class Gas Turbines, 765 KV Transformers and augmentation of transformer capacity from 20500 MVA to 45000 MVA.

Major Strategic Initiatives were undertaken during the year, which have set pace for future business. These include:

- Joint Venture signed in January, 2009 with Karnataka for setting up two nos. Super-critical Power Plants.
- Technical collaboration agreement signed in June, 2009 with M/s Siemens Germany for Super critical TG sets
- Memorandum of Understanding (MOU) signed in August, 2009 with Mahagenco for setting up 1500-1600 MW Super Thermal Power Project in Maharashtra.
- Memorandum of Understanding (MOU) signed in August, 2009 with M/s GE for participating in tender for setting up of Diesel loco factory at Marhowra.
- Joint Venture agreement signed in December, 2009 with Madhya Pradesh Power Generating Company Limited (MPPGCL), for setting up 2x800 Super Thermal Power Plant.
- Memorandum of Understanding (MOU) signed in January, 2010 with M/s Alstom for participating in tender for setting up a factory for electric loco components.



Mr. B.P. Rao receiving the SCOPE MoU Award for the highest growth rate in Market Capitalisation among listed PSUs from the PM, Dr. Manmohan Singh

- Agreement signed in January, 2010 with M/s Metso Automation, Finland for extending technical collaboration agreement for New Generation Automation Platform.
- Memorandum of Understanding (MOU) signed in February, 2010 with M/s Toshiba for establishing a Joint Venture to address Transmission and distribution business.
- Technical collaboration agreement signed in February, 2010 with M/s Sheffield Forge Masters International Limited for large size forgings.

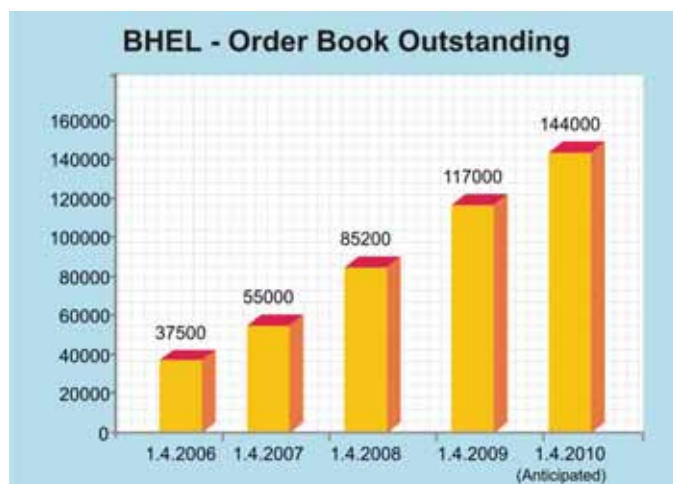
PERFORMANCE ACHIEVEMENTS

The company has ended the year 2008-09 with a turnover of Rs. 28,033 crore, and is likely to achieve a turnover of Rs. 32,000 crore in 2009-10, as envisaged in MOU for Excellent rating.





Order book position of BHEL has substantially improved. The company has received order of Rs. 36,400 crore upto December,2009 and is likely to receive orders of Rs 59,900 crore in 2009-10 as against Rs. 59,687 crore of orders in 2008-09. Against opening balance Rs. 1,17,000 crore of orders outstanding, company is likely to have Rs. 1,44,000 crore as on 1.4.2010 for execution in 2010-11 and beyond.



During the year, the company has received highest ever Private Sector orders of Rs. 25,918 crore for Power Projects.

Major orders received during 2009-10 are :-

- Super-critical orders received for 3x660 MW Bara from Prayagraj Power Generation Company Limited (PGCL), a Jaypee Group company.
- Order for 10 Sets of 270 MW from a single customer i.e Elena Power and Infrastructure Ltd (EPIL- India Bull Group Company). The

order consist of 5x270 MW for Nasik and 5x270 MW for Amravati.

- Orders for 16x270 MW, 2x525 MW and 5x600 MW of recently introduced new ratings (270 MW, 525 MW and 600 MW).
- Repeat order of 4 steam Generators for 700MWe Nuclear Set for Rajasthan Atomic Power Project of Nuclear Power Corporation of India Ltd.
- Orders for 1739 MW Hydro sets received, which include 3x110 MW for Kishanganga Project of Hindustan Construction Copmpnay and 3x99 MW+ 4x96 MW + 5x121.5 MW for Pranhita Lift Irrigation Scheme Projects of Megha Engineering & Infrastructures Limited.
- Order for 1x160 MW Gas based Combined Cycle Power Project for Ramgarh of Rajasthan Rajya Vidhyut Utpadan Nigam Ltd (RRVUNL).
- Order for 6 units of 150 MW from HINDALCO Industries Ltd for their upcoming captive power plant at Aditya Aluminium in Sambalpur district, Orissa.
- Order for 2x150 MW sets from OPG Power Gujarat and 2x180 Tonnes per Hour (TPH) Bubbling Fluidised Bed Combustion (BFBC) Boilers from Jindal Steel & Power Limited (JSPL) Angul, Orissa.
- Order for 150 nos. electric locomotives (25 KV, Type WAG7) from Indian Railways in the transportation segment.
- Order for 14 Sets Electrics for HHP DEMU from ICF, Chennai and 51 Sets AC EMU Traction Electrics from Railway Board, Delhi.
- 1st & 2nd orders for 3 nos. 126 MW GTG sets received under price agreement entered during 2008-09 with Petroleum Development, Oman.
- Overseas order for Gas turbine based co-generation plant received for 100, 130 MW co -generation Power Project, Belarus. This is the first ever order from Belarus making an entry in a new country.
- BHEL has signed Memorandum of Understanding for overseas execution with



BHEL's Centralised Stamping Unit being inaugurated by Sh. Rahul Gandhi on 17.8.09

M/s Power Engineers Contracting Company for 3 combined cycle Projects involving 12 Fr 9E GTs in Iraq, 2 x 125 MW Coal based Power Plant and for 20 MW Gas Turbine based Power Plant in Nigeria. First order for 42 MW Gas Turbine Generator for Iraq has been secured from M/s. Power Engineers (UK) for Nasiriyah Project.

CAPACITY ADDITION IN POWER SECTOR

Capacity addition of 3595 MW has been achieved upto February, 2010. This includes 2 sets of 500 MW for Kahalgaon-7 & Vijayawada-7 and 490 MW for Dadri-5.

OTHER SIGNIFICANT ACHIEVEMENTS & HIGHLIGHTS

- Scope MoU Excellence Award for the year 2006-07 for the highest growth rate in Market Capitalization. Award presented by Hon'ble Prime Minister, Dr. Manmohan Singh to CMD BHEL on 15th October, 2009 in New Delhi.
- The Centralised Stamping Unit established at Jagdishpur (Uttar Pradesh) was dedicated to the nation by Shri Rahul Gandhi, Member of Parliament on 17th August, 2009.
- For outstanding export performance BHEL has won the Engineering Export Promotion Council's (EEPC) Top Export Award for the 19th year in succession. The award was conferred in the category "Star Performer in 2007-08"

product group of motors, Generators and Transformers – Large Enterprise. The award was presented by the Hon'ble Union Minister for Commerce and Industry on 29th August, 2009.

- BHEL once again made it to the prestigious 'Fabulous 50' list of Forbes Asia. The list included companies that have revenue and market capitalization of at least \$3 billion and a five year record of operating profitability and return on equity.
- India Pride Gold Award for excellence in Heavy Industries instituted by Dainik Bhaskar Group. Award presented by Hon'ble Union Home Minister, Mr. P. Chidambaram to CMD BHEL on 9th October, 2009 in New Delhi.
- BHEL was awarded the Dalal Street Investment Journal's (DSIJ) "Most Investor Friendly PSU Award 2009" for the year 2009 as a recognition for its unmatched track record of earning profits and rewarding investors by paying dividends uninterruptedly for over three decades without a break.



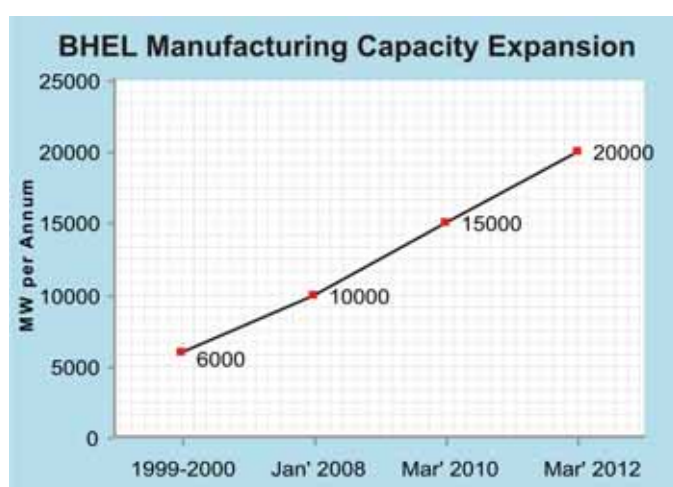
2x500 MW Simhadri STPS (NTPC) - Gold Shield Winners for Meritorious Performance in Power Sector

- BHEL supplied Thermal (Coal-Utility) Sets generated 405793 Million Units (MUs) in 2008-09. BHEL thermal sets have generated 203910 (MUs) upto September, 2009 in 2009-10.
- 2 nos 42 MW Generator Sets for Ras-Al-Khaimah Power Plant in UAE successfully commissioned
- 2 nos 126 MW GTG sets for Sulamaniah Power Plant in Iraq successfully synchronized



EXPANSION OF MANUFACTURING CAPACITY

BHEL has embarked upon a plan of enhancing its manufacturing capacity and capability for preparing itself to meet the country's power demand, for providing "Power to all by 2012" and to contribute fully for meeting the power forecast of the 11th Plan and beyond.



Towards this end, BHEL has been augmenting its capacity and capability and has already enhanced its power generating equipment manufacturing from 6000 MW in 1999-2000 to 10,000 MW per annum w.e.f. 1st January, 2008. This manufacturing capacity is planned to be enhanced to 15,000 MW per annum by end of March, 2010. This will further go up to 20,000 MW per annum by March, 2012.

A new transformer manufacturing facility at Bhopal Unit to produce an additional 12,000 MVA of transformers per annum was dedicated to the nation by Hon'ble Union Minister HI&PE on 17.11.2009. With this, transformer manufacturing capacity of Bhopal Unit stands enhanced to 30,000 MVA per annum.

R & D AND TECHNOLOGY UPGRADATION

- **Integrated Gasification Combined Cycle Project (IGCC)**

An R&D Project on Integrated Coal Gasification which offers the benefits of very low emission, higher efficiency, and has the potential for lower cost of electricity generation has been under



New turbine blade shop facility at BHEL, Haridwar

consideration. BHEL has taken up this project at Vijaywada with Andhra Pradesh Power Generation Company (APGENCO) and has signed an MOU in May 2008 with APGENCO for setting up 125 MW IGCC plant. This capacity is being upgraded to 182 MW for which an MOU is likely in first quarter of 2010-11.

Projects completed upto February, 2010

- Development of alternate design of Electro Hydraulic Converter for Governing system of Siemens design Steam Turbines of all ratings (210/250/500/525/600 MW).
- Developed the design and manufactured "Special Fixtures mounted on 18-axle road trailer for Transportation of 500 MW Turbo Generator Stator".
- Successfully upgraded "PV Manufacturing Facilities" and carried out Process optimization trials successfully achieving competitive solar cell conversion efficiency.
- Designed and demonstrated "Station LAN and Network Security System for NTPC Dadri, Farakka and Korba Projects" placing BHEL at par with world Standards of Network Security implementers.
- Development of Thermodynamic method for Field Testing of Pelton turbine, a capability being possessed by BHEL only.
- Development of new processes of fabricating Ceramic filter candles with integral collars. The



developed processes will help the indigenous manufacture of hot gas filter candles required for IGCC applications.

- Designed and demonstrated "Development of 220-Watts Photovoltaic Modules using 156-mm Size Multi Crystalline Silicon Solar Cells".
- Designed and manufactured "Largest Rating 2150 KW, 6.6 KV, 4 Pole, SCIM Motor in 1RC7638-4 Frame delivering Constant Torque.
- Development of Simulator for Khaperkheda and Bhusawal (500 MW) Plants.
- Design, development and generation of manufacturing drawings for 250MVA air-cooled Turbo Generator TARI 115/52 for STG application (Export market).

Projects Likely to be completed by March, 2010

- Design, development and generation of manufacturing drawings for 200 MW Steam Turbine with high back pressure suiting to desert application (Export market).
- Design and development of Condenser for 660 MW supercritical parameter sets.
- Development of Thermal and Mechanical design and release of manufacturing drawings for Feed Water Heaters with higher feed water outlet temperature for North Chennai 600 MW TG set.
- Development of 765 kV / 4000A Gas Insulated Current Transformer for Yard Applications.

CORPORATE GOVERNANCE

- BHEL endeavors to transcend much beyond the basic requirements of Corporate Governance focusing consistently towards value propositions for its stakeholders, customers, employees, suppliers and the society at large. The Company has developed a framework for ensuring transparency, disclosure and fairness to all, especially minority shareholders.
- BHEL has entered into Integrity Pact with Transparency International, an independent auditor of repute to assess procurement above certain threshold value.

- BHEL is a part of 'Global Compact' of United Nations and has committed itself to support it and the set of core values enshrined in its principles.

CORPORATE SOCIAL RESPONSIBILITY

- BHEL as a socially conscious organization and a responsible Corporate Citizen have undertaken various socio-economic and community development programmes throughout the country. The Company is committed to carrying out various Community Development programmes, in addition to its normal business activities. BHEL's Mission Statement on CSR as committed in the Scheme for implementing the Corporate Social Responsibility is -

"Be a Committed Corporate Citizen, alive towards its Corporate Social Responsibility".

- The Eight Thrust areas under the CSR Scheme are Self-employment generation, Environment Protection, Community Development, Education, Health Management and Medical Aids, Orphanages & Old-age Homes, Infrastructural development and Disaster / Calamity Management.

2.4 BHARAT HEAVY PLATES AND VESSELS LTD.

Bharat Heavy Plates & Vessels Ltd. (BHPV) was set up in the year 1966 for catering to the requirement of equipment for the core sectors such as Fertilizers, Oil Refineries, Petrochemicals, etc. The company has three



BHPV - Heaviest Vacuum Column for IOCL - HALDIA



product divisions namely Process Plant Division, Cryogenics and Boiler Division. The company has been making losses for the last few years and was reviewed in the light of the overall policy of the Government. Based on Government approval, BHPV has been taken over by BHEL. Production of the company for the year 2009-10 is expected to be Rs. 210.00 crore.

2.5 BHARAT BHARI UDYOG NIGAM LTD.

Bharat Bhari Udyog Nigam Ltd. (BBUNL) was incorporated as a holding company in 1986, with the following subsidiary companies:

- (i) Burn Standard Company Ltd. (BSCL)
- (ii) Bharat Wagon & Engineering Company Ltd. (BWEL) – Since transferred to Ministry of Railways
- (iii) Braithwaite & Company Ltd. (BCL)
- (iv) Braithwaite, Burn & Jessop Construction Co. Ltd. (BBJ)
- (v) Jessop & Company Ltd. (majority stake disinvested in August, 2003)

The production of the company for the year 2009-10 is expected to be Rs. 578.36 crore.

2.6 BURN STANDARD COMPANY LTD.

Consequent upon the nationalization of the erstwhile Burn & Company Ltd. and the Indian Standard Wagon Company Ltd., Burn Standard



Container Flat wagons exported by the Company being unloaded at Port Autonome d' Abidjan.

Company Ltd. (BSCL) was incorporated in 1976. The company has two large engineering units at Howrah and Burnpur in West Bengal besides eight refractory and ceramic units located in Bihar, West Bengal, Tamilnadu and Madhya Pradesh. The major products being manufactured by BSCL include wagons, structurals, points and crossings, bogies, ash handling plant, coal handling plant etc. The company is sick and is under reference to BIFR. Seven loss making refractory units and Jellinghum Yard of the company have been closed. The company's future is being reviewed in the light of overall policy of the Government. The production of the company during the year 2009-10 is expected to be Rs. 260.32 crore.

2.7 BRAITHWAITE & COMPANY LIMITED

Consequent upon nationalization, the Braithwaite and Company Ltd (BCL) was taken over by Government in 1976. The company has three manufacturing units viz., (i) Clive Works, (ii) Victoria Works and (iii) Angus Works, all in Kolkata which are engaged primarily in the manufacture of Railway Wagons, Steel Structural, and general and special purpose cranes including Container Handling Cranes, Rail-Mounted Diesel Loco Break down Cranes, Jute Carding Machines and Roll Feeders for the Jute industry, etc. The company was reviewed in the light of the overall policy of the Government and a revival/restructuring plan was approved by the Government during 2005. Subsequently, BIFR, vide order dated 29.06.2006 has discharged BCL from the purview of BIFR and BCL ceased to be a sick industrial company. The production of the company during the year 2009-10 is estimated to be 198.04 crore.

2.8 BRAITHWAITE, BURN & JESSOP CONSTRUCTION CO. LTD.

Braithwaite, Burn & Jessop Construction Co. Ltd. (BBJ) was constituted by Braithwaite, Burn and Jessop in 1935 for erection of the Howrah Bridge. BBJ turned into a CPSE in 1987 when



Bridge over Mahanadi river at Cuttack under construction by Braithwaite Burn & Jessop Construction Co. Ltd.

it became a subsidiary of Bharat Bhari Udyog Nigam Ltd., (BBUNL). The company is engaged in the construction of steel bridges, marine structures and jetties etc. The company has also diversified into marine related activity. The company was reviewed in the light of the overall policy of the Government and a restructuring plan for the company was approved by the Government in 2005. The turnover of the company in 2009-10 is expected to be Rs. 120 crore.

2.9 BHARAT YANTRA NIGAM LTD.

Bharat Yantra Nigam Ltd. (BYNL), was incorporated as a holding company in 1986, with the following subsidiaries.

1. Bharat Heavy Plates & Vessels Ltd., Visakhapatnam.
2. Bharat Pumps & Compressors Ltd., Naini, Allahabad.
3. Bridge & Roof Company (India) Ltd., Kolkata.
4. Richardson & Cruddas (1972) Ltd., Mumbai.
5. Tungabhadra Steel Products Ltd., Hospet, Karnataka.
6. Triveni Structural Ltd., Naini, Allahabad, U.P.

Bharat Heavy Plates & Vessels Ltd has since been taken over by BHEL. Government also approved the closure/winding up of BYNL, the

holding company. Consequently, each of the subsidiaries of erstwhile BYNL, the holding company has become a separate entity.

2.10 BHARAT PUMPS & COMPRESSORS LTD.

Bharat Pumps & Compressors Ltd. (BPCL) was incorporated in 1970 with manufacturing facility at Naini, Allahabad in U.P. The company is engaged in the manufacture and supply of heavy duty pumps & compressors and high pressure seamless and CNG gas



BPCL:- 1700 Mud Pump for ONGC, Sivasagar

cylinders/cascades to cater to the needs of sectors like oil exploration & exploitation, refineries, petro-chemicals, chemicals, fertilizer and down stream industries.

BPCL has been successfully achieving the targets after its turnaround in the year 2005-06 and has been continuously registering net profits. BPCL has not only met the revival package targets, but exceeded the same and achieved them two years in advance.

BPCL maintained steady growth in the year 2008-09, with a turnover of Rs. 239.99 crore and net profit of Rs. 26.86 crore. The target for the year 2009-10 is Rs. 285.00 crore, and net profit of Rs. 42.62 crore. The company has also entered into the export market, by obtaining a breakthrough order from M/S Lavan Refinery, Iran for supply of 6 Nos. Compressors, worth Rs. 48.00 crore.



2.11 BRIDGE & ROOF COMPANY (INDIA) LTD.

Bridge & Roof Co. (I) Ltd. (B&R) was set up in 1920 as a subsidiary of Balmer Lawrie & Company Limited. Subsequently, it became a Government Company in 1972 under the Ministry of Petroleum & Natural Gas. In June, 1986, the administrative control of B&R was transferred to the Ministry of Heavy Industries and Public Enterprises and it was subsequently brought under the fold of the holding company, M/s Bharat Yantra Nigam Limited (BYNL), Allahabad, in 1987. Consequent to the decision taken by GOI, BYNL ceased to be the Holding Company of



B&R - Stainless Steel Railway Wagon Manufactured at Howrah Work Shop

B&R from 06-05-2008 and B&R came directly under DHI. The Company's capital restructuring and strengthening proposal was approved by GOI on 02.09.2005.

B&R is a premier construction and engineering company in the field of Civil and Mechanical Construction and Turnkey Projects in various sectors such as hydrocarbon, power, aluminium, steel, railways, etc. with an enviable reputation for quality and reliability.

It is a consistent profit making Company. B&R's performance during the last few years has been phenomenal and the turnover of the company during the year 2008-09 was Rs. 935 crore with PBT of Rs. 33.26 crore. The turnover during 2009-10 is estimated at Rs.1000.00 crore.

2.12 RICHARDSON & CRUDDAS (1972) LTD.

Richardson & Cruddas (1972) Ltd. (R&C) was taken over from private sector in 1973. It has four units- two in Mumbai and one each in



Hon'ble Minister (HI&PE) inspecting a Rolling Machine in Byculla Plant of R&C during his visit on 12.12.2009.

Chennai and Nagpur. The company became a subsidiary of BYNL in 1987. The company is sick and under reference to BIFR. In July, 2003, the BIFR passed the orders for winding up of R&C. The company was reviewed in the light of the overall policy of the Government and the revival process of the company is under consideration. The Company's turnover during the year 2009-10 is estimated at Rs. 91.50 crore.

2.13 TRIVENI STRUCTURALS LTD.

Triveni Structurals Ltd. (TSL) was incorporated in 1965. The company has facility for manufacture of heavy steel structural products, such as tall towers and masts for power transmission, communication and T.V. broadcasting, hydro-mechanical equipment, pressure vessels etc. The company became a subsidiary of BYNL in April, 1987. The company is sick and stands referred to BIFR. The company was reviewed in the light of the overall policy of the Government and the revival process of the company is under consideration. The turnover of the company during the year 2009-10 is estimated at Rs . 6.00 crore.



2.14 TUNGABHADRA STEEL PRODUCTS LTD.

The company was established in 1960 as a joint enterprise of the Governments of Karnataka and Andhra Pradesh. Tungabhadra Steel Products Ltd.(TSP) became a subsidiary of BYNL in April, 1987. The company has facilities for design, manufacture and erection of hydraulic structures, penstocks, building structures, transmission line towers, EOT & gantry cranes, etc. The company was reviewed in the light of the overall policy of the Government and the revival process of the company is under consideration. The company is generating an amount of 1.5 crore per year from its Mini Hydel Plant. The turnover of the company has been estimated at Rs. 5.62 crore during 2009-10.

2.15 HINDUSTAN CABLES LTD.

Hindustan Cables Ltd. (HCL) was set up in 1952 as the first telecommunication cable manufacturing unit in the country. The company has units in Rupnarainpur, West Bengal; Naini, Allahabad, U.P. & Hyderabad, Andhra Pradesh. HCL is sick and is under reference to BIFR since 2002. Its production activities have been suspended since 2003. As per the recommendation of the BRPSE, the process for locating a Joint Venture Partner for HCL as a whole or unit-wise is under consideration.

2.16 HEAVY ENGINEERING CORPORATION LTD.

Heavy Engineering Corporation Ltd. (HEC), Ranchi was incorporated in December, 1958 with the primary objective of achieving self-sufficiency and self-reliance in the field of design and manufacture of equipment and machinery for the Iron and Steel Industry and other core sector industries like, Mining, Metallurgy etc. It has three manufacturing units namely – Heavy Machine Building Plant (HMBP), Heavy Machine Tools Plant (HMTP) and Foundry Forge Plant (FFP). The company manufactures a wide range of equipment for



HEC:- Wagon pusher for BSL, Bokaro

steel plants, material handling equipment like wagon tippers and EOT cranes. Heavy machine tools including CNC Machine tools and special purpose machine tools and various types of castings, forgings and rolls etc. The company was sick and under reference to BIFR. The company was reviewed in the light of the overall policy of the Government and a revival/restructuring plan was approved by the Government in December, 2005. The company's production during the year 2009-10 is expected to be Rs. 482.88 crore.

HEC manufactured and supplied 200/30T EOT Crane and Folding-cum-Vertically Repositionable Platform (FCVRP) to ISRO in Nation's Second Launch Pad Project for Launching Medium and Heavy Size PSLV and Medium Size GSLV. Facilities supplied by HEC were utilized for assembly of the Satellites before Launching. HEC also supplied 10T Tower Crane which is installed at 80m height i.e. on the Top of Umbilical Tower and is used during the launching of satellites. These facilities were used in Chandrayan-1 Project. HEC has also supplied 400/60T EOT Crane, FCVRP, Horizontal Sliding Door and Mobile Launching Pad for GSLV Mark-III project. With this, India will have facilities for launching larger size GSLV MARK-III.

2.17 HMT LTD. (Holding Company with Tractor Divn.)

HMT Ltd., Bengaluru was set up in 1953 having facilities to manufacture Machine tools, Watches, Tractors, Printing machinery, special



purpose machines, presses and dairy machinery. The Company's turnaround plan approved by the government in July, 2000 envisaged organizational restructuring by conversion of Business Groups into four new separate subsidiary companies. The Company was restructured into HMT Limited, (the Holding Company) with Tractor Business in its fold, HMT Machine Tools Limited, HMT Watches Limited & HMT Chinar Watches Limited. Besides, the company has two wholly owned subsidiaries namely HMT (International) and HMT (Bearings) Ltd. and one partly owned subsidiary, Praga Tools Ltd. The Tractor Division of HMT commenced its operations in 1971 with the manufacture of Tractors at the manufacturing plant established



HMT Tractor

in Pinjore, Haryana. The company was reviewed in the light of the overall policy of the Government. BRPSE has given its recommendations for restructuring/revival of the company which are under consideration of the Government. The production of HMT Holding Company (Tractors Division) in 2009-10 is estimated at Rs. 220.50 crore.

2.18 HMT MACHINE TOOLS LTD.

HMT Ltd., pioneer in Machine Tools Industry in India and manufacturer of a diversified range of products, has incorporated "HMT MACHINE TOOLS LIMITED" as its fully owned subsidiary in 1999. It has manufacturing units at different locations. All the manufacturing



HMT Horizontal Boring & Milling Machine AZ11

units of HMT-MT Ltd. are ISO 9001 certified. The company was reviewed in the light of the overall policy of the Government and Government accorded approval on 01.02.2007 for restructuring/ revival of the company. The production of the company in 2009-10 is expected to be Rs. 225.00 crore.

2.19 HMT WATCHES LIMITED

HMT Watches Limited manufactures mechanical and quartz watches. The company has 3 manufacturing units at



Watches manufactured by HMT (W) Ltd.

Bengaluru, Tumkur and Ranibagh. All its manufacturing units have obtained the ISO 9001 certification. The product range of HMT Watches Ltd. caters to different segments of the market. The company was reviewed in the light of the overall policy of the Government. BRPSE's recommendations for restructuring/ revival of the company are under



consideration of the Government The production of the company during 2009-10 is expected to be Rs. 20 crore.

2.20 HMT CHINAR WATCHES LIMITED

HMT Chinar Watches Limited manufactures mechanical watches. The company has one manufacturing unit at Srinagar, J&K and an assembly unit at Jammu. The company's registered office is located in Jammu. The company is being reviewed in the light of the overall policy of the Government of India. The production of the company in 2009-10 is expected to be Rs. 0.75 crore.

2.21 HMT (BEARINGS) LTD.

HMT (Bearings) Ltd. (erstwhile Indo-Nippon Precision Bearings) was established in the year 1964 as a state public sector company. In 1981, this company became a central public sector enterprise as a subsidiary of HMT Ltd. The company was reviewed in the light of the overall policy of the Government and a restructuring/revival plan for HMT (Bearings) Ltd. was approved by the Govt. on 03.11.2005. The production of the company during the year 2009-10 is expected to be Rs.7.88 crore.

2.22 HMT (INTERNATIONAL) LTD.

HMT (I) Ltd. was established in December, 1974 as a trading company for giving greater thrust to exports of the products of the parent company, HMT Ltd. The major items for exports are machine tools, watches and other associated products which are being exported to various countries. The turnover of the company during the year 2009-10 is estimated at Rs. 5.52 crore.

2.23 INSTRUMENTATION LTD.

Instrumentation Ltd., Kota (IL) was set up in 1964. The company has manufacturing units at Kota, Rajasthan, and Palakkad, Kerala and also has a subsidiary namely, M/s Rajasthan Electronics and Instruments Ltd. (REIL) at Jaipur. The company is engaged in the



IL - Electronic Instruments

manufacture of micro processor based digital distribution control systems, advanced electronic transmitters, fault tolerant control systems, railway signaling systems, telecommunication equipment etc. The company was reviewed in the light of the overall policy of the Government and the restructuring/revival plan for the company was approved by the Government in 2009. The production of IL in the year 2009-10 is estimated at Rs. 385.00 crore.

2.24 RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.

Rajasthan Electronics & Instruments Ltd. (REIL) was set up in 1981 as a Joint Venture of Instrumentation Ltd., Kota and RIICO for the manufacture and supply of Electronic Milk Testers (EMT) to the various milk plants/dairies, milk chilling centres and village cooperative societies. The company has diversified its product range to include Solar photo voltaic



REIL Contribution towards rural development



modules/ systems, Electronic Energy meters and Information Technology. The company is a subsidiary of IL, which holds 51% of its equity, remaining 49% of the equity is held by RIICO, Government of Rajasthan. By virtue of its financial performance, the company has gained the status of 'Miniratna'. The production of the company during the year 2009-10 is expected to be Rs. 92.00 crore.

2.25 **SCOOTERS INDIA LTD.**

Scooters (India) Ltd. (SIL) was incorporated as a CPSE in 1972 at Lucknow, U.P. At present, SIL manufactures and markets three wheelers including the eco-friendly CNG and LPG fuel based vehicles. The company became sick and was referred to BIFR in 1992 but the company achieved a turn around in its performance and posted profits continuously till 2005-06, after the company came out of the purview of BIFR w.e.f April, 2000. The company has not been performing well lately, incurring operating losses from 2001-02 and net losses from 2006-07 onwards. Recognizing that the performance of the company is not commensurate with the growth trends in the auto sector, Government has sanctioned a project named JAGRITI for product improvement, manpower training and up-gradation of facilities for testing and evaluation at SIL at a cost of Rs.18.63 crore. However, the company failed to improve its performance and its net worth has been completely eroded. It has been referred again to BIFR during 2009-10. The production of the company during 2009-10 is expected to be Rs.145.64 crore.

2.26 **CEMENT CORPORATION OF INDIA LTD.**

Cement Corporation of India Ltd. (CCI) was established in 1965 with the principal objective of setting up cement factories in the public Sector to achieve self-sufficiency in cement production and to remove regional imbalance. It has 10 units spread over 8 States/ Union Territories, located in Mandhar, Akaltara

in Chattisgarh; Nayagaon in MP; Kurkunta in Karnataka; Bokajan in Assam; Rajban in HP; Adilabad and Tandur in AP; Charkhi Dadri in Haryana. The company became sick and was referred and registered as a sick co. in 1996 with BIFR. The company was reviewed in the light of overall policy of the Government and restructuring/ revival plan approved by the Government is under implementation. As per the Sanctioned Scheme 3 viable units i.e. Rajban in HP, Bokajan in Assam and Tandur in Andhra Pradesh are operational and other 7 units are closed and to be sold. The approved scheme also envisaged partial expansion of Rajban, Bokajan and technical



View of Bokajan Cement Factory of CCI

up gradation of Tandur unit beside sale of non operating units. The expansion (clinkerisation) of Rajban unit has been completed. The work or expansion of Bokajan and technical upgradation of Tandur unit is in progress.

The estimated production for the year 2009-10 of the running units has been estimated at Rs.345.06 crore with the estimated net profit of Rs. 47.06 crore.

2.27 **HINDUSTAN PAPER CORPORATION LTD.**

Hindustan Paper Corporation Ltd. (HPC), was established in the year 1970, with its headquarters in Kolkata (W.B). HPC is categorized as a Schedule A CPSE

Subsidiaries of HPC -

- a) Hindustan Newsprint Ltd. (HNL)
- b) Nagaland Pulp & Paper Company Ltd. (NPPC).



Units of HPC

- (i) Nagaon Paper Mills (NPM)
- (ii) Cachar Paper Mills (CPM)

The capacity utilization of HPC's Mills (CPM & NPM together) was 104 % during 2006-07, 106 % in 2007-08 and 88% in 2008-09. The production of the company (NPM and CPM) during the year 2009-10 is estimated at Rs. 735.92 crore.



Actual View of CPM of HPC

2.28 NAGALAND PULP & PAPER COMPANY LTD (NPPC)

Nagaland Pulp & Paper Company Ltd. (NPPC) is a subsidiary of Hindustan Paper Corporation (HPC). HPC holds 94.78% of the equity shares and the Government of Nagaland holds the balance 5.22%. There is no production activity presently in the plant. BIFR recommended winding up of the company. The company was reviewed in the light of the overall policy of the Government and a restructuring/revival plan, involving an estimated cost of Rs. 552.44 crore was approved by the Government in 2000. The implementation of this plan is held up due to subsequent cost escalation etc.

2.29 HINDUSTAN NEWSPRINT LTD.

Hindustan Newsprint Ltd. (HNL), originally started as a unit of HPC, was converted into a wholly owned subsidiary of HPC in August, 1983. This mill with an annual capacity of 1 lakh MT is located in Kerala and is engaged in the production of newsprint. HNL has launched its expansion cum diversification

plan to produce writing and printing paper with flexibility to switch over to newsprint for an additional production capacity of 170,000 tonnes per annum of paper at an estimated cost of Rs. 718.80 crore. The production of the mill during the year 2009 -10 is expected to be Rs. 283.64 crore.

2.30 HINDUSTAN PHOTO FILMS MANUFACTURING COMPANY LTD.(HPF)

Established in 1960 at Ooty, T.N., the company is engaged in the manufacture of photosensitized films, cine positive (black and white), cine films sound negative, medical X-ray films, etc. The company was referred to BIFR in 1995. BIFR recommended its winding up on 30th January, 2003. Appeals were filed by various agencies before AAIFR against winding up order of BIFR. AAIFR dismissed these appeals. However, Madras High Court granted an interim stay on the proceedings of AAIFR and BIFR orders on the basis of an appeal filed by the Trade Unions. M/s Ernst and Young was engaged for further study on the viability of the company on the basis of the recommendations of the Department Related Parliamentary Standing Committee on Industry (Rajya Sabha). Report of the consultants was received and processed. Regular meetings are being held at BRPSE regarding the revival plan of the company and the final recommendation of BRPSE are expected shortly. The production of the company during 2009-10 (Anticipated) has been Rs. 26.00 crore.

2.31 HINDUSTAN SALTS LTD.(HSL)

Hindustan Salts Ltd. (HSL), set up in 1959, with its headquarters at Jaipur, Rajasthan is engaged in the production of common salt and salt-based chemicals at its units located at Kharaghoda, Gujarat and Mandi, Himachal Pradesh. The company is sick and under reference to BIFR. The company was reviewed in the light of the overall policy of the Government and a restructuring/revival plan was approved by the government in May, 2005. After the implementation of the revival



HSL - Salt upgradation plant at Sambhar Lake, Rajasthan

package, the company has come out of BIFR. Company's production during 2009-10 is expected to be Rs. 25.42 crore.

2.32 SAMBHAR SALTS LTD.(SSL)

Sambhar Salts Ltd. (SSL) is a subsidiary of Hindustan Salts Ltd. (HSL), located at Jaipur. The paid up capital of the company is Rs. 1 crore, 60% of which has been subscribed by HSL and the balance 40% by the Government of Rajasthan. The company is producing salt, both for edible and industrial use. The production of the company during the year 2009-10 is expected to be Rs.17.86 crore.

2.33 NEPA LTD.

NEPA Ltd, located in Madhya Pradesh, was initially set up in 1947 in private sector. Later on, in October, 1949, its management was taken over by the State Government. The Central Government acquired controlling interest in 1959 by conversion of loans into equity and it became a central CPSE. The company produces newsprint and paper. The company became sick and is under reference to BIFR. The company is being reviewed in the light of the overall policy of the Government. BRPSE's recommendations for restructuring/revival the company are under consideration of the Government. The production of the company during the year 2009-10 is anticipated to be Rs. 97.00 crore.

2.34 TYRE CORPORATION OF INDIA LTD.(TCIL)

Tyre Corporation of India Ltd. was incorporated in 1984 after the nationalization of two sick

companies, namely, M/s Incheck Tyres Ltd. and M/s National Rubber Manufacturers Ltd. The company has its single operating unit at Kankinara (West Bengal) and is engaged in the manufacture of tyres for automobiles. The Company is sick and under reference to BIFR. Tangra unit has since been closed. The company was reviewed in the light of the overall policy of the Government. BRPSE's recommendations for restructuring/revival of the company through disinvestment have been approved by the Government Parliament has passed the Tyre Corporation of India Ltd. (Disinvestment of Ownership) Bill 2007. The production of the company during the year 2009-10 is expected to be Rs. 53.57 crore.

2.35 ENGINEERING PROJECTS (INDIA) LTD.(EPIL)

Engineering Projects (India) Limited (EPI), located at New Delhi, was incorporated in the year 1970 with the main objective to undertake turnkey projects and consultancy services in India and abroad. EPIL is engaged in the field of execution of large and multi-disciplinary industrial and construction projects on a turnkey basis in the areas like civil and structural work, metallurgical sector, water supply and environmental engineering, defence, housing, townships, hospitals & institutional buildings, coal & material handling systems, industrial & process plants, oil and petrochemicals, transmission lines/sub-



EPI executed Indo-Bangladesh Border Fencing, Tripura



stations, irrigation, dams & canal works, roads & highways, shore protection works, airports, sports stadia and mining projects etc. As on 30.9.2009, EPIL has completed 457 projects in India and 30 projects abroad. After its financial restructuring in 2001, the Company has turned around and has been posting consistent profits. After a gap of 26 years, the Company started paying dividend from the financial year 2003-04. EPI is now a profit making, dividend paying Miniratna Category-II CPSE.

The major orders secured by the company are:

- orders worth Rs.1317.43 crore during the month of August, 2009. The major projects secured include Construction of ESI Medical & PG Institute at Joka, Kolkata for a value of Rs. 514.58 crore. Construction of Medical College & Hospital at Baltikuri, Kolkata for a value of Rs. 761.70 crore.
- orders worth Rs. 250.65 crore and Rs. 75.65 crore during the month of October, 2009 for construction of Border Outposts (BoPs) for Border Security Force along the Indo Bangladesh Border in Mizoram & Tripura respectively. Construction of Flood Lighting along Indo Bangladesh Border in the State of Mizoram for a value of Rs. 150.00 crore. Development of Regional Centre of Indira Gandhi National Open University (IGNOU) IN Bangalore for a value of Rs. 25.00 crore

The Company achieved a turnover of Rs. 958.70 crore during the year 2008-09 and declared a dividend of 20%. During the first nine months (April- December, 2009) of the current financial year 2009-10, the Company has achieved a turnover of Rs. 604.96 crore and is estimated to end the year 2009-10 at Rs.1050 crore.

2.36 Dividend Paid by the CPSEs under the Department of Heavy Industry for the year 2008-09

BHEL	Rs. 563.57 Crore
HPC	Rs. 12.95 Crore
EPI	Rs. 7.08 Crore
B&R	Rs. 0.55 Crore
BBUNL	Rs. 0.05 Crore



CMD, BHEL presenting the interim dividend cheque for 2009-10 to Shri Vilasrao Deshmukh, Union Minister of Heavy Industries & Public Enterprises



Chapter 3

Heavy Electrical, Heavy Engineering and Machine Tool Industries

3.1 Heavy Electrical Industry is an important manufacturing sector, which caters to the needs of energy sector & other industrial sectors. Major equipments like boilers, turbo generators, turbines, transformers, condensers, switch gears and relays and related accessories are manufactured by this sector. The performance of this Industry is closely linked to the power programme of the country. The Government of India has an ambitious mission of 'Power for All by 2012' and planned power capacity addition of 78,577 MW in the 11th Five Year Plan (2007-12).

There is a strong manufacturing base for the manufacture of Heavy Electrical equipments in the country. Manufacturer of Heavy Electrical equipment have absorbed sub-critical technology up to a unit capacity of 660 MW and gearing up for adopting super-critical technology for unit size of 800 MW and above for thermal sets. Industry is augmenting its installed capacity to meet the ambitious 11th Plan target and future growth of installation of nuclear reactors in the country. Gas turbines upto 260 MW Unit capacity and Transmission and Distribution equipment up to higher voltage class of 765 KV are also being manufactured by Indian Industry.

Two Development Councils functioning under the Department, relating to Capital Goods & Engineering Industries i.e. Development Council for Machine Tool Industry and Development Council for Textile Machinery have been reconstituted.

Department of Heavy Industry organized a "National Seminar on Engineering Procurement & Construction (EPC) of Power Project" in association with CII on 11th December, 2009 at India Habitat Centre, New Delhi. Over 150 participants attended the seminar. The seminar focused on measures required to achieve the modality of execution of the power projects within the time frame so that the target of power generation capacity addition of 78,577 MW during the XI plan is achieved.

3.1.1 Boilers

Boiler is a pressurised system in which water is vaporised to steam, the desired end product, by heat transferred from a source of higher temperature, usually the products of combustion from burning fuels. High pressure steam thus generated may be used directly as the working fluid in a prime mover to convert thermal energy to mechanical work, which in turn may be converted to electrical energy. BHEL is the largest manufacturer of boiler in the country accounting for around 2/3rd of the domestic market share. It has the capacity to manufacture steam generators for utilities ranging from 30 MW to 500 MW capacity using coal, lignite, oil, natural gas or a combination of these fuels. They are also manufacturing higher capacity boilers with super critical parameters upto 800 MW Unit size. Manufacturing facilities are also available for higher size super critical boilers.

As per SIA statistics, production figures for the last three years for non SSI Sectors are as under:-



Product	2007-2008 (Rs. crore)	2008-2009 Rs. crore)	April-October, 2009 (Rs. crore)
Boiler	8231.34	10,153.94	5542.30

#Source-SIA

3.1.2 Turbines & Generator Sets

The capacity established for manufacture of various kinds of turbines such as steam and hydro turbines including industrial turbines is more than 12000 MW per annum. Apart from BHEL which has the largest installed capacity, there are other units in the private sector who are manufacturing turbines for power generation and industrial use. The manufacturing range of BHEL includes Steam turbines, Boilers, Generators up to 500 MW for utility and combined cycle application and is capable of manufacturing Steam Turbines and matching generators up to 800 MW size. BHEL has the capacity to manufacture gas turbines up to 260 MW.

The AC Generator industry in India is adequately catering to the alternative power requirement of large and small industries, commercial establishments and domestic sector. For this sector, manufacturers in India are capable of manufacturing AC Generators right from 0.5 KVA to 25000 KVA with specified voltage ratings.

As per SIA statistics, production figures for the last three years for non SSI Sectors are as under:

Product	2007-2008 (Rs. crore)	2008-2009 Rs. crores)	April- October, 2009 (Rs. crore)
Turbines (steam hydro)	35,18.15	4193.00	2104.66
Electric Generators	1474.16	1778.10	977.34

#Source-SIA

3.1.3 Transformers

A transformer is an electrical device, which changes Voltage levels and facilitate transmission, distribution and utilisation of electrical power in the most efficient and economic manner. The health of transformer Industry depends largely on the power generation and transmission system programme. The major users of this product are the State Electricity Boards, Power Grid Corporation of India Ltd. and other Industries. Some special types of transformer are also manufactured which are used for the purpose of welding, traction and electrical furnaces etc. The Transformer Industry in India has developed for over 50 years and has a well matured technology base. Energy efficient amorphous core transformers with low losses and low noise levels are also being developed to meet International requirement.

As per SIA statistics production figures for the last three years for non SSI Sectors are as under:-

Product	2007-2008 (Million KVA)	2008-2009 (Million KVA)	April - October, 2009 Million KVA)
Transformer	73.26	71.86	44.03

#Source-SIA

3.1.4 Switchgears & Controlgears

Switchgear refers to the combination of electrical disconnects, fuses and/or circuit breakers used to isolate electrical equipment. Switchgear is used both to de-energise equipment to allow work to be done and to clear faults downstream. Switchgear & Control gear are indispensable not only in transmission and distribution of power, but anywhere where there is a need to access and control electricity. The Indian Switchgear Industry is manufacturing the entire range of circuit breakers from bulk oil, minimum oil, air blast,



vacuum to sulphur hexafluoride as per standard specification. Switchgear & Control gear Industry in India is a fully developed and mature industry, producing and supplying a wide variety of switchgear and control gear items needed by the industrial and power sector. This industry sector in fact manufactures the entire voltage range from 240 V to 800 KV.

Secondary equipment such as relays used for various types of fault protection, also known as control gear, have made significant advances due to major development in the field of electronics. The digital relays are fast replacing the conventional relays due to technology advancement, compact size & its reliability. As per recent trend, in addition to protection and control of power, monitoring and signalling are becoming integral part of switchgears. With monitoring, the fault conditions can be predicted whereas signalling helps to know the status of switch gears at various locations.

As per SIA statistics, production figures for the last three years for non SSI Sectors are as under:-

Product	2007-2008 (Nos.)	2008-2009 (Nos.)	April - October, 2009 (Nos.)
Switchgear and Controlgear	18938508	17805938	13485801

#Source-SIA

3.2. Heavy Engineering Industry

3.2.1 TEXTILE MACHINERY INDUSTRY

The Indian textile machinery industry consists of over 1446 machinery and components manufacturing units with over 600 units producing complete machinery, and the remaining parts and accessories. The range includes textile machinery required for sorting, cording, processing of yarns/ fabrics and weaving.

The industry is gearing itself to avail of opportunities of supplying machines required

to cater to the export target of garment manufacturers post Multi Fibre Agreement (MFA).

With a capital investment of Rs. 6900 crore and an installed capacity of Rs. 8048 crore per annum, their current production, imports as well as exports are as under: -

Year	Production (Rs. Crore)	Exports (Rs. Crore)	Imports (Rs. Crore)
2006-2007	5753	425	6884
2007-2008	6155	640	5255
2008-2009	4063	607	4411

Source: Textile Machinery Manufacturers Association

3.2.2 CEMENT MACHINERY INDUSTRY

Cement plants based on dry processing and pre-calcination technology for capacities up to 7500 TPD are being manufactured in the country. Modern cement plants are designed for zero downtime, high product quality and better output with minimum energy consumed per unit of cement production etc. At present, there are 18 units in the organized sector for the manufacture of complete cement plant machinery. With an installed capacity of around Rs. 600 crore/annum the industry is fully capable to meet the domestic demand.

3.2.3 SUGAR MACHINERY INDUSTRY

Domestic manufacturers occupy a predominant position in the global scenario and are capable of manufacturing (from concept to commissioning stage) sugar plants of latest design for a capacity upto 10,000 TCD (tonnes crushing per day). There are presently 27 units in the organised sector for the manufacture of complete sugar plants and components with an installed capacity of around Rs. 200 crore per annum.



	2006-2007 (Rs. crore)	2007-2008 (Rs. crore)	2008-2009 (Rs. crore)
Import	25.11	20.50	24.65
Export	12.52	22.11	48.21

Source: Directorate General of Commercial Intelligence & Statistics

3.2.4 RUBBER MACHINERY INDUSTRY

There are at present 19 units in the organized sector for the manufacture of rubber machinery mainly required for tyre/tube industry. The range of equipments manufactured in the country includes inter-mixer, tyre curing presses, tube splicers, bladder curing presses, tyre moulds, tyre building machines, turnet servicer, bias cutters, rubber injection moulding machine, bead wires etc. There is a gap in technology for the manufacture of high speed calendaring line particularly for heavy earthmoving equipment and the like.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Import	34.79	25.38	63.13
Export	98.16	82.09	101.33

Source: Directorate General of Commercial Intelligence & Statistics

3.2.5 MATERIAL HANDLING EQUIPMENT INDUSTRY

The range of equipments manufactured includes crushing and screening plants, coal/ore/ash handling plant and associated equipment such as stackers, reclaimers, ship loaders/unloaders, wagon tippers, feeders etc. catering to the growing and rapidly changing needs of the core industries such as Coal, Cement, Power, Port, Mining, Fertilizers and Steel plants.

There are 50 units in the organised sector for the manufacture of material handling equipment. Besides, there are a number of units operating in the small-scale sector. The industry

is self sufficient in meeting the domestic demand and is also capable of meeting global competition.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Import	1552.97	1152.86	1782.17
Export	124.27	197.57	140.55

Source: Directorate General of Commercial Intelligence & Statistics

3.2.6 OIL FIELD EQUIPMENT

The petroleum industry in India is undergoing a major change. With the ongoing process of liberalisation, the industry has been thrown open for private sector in all major areas of exploration, production, refining and marketing, and this has resulted in increased demand for the oil field and related equipments.

Domestic production covers mainly the on-shore drilling equipment. Under Offshore drilling, only offshore platforms and some other technological structures are being produced locally. The major producers of these equipments are BHEL, Hindustan Shipyard, Mazagon Dock and Larsen & Toubro.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Import	411.73	4141.76	1782.17
Export	72.51	185.11	534.11

Source: Directorate General of Commercial Intelligence & Statistics

3.2.7 METALLURGICAL MACHINERY

Metallurgical machinery includes equipment for mineral beneficiation, ore dressing, size reduction, steel plant equipments, foundry equipments and furnaces.

At present, there are 39 units in the organized sector engaged in the manufacture of various types of metallurgical machinery. The existing



production capacity in the country is sufficient to meet the demand of these equipments in the country.

Indigenous manufacturers are in a position to supply majority of the equipments for steel plants e.g. blast furnaces, sinter plants, coke ovens steel melting shop equipment, continuous casting equipment, rolling mills & finishing line. However, there is a technological gap in the basic design and engineering for plants and equipments required in the ferrous and non-ferrous sector for which the domestic manufacturers are dependent on imported know-how. Since the process of making ferrous and non-ferrous metal is linked up with the design of the equipment, there is a need for close interaction between the process know-how, designers and equipment manufacturers.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Import	1843.23	1976.13	3842.33
Export	643.68	592.47	986.10

Source: Directorate General of Commercial Intelligence & Statistic

3.2.8 MINING MACHINERY

The major mining equipments are Longwall Mining Equipments, Road Header, side discharges Loader (SDL), Haulage Winder, Ventilation Fan, Load Haul dumper (LHD), Coal Cutter, Conveyors, Battery Locos, Pumps, Friction Prop, etc.

At present, there are 32 manufacturers in the organized sector, both in public and private, for underground and surface mining equipment of various types. Out of these, 17 units manufacture underground mining equipment. Majority of the requirement of the mining industry is being met by the indigenous manufacturers.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Import	76.71	110.61	158.03
Export	48.47	6.59	3.30

Source: Directorate General of Commercial Intelligence & Statistic

3.2.9 DAIRY MACHINERY INDUSTRY

At present there are around 20 units in the organized sector, both in private and public sector, manufacturing Dairy Machinery equipments such as evaporators, milk refrigerators and storage tanks, milk and cream deodorizers, centrifuges, clarifiers, agitators, homogenisers, spray dryers and heat exchangers. Small Scale units are also contributing to indigenous production. The spray dryers, plate type heat exchanger and other core equipments for milk powder plant call for a high degree of polish requirement on the equipments because the presence of any micro crevices resulting from inadequate polish tends to be the incubation and breeding ground for the bacteria.

The technology gap exists for handling equipments such as self cleaning cream, separator, aseptic processing systems, and for the equipment required for manufacture of yoghurt and traditional Indian sweets etc.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Import	68.97	76.19	112.42
Export	10.27	24.25	23.03

Source: Directorate General of Commercial Intelligence & Statistic

3.2.10 MACHINE TOOL INDUSTRY

Machine Tool Industry is in a position to export general purpose and standard machine tool to even industrially advanced countries. During the last four decades, the machine tools industry in India has established a sound base and there are around 200 machine tool manufacturers in the organized sector as also around 400 units in the small scale sector. The Indian industry has good design capability and the production of CNC machines has increased to about 4000 nos. per annum. The industry, however, lacks in design and engineering capability to undertake very high precision CNC Machines.



Import of technology is encouraged to bridge the gap.

Indian machine tools are manufactured to the international standard of quality / precision and reliability. A number of collaborations have also been approved for bringing in the latest technology in this field of modern machine tools and the industry is now exporting conventional as well as NC/CNC high – tech machine tools. In the field of R & D, Central Manufacturing Technology Institute, Bangalore has been doing research for more appropriate designed machine tools.

	2006-2007 (Rs. Crore)	2007-2008 (Rs. Crore)	2008-2009 (Rs. Crore)
Production	1719.00	1902.00	1424.00
Import	4656.00	5992.00	6271.00
Export	73.00	147.00	89.00

Source: IMTMA



Chapter 4

Automotive Industry

4.1 Overview of the Automotive Industry

- 4.1.1 Automotive Industry globally is one of the largest industries and is a key driver of economy. Owing to its deep forward and backward linkages with several key segments of industry, automotive industry has a strong multiplier effect on the economy. A sound transportation system plays a pivotal role in the country's rapid economic and industrial development. The well-developed Indian automotive industry ably fulfils this catalytic role by producing a wide variety of vehicles such as passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles, scooters, motor-cycles, mopeds, three wheelers, etc.
- 4.1.2 Automobile Industry was delicensed in July 1991 with the announcement of the New Industrial Policy. The passenger car was however delicensed in 1993. No industrial licence is required for setting up any unit for manufacture of automobiles, except in some special cases. The norms for foreign investment and import of technology have also been progressively liberalized over the years for vehicle manufacturers including passenger cars, in order to make this sector globally competitive. At present, 100% Foreign Direct Investment (FDI) is permissible, under automatic route, in this sector including passenger car segment. With the gradual liberalization of the automobile sector since 1991, the number of manufacturing facilities in India has grown progressively.
- 4.1.3 The automotive industry, comprising the automobile and the auto component sectors, has made rapid strides since delicensing and opening up of the sector to FDI in 1991. The

automotive industry (including components & tyres) has already attained a turnover of Rs. 2, 20,600 crore. The industry provides direct and indirect employment to 13.1 million people. The contribution of the automotive industry to GDP has risen from 2.77% in 1992-93 to 4.14% in 2008-09. The industry is also making a contribution of 17% to the kitty of indirect taxes of the Government.

- 4.1.4 Today, India is the world's second largest manufacturer of two wheelers and fifth largest manufacturer of commercial vehicles. It manufactures largest number of tractors in the world and is the 9th largest car manufacturer in world.

4.2 Production:

- 4.2.1 The Indian automobile sector, described as the sun rise sector, had been growing at a healthy double digit rate till 2006-07. However, it witnessed a downturn during the later half of 2007-08 and 2008-09 due to global economic slowdown. To tide over the situation, the Government of India took immediate remedial action and announced three stimulus packages. As a result of this, the overall position has improved since July, 2009 onwards. In the year 2008-09 the industry witnessed a modest growth in production at 2.96% over 2007-08. In the year 2009-10 (April 2009 to December, 2009), passenger vehicle segment, two-wheeler segment, three-wheeler segment and commercial vehicle segment have all recorded a growth of 24.55%, 19.70%, 16.04% and 15.10% respectively over the corresponding period last year (CLPY). The details of actual production of various automobile segments during the year 2006-07 to 2009-10 (upto December, 2009) are given below:

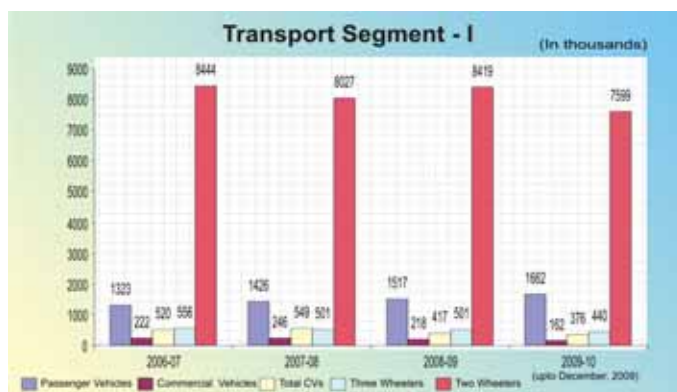


Automobile production:

(in thousands)

Segment	2006-07	2007-08	2008-09	2009-10 (upto December, 2009)
Passenger vehicle	1323	1426	1517	1662
Commercial Vehicles	222	246	218	162
Total CVs	520	549	417	376
Three Wheelers	556	501	501	440
Two Wheelers	8444	8027	8419	7599
Total	11065	10854	11175	10239
Percentage growth	13.57	(-).2.29	2.96	

Source: SIAM



4.2.2 Export :

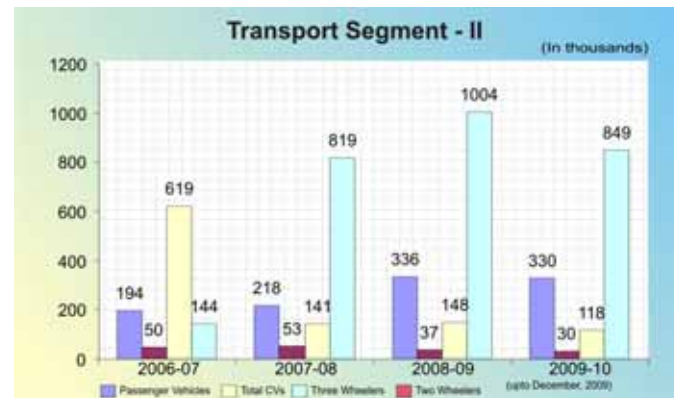
In the year 2009-10 (April 2009 to December, 2009), the export of passenger vehicle segment, two-wheeler segment recorded a growth of 30.12% and 7.15%. However, the export of three-wheeler segment and commercial vehicle segment declined by (-) 1.87% and (-) 14.59% respectively over the corresponding period last year (CLPY). The details of export of various automobile segments during the year 2006-07 to 2009-10 (upto December, 2009) are given below:

Automobile Exports:

(in thousands)

Segment	2006-07	2007-08	2008-09	2009-10 (upto December, 2009)
Passenger vehicle	194	218	336	330
Total CVs	50	53	37	30
Three Wheelers	619	141	148	118
Two Wheelers	144	819	1004	849
Total	1011	1238	1530	1328
Percentage growth	25.43	22.45	23.61	

Source: SIAM



4.2.3 Vehicular Pollution Control Measures of the Government:

Government has initiated pollution & safety checks by notifying emission & safety standards from the year 1992 which were further modified in April, 1996 under the Central Motor Vehicle Act. **BHARAT STAGE-I** (Equivalent to **Euro I**) emission norms have already been made applicable throughout the country. Euro II equivalent Bharat Stage II norms came in to force from 2001 in 4 metros of Delhi, Mumbai, Chennai and Kolkata. These norms have been extended to entire country w.e.f. 1.4.2005. India is harmonizing its Emission Norms for four Wheelers with the European Regulation and has adopted Euro III, equivalent norms in 11 Metropolitan Cities from April 2005. The next higher level of emissions standards is slated to come into force w.e.f. April, 2010.

4.3. Auto Components Industry:

4.3.1 The Auto and Auto-component Industry has, in the recent past, passed through an extremely trying phase, marked by a reduction in the demand for Commercial Vehicles, reduced off-take of components, a severe squeeze on liquidity, decline in exports and constantly falling margins in the component industry. It has been one of the most difficult phases for the auto component industry, in both domestic and export markets. However, the incentives and support given by the government have helped the industry to tide over a difficult time.

4.3.2 The demand contraction in both the domestic and overseas market has seen the auto-



component industry combating with a flat growth in the first two quarters of 2009-2010. On the other hand, exports, which were growing at an average of 20% and had even registered a growth of 17% in 2008-09, due to the dollar fluctuation, has seen a drop to an all time low of -30% in the first two quarters of 2009-10. Imports for the corresponding period, had also dropped by -32%.

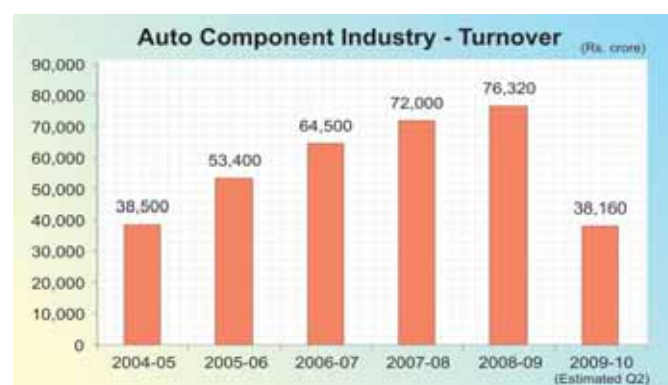
4.3.3 The export performance has been severely impacted due to the recession in the US and EU automotive markets and it is expected that the export market for the auto component industry is unlikely industry to revive significantly over the next 12 months. Furthermore, imports continue to outstrip exports and while exports account for 16% of the industry's turnover, imports account for 25% of the industry's turnover. Most auto-component manufacturers have, in 2009-2010 put on hold their future investment plans and have made only mandatory investments that are required for catering to firm commitments of OEMs.

4.3.4 Auto Component Industry statistics, reflective of the current state of the industry, are given below:

Auto Component Industry Statistics

(in Rs. Crore)

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 Estimated Q2
Turnover	38,500	53,400	64,500	72,000	76,320	38,160
% Gr.	25.7	38.7	20.8	11.6	6.0	0
Exports	7,937	11,198	13,184	14,132	16,522	5,780
% Gr.	37.0	41.1	17.7	7.2	17	-30
Imports	9,504	12,115	15,974	20,998	28,160	9,575
% Gr.	46.2	27.5	31.9	31.5	34	-32
Investments	16,800	19,500	24,000	28,800	32,000	16,800
% Gr.	15.9	16.1	23.1	20.0	11.1	5
Import as % of Turnover	24.7	22.7	24.8	29.2	36.9	25
Export as % of Turnover	20.6	21.0	20.4	19.6	22	16



4.3.5 In the third quarter of 2009-2010, the industry has started showing signs of recovery. Today, we can see the auto-component industry gradually returning to normalcy and it is estimated that the third quarter will report a turnover growth of 8%. This is mainly due to the growth in the domestic vehicle industry. Despite the impact of the economic slowdown, industry is very positive about the long-term growth prospects of automotive business.

4.3.6 The quality consciousness of the Indian auto component industry has led to more and more exports being directed to the international OEMs and Tier 1 companies. The component industry has perhaps the highest number of QS-9000 & TS 16949 companies in any industry sector in the country. Currently, the component industry boasts of 487 companies with ISO-9000, 157 companies with ISO 14001, over 332 companies with TS-16949, 87 companies with QS 9000 and 42 companies with OHSAS 18001. In addition, 9 auto-component companies have won the Deming Prize for Quality, with 4 companies have won JIPM and 1 company having also won the Japan Quality Medal.

4.4. Agricultural machinery

Agricultural Machinery mainly consists of Agricultural Tractors, Power Tillers, Combine Harvesters and other agriculture machineries & implements. Due to negligible production of Power Tillers, Combine Harvesters and other agricultural machineries, this sector is mainly dominated by agricultural tractors.

Indian Tractor Industry is the largest in the world (excluding sub 20 HP belt driven tractors used in



China), accounting for one third of the global production. The other major tractor markets in the world are China and United States. In 2006-07, Tractor Industry growth surpassed the industry best of 2000-01, to reach the new peak of 352831 unit sale. However, in the year 2007-08 it declined to 346499, registering a negative growth of 2% and also witnessed a negative growth of 1.06% in 2008-09 due to poor availability of affordable finance to the farmers.

4.4.1 Export

Tractor exports from India have grown by around 29 percent in 2007-08. Indian Tractors were exported to US and other South Asian countries like Malaysia, Turkey etc. Indian players have aggressively started exporting to African countries by bidding for government tender requirement. As such, Indian tractors are gaining acceptance in international markets. In 2008-09, the industry exported 38,214 units of tractor; however, the export volumes had declined by (13.97) percent over last year. It is further expected to decline by another 8-10 percent in 2009-10 due to global recession and poor credit availability.

4.4.2 Segment-wise analysis

The Indian tractor market is traditionally a medium-horsepower market consisting mostly of 31-40 hp, which constitutes almost 46 percent of the total market in 2008-09. Tractors of this category have clocked a sale volume of 1.57 lakh units, but registered a negative growth of (0.50) percent over 2007-08. Of the other variants, more than 51 HP registered growth of 17.61%. All other categories viz. 21-30 HP, 31-40 HP and 41-50 HP registered negative growth of (3.77), (0.50) and (11.82) percent over 2007-08 figures.

4.5. Earth Moving and Construction Machinery

4.5.1 Earthmoving and Construction equipment (ECE) industry constitutes a major backward linkage of construction along with the building material manufacturing industry. Construction materials account for nearly two-third of the average construction costs.

4.5.2 Construction equipment cover a variety of machinery such as hydraulic excavators, wheel loaders, backhoe loaders, bull dozers, dump trucks tippers, graders, pavers, asphalt drum/wet mix plants, breakers, vibratory compactors, cranes, forklifts dozers, off-highway dumpers (20T to 170T), drills scrapers, motor graders, rope shovels etc. They perform a variety of functions like preparation of ground, excavation, haulage of material dumping/laying in specified manner, material handling, road construction etc. The Indian earthmoving and construction equipment industry has been undergoing a silent revolution over the past few years, expanding volumes at a compounded annual rate of 40 per cent.

4.5.3 The organized construction sector (e.g., roads urban infrastructure) in India accounts for approximately 55 percent of the industry, while mining, irrigation and other infrastructure segments (e.g., power, railways) account for the rest. Each of these end-use demand segments is likely to witness a huge wave of additional investments in the next 10-15 year period, which augurs well for the sustained and strong growth of the ECE industry in India. Key infrastructure projects- such as road & highways, bridges & urban construction, power projects, railways, airport modernization, real estate development, mining sector etc. have, in recent years, attracted huge investment. This, in turn, provides a major business opportunity to the equipment manufacturers.

4.6. **Important initiatives taken in respect of auto sector by the Department of Heavy Industry (DHI):** DHI being the nodal Department for automobile and auto component industry takes up issues relating to automobile sector, at various platforms, for its growth. In this regard, DHI has taken various important initiatives as outlined below:

4.6.1 **Development Council for Automotive and Allied Industries (DCAAI):** Two meetings of the DCAAI were held in 2009-10 under the chairmanship of Secretary, Heavy Industry on 9th July, 2009 and 22nd February, 2010. The impact of global economic slowdown on the



Indian automotive and auto-component industries and the measures to overcome the situation and the other important issues relating to the growth of the sector and achieving AMP targets were focussed upon. This forum provides an opportunity to identify key areas of concern for which appropriate policy modulations and other identified areas of action can be taken by various Ministries/Departments of the Government of India.

4.6.2 Release of grant from Cess Fund: During the year 2009-10, a total of 7 automobile R&D projects worth Rs. 23.525 crore have been considered/are under consideration for approval by the Cess Committee under the Chairmanship of Secretary (HI).

4.6.3 Meeting of the Indo-German Joint Working Group (JWG) on Automotive Sector: Indo-German Joint Working Group (JWG) on automotive sector was established under the aegis of Indo-German Joint Commission on Industrial and Economic Cooperation (JCM). This is the fifth JWG; the other four groups are in the areas of Agriculture, Coal, Infrastructure and Tourism. The first meeting of the JWG was held on 6.2.2009 in New Delhi. During the first meeting, three working sub-groups were constituted on (i) Technology (ii) Commercialization & Framework Development (iii) Institutional Cooperation, Training & Skill Development. The second meeting of the JWG and its working sub-groups was held at Frankfurt, Germany during 21st to 22nd September, 2009.

4.6.4 EFV Conference 2009: As part of WP-29 initiative, a series of International Conferences on Environmentally Friendly Vehicles (EFV) are organized. The first conference was held in Tokyo, Japan in 2003, second in Birmingham, UK in 2005 and the third conference at Dresden, Germany in 2007. The 4th EFV conference was successfully held in New Delhi from 23rd to 24th November, 2009. This is for the first time that such a prestigious international event has been held in a developing economy. The Conference was a huge success and saw large participation by the leading global automobile experts from both India and abroad. The theme

of the conference was to generate awareness about environmentally friendly vehicles. The Conference was inaugurated by the Hon'ble Minister of Heavy Industries and Public Enterprises, Shri Vilasrao Deshmukh on 23rd November, 2009 at Hotel Ashok, New Delhi. The inaugural session also witnessed the august presence and address by Shri Jairam Ramesh, Hon'ble Minister of State (Independent Charge) for Environment & Forests.

Prior to the conference, a Vehicle rally encompassing all types of Environmentally Friendly Vehicles available, and coming soon in India, was also held on 22nd November, 2009. On the occasion, Hon'ble Minister of State for Heavy Industries & Public Enterprises, Shri Arun Yadav and Hon'ble Chief Minister of Delhi, Smt. Shiela Dixit jointly flagged off 18 vehicles ranging from electric two-wheelers to CNG Mini truck, from India Gate.



EFV Conference, New Delhi 23-24 November, 2009

4.6.5 Informal group on EFV: The Chairmanship, Co-chairman and Secretariat for the Informal Group on EFV under GRPE (WP-29), UNECE has been conferred on India. As per WP-29 norms, the informal group is required to meet on the sidelines of GRPE/WP-29 meetings and also report progress to GRPE/WP-29. The first meeting of the Informal Group on EFV under the chairmanship of India was held on 25th November, 2009 at New Delhi. Moreover, during this meeting, it has been decided that DHI will function as the Secretariat for the informal group till 2012 i.e., the period till the next EFV Conference to be held in USA.

Chapter 5

Technology Upgradation and R&D

5.1 India has established a strong and diversified manufacturing base for production of a wide variety of basic and capital goods to meet the requirements of various sectors including heavy electrical, power generation and transmission industries, process equipment, automobiles, ships, aircrafts, mining, chemicals, petroleum, etc. However, share of manufacturing sector in India's economy is still quite low. There is considerable potential for growth, which in a globalised world economy, has to be based on improving productivity and competitiveness. Innovation and adoption of new technologies are the key factors in competitiveness. In the Indian context, opening of the economy and consequently the entry of international players has substantially enhanced the need for production of goods and services matching international standards. Indian Industry has undertaken a number of steps to meet the needs of the customers in a fast changing environment. PSEs under the Department are also pursuing their plans to adopt and adapt new technologies through collaboration and in-house R&D efforts. Some of the initiatives in this regard are described below:

5.1.1 Testing and R&D infrastructure for Automotive Sector

The National Automotive Testing and R&D Infrastructure Project (NATRIP) was approved by the Government on 25th July 2005 and notified by the Department of Heavy Industry on 31st August 2005. NATRIP envisages setting up of world-class automotive testing and homologation facilities in India with a total investment of Rs.1,718 crore in six years from

the date of its being notified. The principal facilities will come up in the three automotive hubs of the country, in the south, the north and the west. The project aims at (I) creating critically needed automotive testing infrastructure to enable the Government in ushering in global vehicular safety, emission and performance standards, (II) deepening manufacturing in India, promoting larger value addition leading to significant enhancement of employment potential and facilitating convergence of India's strengths in IT and electronics with automotive engineering, (III) enhancing India's considerably low global outreach in this Sector by de-bottlenecking exports and (IV) removing the crippling absence of basic product testing, validation and development infrastructure for automotive industry.



Baja SAE India 2010 organised by SAE India and NATRIP at Indore

The project envisages setting up of the following facilities:-

- (i) A full-fledged testing and homologation centre within the northern hub of automotive industry at Manesar, Haryana.



- (ii) A full-fledged testing and homologation centre within the southern hub of automotive industry at a location near Chennai, Tamil Nadu.
- (iii) Up-gradation of existing testing and homologation facilities at Automotive Research Association of India (ARAI), Pune and at Vehicle Research and Development Establishment (VRDE), Ahmednagar, Maharashtra.
- (iv) World-class proving grounds or testing tracks on around 4,000 acres of land, including summer and winter pads, the locations of which would be decided with technical assistance from a reputed global consultant to be appointed on the basis of global tendering process.
- (v) National Centre for Testing of Tractors and Off-Road Vehicles together with national facility for accident data analysis and specialized driving training in northern part of the country at Rae Bareilly in the State of Uttar Pradesh.
- (vi) National Specialized Hill Area Driving Training Center as also Regional In-Use vehicle management Center at Dholchora (Silchar), Assam.

II. Approved Funding Pattern

The investment of Rs. 1718 crore is proposed to be funded jointly by the Government and the Industry, based on recommendations of the Expenditure Finance Committee and the approval of the Government, in the following manner:-

A. Plan Support by the Government

By way of grant	:	Rs. 817 crore
By way of Cess Funds	:	Rs. 510 crore
By way of loan	:	Rs. 273 crore

B. User Charges to be

paid by auto industry	:	Rs. 118 crore
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Total Project Cost (A+B) : Rs. 1718 crore

III. Main Activities Undertaken

- **NATRIP Implementation Society (NATIS) Formed-** NATRIP Implementation Society headed by Secretary, Ministry of Heavy Industry & Public Enterprises involving all key stake

holders was constituted and registered on 27 July, 2005 to steer the project implementation.

- **Governing Council-** The Governing Council (GC) held its first meeting on 14 August, 2005, and set the ground for implementation. Since then the GC has held 26 meetings for guiding the project implementation.
- **The Corporate and Site Offices -** The Corporate office of NATRIP became functional from 5th Floor, Core 3 of Scope Complex at Lodhi Road from 30 September, 2005 onwards. The corporate office has now shifted to 3rd floor, Bhisham Pitamah Marg, NBCC Place, Pragati Vihar, Lodhi Road, New Delhi. Small site offices have also become operational at all the places where the project is being implemented.
- **Global Consultancy-** The consortium led by IDIADA of Spain was selected as Global Consultants for NATRIP on 5th November, 2005 and the Project Consultancy Agreement was signed between NATRIP and IDIADA led consortium on 27th January, 2006.
- **Topography Survey of Project Sites -** Based on detailed technical specifications for the survey as finalized with the assistance of Global Consultants, the topography survey of all project sites has been completed. The data from the topography survey has been provided to the Global Consultants as input for DPIR preparation.
- **Detailed Project Implementation Report (DPIR)-** was finalized and approved by the Governing Council of NATIS on 25th July, 2006. The DPIR spells out the technical architecture of the project focusing on analysis on test sites, outcome of market survey and preliminary facility sizing and the implementation schedule for various activities.
- **Preparation of Internal Processes & Procedures-** Based on the directions of the Empowered Committee and the Governing Council, in order to streamline the functioning and to optimize the efficiency of the project execution, consultants were hired for developing a robust system of budget and accounts, office procedures and procurement. These procedural manuals have been finalized and approved by the Governing Council of NATIS and DHI.



- **Annual Accounts of NATIS for the year 2005-06 & 2006-07** – The Annual Accounts for years 2005-06 & 2006-07, after approval by the Governing Council of NATIS and adoption in Annual General Meetings after the receipt of final report on the Audit of Accounts by the O/O C&AG were placed before both Houses of Parliament .
- **Annual Accounts of NATIS for the year 2007-08**– After statutory audit of accounts by a Chartered Accountant firm as per clause 89 of Memorandum and Rules of NATIS is complete, the Annual Accounts were approved by the Governing Council of NATIS in its 23rd meeting and adopted in the 3rd Annual General Meeting held on 31st July, 2008. The annual accounts and report after the receipt of final report on the certification Audit of Accounts by the O/O C&AG was placed before both Houses of Parliament in the winter session dated 15th December, 2008.
- **Annual Report-2008-09**- The Annual Accounts for 2008-09 have been completed and statutory audit has also been completed. The annual accounts for 2008-09 and annual report with the final report on the certification Audit of Accounts by the O/o C&AG would be placed before both Houses of Parliament in the winter session.
- **Geo-Technical Survey of Project Sites** – The Geo- Technical Survey of all sites has been completed.
- **Signing of MoU with Vehicle Certification Authority (VCA) of U.K Government** – NATRIP has taken a novel initiative by arranging an MoU between VCA and NATRIP for providing internationally valid certification for automotive exports for homologation services to be provided by the upcoming NATRIP centres. The MoU was signed on 27th October, 2006 and this would give a boost to the auto exports as well as save costs to the industry for getting internationally valid certification from recognized agencies outside India. To implement the MOU, a series of conclaves with the auto industry are being held.
- **iCAT Manesar recommended for IMS**
International Centre for automotive Technology (iCAT) Manesar, Gurgaon in Haryana has been recommended for integrated management System (IMS-ISO 9001:2008, ISO 14001:2007 and OHSAS 18001:2008) by TUV India Pvt. Ltd. in the month of August, 2009. These standards basically are Occupational Health and Safety. Being recommended for IMS means that its processes & practices comply with the spirit of these international standards.
- **MoU between Argonne National Laboratory and NATRIP**
NATRIP recently signed an MoU with the Argonne National Laboratory, located in Argonne, Illinois, under Prime Contract Number DE-AC02-06CHI1357 with the US Department of Energy, to cooperate in technical areas like engine combustion technologies hybrids, emission technologies etc. through information exchange of publicly available research data and collaborative visits, including staff exchanges. Topics would also cover electric drive vehicles, vehicle simulation models, motor vehicle fuels, mass transportation vehicles and identification of topics for joint research activities on economic and policy studies to evaluate and promote the commercialization of energy efficient transportation and clean transportation fuels.
- **Commissioning and handing over of EMC lab at VRDE, Ahmednagar** took place on 16th August, 2009 in the august presence of Hon'ble Minister, and Hon,ble Minister of State for Heavy Industries & Public Enterprises. The ABS Test Tracks are scheduled to be completed by March, 2010.



EMC Lab at VRDE, Ahmednagar



Under the Rs. 1718 crore NATRIP Project, which envisages setting up of world class modern testing, homologation and R&D centres at 7 locations across India, so far works have been completed for Rs. 498.28 crore and work is in advance stages at all sites to ensure completion in all respects by end of 2011.

IV. Likely Benefits of NATRIP

NATRIP is aimed at addressing one of the most significant constraints of Indian automotive sector and is, therefore, likely to provide a major impetus to manufacturing in India, significantly unlocking employment potential in this sector. Some of the key benefits expected from the project, inter alia, would be:-

- a. Availability of world class infrastructure to test vehicles and components against existing and emerging automotive standards expected to become mandatory till 2015, to significantly enhance vehicular safety, emissions and performance.
- b. Bolstering efforts of the Government to usher in global vehicular safety, emission and performance standards in India leading to modernization of industry.
- c. Convergence of India's strengths in Information Technology and electronics with automotive engineering, to expand India's global presence in this key sector.
- d. Deepening of automotive manufacturing in India, promoting greater value addition and thereby significantly enhancing employment generation in this sector.
- e. Enhancement of India's abysmally low global outreach in this sector by de- bottlenecking exports and making them more competitive.
- f. Facilitation and promotion of larger R&D efforts within India by not only Indian automotive industry but also by global automobile and component manufacturers who are expected to take advantage of this pre-competitive R&D infrastructure.

- g. Significant enhancement in current fiscal contribution of this sector to the general exchequer.
- h. Bringing about large savings out of annual outflow of around Rs. 180 crore being currently spent to test the exportable vehicles at overseas facilities.
- i. Significant contribution towards the cause of India's emergence as a global outsourcing base for automobiles and auto components in furtherance of Auto Policy.

India loses more than 1, 00,000 human lives every year in road accidents. These road accidents cost the national economy more than Rs. 55,000 crore annually as per an estimate by the Planning Commission. NATRIP aims to ensure better safety and performance profile of vehicles. Its cost would be more than fully recovered even if it helps to reduce road casualties by a small fraction.

Automotive sector is one of the largest employers in India. Its 1.30 crore employment can multiply with deepening of manufacturing and exploitation of export potential that NATRIP aims to achieve. Every six wheel truck creates employment potential of 13.3 persons, every passenger car of 5.3 persons and every two wheeler of 0.49 persons. Indian automotive industry is currently adding around 11 lakh employment potential every year at the existing level of growth as per an assessment made by experts. It has, thus, the potential of significantly scaling up employment generation provided basic constraints are addressed. NATRIP is in response to this crucial need.

The expected fiscal gains due to incremental buoyancy in automotive manufacturing in India are also substantive. An effort has been made to quantify some of these benefits, which will accrue to the country in combination with other progressive steps. While the entire incremental growth projections cannot be exclusively attributed to NATRIP, substantially large possibilities of growth are expected to emerge with the setting up of NATRIP infrastructure, which is seen by experts as one of the major catalyzing factors.



Indian Automotive Industry by 2010-11

Parameter	Current level	Projections by Working Group	Potential Indicated by Expert Reports	Incremental possibilities, <i>inter alia</i> , due to NATRIP
Investment (US\$ Bn)	12	17	28	11
Turnover (US\$ Bn)	32	56	108	52
Exports (US\$ Bn)	3	3	32	29
Employment (Million)	13	16	38	22

Incremental Fiscal Advantage: It is expected that due to buoyancy in automotive manufacturing, Excise duty collections will go up from Rs. 12,500 crore in 2002-03 to Rs. 30,000 crore and Sales Tax realization from Rs. 9000 crore to Rs. 22,000 crore by the year 2010-11.

IV(A). Research & Development and Technology Upgradation

NATRIP Centers will not only cater to the requirements of global automotive test standards but will also house several "Centers of Excellence" for advanced research in emerging areas of technologies. "Centers of excellence" will also facilitate utilization of India's strengths in IT and electronics to catapult the Indian automotive capabilities into the next generation.

The advanced Research & Development centers of excellence planned under NATRIP are as follows:

- 1) **Manesar Centre**
 - a. Materials
 - b. Noise, Vibration and Harshness
- 2) **Chennai Centre**
 - a. Passive Safety
 - b. Electro magnetic compatibility
 - c. Infotronics
- 3) **ARAI, Pune**
 - a. Fatigue
 - b. Power train
 - c. Materials
- 4) **Indore Proving Grounds**
 - a. Vehicle Dynamics

NATRIP facilities will cater to the complete process of development of new components including:

- I. Research strategy: markets targeted and investment/outourcing of R&D Activities
- II. Concept development: styling, design and engineering.
- III. Product development: materials and prototyping.
- IV. Industrialization: cost reduction, quality improvement.
- V. Product life: quality and fatigue

All NATRIP R&D test centers will have world class test facilities and also aim at attracting customers from various parts of the world. The centers will also be involved in advanced research in the areas mentioned above and will have collaboration in technology up gradation.

An accident data analysis centre coming up at Rae Bareilly centre will provide training to the police and other relevant stakeholders in data collection and analysis. This centre would also involve in accident reconstruction, cause analysis and assist in taking corrective actions.

The in-use vehicle management centre and hill driving training centre coming up at Silchar would help in developing safe in-use vehicles and safe driving.

5.1.2 R&D INITIATIVES BY THE CPSEs

Some of the other major programmes of technology up gradation and R&D efforts of the Central Public Sector Enterprises under the Department of Heavy Industry are detailed below:

(1) Bharat Heavy Electricals Ltd. (BHEL)

During the year, a turnover of Rs. 5571 crore was achieved by commercializing products and systems developed through in-house R&D. Credit for products and systems which have been commercialized during the last five years only has been taken.

An amount of Rs. 690 crore was spent on R&D activities. Of this, Rs. 677.3 crore was spent on revenue expenditure, focusing on new product and system developments and improvements in existing products for cost effectiveness and



higher reliability, efficiency, availability, quality etc. In addition, an expenditure of Rs. 12.7 crore has been incurred for purchase of capital assets for R&D.

Some significant developments carried out during the year are as follows:

- Consistently offering tailor-made designs to suit customer needs, BHEL has developed a new design of a Steam Turbine in the 120-150 MW range. Apart from reduced manufacturing cycle time, the new Single Cylinder Reheat Turbine offers improved load efficiency with a compact design leading to reduced installation costs.
 - Extending the range of exciters for meeting customer requirements, a more reliable Brushless Exciter with Permanent Magnet Generator has been designed, developed and manufactured for 250 MW Turbo Generators. The new exciter offers benefits like reduced manufacturing cycle time, better dynamic behavior and more efficient site operation.
 - Following successful testing of in-house developed 320kN/420kN HVDC Disc Insulators at STRI, Ludvika, Sweden, BHEL has become the sole manufacturer of such insulators in the world. Also to augment its range of disc insulators for meeting customer requirements, BHEL has developed 800 kV Hollow Insulators for the first time in the country. These insulators will be used in 765 kV Ultra High Voltage AC transmission systems.
 - State-of-art controllers for Electrostatic Precipitator (ESP). These controllers are capable of handling multiple inputs for generating necessary feed back signals so as to optimize ESP operation, minimizing the dependence on operator's intervention and ensure consistent performance.
 - As part of its endeavour to establish technology for the entire spectrum of products for supercritical power plants, BHEL has designed and developed a deaerator for 1,000 MW power plants.
- This in-house development will not only address the emerging need for supercritical equipment but also result in substantial savings by eliminating the need for a technology tie-up with an international player.
- To address the demand and technology trend for compact, economical and more efficient 2-cylinder turbines, BHEL has developed a combined HP-IP module to cover the range of 500-650 MW TG Sets. The development of this module will enable BHEL to offer a technically more competitive design, enhancing its business potential in the output range of 500-650 MW with sub-critical parameters.
 - Developed technical expertise and demonstrated for the 1st time, islanding operation with 3 units of 120 MW rating simultaneously for captive power plant customer. This development addresses availability of power and enables customer to avail un-interrupted power from the captive plant in the event of grid failure.
 - Developed design for Radial Fan (BAB1 series-NDV 20 BAB1) for FD application. The Fan is backward aerofoil bladed one, having higher efficiency compared to plate bladed design.
 - Aimed at significantly reducing erection cycle time in hydro projects, BHEL has developed a new compact design of site welded stay ring for hydro turbines which gives multiple advantages like 45% weight reduction for medium/high head stay rings and permits accommodation of semi-umbrella bearing arrangement in the limited space in underground caverns. This concept can also be applied in large size projects.
 - In a bid to enhance reliability of its boilers for the benefit of its customers, BHEL has established a supercritical test advanced research facility to conduct heat transfer studies at super critical pressure conditions. This facility is also capable of analyzing ultra supercritical boiler



requirements being considered worldwide for economical power generation. The facility will cater to the technology requirement of supercritical boilers in India for the next two decades.

- Established a new “Magnetically Impelled Arc Butt (MIAB)” automated welding process capable of welding irregular or non-circular components as circular. This is a new development and apart from improving process efficiency, it will also result in a low distortion welds, free from inclusions and impurities.
- As its contribution to the armed forces, BHEL has developed a compact 2.4 TPD RO-based desalination plant skid (water filtration system suitable for sea water) for Indian Navy submarines.
- BHEL has achieved the unique distinction of becoming part of an elite group of few companies who possess ‘PTFE Bonding Process’. This technology is used for lining pads of thrust bearing for hydro generators.
- As a capability building initiative, BHEL has successfully developed new in-house compact design of “1326 KVA, Transformer for 3 Phase IGBT based Electrics for EMU”. The development has improved “output to weight” ratio, an important criterion for the equipment. BHEL has also successfully completed in-house design of ‘Development of Thermal cycle for new rating 600 MW power plants’.
- BHEL has successfully completed for the first time “PG Test scheme and Method for computation of Heat Rate for BHAVINI 500MWe PFBR project’. The development will lead to reduction in engineering cycle time for Nuclear power projects.

National Level Institutes for R&D in BHEL

(a) Ceramic Technological Institute (CTI), Bengaluru.

The objective of this project is to support the Indian Ceramic Industry in modernizing its technology and to develop new products of



For the first time in the world, BHEL has developed and successfully type-tested 320 kN & 420 kN Disc Insulators for \pm 800 kV HVDC Transmission Lines

advanced ceramics. Areas of research at CTI relate to Nano-technology, Separation Technology, Microwave Processing, Plant related Investigations and special projects. The Institute has been working closely with some of the major international organizations namely Max Planck Institute, Germany; University of Utah, USA; and NIFS, Japan. Some of the major developments at CTI are Cordierite kiln furniture, Ceramic armour, Ceramic Honeycomb for Catalytic Converter, Diesel Particulate filter and Ceramic Grinding media. Major ongoing R&D efforts are on Porous Ceramics for Industrial water treatment, Membranes for gas separation and particulate A, Composite Insulators with Nano-additives and Nano material synthesis, new processes of fabricating Ceramic filter candles with integral collars. CTI has also established Has-fired Spray Pyrolysis System for the Synthesis of nano-sized & Porous Ceramic Powders and Burst strength test facility for Ceramic filter candles.

Several developmental projects are under various stages of execution e.g. Drying of Station Post Insulators & sintering in large volume by Microwave processing, development of novel materials and membranes for carbon di oxide Capture.

(b) Centre for Electric Transportation (CET), Bhopal

The project for development of Electric Transportation Technology was approved by the Govt. of India and United Nations Development



Programme (UNDP) in July, 1988. The capabilities in the Centre have been developed to analyse and test all aspects of electrically powered vehicle designs to improve their performance, reliability and efficiency.

Some of its achievements include Combined System Testing of Cape Gauge DEMU for ANGOLA, Type Test on Traction Motors for IGBT based 3 phase drives for ACEMU, Combined System Testing of MG DEMU, Combined System Testing of GTO based 3 phase drive system for 1500 V DC/25 kV AC dual voltage EMUs for Railways, Combined System Testing of IGBT based 700 HP Diesel Electric Locomotive, testing of import substitute traction alternator for 4000 HP Diesel electric locomotive for Indian Railways.

(c) Pollution Control Research Institute (PCRI), Haridwar.

Pollution Control Research Institute (PCRI) was set up by Department of Heavy Industry with Bharat Heavy Electricals Ltd., (BHEL) as the lead agency under United Nations Development Programme (UNDP). The objectives of PCRI are environment management and pollution control in the areas of water, noise and solid waste management. The institute is recognized as an Environmental Lab under Environment Protection Act 1986 by Central Pollution Control Board, Ministry of Environment and Forests, Govt. of India and a number of State Pollution Control Boards. The Institute has undertaken a number of R&D projects to develop industrial pollution control technologies, such as Phytoremediation of dust from ambient air through selection of plant species, Preparation of environmental guidelines for religious places in India, Effect of mass bathing on river Ganges and Kshipra during Kumbh mela in Haridwar and Ujjain, River water quality assessment for Ganges and Western Yamuna Canal at selected stretches, assessment of heavy metal emission from thermal power plants, etc. Major R&D projects in hand include characterization of effluents from thermal power plants, and development of advance facilities for microbiological analysis, Assessment of water quality of river in Kumaon region of Uttarakhand,

Assessment of water quality of river in Kumaon region of Uttarakhand, Assessment of fugitive emissions and development of environmental guidelines for control of fugitive emissions in Thermal Power Plants.

As part of capacity building and resource development training programmes are being organized regularly for the officials of State/ Central Pollution Control Boards and major industries. A number of training programmes in the field of Environmental Impact Assessment Studies, Water Quality Monitoring Network Design and quality Assurance, Air Quality Monitoring Network Design and Quality Assurance, Municipal Solid Waste Management have been conducted by PCRI in association with CPCB in the past.

The Institute is playing a vital role in performing year long comprehensive Environmental Impact Assessment Studies for setting up large size industrial projects like thermal power plants, petroleum product pipelines and oil terminals etc. On going EIA studies include Suratgarh Stage, V.Chhabra, Stage-II, Giral Stage-II, Ramgarh Stage III of RVUNL, Obra C, Panki of UPRVUNL, Bara and Karchhana of UPPCL, Wanakbori Unit 8, Sinor and Sarakhadi of GSECL, Nuclear fuel processing plant of BARC.

PCRI is also actively involved in setting up of Environmental and Chemical laboratory for various thermal power plants as part of total package being supplied by BHEL. Recently PCRI established environmental laboratory for Bellary I, and Santaldih Unit 5. Order in hand/execution for various thermal power plants includes Chandrapura unit 7 & 8, Mejia Phase II, GIPCL, DSTPS, Durgapur, Hazira, Koderma, Anpara D, Pipapay, OTPC, North Chennai and Avantha Bhandar.

(d) Welding Research Institute (WRI), Tiruchirapalli.

Welding Research Institute (WRI), the only one of its kind in the country, is equipped with state-of-the-art welding research facilities like electron and laser beam, flash butt, friction and plasma welding in addition to facilities for conventional arc welding. Further, it has advanced testing



facilities for fatigue testing, residual stress measurement, residual life estimation etc. The Institute has been providing services to ISRO, Indian Railways, Defence and Industry in Public and Private sectors. The Institute maintains close contact with various national and international level associations/organizations, major customers, and researchers to share and publicise developments in welding related fields. It also conducts Skill Development Program for welders with the assistance of Department of Science & Technology (DST), Govt. of India. The Institute is an approved centre for training & testing of Welders as per Central Boiler Board, Govt. of India. The Institute conducts training/certification programs for practicing Engineers & technicians in welding & non-destructive testing on a regular basis.

Major ongoing R&D projects executed by WRI include: Cold wire addition in SAW used for Ring header fabrication, Development of HVOF & Wire Spraying Technology for boiler components, Tandem twin wire SAW for thick section welding, development of fabrication procedures in new materials for Super critical and Ultra Super Critical Boilers, Development of Friction Stir Welding Technology, established a new "Magnetically Impelled Arc Butt (MIAB)" automated welding process capable of welding irregular or non-circular components as circular, development of Robotic Time Twin Technology, etc. Development of Orbital GMAW/FCAW technology for welding boiler and turbine piping at site is another important development which is under execution.

(2) Bharat Heavy Plate & Vessels Limited (BHPV)

The following are the achievements of R&D during April to September, 2009:-

- a. Fabrication, testing and supply of Compact Heat Exchangers for Series Production (SP) of Tejas aircraft for M/s. HAL, Bangalore, is in progress. Successfully fabricated tested and supplied 9 Nos. of Compact Heat Exchangers worth Rs. 104.83 lakhs and supplied to M/s HAL, Bengaluru.
- b. Fabrication, testing and supply of 10 Nos. of

Precoolers and 8 Nos. of FADEC Coolers for ADA, Bangalore. Supplied 1 No. Precooler and 2 Nos. of FADEC Coolers worth Rs. 26.35 lakhs to ADA, Bengaluru.

- c. Type Approval for precooler, was accorded by Centre for Military Airworthness & Certification (CEMILAC), Bengaluru in the month of September, 2009.

(3) Tyre Corporation of India Limited (TCIL)

Presently, company is undertaking 100% job work on behalf of other private tyre manufacturers. Tyres are manufactured as per specifications developed by the jobbers through their R&D initiatives.

TCIL have successfully implemented the norms and standards fixed by the jobbers in respect of MOU signed. Company have also developed new patterns of tyre as desired by the different customers.

TCIL has established a quality management system that is in compliance with the International Quality System Standard ISO 9001:2000.

(4) Rajasthan Electronics & Instruments Limited, Jaipur (REIL)

In current competitive business environment, innovation and product improvement clearly aligned with business strategy through quality Research and Development (R&D) is the key driver of break through growth. In this context, Company's Research & Development department which is recognized by Department of Scientific & Industrial Research, Ministry of Science & Technology is taking care of customer's specific requirements and providing them with the customized solutions to meet the same. Besides development of new products, the R&D has been providing Engineering support to various internal agencies in respect of existing products and processes.

(5) HMT Limited

HMT has established R&D centres in all its manufacturing units to meet the needs of research & development of different products, with a focus to improve product technology and enhance product competitiveness.



R&D has been a focus area for the company in its endeavour to serve the customer better and to improve productivity. R&D activities are carried out in each subsidiary with particular reference to customer needs in product technology, quality, reliability and price competitiveness. Upgrading the existing products with additional features, design optimization and improvement in aesthetics are the major thrust areas. The initiative has resulted in many new products and also up-gradation of existing products.

Highlights of R&D activities carried out/planned in the different product areas of HMT's domain are as below:

(6) HMT Tractors:

- Development of HMT 6522 Tractor model with new features has been done.
- HMT Tractors Engines are being developed by M/s ARAI, Pune to meet tractor emission norms Bharat (Trem) stage III A for 25-50 HP which will be applicable from 01.04.2010 and for 50 HP & above from 01.04.2011.
- Development of power steering in Tractor model 3522 FX.
- Tractor model 4022 EDI with portal and hydraulic brakes developed.
- Tractor implement like Rotavator is being developed.

(7) HMT Machine Tools Limited

The company commissioned 3D CAD software package in Design and Development departments of all the manufacturing units and Finite Element Analysis (FEA) software package for R&D centre in Bengaluru.

Product Development

- NC Version Surface Grinder, Model: SFWNC 1.
- Heavy duty CNC Lathe, Model: HDL 70/7000.
- Angular wheel Head Grinder with traversing table, Model: GNC 20/1000.
- Vertical Machining Centre for Tool Room & Training centre.

- SBCNC30 for Billet machining with Gantry automation.
- 4-Colour Printing Machine with pneumatic controls Model: SOM436.
- CNC Universal cylindrical Grinding Machine for External & Internal Grinding with multi dia inprocess gauging for OD Measurement.
- CNC heavy duty double Disc Grinding with wheel spindle sleeve movement.
- CNC Heavy Duty Internal Grinding Machine (Bore dia 300mm, bore depth – 200 mm).
- CNC Heavy Duty Cylindrical Grinding M/c. (Swing dia 840mm,centre distance – 3000mm and job wt 2 Ton).
- Mill turn centre – ABC – 5200mm. (Swing over top plate - 900 mm, Main spindle power- 90KW, Milling Spindle power – 55KW).

(8) HMT Watches Limited

51 new Watch models were designed & developed during the year.

(9) HMT Chinar Watches Limited

During the year CNC machines were inducted in the production line thereby upgrading facilities in manufacturing of some key components like Watch Cases.

(10) HMT Bearings Limited

The focus of R&D at HMT Bearings is to progressively achieve self reliance in product technology and to upgrade the existing products with additional features. The access to bearings life testing facilities for new/custom-built Bearings available at Pune indigenously now is facilitating quick testing and avoids long cycle of field trials of new products/applications.

(11) NEPA Limited

The R&D of the company is registered with DSIR and remains the heart of the organization. R&D work undertaken at Nepa Ltd., has given a new dimensions to the company. Earlier NEPA was manufacturing economy quality newsprint with furnish mix of Old Newspapers and Exercise Note Books, Standard quality with furnish mix



of over issue (imported) Newspapers and Exercise Notebooks in combination with bleaching chemicals. After several in-house R&D experiments, plant trial of the same proved fruitful and presently Nepa is manufacturing economy quality newsprint solely with old newspapers (without exercise notebooks) and Standard quality newsprint with old newspapers and bleaching chemicals only, thus, saving on cost of exercise notebooks which are very costly.

White water diversification also added to the improvement of brightness of newsprint from a brightness range of 39-42% to brightness 42-44%. This gave not only improved brightness but also excellent machine runnability and customer confidence in Nepa newsprint. The other benefit of this method is saving in consumption of additives like Defamer, Slimicide and Sulphuric acid.

12. Hindustan Paper Corporation Limited (HPCL)

i. Research & Development (R&D) at NPM & CPM:

Applied R&D activities undertaken on

- ● Desilication of black liquor at different concentration levels.
- ● Study effect on sizing properties and shade of paper by substituting non-ferric alum with spent sulphuric acid.
- ● DAP optimization to reduce load in effluent.
- ● Defoamer of high PH to reduce foam.
- ● Utilisation of screw press rejects to recover fibre.
- ● Stationery screening to arrest drainage of high solids from Paper machine quarternary rejects at NPM.

ii. R&D at Hindustan Newsprint Ltd (HNL).

Specific areas in which R&D carried out

- ● Study of Grade wise waste paper delinking in comparison to conventional delinking.
- ● Use of Direct Borohydride Injection for colour stripping of Recycled fibres.
- ● Ground water quality assessment in mill neighbourhood area

iii. Technology Absorption, Adaptation & Innovation at NPM & CPM

- Efforts made towards technology absorption, adaptation and innovation
- Manufacture of high brightness paper with alternative sizing additives, brightening and whitening agents.
- Wash aid chemicals trial to reduce soda loss and foam formation.

Benefits:

- Use of high potency additives like optical whitening agent, high brightness talcum powder, pigment dyes helped enhance brightness level to 87-88%.
- Laboratory scale trial taken – results encouraging.

(13) Heavy Engineering Corporation Ltd.(HEC)

Specific areas in which R&D activities were carried out by the company are detailed below:

(i) 450 T Crane for BSL, Bokaro:

450+100/20T, 19m span and 450+100/16T, 25m span hot metal holding cranes with highest hoisting speed as per IPSS alongwith Variable Voltage Variable Frequency control developed for BSL, Bokaro. Down Shop Lead (EOT crane power source) is equipped with 3.3 KV festoon cable to have safe maintenance and operational work. Controls System of the Crane will be operated at 690V/415V as such two transformers is fitted on the Platform to convert 3.3 KV to 690V and 415V. To accommodate 30m long VVVF Control Panels, Crane has to have Double Decker Platform. In addition, first time, motorized wire rope lubrication and automatic rail lubrication systems are being provided which will enhance the life of wire rope and wheel. Crane should also have additional features like Main Hoist (450T) with double drive to ensure continuous operation, emergency disk brake on both rope drums to avoid accident in case of failure of either drive brakes or output shaft of rope drum, and load cell for weighing liquid metal.

Crane with such features has been designed and developed for the 1st time in India.



(ii) **15+15T,28m Span Grab and Magnet Trolley Crane for BSL, Bokaro:** The crane has two trolleys which move at the same level with laser operated anti collision device to avoid collision. One trolley has circular magnet of 1.6m Dia for handling scrap which will be operated through positive driven Cable Reeling Drum (CRD). Other trolley will have 2.5 CuM Grab for handling Coal and the hoist mechanism of this trolley has two drums for closing and opening as well as hoisting/lowering of Grab. All the mechanism is having thyristor control for achieving micro speed. Pressurized and ventilated wide girder box (2.6m high and 2m wide and 29.5m long) has been designed for this crane and all the control panels are placed inside these pressurized girders.

(iii) **Special Steel Forging for BARC:** HEC developed heaviest size ingot (120T) of ultra clean quality, highly controlled impurities and gaseous elements controlled to extremely low levels. Material was forged, heat treated and qualified by destructive and non-destructive tests. For development of this forging, HEC has developed many innovative technological solutions to achieve the desired results with the facilities available with them. Some of these were (i) making the liquid steel in batches from the available melting furnaces, (ii) refining of liquid steel in batches from the limited capacity of VAD furnaces available with them, (iii) Control of harmful gaseous elements like Hydrogen, during each stage of steel making which typically included refining of steel at very low level of vacuum, (iv) use of technology of partial upsetting of the heavy ingot to be able to work the metal with available press upsetting of the heavy ingot able to work the metal with available press capacity, and (v) Development of heat treatment technology and achieving the uniform metallurgical and mechanical properties across large section thickness.

(14) **Instrumentation Ltd. (IL)**

During the last ten years or so the company has been laying emphasis on applied R&D activities as basic R&D in Control & Instrumentation can not be extensively introduced because of insistence of "proven technology" by the end

users, which are large process industries. However, various products such as Electronic Ballast's Light sensing Switching devices, high capacity control valves, compact spring loaded actuators and their variants, pressure balanced control valves with quick change trim (which can withstand temperature up to 500 o C), Defence items like Nose Fuze, RPL Dosimeter reader, Firing device etc., have been developed. All these are additions to the product range.

The Palakkad Unit has developed Bellow Sealed Valve, which is an important control element for Nuclear Power application. The unit received import substitution award from DGTD for this.

In earlier years, the Kota Unit for following products has received Import substitution award:

- Solenoid Valves for nuclear applications
- Throw-away thermocouples for measuring molten metal temperature
- Miniature Electronic Indicators

IL has developed technical competence through enhanced R&D activities and development of engineering capabilities towards further improvement in products and also to reduce dependence on imported technology. IL developed special solenoid valves and flow nozzles, which have been widely used by Narora, RAPP & MAPP units of Nuclear Power Corporation.

(15) **Bharat Pumps and Compressors Ltd.(BPCL)**

Company is committed to cope with technological and engineering up gradation, required for increasing market share in all its product range. The progress made in some important areas of technology up-gradation, design and development during the year 2008-09 are as follows:-

- Engineering work for stepless capacity control system, named as Hydrocom, for the first time which will be fitted in 4HF/ 2 compressor being supplied to CPCL, Chennai Euro IV Project.
- Electrical engineering activity for procuring purging kit required for 450 KV motors for M/s RCF, have been successfully completed for the first time in consultation with customer, motor vendor and panel vendor.



- For enhancing our engineering capabilities, M/s EIL has authorized our Electrical Design for approving drawings/documents of motors up to 160 KV rating resulting in saving of appreciable approval time.
 - Design and development activities have been upgraded by acquiring HTRI software for thermal design & rating of shell and tube heat exchangers.
- (16) Burn Standard Company Limited (BSCL)**
The Company has entered into an agreement with CGCRI for collaborative research for upscaling of Alumina Mag. Carbon and Mag. Alumina Bricks for enhancement of the number of heats in Steel Ladle and Rotary Kiln in Cement Plants. Besides this, the wagon-manufacturing units have also developed infrastructure to manufacture stainless steel wagons for Indian Railways.
- (17) Braithwaite & Company Limited (BCL)**
BCL is trying to develop/refurbish existing infrastructure for manufacture of stainless steel wagons for the Railways and also wagons for private sector and overseas customers. BCL is also entering into its non core area of operation like Bridge Girder fabrication, Column structure manufacturing, civil structure, Crane manufacturing with technology upgradation etc.
- (18) The Braithwaite Burn & Jessop Construction Company Ltd.(BBJ)**
Besides its usual technology base, in the field of construction of steel bridges including Cable Stayed Bridges, the company has developed an effective Erection Scheme to replace old early steel bridges in a very short time with newly fabricated girders during block period on running line. This newly developed scheme has been successfully applied in Eastern Railway Project. Recently, BBJ had developed forward launching of 60M/450MT Trussed Bridge which was successfully used in DMRC project.
- (19) Bharat Bhari Udyog Nigam Ltd., (BBUNL)**
It is an ongoing process for retaining the Group's leadership position in business environment. Salem Works of BSCL is endeavouring to develop low cost Magnesium Carbon Bricks and high Alumina Magnesium Carbon Bricks for ladles impact zone, low cost Magnesium Chrome Bricks for different applications and Magnesium Chrome spinnel based induction furnace ramming mass. Besides, the wagon manufacturing companies have already developed manufacturing of stainless steel wagons for Indian Railways and also wagons for private sector and overseas customers. BBJ is endeavouring to diversify into infrastructure development and other related areas.
- (20) Cement Corporation of India Ltd.,(CCI)**
The operating plants of CCI have well established laboratories where all physical and chemical testing of raw materials and product aimed at maintaining/improving quality & operational parameters is carried out on regular basis. Technology upgradation of Tandur unit and expansion of Bokajan (which encompasses technology upgradation of the unit) has been taken up for implementation as a part of sanctioned scheme.
- (21) Hindustan Photo Films Mfg.Co. Ltd. (HPF)**
R&D activities were carried out on new product development, product/process improvement, technology up gradation, import substitution and cost reduction. Company's requirements with respect to 14 Speciality Chemicals were met by manufacturing the same at Organic Synthesis Unit resulting in cost savings of Rs. 63 lakhs. With know-how developed at R&D, Industrial x-ray with further low coating weight and Medical x-ray (Blue) on a large scale with low coating weight were commercialized.
Plant trials are in process for Medical Imaging Film (Panchromatic), Digital X-ray Film, Polyester Subbed Base, Inkjet Paper, Laser Printer Film and Graphic Arts Red Laser Scanner Film and these products will soon be commercialized.
- (22) Engineering Projects (India) Ltd.,(EPI)**
The Company continues its endeavour to apply and absorb latest technology development and innovation in its operations which are taking place in different areas of its business. As a turnkey project executing organization, EPI aims to organize its design and engineering activities



with the goal of developing Indian capabilities, materials and methods to meet the challenge of advancing technologies. The activities are focused to improve performance and efficiency in product cycle like achieve cost reduction while adopting advanced technologies. Specific emphasis is laid on evolving improved features of design and use of materials under Indian conditions coupled with reducing dependence on import.

EPI is exploring possibilities for collaboration/ association with renowned technology providers/consultants in the following fields:

- a) Mass Rapid Transit System.
- b) Nuclear Power Projects
- c) Desalination Plants
- d) Oil & Petrochemical Projects.

(23) Bridge & Roof Company (India) Ltd.(B&R)

The Company has been continuously pursuing to update technology and upgrade quality standards along with R&D efforts to the maximum extent applicable.

The Company has taken up the programme for updating of Quality Management System. The Company has already been awarded ISO 9001: 2000 Certificate in Tank Construction and Manufacture of Bailey Bridge and Wagons. The Surveillance Audit has been carried out successfully periodically by External Auditor M/s. DNV.

(24) Scooters India Limited (SIL)

Product Development:

- Development of 3-Wheelers for application in CNG and LPG operating mode using Greaves G-400 WG water-cooled engine.
- Development of diesel 3-wheeler using Greaves G-435 A-III air-cooled engine.
- Upgradation of existing models of 3-wheelers to conform to the BS-III emission norms applicable from April, 2010.

Technology Upgradation:

- Implementation of system/sub-systems

identified for improvement through design and process changes for the No Problem Vehicle concept, under the Jagriti Project. Components include welded chassis frame, welded front fork, exhaust system, oil-dipped clutch sub assembly etc.

- Improvement in design features through collaborative working through EOI; Components include control cabled, shock absorbers, front facia, complete clutch assembly etc.

(25) Andrew Yule & Company Limited (AYCL)

The main focus of in house R&D facilities in the Company is to provide continuous upgradation of existing products to match the domestic market as well as to grab the opportunity in export market. Their task includes new product development, product extension and revalidation of the test certificates for the upper ranges to be followed up by prototype development and commercialization. The Company's R&D set up has been recognized by the Department of Scientific and Industrial Research. Some of the R&D activities carried out by the Company's different Divisions were as follows:-

Specific areas in which R&D was carried out by the Company:

- (a) Engineering Division has developed the following accessories of Industrial Fans-
 - 10 1/2" Pressure fed White Metal Bearings.
 - Inlet Silencer size 700 X 2100 mm, 1500 x 6000 mm and 600 x 1800 mm.
- (b) Electrical Division has carried out R&D activities in the following areas:
 - Design upgradation & testing of 1600 Amps 11 KV Indoor VCB.
 - Design upgradation for 33 KV PC VCB.
 - Validation Test for Yule HEAG make 11 KV, 20KA, 630A outdoor VCB for capacitor bank switching test.
 - Re-Engineered Design of 12 KV VCB Indoor Panel for reduced width and distinct compartmentalized enclosure for Internal Arc suitably.



- ● Re Engineered Design of 36 KV outdoor VCB for making provision of SF6 Gas filling.
- ● Re Engineered Design of 36KV outdoor VCB for value Engineering & adopting ABB Interrupter.

(26) Fluid Control Research Institute (FCRI), Kerala

Fluid Control Research Institute (FCRI) is a premier facility in flow measurement related services and solutions. The Flow Centre at FCRI hosts traceable International standards for flow measurement, which are the most comprehensive set of flow facilities in the world and provide a unique resource for industry in India. All of the facilities are open for calibration, evaluation and R&D activities.

FCRI has developed strong links with the oil & gas sector, water industry, power industry, process/manufacturing sector, automotive sector, R&D organizations etc. by undertaking joint projects, providing quality services etc. FCRI conducts regular seminars, workshops, online training and conferences on practical aspects of flow measurement for industry/academic institutes which are considered as high rated knowledge support to the beneficiaries.

The Institute undertakes sponsored R&D projects and as of now has completed nearly 130 projects making it one of the specialized fluid engineering research Institute dedicated to approved technological services such as consultancy, testing, certification and training for private and public sector organizations.

The Institute acts as a National Certifying body for flow measuring systems/electronics and instrumentation. It facilitates acquiring quality conformance as per the norms of ISO 9000/ISO 17025 series.

FCRI has the following accreditations from National/International agencies for its facilities:

- ● NABL accreditation in the field of Fluid Flow Measurements (Calibration & Testing), Mechanical Measurements & Electrical – Thermal Measurements
- ● NMI, Netherlands has certified that the Quality System, Calibration and Flow

Measurements carried out at Closed Loop Air Test Facility (CLATF – 20 Bar, 400m³/h) of FCRI complies with the criteria for calibration laboratories according to ISO/IEC 17025

- ● Bureau of Indian Standards (BIS) has recognized FCRI for testing samples of products under BIS Certification mark scheme.
- ● DST & DSIR have recognized FCRI as an R&D Institute for Flow Measurements.
- ● Dept. of Weights & Measures, Ministry of Civil Supplies has accredited for “Model Approval” of volume measuring instruments and flowmeters for Hydrocarbon Industry for Oil & Gas custody transfer as per OIML Standards.
- ● Chief Controller of Explosives, Nagpur has approved FCRI for testing safety relief valves.
- ● Underwriters Laboratory, USA has approved FCRI for testing fire fighting equipments & product safety certification.
- ● Ministry of External Affairs (ITEC) & Deptt. of Economic Affairs, Ministry of Finance (Colombo Plan) have authorized FCRI for conducting technical training programmes for foreign national.
- ● Central Pollution Control Board has approved FCRI for certification of Petrol, Kerosene & Diesel generator sets for type approval for compliance to noise limits.
- ● GCAS Quality Certification for ISO 9001:2000.

FCRI has completed more than two decades of dedicated service to the Industry and continues to be on its path to achieve greater heights and provide better and prompt services to its ever growing customer base.



Chapter 6

Welfare of SC/ST/OBC/ PWDs and Minorities

- 6.1 This Department is highly conscious regarding obligations of Central Public Sector Enterprises to promote the welfare of minorities in the light of Government's directive on this subject. Instructions issued by the Government in respect of reservation in appointment/promotion for SC/ST/OBC, handicapped persons and minority communities are followed by CPSEs under the Department.
- 6.2 An SC/ST Cell has been functioning under the supervision of a Liaison Officer of the rank of Director/Deputy Secretary for proper monitoring of the implementation of reservation policy of Government of India. This Cell is also responsible for conducting annual inspection of reservation rosters of the CPSEs. The work force in the CPSEs consists of a large number of persons from different minority communities. Their integration into the mainstream workforce is emphasized in all CPSEs and there is no discrimination on account of their caste, creed or religious beliefs. In terms of facilities like residential accommodation etc. all employees are treated at par.
- 6.3 Every year, Qaumi Ekta/Sadbhavna Diwas is organized where people from all sections of the society including women and children participate to stimulate the spirit of oneness, national integration and harmony.
- 6.4 All operating CPSEs under this Department have been advised to comply with the provisions of the "Persons with Disabilities" (Equal opportunities, Protection of Rights and Full participation) Act, 1995. Most of the CPSEs under the Department of Heavy Industry are sick/incurred losses resulting in very limited recruitment in the last few years. Nevertheless, CPSEs are keeping these instructions in view whenever recruitment is made.
- 6.5 Efforts are made by the CPSEs to follow the instructions issued by the Government from time to time to promote the welfare of persons with disabilities. Persons with disabilities are provided facilities like special conveyance allowance, ground floor residential accommodation, exemption from payment of professional tax, to and fro transportation facilities, provision of medical equipments and general medical assistance. The visually handicapped persons are provided Braille symbols and are engaged in running telephone booths, repair of cane chairs etc. Special Schools are being run for mentally challenged children & visually handicapped persons. These facilities are being provided to enable them to discharge their duties and facilitate their integration into the mainstream workforce.



Chapter 7

Empowerment / Welfare of Women

- 7.1 Department of Heavy Industry and the CPSEs under its administrative control constantly endeavour to ensure that there is no discrimination against women on any count. All members of the staff are made conscious of the principles of gender mainstreaming and gender justice enshrined in the Constitution of India.
- 7.2 In order to create awareness regarding human rights especially of female employees, in accordance with the directions issued by the Government for the preservation and enforcement of rights to gender equality and justice to working women employees, a Complaints Committee has been constituted in this Department for redressal of complaints related to sexual harassment of women. Department actively encourages women employees to freely participate in all activities like meetings, seminars, competitions and training etc. This helps in ensuring their integration into the mainstream work force.



Chapter 8

Vigilance

- 8.1 Vigilance activity is an essential requirement of any organization. The Department has a Chief Vigilance Officer of the rank of Joint Secretary to look into complaints against the employees of the Department as well as Board Level Officers of the Central Public Sector Enterprises and Organisations under its administrative control. He is assisted by a Director and one Under Secretary along with a Vigilance Section.
- 8.2 The main areas of work of Vigilance Section are:
- Dealing with complaints against Board level appointees of CPSEs as well as the officers of the Department of Heavy Industry;
 - Issue of vigilance clearance in respect of Board level appointees in CPSEs and all other appointments based on PESB recommendation requiring ACC approval;
 - Liaisoning with CVC, CBI and CVOs of CPSEs under DHI to streamline flow of information in respect of vigilance matters;
 - Tendering advice on issues of financial and procedural irregularity;
 - Vetting charge sheet in respect of charges against Board level appointees.
- 8.3 The vigilance Organization also lays emphasis on preventive vigilance and is promoting the use of IT to bring about greater transparency. Even punitive measures are also taken in appropriate cases and followed up wherever required.
- 8.4 Vigilance Section is responsible for Monitoring & completion of Annual Confidential Reports of officers and staff of the Department and also of the Board level appointees of CPSEs under the administrative control of this Department.
- 8.5 Vigilance Section also monitors submission of Annual Property Returns by officers and staff of the Department of Heavy Industry as well as Board level Officers of CPSEs under Department of Heavy Industry.

Chapter 9

Progressive Use of Hindi

Hindi Section of the Department of Heavy Industry takes up measures to promote use of Official Language in the Department. The efforts to promote the use of Hindi in official works of the Department continued during the period under review. The Official Language Implementation Committee hold its periodical meetings regularly to review the progress made in use of Hindi and suggestions to remove the impediments in implementation of provisions of the Official Language Act, 1963 and the rules made there under.

2. During the period under review, the Committee of Parliament on Official Language inspected the offices of (i) Bharat Heavy Electricals Ltd., Varanasi (ii) Bharat Heavy Electricals Ltd., Trichy (iii) Bharat Heavy Electricals Ltd., EPD, Bangalore and has expressed satisfaction with the progress of Hindi. During the year 2009-10, the officers of the Department carried out inspection of 18 Units/Offices to monitor progress made in the use of Hindi and the officers of these Units/Offices so visited were directed to achieve the targets prescribed in the Annual Programme 2009-10.
3. All the Notifications, Resolutions, Notes and Circulars, Parliament Questions, Annual Report, Budget Performance, General Orders and papers laid on the Tables of both Houses of the Parliament were issued both in Hindi and in English. All the letters received in Hindi were responded to in Hindi. In order to promote the use of Hindi and to increase correspondence in Hindi "Hindi Fortnight" was organized from 1st September, 2009 to 15th September, 2009 during which several competitions including Hindi Essay, Translation

from English to Hindi and vice-versa, General Hindi Knowledge, Noting & Drafting, Hindi Poem Recitation etc. were conducted. Staff of the Department participated in these activities with keen interest. Awards were given to winning candidates by Hon'ble Minister of State (Heavy Industries and Public Enterprises). Workshops were also organised for officers/employees of the Department to impart training in noting/drafting in Hindi as well as filling up of the proforma for quarterly report for progressive use of Hindi correctly. Besides, the programme of learning Hindi through "AAJ KA SHABD" is being implemented actively.

4. Public Sector Undertakings, under the administrative control of this Department, also continued to make vigorous efforts to



DHI- Hindi Diwas, Prize Distribution by Hon'ble Shri Arun Yadav, Minister of State for Heavy Industries and Public Enterprises

implement the Official Language Act and its provisions. Various Seminars, Competitions and Workshops were organised in these PSUs to propagate the use of Hindi. "HINDI FORTNIGHT" was celebrated in these PSUs with great zeal.



Annexure-I

Allocation of Business to the Department of Heavy Industry

INFORMATION IN RESPECT OF ADMINISTRATION SECTION

Department of Heavy Industry used to be one of the Departments of Ministry of Industry. With effect from 15th October, 1999, a separate Ministry viz. Ministry of Heavy Industries & Public Enterprises has been created. The Ministry comprises two Departments namely Department of Heavy Industry and Department of Public Enterprises. The Department of Heavy Industry is looking after the following items of work:-

A. Work relating to following CPSEs:-

1. Heavy Engineering Corporation Limited
2. Engineering Projects (India) Limited
3. Bharat Heavy Electricals Limited

Subsidiary

Bharat Heavy Plate and Vessels Limited

4. HMT Limited

Subsidiaries

- a) HMT (Bearings) Limited
- b) HMT International Limited
- c) HMT (Machine Tools) Limited
- d) HMT (Watches) Limited
- e) HMT (Chinar Watches) Limited
5. Scooters India Limited.
6. Andrew Yule and Company Limited
7. Cement Corporation of India Limited
8. Hindustan Cables Limited
9. Hindustan Paper Corporation Limited

Subsidiaries

- (a) Nagaland Pulp and Paper Company Limited
- (b) Hindustan Newsprint Limited
- (c) Jagdishpur Paper Mills Limited
10. Hindustan Photo Films Manufacturing Company Limited
11. Hindustan Salts Limited and its subsidiary Sambhar Salts Limited
12. Instrumentation Limited and its subsidiary i.e. Rajasthan Electronics and Instruments Limited.

13. NEPA Limited
14. Tyre Corporation of India Limited
15. Bharat Bhari Udyog Nigam Limited

Subsidiaries

- a) Braithwaite, Burn & Jessop Construction Limited
- b) Braithwaite and Company Limited
- c) Burn Standard Company Limited
16. Triveni Structurals Limited
17. Tungabhadra Steel Products Limited
18. Bharat Pumps and Compressors Limited
19. Richardson and Cruddas (1972) Limited
20. Bridge and Roof Company (India) Limited
21. Fluid Control Research Institute (Autonomous Body)

PSEs/ Subsidiaries of CPSEs under liquidation/winding up/closure/ transfer to other Departments/Organisation :

1. Bharat Ophthalmic Glass Limited
2. Bharat Leather Corporation Limited
3. Tannery and Footwear Corporation of India Limited
4. Rehabilitation Industries Corporation
5. Bharat Yantra Nigam Limited
6. National Bicycle Corporation of India Limited
7. National Industrial Development Corporation Limited
8. National Instruments Limited
9. Mining and Allied Machinery Corporation Limited
10. Cycle Corporation of India Limited
11. Jessop and Company Limited
12. Lagan Jute Machinery Company Limited
13. Reyrolle Burn Limited
14. Weighbird (India) Limited
15. Bharat Brakes and Valves Limited
16. Bharat Process and Mechanical Engineers Limited
17. Bharat Wagon and Engineering Company Limited



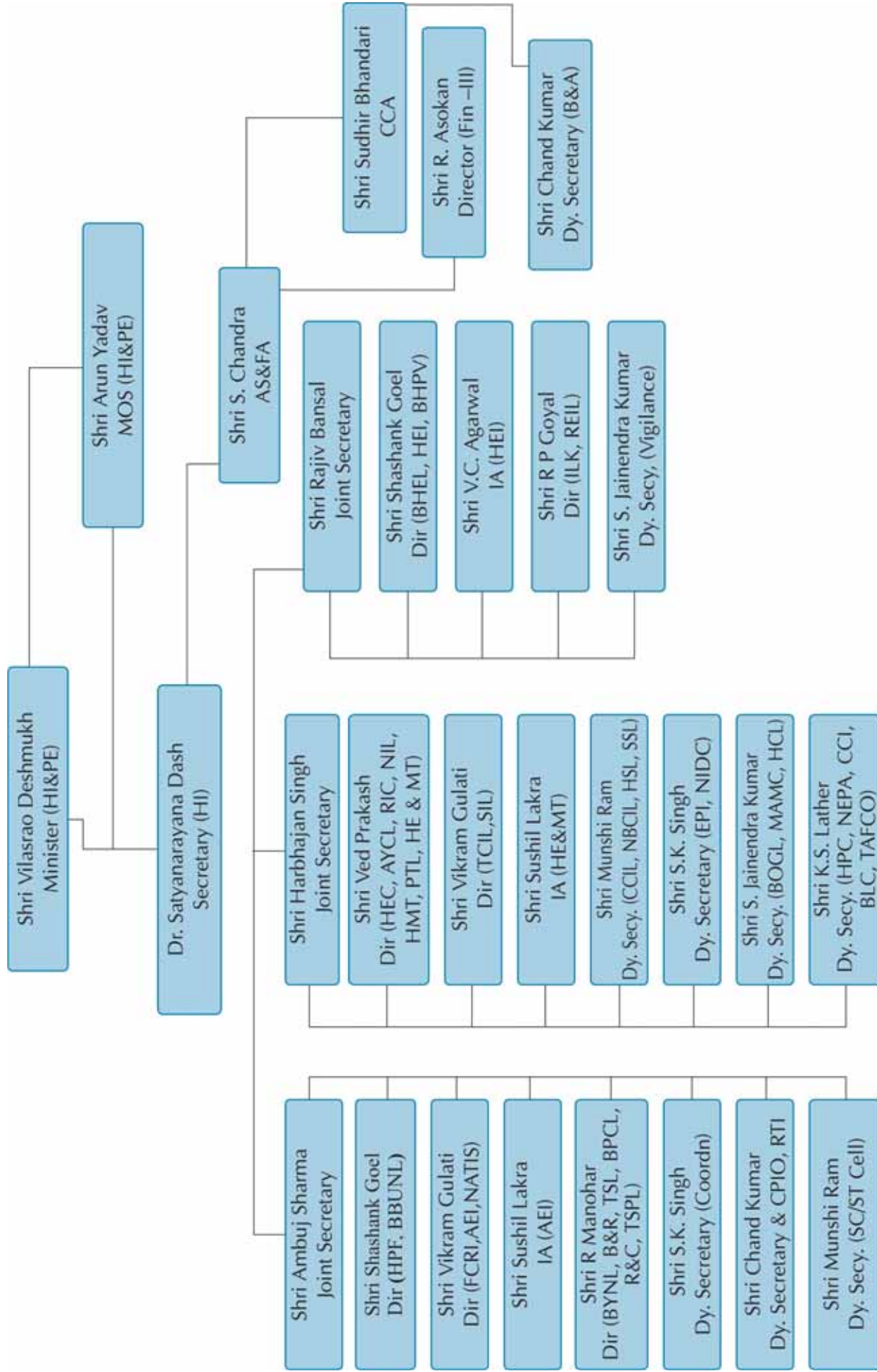
B. OTHER SUBJECTS

- 1) Manufacture of Heavy Engineering Equipment for all industries
 - 2) Heavy Electrical Engineering Industries
 - 3) Development Council for Heavy Electrical and Allied Industries
 - 4) Machinery Industries including Machine Tools and Steel Plant Equipment Manufacturing
 - 5) Development Council for Textile Machinery Industry
 - 6) Development council for Machine Tools
 - 7) Auto Industries, including tractors and earth moving equipment
 - 8) Development Council for Automobile and Allied Industries
 - 9) All diesel engines including automobile engines
 - 10) The Automotive Research Association of India (ARAI)
 - 11) National Automotive Testing and Research and Development Infrastructure Project (NATRIP) and NATRIP Implementation Society (NATIS)
 - 12) Forging Industry Research Institute of India (FIRI)
2. The Department of Heavy Industry is headed by a Secretary to the Government of India who is assisted by a team of officers and staff of overall sanctioned strength of 279. The Department is also supported by an Integrated Finance Wing headed by Additional Secretary and Financial Adviser. An organogram of the Department of Heavy Industry is attached as **Annexure-II**.
3. In addition to above, the Department has appointed / designated various Nodal Officers at senior level for smooth functioning of the Department as well as for helping its staff and the public. Some of such areas have been described below:-
- (i) In an effort to streamline the system of redressal of public grievances, a Joint Secretary and a Director, in this Department is functioning as Joint Secretary (Public Grievances).
 - (ii) In order to impart information sought under RTI Act, 2005 to public, a Joint Secretary and a Deputy Secretary have been appointed as Appellate Authority and Central Public Information Officer(CPIO) for this Department.
- (iii) In an effort to computerize all matters in this Department, a Joint Secretary in this Department has been designated as IT Manager who will also be responsible for updating the websites of the Department periodically.
- (iv) In order to deal with the litigation matters and to further co-ordinate, a Joint Secretary in the Department has been designated Nodal Officer to ensure that timely action is taken in the matter.
- (v) In order to preserve the important records emanated from this Department and to co-ordinate in the related matter, a Joint Secretary in this Department has been designated as Chief Records Officer.
- (vi) In order to create adequate awareness regarding human rights especially of female employees, Department of Heavy Industry, in accordance with the directions issued by the Government for the preservation and enforcement of rights to gender equality and justice to working women employees, a Complaint Committee has been constituted in this Department for redressal of complaints related to sexual harassment of women.
4. Further, this Department actively encourages women employees to freely participate in all activities like meetings, seminars, competitions and training etc. This helps in ensuring their integration into the mainstream work force.



Annexure-II

ORGANOGRAM OF DEPARTMENT OF HEAVY INDUSTRY





Annexure-III

General Information about CPSEs under DHI

Sl.No.	Name of CPSE and location of Registered Office	Year of setting up of CPSE	Gross Block as on 31.3.2009 (Rs. in crore)
1	Andrew Yule & Co.Ltd., (AY&CL), Kolkata	1979	127.62
2	Hooghly Printing Co. Ltd., Kolkata	1979	4.81
3	Bharat Heavy Electricals Ltd., (BHEL), New Delhi	1956	6382.00
4	Bharat Heavy Plate & Vessels Ltd., (BHPV) Vishakhapatam		
5	Burn Standard Co. Ltd., (BSCL), Kolkata	1976	141.74
6	Braithwaite & Co.Ltd., (BCL) Kolkata	1976	53.80
7	Brithwaite, Burn & Jessop Construction Co.Ltd., (BBJ), Kolkata	1987	9.70
8	Bharat Pumps & Compressors Ltd., (BPCL) Allahabad	1970	38.01
9	Richardson & Cruddas (1972) Ltd., (R&C) Mumbai	1972	31.20
10	Triveni Structurals Ltd., (TSL) Allahabad	1965	19.59
11	Tunghabhadra Steel Products Ltd., (TSPL) Hospet, Karnataka	1967	20.87
12	Bridge and Roof Co.(India) Ltd., (B&R) Kolkata	1972	172.32
13	Hindustan Cables Ltd., (HCL) Kolkata	1952	525.41
14	Heavy Engineering Corpn.Ltd., (HEC) Ranchi	1958	337.05
15	HMT Ltd.,(Holdg Co.) Bangalore	1953	132.48
16	HMT (Machine Tools) Ltd., Bangalore	2000	284.90
17	HMT (Watches) Ltd, Bangalore	2000	190.06
18	HMT (Chinar Watches) Ltd., Jammu	2000	12.16
19	HMT (Bearings) Ltd. Hyderabad	1981	30.24
20	HMT(International) Ltd., Bangalore	1974	7.39
21	Instrumentation Ltd, (IL) Kota	1964	69.17
22	Rajasthan Electronics & Instruments Ltd., (REIL) Jaipur	1981	20.35
23	Scooters India Ltd., (SIL) Lucknow	1972	55.57
24	Cement Corpn.of India Ltd. (CCI) New Delhi	1965	664.17
25	Hindustan Paper Corporation Ltd. (HPC) Kolkata	1970	941.98
26	Hindustan Newsprint Ltd., (HNL) Vellore, Kottayam	1983	403.53
27	Hindustan Photo Films Mfg. Co. Ltd. (HPF) Ooty	1960	715.00
28	Hindustan Salts Ltd., (HSL) Jaipur	1959	9.85
29	Sambhar Salts Ltd., (SSL) Jaipur	1964	11.83
30	Nepa Ltd ., (NEPA) Neapanagar	1958	115.99
31	Tyre Corpn.of India Ltd., (TCIL) Kolkata	1984	119.18
32	Engineering Projects (India) Ltd., (EPI) New Delhi	1970	15.94
TOTAL:			11663.91

- Note:**
- 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation).
 - BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.
 - PTL has been merged with HMT (MT) Ltd. as approved by BIFR on 12.6.2008.
 - Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e.BBUNL.



Annexure-IV

Employment Position including SC, ST & OBC as on 31.3.2009 in CPEs under DHI.

Sl. No.	Name of CPSE	Total Number of Employees				Number of Employees		
		Executives	Supervisors	Workmen/ Others	Total	SC	ST	OBC
1	2	3	4	5	6	7	8	9
1	AYCL	195	127	15253	15575	2549	3229	7472
2	Hooghly Ptg	8	7	44	59	2		
3	BHEL	12547	12454	20106	45107	8795	2246	6851
4	BSCCL	121	0	1334	1455	154	10	274
5	BCL	65	25	382	472	50	0	1
6	BBJ	48		45	93	10	1	3
7	BHPV	307	74	989	1370	237	105	268
8	BPCL	190	59	813	1062	166	3	337
9	R&C	18	15	32	65	8	0	3
10	TSL	51	14	124	189	26	0	69
11	TSP	13	15	76	104	27	3	28
12	B&R	706	0	777	1483	171	4	57
13	HCL	380	451	2078	2909	747	222	193
14	HEC	1359	278	1231	2868	325	602	718
15	HMT (Hldg Co.)	272	135	1798	2205	518	99	26
16	HMT (Machine Tools)	866	414	2546	3826	662	183	902
17	HMT (Watches)	361	56	1633	2050	363	96	331
18	HMT (Chinar Watches)	7	25	196	228	16	3	0
19	HMT (Bearings)	22	38	203	263	38	0	104
20	HMT (International)	53	0	7	60	9	4	1
21	IL	240	697	451	1388	227	65	209
22	REIL	66	64	85	215	43	6	40
23	SIL	235	67	1064	1366	281	1	370
24	CCI	129	177	826	1132	144	106	130
25	HPC	557	208	1995	2760	279	215	152
26	HNL	207	94	735	1036	72	5	235
27	HPF	101	227	484	812	134	44	362
28	HSL	9	30	75	114	12	7	15
29	SSL	9	27	75	111	25	9	36
30	NEPA	1	1029	252	1282	118	22	77
31	TCIL	35	18	157	210	14	0	0
32	EPIL	358	95	19	472	86	21	46
TOTAL		19536	16920	55885	92341	16308	7311	19310

Note: (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation.

(ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.

(iii) PTL has been merged with HM(MT) Ltd. as approved by BIFR on 12.6.2008.

(iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.



Annexure-V

Production Performance of CPSEs under DHI

		(Rs. in crore)				
Sl.No.	Name of CPSE	2006-07 (Actual)	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Anticipated)	2010-11 (Target)
1	2	3	4	5	6	7
1	AYCL	137.76	169.82	182.65	221.66	289.80
2	Hooghly Printing	4.07	4.12	6.57	10.00	11.16
3	BHEL	18739.00	21401.00	28033.00	32000.00	35000.00
4	BHPV	180.36	180.30	84.39	210.00	270.00
5	BSCL	233.08	255.74	235.32	260.32	339.78
6	BCL	106.21	104.16	115.10	198.04	236.29
7	BBJ	80.17	87.72	68.11	120.00	130.00
8	BPCL	149.83	191.77	239.99	285.00	385.00
9	R&C	53.56	76.78	81.37	91.50	98.00
10	TSL	3.74	5.99	4.30	6.00	8.00
11	TSP	2.00	2.54	1.44	5.62	7.00
12	B&R	610.44	710.63	935.10	1000.00	1220.00
13	HCL	3.66	2.00	0.97	0.13	
14	HEC	280.81	382.86	419.47	482.88	690.33
15	HMT(Holding Co.)	212.30	177.70	134.34	220.50	313.85
16	HMT(Machine Tools)	214.32	233.69	188.18	225.00	402.48
17	HMT(Watches)	40.05	18.99	15.35	20.00	25.58
18	HMT(Chinar Watches)	3.67	2.12	0.40	0.75	3.00
19	HMT(Bearings)	24.40	13.08	7.17	7.88	26.35
20	HMT(International)	31.45	25.14	16.36	5.52	40.00
21	IL	228.34	246.81	253.09	385.00	460.00
22	REIL	72.10	81.51	88.44	92.00	100.00
23	SIL	200.39	151.72	126.48	145.64	208.11
24	CCI	325.72	342.63	363.89	345.06	370.17
25	HPC	721.60	774.06	677.31	735.92	825.80
26	HNL	315.31	298.50	340.51	283.64	341.00
27	HPF	17.68	17.62	24.10	26.00	32.00
28	HSL	7.79	12.56	27.29	25.42	29.08
29	SSL	10.37	15.00	15.88	17.86	30.56
30	NEPA	83.3	102.96	104.38	97.00	87.75
31	TCIL	155.05	224.29	128.37	53.57	196.50
32	EPI	763.61	851.05	958.71	1050.00	1200.00
Total		24012.14	27164.86	33878.03	38627.91	43377.59

- Note:** (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation.
- (ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.
- (iii) PTL has been merged with HM(MT) Ltd. as approved by BIFR on 12.6.2008.
- (iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.



Annexure-VI

Profit (+) Loss (-) (before tax) of CPSEs under DHI.

(Rs. in crores)

Sl.No.	Name of CPSE	2006-07 (Actual)	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Anticipated)	2010-11 (Target)
1	2	4	5	6	7	7
(A)	PROFIT MAKING CPSEs					
1	AYCL	-90.11	8.61	31.76	56.41	8.16
2	Hooghly Printing	0.20	0.05	0.07	0.50	0.58
3	BHEL	3736.00	4430.00	4849.00	6043.00	7279.00
4	BPCL	19.14	30.50	26.88	42.62	44.37
5	B&R	7.17	11.27	33.26	18.50	25.85
6	BCL	0.67	0.61	1.71	4.60	5.07
7	BBJ	1.39	1.84	2.86	3.08	2.25
8	CCI	166.61	40.89	52.55	47.46	523.51
9	EPI	17.55	20.13	24.66	25.70	27.30
10	HEC	2.86	4.17	18.37	26.88	42.29
11	HPC	120.31	136.74	60.73	16.04	32.22
12	HNL	45.08	18.10	21.10	0.81	9.68
13	HMT(International)	1.64	1.02	1.27	1.04	1.03
14	HMT(Watches)	-195.67	-146.95	-164.05	24.49	-26.31
15	HSL	-0.41	0.04	0.66	0.09	0.24
16	SSL	-0.91	0.77	1.6	0.30	2.05
17	IL	-27.80	-32.91	282.29	10.20	13.50
18	REIL	3.48	4.06	1.49	2.45	3.36
Sub-total for (A) Profit making Companies		3807.20	4528.94	5246.21	6324.17	7994.15
(B)	LOSS MAKING CPSEs					
19	BSCL	-151.83	-151.25	-157.56	-238.42	-233.23
20	TSP	-37.49	-20.45	-18.44	-24.68	-27.15
21	BHPV	-34.70	-56.05	96.35	-62.28	-27.84
22	R&C	-37.62	-59.60	-30.30	-37.17	-39.49
23	TSL	-46.86	-50.80	-46.98	-47.22	-51.80
24	HCL	-310.68	-434.98	-445.35	-445.11	-445.00
25	HMT(Hldg. Co.)	40.48	-45.97	-68.98	-6.70	-144.00
26	HMT(Bearings)	-6.79	-18.43	-10.68	-17.31	-1.31
27	HMT(Machine Tools)	-149.25	-39.93	-36.57	-59.21	497.22
28	HMT(Chinar Watches)	-39.89	-49.02	-69.47	-58.83	-39.94
29	HPF	-653.06	-789.49	-890.26	-992.00	-1095.00
30	SIL	-22.43	-22.43	-27.59	-25.82	-3.25
31	NEPA	-43.00	-37.34	-40.88	-48.17	-52.40
32	TCIL	-47.91	-49.20	-7.37	-13.92	-4.67
Sub-total (B) Loss making Companies.		-1541.03	-1824.94	-1754.08	-2076.84	-1667.86
GRAND TOTAL(A&B)		2266.17	2704.00	3492.13	4247.33	6326.29

Note: (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation).

(ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.

(iii) PTL has been merged with HM(MT) Ltd. as approved by BIFR on 12.6.2008.

(iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.



Annexure- VII

Salary/Wage Bill & Social Overheads as % of Turnover of CPSEs under DHI

Sl.No.	Name of CPSEs	Wages and salaries as % of Turnover						Social overheads as % of Turnover					
		2006-07 (Actual)	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Anticipated)	2010-11	2011	2006-07 (Actual)	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Anticipated)	2010-11 (Target)	
1	2	3	4	5	6	7	8	9	10	11	12		
1	AYCL	37.33	31.82	29.35	25.22	21.22	10.95	9.77	9.13	8.17	6.63		
2	Hoogly Ptg.	34.66	29.21	18.30	12.81	13.00	1.90	2.16	1.59	1.22	1.00		
3	BHEL	13.08	14.70	14.67	13.83	13.48	1.86	1.86	1.98	2.06	2.24		
4	BSCCL	15.10	14.80	13.90	11.70	12.20	1.50	1.60	1.40	2.40	1.90		
5	BCL	14.20	14.90	14.90	7.90	7.80	0.80	1.00	0.70	0.80	0.80		
7	BBJ	7.80	9.90	10.90	9.40	9.30	0.40	0.50	0.50	0.60	0.60		
8	BHPV	15.00	15.00	67.00	22.58	19.00	3.00	6.00	7.00	8.00	4.00		
9	BPCL	18.70	15.18	18.93	13.42	13.90	0.96	0.79	0.85	0.53	0.42		
10	R&C	3.00	2.00	2.00	2.00	2.00	0.003	0.002	0.001	0.001	0.001		
11	TSL	157.00	240.00	92.00	58.00	51.00	21.00	16.00	10.00	8.00	6.00		
12	TSP	87.10	44.34	157.63	32.00	31.00	48.84	19.32	44.84	14.23	11.43		
13	B&R	5.56	6.27	6.58	5.40	4.87	1.36	1.16	2.03	1.00	0.87		
14	HCL	1732.76	2090.04	N.A.	N.A.	N.A.	119.91	139.93	N.A.	N.A.	N.A.		
15	HEC	20.60	17.50	22.40	19.90	17.10	-0.40	-0.90	-0.10	1.00	0.90		
16	HMT(Hldg)	27.20	38.44	40.03	28.45	18.98	2.77	3.98	4.11	2.85	1.90		
17	HMT(Machine Tools)	45.00	47.00	49.00	50.00	48.00	2.00	2.00	3.00	3.00	2.00		
18	HMT(Watches)	117.00	308.00	323.00	293.00	103.00	0.73	1.65	1.70	1.60	1.65		
19	HMT(Chinar)	531.84	845.51	1182.89	701.00	395.00	4.23	6.63	7.70	7.57	2.26		
21	HMT(Bearings)	30.88	50.97	103.35	102.28	27.63	1.98	1.56	2.46	0.43	1.30		
22	HMT(International)	7.25	7.96	12.63	6.92	7.66	0.78	0.76	0.86	0.57	0.49		
23	IL	17.05	18.32	19.22	13.90	11.39	1.28	1.45	1.56	1.65	1.70		
24	REIL	7.82	8.87	12.24	11.40	11.30	1.69	2.20	2.40	3.25	1.50		
25	SIL	17.51	24.14	25.55	34.67	15.96	3.93	3.68	5.66	4.9	4.94		
26	CCI	8.19	8.19	11.27	6.66	6.73	3.40	3.63	6.27	4.77	4.27		
27	HPC	8.71	10.28	13.39	12.71	12.81	4.90	4.98	4.1	3.83	4.49		
28	HNL	8.73	9.92	15.58	10.72	11.06	3.85	3.96	3.67	1.9	1.67		
29	HPF	95.34	94.06	47.86	49.04	43.33	2.18	1.81	0.51	0.55	0.58		
30	HSL	40.04	25.10	12.27	14.95	15.49	2.98	2.10	1.51	1.95	1.26		
31	SSL	36.47	27.31	30.21	36.00	22.29	2.00	1.00	4.00	3.00	3.00		
32	NEPA	22.00	17.00	20.00	20.00	21.00	2.45	2.75	3.42	5.07	2.68		
33	TCIL	30.78	35.34	50.61	74.00	35.36	0.73	0.61	0.97	0.79	0.79		
34	EPIL	2.85	3.26	3.08	3.26	3.13							

Note: (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation.

(ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.

(iii) PTL has been merged with HMT(MT) Ltd. as approved by BIFR on 12.6.2008.

(iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.



Annexure -VIII

Order book position of CPSEs under DHI

		(Rs. in crore)				
Sl.No.	CPSE	As on 1.10.2005	As on 1.10.2006	As on 1.10.2007	As on 1.10.2008	As on 1.10.2009
1	2	3	4	5	6	7
1	AYCL	93.91	68.51	62.28	69.10	39.98
2	Hooghly Ptg	6.50	1.27	0.90	1.50	0.75
3	**BHEL	32000.00	37500.00	55000.00	85200.00	144000.00
4	BSCCL	102.80	106.92	183.64	215.22	370.52
5	BCL	228.72	255.05	201.73	196.40	320.44
6	BBJ	116.54	126.35	144.49	59.48	958.35
7	BHPV	305.87	348.57	262.17	144.83	211.38
8	BPCL	130.65	136.20	232.87	346.55	241.63
9	R&C	54.00	60.00	64.00	74.00	103.00
10	TSL	16.25	8.29	10.86	11.52	5.71
11	TSP	5.50	3.02	1.86	0.17	0.19
12	B&R	856.02	994.79	1381.00	1958.63	1995.97
13	HCL	2.57	5.80	3.25	4.18	3.40
14	HEC	378.25	522.10	606.28	1910.80	2076.90
15	HMT(HIdg)	0				
16	HMT(MT)	175.31	196.77	181.55	187.55	-
17	HMT(Watches)	0	-	-	-	-
18	HMT(Chinar watches)	0	-	-	-	-
19	HMT(Bearing)	2.40	2.50	2.23	3.87	0.90
20	HMT(International)	35.81	18.51	16.06	26.72	21.55
21	IL	165.00	158.00	170.00	248.84	335.00
22	REIL	22.01	20.23	44.52	27.25	36.15
23	SIL*					
24	CCI	19.00	20.48	26.80	24.36	21.46
25	HPC	12.76	8.26	119.06	213.76	144.28
26	HNL	0				
27	HPF	2.85	1.46	2.75	2.50	5.00
28	HSL	4.57	15.00	14.52	17.88	17.63
29	SSL	4.36	6.51	2.48	4.96	0.50
30	NEPA	51.70	78.73	64.69	74.59	45.34
31	TCIL	3.00	3.60	4.10	3.78	0.72
32	EPIL	1580.39	1225.54	1957.57	2131.26	1707.75
TOTAL		36376.74	41892.46	60761.66	93159.7	152664.5

*Goods are produced for stock & sale

- Note:** (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOG, RICL & BYNL have been closed and one CPSE (NPPC) is not in operation.
- (ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.
- (iii) PTL has been merged with HM(MT) Ltd. as approved by BIFR on 12.6.2008.
- (iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.

** BHEL figures of Rs. 144000 as on 1/4/2010

Annexure - IX

Export Performance of CPSEs under DHI

(Rs. in crore)

Sl.No.	CPSEs	2005-06 (Actual)			2006-07 (Actual)			2007-08 (Actual)			2008-09 (Actual)			2009-10 (Anticipated)			
		Physical	Deemed	Total	Physical	Deemed	Total	Physical	Deemed	Total	Physical	Deemed	Total	Physical	Deemed	Total	
1	AYCL	0.80	0.00	0.80	1.64	0.00	1.64	0.05	0.00	0.05	3.30	0.00	0.00	3.30	1.87	0.00	1.87
2	BHEL	745.00	3021.00	3766.00	1076.00	5525.00	6601.00	980.00	3660.00	4640.00	1794.00	6346.00	8140.00	2110	11306	13416.00	
3	BCL	4.98	0.00	4.98	0.88	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	
4	BSCL	2.75	0.00	2.75	8.48	0.00	8.48	7.70	0.00	7.70	12.07	0.00	12.07	10.15	0.00	10.15	
5	BHPV	2.92	0.45	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	BPCL	0.00	4.07	4.07	0.00	6.81	6.81	0.00	0.63	0.63	0.63	0.00	0.15	0.15	0	0.00	
7	R&C	1.17	0.00	1.17	0.00	6.81	6.81	0.00	0.63	0.63	0.63	0.00	0.00	0.00	0.00	0.00	
8	B&R	1.95	0.00	1.95	2.23	0.00	2.23	0.52	0.00	0.52	13.82	0.00	13.82	0.00	0.00	0.00	
9	HMT(I)	14.89	0.00	14.89	31.45	0.00	31.45	25.00	0.00	25.00	16.36	0.00	16.36	34	0.00	34.00	
10	IL	0.23	9.01	9.24	0.21	7.74	7.95	0.13	0.29	0.42	1.01	9.80	10.81	1.2	10.8	12.00	
11	REIL	1.09	0.00	1.09	4.05	1.27	5.32	7.73	0.79	8.52	0.81	1.97	2.78	2.00	2.00	4.00	
12	SIL	0.63	0.00	0.63	0.41	0.00	0.41	0.87	0.00	0.87	0.43	0.00	0.43	0.75	0.00	0.75	
13	HPC	0.00	43.37	43.37	0.00	40.76	40.76	0.00	15.94	15.94	0.00	34.02	34.02	42.15	0.00	42.15	
14	HSL	0.39	0.00	0.39	0.56	0.00	0.56	0.64	0.00	0.64	0.79	0	0.79	1.26	0.00	1.26	
15	EPI	0.00	0.00	0.00	0.00	0.00	0.00	25.43	0.00	25.43	11.28	0.00	11.28	0	0.00	0.00	
Total		776.80	3077.90	3854.70	1125.91	5588.39	6714.30	1022.64	3678.28	4700.92	1853.87	6391.94	8245.81	2159.97	11362.21	13522.18	

Note: (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation).

(ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.

(iii) PTL has been merged with HM(MT) Ltd. as approved by BIFR on 12.6.2008.

(iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.



Annexure-X

Paid-up Capital, Networth and Accumulated Profit (+)/Loss(-) as on 31.3.2009 of the CPSEs under DHI

(Rs. in crore)

Sl. No.	Name of CPSE	Paid-up Capital		Networth	Accumulated Profit (+)/Loss (-)
		Government/ Holding PSE	Others		
1	2	3	4	5	6
1	AYCL	55.96	3.31	6.74	-168.57
2	HOOGHLY PTG	1.03		2.95	0.27
3	BHEL	331.51	158.01	12939.00	12449.00
4	BSCCL	137.2		-1490.18	-1627.38
5	BCL	19.79		10.06	-9.74
6	BBJ	20.27		19.22	-1.04
7	BHPV	33.80		-229.94	-263.76
8	BPCL	53.53		98.61	23.76
9	R&C	54.24		-263.59	-348.42
10	TSL	21.27		-503.62	-524.89
11	TSP	6.69	1.75	-259.17	-267.61
12	B&R	54.63	0.36	118.12	63.14
13	HCL	417.69	1.67	-2712.57	-3188.67
14	HEC	606.08		-251.99	-1064.61
15	HMT(Holding Co.)	1194.85	8.5	749.86	-453.2
16	HMT(Machine Tools)	719.60		26.91	-715.32
17	HMT(Watches)	6.49		-1124.05	-1130.54
18	HMT(Chinar Watches)	1.66		-291.76	-293.42
19	HMT(Bearing)	37.47	0.24	-28.1	-65.81
20	HMT(International)	0.72		22.99	22.27
21	IL	92.31	1.01	24.19	-44.56
22	REIL	2.08	217.00	19.55	14.29
23	SIL	51.01	2.47	-2.99	-56.51
24	CCI	811.41		-266.93	-1060.98
25	HPC	668.38		902.29	147.31
26	HNL	100.00		239.77	127.79
27	HPF	184.68	19.19	-5820.19	-6047.17
28	HSL	22.55		21.53	-11.30
29	SSL	1.00		-0.70	-12.72
30	NEPA	108.17	0.69	-581.84	-473.00
31	TCIL	93.45		-146.97	-265.05
32	EPIL	35.42		121.93	80.08
TOTAL		5944.94	414.20	1349.13	-5166.36

Note: (i) 13 CPSEs namely, BPME, WIL, BBVL, TAFCO, CCIL, BLC, NBCIL, MAMC, NIDC, BOGL, RIC & BYNL have been closed and one CPSE (NPPC) is not in operation).

(ii) BWEL has been transferred to Ministry of Railways on 13.8.2008. NIL has also been transferred to Jadavpur University, Kolkata on 7.1.2009.

(iii) PTL has been merged with HM(MT) Ltd. has approved by BIFR on 12.6.2008.

(iv) Apart from above 32 operating CPSEs, there is one non-manufacturing holding company i.e. BBUNL.



Annexure-XI

Inputs sanctioned by the Govt. for revival/ restructuring of CPSEs under DHI

As on 31.3.2009

(Rs. crore)

S. No.	CPSE	Fresh GOI funds		Waivers/ conversions	GOI guarantee	Total
		Capital Investment	Other			
1.	Hindustan Salts Ltd., Jaipur	4.28	nil	66.32	nil	70.60
2.	Bridge & Roof Co.Ltd., Kolkata	60.00	nil	42.92	nil	102.92
3.	BBJ Constn. Co. Ltd, Kolkata	nil	nil	54.61	nil	54.61
4.	Praga Tools Ltd, Secunderabad (AP)	5.00	nil	177.12	32.59	214.71
5.	Heavy Engg Corp, Ranchi	102.00	nil	1116.30	150.00	1368.30
6.	HMT (Bearings) Ltd, Hyderabad.	7.40	nil	26.57	17.40	51.37
7.	Braithwaite & Co. Ltd., Kolkata	4.00	nil	112.91	nil	116.91
8.	Cement Corpn of India Ltd., New Delhi	30.67	153.62	1252.25	15.70	1452.24
9.	Bharat Pumps & Compressors Ltd., Allahabad	nil	3.37	153.15	nil	156.52
10.	HMT (MT) Ltd.	180.00	543.00	157.80	—	880.80
11.	Andrew Yule & Co. Ltd	29.56	87.06	154.75	111.96	383.33
12.	National Instruments Ltd.	—	1.81	240.05	—	241.86
13.	Nagaland Pulp & Paper Co. Ltd*	251.26	38.19	126.98	252.99	669.42
14.	Tyre Corporation of India Ltd.	—	—	815.59	—	815.59
15.	Instrumentation Limited	—	—	504.36	45.00	549.36
	TOTAL	674.17	823.68	5001.68	629.01	7128.54

* Rs.108.18 crore for setting off the Capital reduction fund on account of reduction of existing paid up capital from Rs.120.20 crore to Rs.12.02 by way of reduction of the face value of the share from Rs.1000 per share to Rs.100 per share.



Annexure-XII

Important Audit observations from Comptroller & Auditor General Audit Report for 2009

Chapter - 9 of the Report No. CA 24 of 2009 is related to Department of heavy Industry.

Bharat Bhari Udyog Nigam Ltd.

- The Company irregularly refunded service charges of Rs. 82.72 lakh to a private party
(para No. 9.1.1 – Report No. CA 24 of 2009)

Bharat Heavy Electricals Ltd.

- Due to inadequate planning the Company could not adhere to the delivery schedule and incurred an avoidable expenditure of Rs. 26.95 crore.
(para No. 9.2.1 – Report No. CA-24 of 2009)
- The Company contravened its laid down guidelines and ethical practices by placing contracts worth Rs. 26.61 crore on a banned firm during the period when the business ban was effective on it.
(para No. 9.2.2 – Report No. CA-24 of 2009)
- The Company sanctioned and disbursed Rs. 5crore for lighting arrangements of a sports stadium in contravention of its Corporate Social Responsibility scheme.
(para No. 9.2.3 – Report No. CA-24 of 2009)
- Due to accepting a purchase order at below the minimum price without proper analysis of the end user's requirements, the Company incurred a loss of Rs. 4.60 crore.
(para No. 9.2.4 – Report No. CA-24 of 2009)
- By not exploring the possibility of placing a repeat order in terms of its purchase policy, the Company lost an opportunity to save an expenditure of Rs. 1.68 crore.
(para No. 9.2.5 – Report No. CA-24 of 2009)
- The Company did not adhere to its purchase policy despite having an option for placing repeat order. Resultantly, the Company incurred an extra expenditure of Rs. 1.57 crore on procurement of the four outer casings.
(para No. 9.2.6 – Report No. CA-24 of 2009)

Tungabhadra Steel Products Limited.

- In contravention of the DPE guidelines, the Company paid notice pay in addition to salaries and included personal pay for computation of *ex-gratia* payment resulting in excess payment of Rs. 73.59 lakh.
(para No. 9.3.1 – Report No. CA-24 of 2009)

Statement showing status of outstanding paragraphs as per the proforma

Sl.No.	Year	No. of Paras/PA reports on which ATNs have been submitted to PAC after vetting by Audit	Details of the Paras/PA reports on which ATNs are pending		
			No. of ATNs not sent by the Ministry even for the first time.	No. of ATNs sent but returned with observations and Audit is awaiting their resubmission by the Ministry	No. of ATNs which have been finally vetted by audit but have not been submitted by the Ministry to PAC
1	2005	6	1	1	-
2	2006	7	8	1	-
3	2007	9	7	4	-
4	2008	2	33	7	-
5	2009	-	7	1	-
Total		24	49	14	-



Abbreviations

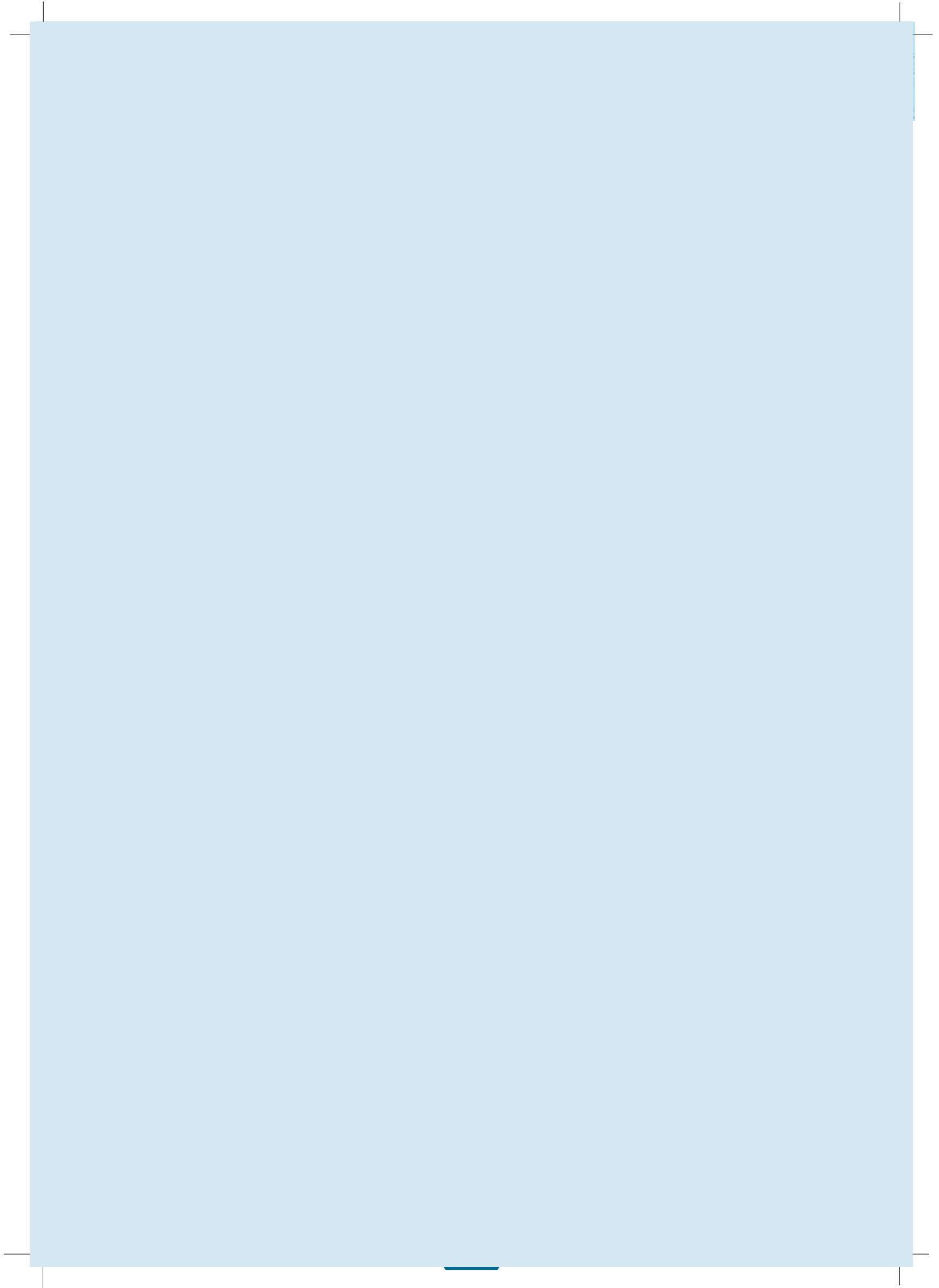
AAIFR	Appellate Authority of Industrial & Financial Reconstruction
ACMA	Automotive Component Manufacturers Association
ARAI	Automotive Research Association of India
AYCL	Andrew Yule & Company
BBJ	Braithwaite, Burn & Jessop Construction Company Limited
BBUNL	Bharat Bhari Udyog Nigam Limited
BHEL	Bharat Heavy Electricals Limited
BHPV	Bharat Heavy Plate & Vessels Limited
BIFR	Board of Industrial & Finance Reconstruction
BLC	Bharat Leather Corporation Limited
BOGL	Bharat Ophthalmic Glass Limited
BPCL	Bharat Pumps & Compressors Limited
BPME	Bharat Process & Mechanical Engineers Limited
BCL	Braithwaite & Company Limited
BWEL	Bharat Wagon & Engineering Company Limited
BYNL	Bharat Yantra Nigam Limited
BRPSE	Board for Reconstruction of Public Sector Enterprises
C-DOT	Centre for Development of Telematics
CCI	Cement Corporation of India Limited
CCIL	Cycle Corporation of India Limited
CEA	Central Electricity Authority
CCEA	Cabinet Committee on Economic Affairs
CNC	Computer Numerically Controlled
CPSE	Central Public Sector Enterprise
CPIO	Central Public Information Officer
CPLY	Corresponding Period Last Year
DOE	Department of Electronics
EEC	European Economic Community
EFV	Environmentally Friendly Vehicle
EOT	Electrically Operated Trolley
EPC	Engineering Procurement and Construction
EPI	Engineering Projects (India) Limited
EEPC	Engineering Export Promotion Council
FBP	Fluidized Bed Combustion
FCRI	Fluid Control Research Institute
FFP	Foundry Forge Plant
HCL	Hindustan Cables Limited
HMBP	Heavy Machine Building Plant
HMT(I)	HMT (International) Limited
HMTP	Heavy Machine Tools Plant
HPC	Hindustan Paper Corporation Limited
HNL	Hindustan Newsprint Limited
HPF	Hindustan Photo Films Manufacturing Company Limited
HSL	Hindustan Salts Limited
IL	Instrumentation Limited
ISRO	Indian Space Research Organization



ICGCC	Integrated Coal Gasification Combined Cycle
JPML	Jagdishpur Paper Mills Limited
JVC	Joint Venture Company
JESSOP	Jessop Company Limited
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
KV	Kilo Volt
KW	Kilo Watt
LAGAN JUTE	Lagan Jute Machinery Company Limited
OA	Operating Agency
MAMC	Mining & Allied Machinery Corporation Limited
MAX	Main Automatic Exchange
MoU	Memorandum of Understanding
MoHI&PE	Minister of Heavy Industries & Public Enterprises
MOEF	Ministry of Environment & Forests
MoPNG	Ministry of Petroleum & Natural Gas
MoSRT&H	Ministry of Shipping, Road Transport & Highways
MT	Metric Tonne
MUL	Maruti Udyog Limited
MVA	Mega Volt Amperes
MW	Mega Watt
NBCIL	National Bicycle Corporation of India Limited
NC	Numerically Controlled
NEPA	NEPA Limited
NPCIL	Nuclear Power Corporation of India Limited
NIDC	National Industrial Development Corporation Limited
NATRIP	National Automotive Testing and Research & Development Infrastructure Project
PSE	Public Sector Enterprise
PWD	Persons With Disabilities
PTL	Praga Tools Limited
R&C	Richardson & Cruddas (1972) Limited
RDSO	Research Design & Standard Organization
RIC	Rehabilitation Industries Corporation Limited
RSW	Radiation Shielding Window
RTI	Right to Information Act
SIAM	Society of Indian Automobile Manufacturers
SIL	Scooters India Limited
SIAT	Symposium on International Automotive Technology
SSL	Sambhar Salts Limited
TAFCO	Tannery & Footwear Corporation of India Limited
TCIL	Tyre Corporation of India Limited
TSL	Triveni Structural Limited
TSP	Tungabhadra Steel Products Limited
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organizations
VRS	Voluntary Retirement Scheme
VRDE	Vehicle Research Development Establishment
WIL	Weighbird (India) Limited.
WP	Working Party

Department of Public Enterprises

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Chapter 1

Public Enterprises Survey

- 1.1 The Department of Public Enterprises (DPE) presents to Parliament every year a comprehensive report known as the Public Enterprises Survey on the financial and physical performance of Central Public Sector Enterprises (CPSEs) in the country.
- 1.2 This is in compliance with the recommendations of the Estimates Committee, which suggested in their 73rd Report (1959-60) 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 Government's total appraisal of the working of public enterprises. Accordingly, the first "Annual Report" (Public Enterprises Survey) was prepared by the erstwhile Bureau of Public Enterprises (now DPE) in 1960-61.
- 1.3 The Public Enterprises Survey covers the Central Public Sector Enterprises established either as Government Companies under the Companies Act or as Statutory Corporations under specific statutes of Parliament. The Survey, moreover, covers only those Government Companies in which Central Government's share in paid-up capital is more than fifty per cent including the subsidiaries of such companies. This does not, however, include public sector commercial banks.
- 1.4 The Committee on Public Undertakings (COPU) in their recommendations made in the 46th Report (5th Lok Sabha) had covered various aspects, such as scope, coverage, classification of undertakings, contents of the report, time for presentation and other matters relating to the Public Enterprises Survey. These recommendations of COPU are also taken into account while preparing the Public Enterprises Survey.
- 1.5 The basic data for the Survey is compiled from the Annual Reports of various CPSEs and the information provided directly by CPSEs to this Department. The data is compiled, analysed and presented by way of a report in three separate volumes.
 - 1.5.1 Volume-1 of the Public Enterprises Survey contains a macro analysis of the performance of CPSEs in terms of broad physical and financial parameters. Various chapters in this Volume reflect the key activities and the progress made during the year. It also covers aspects, such as, price policy, productivity, R&D, international operations, human resource development and welfare measures.
 - 1.5.2 Volume-2 contains an analysis of the performance of CPSEs in different sectoral groups, disaggregated further into individual enterprises, relating to business activities, operational profile and major financial and physical highlights.



- 1.5.3 Volume-3 of the survey contains enterprise-wise analytical data for the last three years i.e. 2008-09, 2007-08 and 2006-07. This information consists of summarized balance sheet, profit and loss account and important management ratios.
- 1.6 The Public Enterprise Survey (2008-09), is the 49th report on the overall performance of CPSEs which *will be laid in both the Houses of Parliament in the Budget Session (February, 2010)*.
- 1.7 Performance of CPSEs during the year 2008-09 is summarized as mentioned below:
- 1.7.1 There were 246 Central Public Sector Enterprises under the administrative control of various Ministries / Departments as on 31.3.2009. Out of these 246 CPSEs, 213 have been in operation and 33 CPSEs have yet to commence business.
- 1.7.2 Out of 213 operating CPSEs from which information is available, while 158 CPSEs have shown profit during 2008-09, 54 CPSEs incurred losses during the year. In case of one CPSE, namely, Food Corporation of India (FCI), the Profit / Loss is 'NIL' as the procurement and issue price of food grains is fixed by the Government of India and the difference between the economic cost and price realization is reimbursed by the Government as subsidy.
- 1.7.3 The cumulative investment (paid up capital plus long terms loans), which was Rs. 29 crore in 5 enterprises as on 31.3.1951, has gone up to Rs.528951 crore in 246 CPSEs as on 31.3.2009. While the increase in 'investment' in all the CPSEs went up by 16.16% in 2008-09 over 2007-08, the increase in 'capital employed' went up by 9.62% during the same period (Table 1). A great deal of investment in CPSEs is being made through internal resources, that is, without any budgetary support.
- 1.7.4 The 'net profit' of profit making CPSEs (158) was Rs. 98,652 crore in 2008-09. The 'net loss' of loss making enterprises (54) stood at Rs.14424 crore during the year; this includes accounting losses of National Aviation Company of India Ltd. (Rs. 5443 crore), Eastern Coalfields Ltd. (Rs.2106 crore), Hindustan Photofilms Mfg. Company Ltd, (Rs.876 crore), Fertilizers Corporation of India Ltd. (Rs.753 crore) etc.
- 1.7.5 The CPSEs have to serve macro-economic objectives besides financial objective. The Food Corporation of India (FCI) and Artificial Limbs Manufacturing Corporation of India (ALIMCO) etc. are CPSEs that have been laying greater emphasis on non-financial / social objectives. The year was also witness to severe financial under-recoveries by public sector Oil Marketing Companies (OMCs) on sale of petroleum products in order to keep the prices low in the domestic market.
- The major highlights of the performance of CPSEs during 2008-09 are given overleaf :



Table : Performance of CPSEs during 2008-09

(Rs. in Crore)

Sl. No.	Particulars	2008-09	2007-08	% change over previous year
1.	Investment (long term loan + equity)	528951	455367	16.16
2.	Capital employed (net fixed assets + workingcapital)	793096	723719	9.62
3.	Total turnover	1263405	1094484	15.43
4.	Profit of Profit Making CPSEs	98652	91571	7.73
5.	Loss of Loss Making CPSEs	14424	10257	40.63
6.	Net worth	584072	518530	12.64
7.	Dividend declared	25493	28081	-9.21
8.	Corporate tax	151728	165994	-8.59
9.	Interest paid	40338	32200	25.25
10.	Contribution to Central Exchequer	151728	165994	-8.59
11.	Foreign Exchange Earnings	74184	67678	9.61
	11.1 Oil companies	48422	46051	5.15
	11.2 Other companies	25762	21627	19.12
12.	Foreign Exchange Outgo	428821	368228	16.46
	12.1 Oil companies	278989	257723	8.25
	12.2 Other companies	149832	110505	35.59



Sh. Bhaskar Chatterjee, Secretary, Department of Public Enterprises addressing the Regional Workshop on Public Sector Enterprises held on 20-21 January, 2010 at Kolkata



Chapter 2

Autonomy to CPSEs

2.1.1 The endeavour of the Government is to make public sector enterprises autonomous board managed companies. Under Articles of Association, the Board of Directors of CPSEs enjoy autonomy in respect of recruitment, promotion and other service conditions of below Board level employees. The Board of Directors of a CPSE exercises delegated powers subject to broad policy guidelines issued by Government from time to time. The Government has granted enhanced powers to the Boards of the profit making enterprises under various schemes like Maharatna, Navratna and Miniratna in the manner stated in the following paragraphs.

2.2 NAVRATNA CPSEs

2.2.1 Under this scheme, the Government has delegated enhanced powers to CPSEs having comparative advantage and the potential to become global players. Presently, there are 18 Navratna CPSEs as under:

- (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) Indian Oil Corporation Limited
- (ix) Mahanagar Telephone Nigam Limited

- (x) National Aluminium Company Limited
- (xi) NMDC Limited
- (xii) NTPC Limited
- (xiii) Oil & Natural Gas Corporation Limited
- (xiv) Power Finance Corporation Limited
- (xv) Power Grid Corporation of India Limited
- (xvi) Rural Electrification Corporation Limited
- (xvii) Shipping Corporation of India Limited
- (xviii) Steel Authority of India Limited

2.2.2 The powers presently delegated to the Boards of Navratna CPSEs are as under: -

- (i) **Capital Expenditure:** - The 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) **Organization 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 centers, etc.
- (iv) **Human Resources Management:-** The Navratna CPSEs have been empowered



to create posts upto E-6 level and wind up all posts up to non-Board level Directors and 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 for borrowings from international market, subject to condition that approval of RBI/ Department of Economic Affairs, as may be required, should 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. Rs. 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:-** The Navratna CPSEs have been delegated powers for mergers and acquisitions 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 would be kept informed in case of investments abroad. Further, the powers relating to Mergers and Acquisitions are to be exercised in such a manner that it should not lead to any change in the public sector character of the concerned CPSEs.

- (viii) **Creation/Disinvestment in subsidiaries:-** The Navratna CPSEs have 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 subsidiary) would not be changed without prior approval of the Government and such Navratna CPSEs will be required to seek Government approval before exiting from their subsidiaries.
- (ix) **Tours abroad of functional Directors: -** The Chief Executive 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.

2.2.3 The above mentioned delegation of powers is 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 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 would 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 an 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 Government guarantees. The resources for implementing their programmes should come from their internal resources 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 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.

2.3 Miniratna scheme

2.3.1 In October 1997, the Government had also decided to grant enhanced autonomy and delegation of financial powers to some other profit making companies subject to certain eligibility conditions and guidelines to make them efficient and competitive. These companies, called Miniratnas, are in two categories, namely, Category- I and Category-II. The eligibility conditions and criteria are:

- (i) **Category-I CPSEs** should have made profit in the last three years continuously, the pre-tax profit should have been Rs.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 the enhanced delegated powers provided they have not defaulted in the repayment of loans/interest payment 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 Public Sector Enterprise fulfilled the requirements of a Category-I/ Category-II company before the exercise of enhanced powers.
- 2.3.2 The delegation of decision-making authority available at present to the Boards of these Miniratna CPSEs is 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 upto Rs. 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 upto Rs. 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 Rs. 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 Rs. 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 :-** 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 would be kept informed in case of investments abroad. Further, the powers relating to Mergers and Acquisitions are to be exercised in such a manner that it should not lead to any change in the public sector character of the concerned CPSEs.
 - (iv) **Scheme for HRD :-** To structure and implement schemes relating to personnel and human resource management, training, voluntary or compulsory retirement schemes, etc. 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 CPSE.
 - (v) **Tour 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.
 - (vi) **Technology Joint Ventures and Strategic Alliances:-** 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 :-** 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 such Miniratna CPSEs will be required to seek Government approval before exiting from their subsidiaries.

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

2.4 Other profit making CPSEs

- 2.4.1 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 under:-

(i) **Capital Expenditure:-** These CPSEs have the power to incur capital expenditure up to Rs. 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 and Annual Plans and outlays provided for;

(b) the required funds can be found from the internal resources of the company and extra budgetary resources (EIBR) 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 would continue to require the prior approval of the Minister of the Administrative Ministry/ Department.

2.5. MAHARATNA SCHEME

- 2.5.1 The Government had introduced the Navratna scheme, in 1997, to identify Central Public Sector Enterprises (CPSEs) that had comparative advantages and to support them in their drive to become global giants. The Boards of Navratna CPSEs have been delegated powers in the areas of (i) capital expenditure, (ii) investment in joint ventures/subsidiaries, (iii) mergers & acquisitions, (iv) human resources management, etc. At present, there are 18 Navratna CPSEs.

- 2.5.2 The current criteria for grant of Navratna status are size neutral. Over the years, some of the Navratna companies have grown very big and have considerably larger operations than their peers. The CPSEs which are at the higher end of the Navratna category and have potential to become Indian Multinational Companies (MNCs), will be recognized as a separate class, i.e. 'Maharatna'. The higher category will act as an incentive for other Navratna companies, provide brand value and facilitate delegation of enhanced powers to CPSEs.

- 2.5.3 The main objective of the Maharatna scheme is to empower Mega CPSEs to expand their operations and emerge as global giants. The Maharatna Scheme will empower big sized CPSEs to expand their operations and emerge as global giants.

- 2.5.4 The CPSEs meeting the following eligibility criteria will be considered for 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 of more than Rs.25,000 crore during the last 3 years
- d) An average annual net worth of more than Rs.15,000 crore during the last 3 years
- e) An average annual net profit after tax of more than Rs.5,000 crore during the last 3 years
- f) Should have significant global presence/ international operations.

2.5.5 The procedure for grant of Maharatna status as well as their review is similar to that in vogue for the grant of Navratna status.

2.5.6 The Boards of Maharatna CPSEs in addition to exercising all powers to Navratna CPSEs, will exercise enhanced powers in the area of investment in joint ventures/subsidiaries and creation of below Board level posts. The Boards of Maharatna CPSEs will have powers to (a) make equity investment to establish financial joint ventures and wholly owned subsidiaries in India or abroad and (b) undertake mergers & acquisitions, in India or abroad, subject to a ceiling of 15% of the net worth of the concerned CPSE in one project, limited to an absolute ceiling of Rs.5,000 crore (Rs. 1,000 crore for Navratna CPSEs). The overall ceiling on such equity investments and mergers and acquisitions in all projects put together will not exceed 30% of the net worth of the concerned CPSE. In addition, the Boards of Maharatna CPSEs will have powers to create below Board level posts upto E-9 level.



Chapter 3

Corporate Governance and Professionalization of Boards in Central Public Sector Enterprises (CPSEs)

3.1 Corporate Governance - Background

- 3.1.1 The concept of Corporate Governance has generated extensive debate during the last few years due to the fast changing economic scenario all over the world. The term Corporate Governance includes the policies and procedures adopted by a corporate entity in achieving its objectives in relation to shareholders, employees, customers and suppliers, regulatory authority and the community at large. In general parlance, it means a code of corporate conduct in relation to all the stakeholders, whether internal or external. Corporate Governance implies transparency of management systems and encompasses the entire mechanics of the functioning of the company. It provides a system by which corporate entities are directed and controlled, besides attempting to put in place a system of checks and balances between the shareholders, directors, auditors and the management.
- 3.1.2 In India, all listed companies including listed CPSEs are covered by the SEBI guidelines. To further improve Corporate Governance standards in India, SEBI revised the code of Corporate Governance based upon the recommendations of N.R. Narayana Murthy Committee set up in 2002. Clause 49 of SEBI guidelines mandates a listed company to comply with the various provisions relating to corporate governance. The Organization for Economic Cooperation and Development (OECD), which is a forum of the Governments of 30 democracies also took initiatives to

address governance issues and it suggested principles of Corporate Governance. India is not a member of OECD. In September 2005, the OECD circulated guidelines on Corporate Governance of State-owned enterprises. These guidelines cover issues like (i) ensuring an effective legal and regulatory framework for State-owned enterprises; (ii) the State acting as an owner; (iii) equitable treatment of shareholders; (iv) relations with stakeholders; (v) transparency and disclosures; and (vi) responsibilities of the Boards of State-owned enterprises.

- 3.1.3 The post-1991 period has witnessed significant changes in the public sector policy. The areas reserved for public sector were reduced. The Central Public Sector Enterprises (CPSEs) were expected to look for internal resources and borrowings and concentrate on improvement in operations and efficiency on commercial lines of operation aimed at earning profit.
- 3.1.4 In pursuance of the Industrial Policy Statement of 24.7.1991, detailed guidelines on composition of Board of Directors were issued by the Department of Public Enterprises (DPE) in March 1992. These guidelines inter-alia provided that at least one-third of the Directors on the Board of a CPSE should be non-official Directors. The Navratna and Miniratna schemes evolved by the Government in 1997 provided that these CPSEs should set up Audit Committees. Based on the SEBI guidelines, further instructions were issued by DPE in November 2001 stating that at least half of the Board of listed CPSEs with executive Chairman should be Independent Directors.



3.2. Formulation of Guidelines on Corporate Governance

3.2.1 The Government has enhanced the powers delegated to Navratna, Miniratna and other profit making PSEs and more CPSEs are being granted Navratna status. As a result the public accountability of the PSEs has increased. In this context, Government had approved the implementation of guidelines on corporate governance for CPSEs. These guidelines have been formulated by DPE keeping in view relevant laws, instructions and procedures. The views of various stakeholders such as administrative Ministries/ Departments, CPSEs, nodal Ministries like Company Affairs, Finance (Expenditure), Comptroller and Auditor General (C&AG), Securities and Exchange of Board of India (SEBI), Institute of Chartered Accountants of India (ICAI), Institute of Company Secretaries of India (ICSI), Institute of Cost & Works Accountants of India (ICWAI), National Foundation for Corporate Governance (NFCG), Institute of Public Enterprise, etc. were taken into account while formulating these Guidelines.

3.2.2 These guidelines are applicable to listed as well as un-listed CPSEs and cover issues like composition of Boards, Audit Committee, Subsidiary companies, disclosures, Code of conduct and ethics, risk management and compliance.

3.3. Composition of Board

3.3.1 In respect of the Board composition, these Guidelines provide that the number of functional Directors should not exceed 50% of the actual strength of Board and the number of Government nominee Directors shall be restricted to maximum of two. In case of listed CPSEs with executive chairman, the number of non-official Directors shall be at least 50% of Board members. In case of unlisted CPSEs and listed CPSEs with non-executive chairman, at least one-third of the Board Members shall be non-official Directors. The Government has also

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. As in clause 49 of SEBI, relevant clauses have been incorporated in these guidelines to ensure 'independence' of non-official Directors and avoid potential conflict. It has also been provided that the Directors nominated by any institution other than public financial institution will not be treated as non-official Directors.

3.3.2 It has been further mandated that the Board meetings are to be held at least once in every 3 months and at least 4 such meetings in a year and all relevant information is required to be given to the Board. Further, the Board should lay down code of conduct for all members and 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 and the company should undertake suitable training programmes for its new Board members.

3.4. Audit Committee

3.4.1 The provisions relating to Audit Committee require a qualified and independent Audit Committee to be set up by CPSEs with minimum three Directors as members. Further, two-thirds of the members of this Committee should be independent Directors with chairman to be independent Director. The Audit Committee has been given extensive powers with regard to financial matters of company and it should meet at least 4 times in a year.

3.5. Subsidiary Companies

3.5.1 With regard to subsidiary companies, it has been provided that at least one independent Director of holding company to be Director on the Board of subsidiary company and the Audit Committee of holding company to review financial statements of subsidiary. All significant transactions and arrangements of subsidiary are required to be brought to the attention of Board of Directors of holding company.



3.6. Disclosures

- 3.6.1 The provisions regarding disclosures require all transactions to be placed before the Audit Committee. The Guidelines mandate that financial statements should be as per prescribed Accounting Standards, and if there are any deviations, the same are to be explicitly mentioned. Further, the Board is to be informed about risk assessment and minimization procedures and senior Management is to make disclosures to Board relating to all financial and commercial transactions where they have personal interest or may have a potential conflict of interests.

3.7. Compliance

- 3.7.1 It has also been mandated in the Guidelines that there should be a separate section on Corporate Governance in Annual report of company with details of compliance. The CPSEs will have to obtain a certificate from auditors/company secretary regarding compliance with these Guidelines. Chairman's speech in AGM will also carry a section on compliance with Corporate Governance Guidelines and will form part of the company's Annual Report.

3.8. Implementation and Grading

- 3.8.1 The DPE will grade CPSEs on the basis of their compliance with Guidelines and such grading to be used for MOU Awards.
- 3.8.2 Keeping in view the importance of Corporate Governance to State level Public Enterprises, all States have also been advised to implement these Guidelines.

3.9. Professionalization of Boards of CPSEs

- 3.9.1 Department of Public Enterprises (DPE) formulates policy guidelines on the Board structure 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.

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

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.

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

Experience:- Persons of eminence with proven track record from industry, business or agriculture. CMD/MD in corporate sector/PSE; Professor level in an academic institution or professionals of repute like eminent Chartered Accountants/Cost Accountants at the level of Directors of Institutes/Heads of Department; persons having experience of not less than 10 years at the level of Joint Secretary and above in the Government.

- 3.9.3 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, i.e. Appointments Committee of Cabinet (ACC).

Conference was attended by about 100 non-official Directors of various CPSEs, representatives of administrative Ministries/Departments and ICSI.

- 3.9.4 The Navratna scheme provides that the Boards of these companies should be professionalised 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 minimum 3 non-official Directors is pre-condition for the exercise of delegated powers under the Miniratna Scheme.
- 3.9.5 During the year (upto 31.1.2010), the Search Committee and Public Enterprises Selection Board have recommended the names of about 36 persons for appointment as non-official Directors on the Boards of various CPSEs.
- 3.9.6 The functional Directors are appointed by the administrative Ministry on the recommendations of PESB and with the approval of Competent Authority. The Government Directors are appointed in ex-officio capacity and their choice vests with the concerned administrative Ministries/Departments.
- 3.9.7 The Department has 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.
- 3.9.8 The first ever one-day Conference of non-official Directors of Central Public Sector Enterprises (CPSEs) was organised on 22.7.2009 in Vigyan Bhawan, New Delhi with Institute of Company Secretaries of India (ICSI) as knowledge partner. The Conference was inaugurated by Minister of Heavy Industries and Public Enterprises and was addressed by Minister of State for Heavy Industries and Public Enterprises and Secretary, Department of Public Enterprises. The

Chapter 4

MoU System in CPSEs

4.1 The MoU System

MOU is a mutually negotiated agreement between the management of the CPSEs and the Government of India. Under this agreement, the enterprise undertakes to achieve the targets set in the agreement at the beginning of the year.

4.2 Objective:

- 4.2.1 To improve the performances of public sector enterprises by increasing autonomy and accountability of the management

4.3 Genesis of the MoU system in India :

- 4.3.1 The system of Memorandum of Understanding (MOU) was initiated on the recommendations of the Arjun Sengupta Committee(1984) which was set up to review the policy on Central Public Sector Enterprises(CPSEs). While examining the recommendations of the Committee, the Group of Ministers in their meeting held in December, 1985 decided that performance evaluation of CPSEs should be done by the Government on the basis of Memorandum of Understanding. In accordance with this decision, four (4) Central Public Sector Enterprises (CPSEs) signed the MOUs with their respective Ministries for the year 1987-88.

- 4.3.2 The MOU system was given broader thrust by the Government after the announcement of the New Industrial Policy of 1991 wherein it was highlighted that more and more CPSEs should be brought under its ambit. It was mentioned in that policy statement:-

"There will be greater thrust on performance improvement through the Memorandum of

Understanding (MOU) system through which managements would be granted greater autonomy and will be held accountable. Technical expertise on the part of the Government would be upgraded to make the MOU negotiations and implementation more effective."

- 4.3.3 In view of the above policy statement, the scope of MOU system has been extended to all CPSEs over a period of time.

4.4 NCAER study on MoU and Performance Evaluation :

- 4.4.1 The Department of Public Enterprises assigned a study to the National Council of Applied Economic Research (NCAER) in 2003 to examine afresh the choice of criteria for performance evaluation and the allocation of weight to the different parameters. The NCAER finally came up with the following Principal Components of parameters for performance evaluation:

Principal Components of Parameters

	<u>Weight</u>
I. Financial (Static) Parameters	50%
II Non- financial Parameters	50%
(i) Dynamic Parameters	30%
(ii) Enterprise-specific Parameters	10%
(iii) Sector-specific Parameter	10%

- 4.4.2 While the performance evaluation under the earlier system allocated 60% weight to 'financial parameters' and 40% weight to 'non-financial parameters', the NCAER recommended equal weights (50%) to both 'financial' and 'non-financial' parameters. In this



respect it is similar to the 'balanced score card' approach of performance evaluation. The 'non-financial parameters' were further sub-divided into 'dynamic parameters', 'enterprise-specific parameters' and 'sector-specific parameters'. Whereas the 'static/financial' parameters generally relate to profit related, size related and productivity related parameters, the 'dynamic' parameters refer to *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. beyond the control of the management, the 'enterprise-specific' parameters relate to issues such as safety and pollution etc.

4.4.3 Moreover, while the above mentioned *principal components* were recommended to be the same for all CPSEs, the individual items/suggested as criteria for performance evaluation under each of these principal components were indicated to be different for different CPSEs classified as (a) 'social sector', (b) 'financial sector', (c) 'trading and consulting sector' and (d) 'other than financial trading/consulting and social sector'. Besides the above, *the new approach allowed discretion to the Task Force to change the weights* of the different criteria included under 'dynamic', 'enterprise-specific' and 'sector-specific' parameters depending on their perception of the CPSE under consideration. The recommendations of the NCAER were subsequently accepted by the Government and the new methodology for setting up performance targets came into force since financial year 2004-05.

4.5 Institutional Arrangement for Implementation of MoU Policy :

4.5.1 **The High Power Committee (HPC)** 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 Cabinet Secretary. Secretary, Department of Public Enterprises is the Member-Secretary of this committee. At the apex of this institutional arrangement is the High Power Committee(HPC) consisting of following members:

1. Cabinet Secretary, Chairman
2. Finance Secretary, Member
3. Secretary(Expenditure), Member
4. Secretary(Planning Commission), Member
5. Secretary(Statistics & Programme Implementation), Member
6. Secretary, Performance Management, Member
7. Chairman(Public Enterprises Selection Board), Member
8. Chairman, Tariff Commission
9. Chief Economic Adviser, Member
10. Secretary(Public Enterprises), Member-Secretary

4.6 Task Force on MoU :

4.6.1 The Committee of Secretaries in its meeting held on 26th December, 1988 decided to constitute a Task Force for determining the parameters and weights and also for evaluation of performance of the CPSEs. The Members of the Task Force are ex-Civil Servants, ex-Chief Executives of CPSEs, Professionals and academicians from relevant disciplines. The Task Force is further divided into different groups called syndicate and each of the syndicate is entrusted with the tasks relating MoU of CPSEs of a particular sector.

4.6.2 In order to lend greater technical and professional expertise as well as diverse and rich experience to Task Force on MoU for the year 2010-11, CPSEs were categorized into 11 syndicates in total; each syndicate normally having 6 members comprising 1 Convenor (Senior most among the members), 1 Administrative member (retired secretary to GOI), 1 Finance/ CA expert, 1 Ex-CMD of any CPSE, 1 renowned academician, and 1 domain expert. There are 67 Task Force members and



one Chairman for the year 2010-11.

The following are the 11 Syndicates:-

1. Petroleum
2. Energy
3. Industrial Sector I
4. Industrial Sector II
5. Mining & Metals
6. Electronics/ Communication
7. Transport
8. Trading & Services
9. Fertilizers & Agro Industries
10. Consultancy
11. Financial Services

4.7 Revision of Targets :

- 4.7.1 The revision of targets is sought by some of the CPSEs on account of various reasons. While evaluating the MoU performance for the year 2004-05 and 2005-06, the Task Force noticed that a large number of CPSEs had sought downward revisions of their MoU parameters/targets due to various factors. This was viewed as not a healthy trend as it amounted to re-fixing of targets when the achievement for the year was known. This was also viewed as against the spirit of the MoU system, which is basically an agreement between the management of the CPSE and the Department of Government of India under which the enterprise undertakes to achieve the targets set for different parameters *at the beginning of the year*.
- 4.7.2 In order to discourage this un-healthy trend and to make the system of fixation of MoU targets more realistic, the Chairman and Convenors of the Task Force had recommended *that those CPSEs should not be entitled for any kind of award including 'excellence certificates' if the evaluation of its MoU performance was based on downward revision of targets*. The HPC also in its meeting dated 18.08.1989 had decided that "MoU targets and Annual Plan Targets should be the same and that they should not be changed during the course of the year". As such, once the MoUs are signed, revision of targets is not permitted.

4.8 Exemption from MoU :

- 4.8.1 In the 13th Meeting of High Power Committee (HPC) on MOU held on 09.08.1995, it was decided that henceforth Administrative Ministries/Departments with the consent of the concerned Secretary will have to take prior approval of HPC through Department of Public Enterprises, if they desire to opt out of the system in a particular year for specific reasons. This procedure will apply to all the CPSEs irrespective of whether they are profit making, loss making or sick.
- 4.8.2 Over the years it was noticed that a larger number of CPSEs were seeking exemptions from signing of MoU. Hence HPC had taken the following decisions with regard to the signing of MoUs:
- (i) All CPSEs including sick and loss making CPSEs would sign MoU with the Ministries/ Departments concerned by 31st March every year. In case, CPSEs do not sign or delay in signing, their performance will be rated as "Poor" and the same should be reflected in the Annual Confidential Reports (ACRs) of Chief Executive of CPSE concerned. There will be no exemption of any CPSE from the MoU.
 - (ii) The Subsidiary Companies will sign MoUs with the Holding Companies on the same lines as MoU is signed between a CPSE and Government of India. The Task Force will finalize and evaluate the MoUs in respect of Subsidiary CPSEs also. The MoU formats will remain the same for all CPSEs including the subsidiaries.

4.9 Revised Guidelines on MoU 2010-11 :

- 4.9.1 Guidelines for signing MoU between holding CPSEs and their respective Ministries/ Departments and between Subsidiary companies with their respective Apex/Holding companies for the year 2010-11 were issued on 10th December 2010. The salient features of the guidelines are :
- (i) The basic targets should be realistic and growth oriented; with projection based on last five years' actual subject to the condition



that they are at least 10% higher than the expected achievement for 2009-10, or achievement in 2008-09, whichever is higher and supported by Industrial growth forecast by CMIE for 2010-11.

- (ii) Non financial parameters should be consistent with the proposed Annual Plan and budget of the Department, and Corporate Plan of the CPSE for 2010-11. Major ongoing projects being monitored by the Ministry of Statistics and Programme Implementation should be included. The non-financial targets should be SMART (Specific, Measurable, Attainable, Results-oriented, Tangible). Targets should be included to assess the performance of the CPSE under Corporate Social Responsibility, (5% weightage), R&D (5% weightage) and Sustainable Development (5% weightage). To the extent possible, the targets for non-financial parameters should be independently verifiable, and CPSE should also specify the agency and means of their verification.
- (iii) CPSEs under the administrative control of different Ministries/Departments were advised to draft MOU for the year 2010-11 on the basis of these Guidelines. These guidelines are also available on DPE website <http://www.dpemou.nic.in>

4.10. Performance Evaluation under the MoU System :

- (i) Evaluation of MoU of the enterprises is done at the end of the year by the MoU Task Force on the basis of actual achievements vis-à-vis the MoU targets
- (ii) Performance evaluation is based on the "Balanced Score" approach, which includes both financial and non-financial parameters. The non-financial parameters include 'dynamic' 'sector-specific' and 'enterprise-specific' parameters
- (iii) The composite score is moreover worked out by taking into account the actual achievements and the weights assigned to that parameter on a 5-point scale.

4.11 Excellence Awards under MoU system :

- 4.11.1 The MOU is based on the premise that to improve performance it will not suffice merely to have a system of objective Performance Evaluation. It is also necessary to reward good performance through a Performance Incentive System. This incentive system can take two forms, i.e., monetary and non-monetary. The MoU scores have implications for monetary incentive as they are rewarded for good performance through performance related payments, which in a number of cases take into account achievement against MoU targets.
- 4.11.2 The Jagannath Rao Committee (Second Pay Revision Committee) has recommended that, MoU performance evaluation will be the one of the basic criteria for Performance related pay, which is directly linked with the MoU performance. The Government has accepted this recommendation. The signing of MoU by the CPSEs with their parent Ministries/ Departments/ Holding Companies have been made mandatory for making them eligible for performance related pay/variable pay. The MoU rating will also form the basis of PRP with all the key result areas identified in the MoU. The PRP will be payable at 100% eligibility levels in case the CPSE achieves the MoU rating as "Excellent". In respect of "Very Good", "Good" and "Fair" MoU ratings, the eligibility levels for PRP would be 80 %, 60% and 40% respectively. If the MoU performance of a CPSE is rated as 'Poor', it will be not be eligible for PRP irrespective of the profitability of the CPSE.
- 4.11.3 The non-monetary incentive is in the form of MoU Excellence Award. Apart from providing an incentive for the Chief Executives of the Public Sector Enterprises towards achieving excellence in their performance, these MoU awards are an expression of commitment of the policy makers to the CPSE and the MoU system.

4.12 Principles for MoU Excellence Awards :

- 4.12.1 The basic principles for selecting the Top 10 CPSEs for MoU Excellence Awards as laid down by HPC in its meeting dated 10th March 1995 are as follows:-



- (i.) The profit of the CPSE in the year should be higher compared to the previous year.
- (ii.) It should not be loss-making enterprise.
- (iii.) The composite score of the CPSE should not be more than 2.00.

4.13 New system of MoU Excellence Awards (w.e.f. 2006-07 onwards) :

- 4.13. The report of the N.K.Sinha Committee was considered by the HPC in its meeting dated 27.7.2007 and the following decisions were taken:
- (i) There would be MoU evaluation of CPSEs only once during the year based on audited figures. Those CPSEs who do not submit self evaluation score based on audited accounts to DPE by 31st August will not be eligible for the Award.
 - (ii) The MoU composite scores and ratings should be prepared and finalized by the Syndicate Group concerned of the Task Force.
 - (iii) Once the MoUs are signed between the CPSEs and the Departments, no revision of targets will be permitted.
 - (iv) The existing system of equal weightage of 50% each to financial and non-financial parameters in MoU, which is based on NCAER Report should continue for the time being.
 - (v) The total number of Awards will be 12 (1 from each of 10 Syndicates, 1 from the listed CPSEs, 1 from amongst the turnaround sick and loss making Enterprises). All other excellent performing CPSEs will get merit certificates.
 - (vi) Three basic principles for selection of CPSEs for MoU Excellence Awards as laid down by HPC in its meeting dated 10th March, 1995 should be continued.
 - (vii) As the excellent grading has a range of 1 to 1.5, CPSEs getting a composite score upto 1.5 will be eligible for MoU Excellence Awards and Certificates.
 - (viii) Compliance of Corporate Governance should also be included as one of the

criteria for consideration of the awards in all the 3 categories for the year 2007-08 onwards.

4.14 MoU Excellence Awards for the year 2006-07 and 2007-08:

4.14.1 MoU Excellence Awards Ceremony for the year 2006-07 and 2007-08 was held on 15th October, 2009 at Vigyan Bhavan, New Delhi., Dr. Manmohan Singh, Hon'ble Prime Minister of India presented 24 MoU Excellence Awards for 2006-07 and 2007-08 to Central Public Sector Enterprises, who have shown exceptional performance on the Memoranda of Understanding (MoU) signed with the Administrative Ministries.

4.14.2 The awardees were as under:

MoU Excellence Award winners

Sector/Category	2006-07	2007-08
"Consultancy"	"National Buildings Construction Corporation Ltd."	"WAPCOS Ltd."
"Electronics & Communication"	"Electronics Corporation of India Ltd."	"Electronics Corporation of India Ltd."
"Energy"	"Power Grid Corporation of India Ltd."	"Power Grid Corporation of India Ltd."
"Fertilizers & Agro Industries"	"Rashtriya Chemicals & Fertilizers Ltd."	"Rashtriya Chemicals & Fertilizers Ltd."
"Financial Services"	"National Backward Classes Finance & Development Corporation"	"Power Finance Corporation Ltd."
"Industrial"	"Hindustan Aeronautics Ltd."	"Hindustan Paper Corporation Ltd."
"Mining & Metals"	"Manganese Ore (India) Ltd."	"Steel Authority of India Ltd."
"Petroleum"	"Bharat Petroleum Corporation Ltd."	"Indian Oil Corporation Ltd."
"Trading & Service"	"State Trading Corporation of India Ltd."	"MMTC Ltd."
"Transport"	"Container Corporation of India Ltd."	"Container Corporation of India Ltd."
"Turnaround CPSEs"	"Mineral Exploration Corporation Ltd."	"Projects & Development India Ltd."
"Listed CPSEs"	"Bharat Heavy Electricals Limited"	"Steel Authority of India Ltd."



MoU Excellence Certificates for the year 2006-07 and 2007-08 were awarded to 38 and 45 CPSEs respectively.

4.15 Coverage of CPSEs under the MoU System:

Year	No. of MOU's signed	Year	No. of MOU's signed
1987-88	4	1998-1999	108
1988-89	11	1999-2000	108
1989-90	18	2000-2001	107
1990-91	23	2001-2002	104
1991-92	72	2002-2003	100
1992-93	98	2003-2004	96
1993-94	101	2004-2005	99
1994-95	100	2005-2006	102
1995-96	104	2006-2007	113
1996-97	110	2007-2008	144
1997-98	108	2008-2009	147
		2009-2010	197

4.16 Performance of the MoU signing CPSEs:

4.16.1 The actual performance of the MoU signing CPSEs is evaluated w.r.t. the targets fixed at the beginning of the year and they are rated as Excellent, Very Good, Good, Fair and Poor as per their performance. The ratings secured by the CPSEs during the last 6 years and their performance are as under:-

Rating	No. of Public Sector Enterprises						
	Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Excellent		54	45	49	46	55	47
V.Good		21	31	32	37	34	34
Good		10	12	15	13	15	25
Fair		11	10	06	06	08	17
Poor		00	01	00	00	00	01
Total		96	99	102	102	112	124

4.17 Introduction of MoU system in State Level Public Enterprises :

4.17.1 Conference of Secretaries of States and Union Territories who are in charge of State Level Public Sector Enterprises (SLPEs) was held at SCOPE Convention Centre, Lodhi Road, New Delhi on 27.08.2009 for introduction of the MoU system in State Level Public Sector Enterprises. The various aspects of the development of SLPEs were discussed. Apart from the Minister and the Minister of State of Heavy industries and Public Enterprises, Member (Industry), Planning Commission also addressed the Conference. The experience of the system of MoU as a management tool for improving the performance of CPSEs through increased autonomy with accountability was shared with participants. A draft MoU format relevant for SLPEs was taken up for discussion with the Secretaries of the State Governments in the Conference.

4.17.2 Based on the deliberations in the Conference with Secretaries of the State Government and the various inputs obtained from the State Governments, DPE has prepared a Model MoU document that can be conveniently used by the State Governments for the SLPEs. Minister (HI&PE) and Secretary, DPE have written separate D.O. letters alongwith model MoU documents to all the Chief Ministers of States and Chief Secretaries of States and Union Territories respectively requesting them to consider adoption of the MoU System for the State Level PSEs.



Chapter 5

Human Resource Development

5.1.1 Central Public Sector Enterprises (CPSEs) has a vast reservoir of professionally qualified manpower in different disciplines and the efficient operations of these enterprises, to a large extent, depend on the effective utilization of this manpower. There have been widespread changes in the management techniques, technologies, financial methods, production management, etc. due to globalization and liberalization. Human Resource Development is thus a thrust area of public sector performance. It necessitates creating an environment in which people can develop their full potential for productive and creative activities. To improve the quality and capabilities of the manpower as well as to upgrade their knowledge and skill, various steps have been taken by the CPSEs. Apart from organizing in-house training programmes, the CPSEs also depute their executives for various training programmes being organized by premier Management/ Training Institutes in India and abroad.

5.2 Executive Training Programmes

5.2.1 As the nodal Department for PSEs, the Department of Public Enterprises is supplementing the efforts of the public enterprises towards human resource development by organizing Executive Development Programmes (EDPs) for senior and middle level executives in collaboration with premier Management/Training Institutes in the country.

5.2.2 The CPSEs design their own human resources development programmes so as to upgrade the skills and knowledge of middle and senior level executives by giving them training in India. To

supplement the efforts of CPSEs, some of the premier management/training institutes and CPSEs are conducting training programmes in collaboration with the Department of Public Enterprises. The EDPs are conducted for a duration of 2-5 days. During 2008-09, 23 such programmes were conducted and for the year 2009-2010, 15 such programmes are planned. These programmes are organized in collaboration with the Institute of Cost and Works Accountants of India, National Institute of Micro Small and Medium Enterprises, National Institute of Financial Management, Institute of Chartered Accountants of India, Indian Society for Training and Development, Institute of Company Secretaries of India, Indian Society of Health Administration, Bangalore, etc.

5.2.3 The subjects covered under these programmes include financial management, leadership challenge, effective marketing management, total quality management, information technology & e-commerce, management information systems, communication skills, corporate governance, corporate social responsibility, MoU principles & Practices, project management, capital market reform & risk management, negotiation strategies & skills, health and stress management, industrial relations & labour issues, international taxation/ international finance, accounting standards, project planning and monitoring, etc.

5.2.4 India is a founder member of International Center for Promotion of Enterprises (ICPE), Ljubljana, Slovenia which is an inter-governmental organization. India has doubled its annual contribution to ICPE from the year



2007-2008. Currently, India is the President of ICPE Council. ICPE also conducts full year MBA Course every year. Secretary, DPE is a member on the Board of Governors of IIM, Kolkata and Institute of Public Enterprise, Hyderabad. DPE is also a member of the Executive Board of the Standing Conference of Public Enterprises (SCOPE), New Delhi.

5.3 PERSONNEL POLICY

5.3.1 Various personnel policy matters relating to CPSEs are dealt by DPE. Some of the important policy initiatives taken during the year are given below.

5.4 PROCEDURE TO BE OBSERVED FOR BOARD LEVEL APPOINTMENTS FOR CPSEs REQUIRING APPROVAL OF ACC

5.4.1 In September, 2005 powers for entrusting additional charge arrangements in all scheduled CPSEs have been delegated to the respective Ministries subject to certain conditions.

5.4.2 The issue relating to requirement of fresh vigilance clearances for extension of additional charge arrangements in respect of Board level posts in Central Public Sector Enterprises (CPSEs) had been considered by the Government in consultation with Central Vigilance Commission and the following further guidelines had been issued in October, 2007:-

- (a) for additional charge of Board level positions in PSUs, for an initial period of up to three months, clearance from the CVO would suffice;
- (b) for continuation of the additional charge arrangements, beyond three months, clearance from CVC would be required; and
- (c) fresh CVC clearance would be required, if the arrangements continue, beyond one year.
- (d) In the cases where additional charge is assigned to either a functionary of another PSU, or an officer from a Ministry, clearance from the CVO would not suffice, and CVC clearance would be necessary.

5.4.3 The matter was again considered by the Government in consultation with Central Vigilance Commission and it has been decided that henceforth in such cases clearance from the Commission is not required to be sought for the purpose of additional charge arrangements in respect of Board-level functionaries in PSUs, unless the Department concerned has material in their possession on the basis of which it has reason to believe that vigilance status has changed since the incumbent was last cleared for Board level appointment. The clearance from CVO would continue to be required as stipulated in the foregoing paragraph. The earlier instructions dated October, 2007 would continue to apply in cases where the Functional Director of a CPSE or an officer from the Ministry is proposed to be given additional charge of MD/CMD of the CPSEs.

5.4.4 The following guidelines issued by ACC have been intimated to all administrative Ministries/ Departments for adherence on 16.4.2009:-

- The power to approve additional charge in the Central Public Sector Undertakings upto a period of three months has been delegated to the Minister-in-charge, and for the next three months, to the MOS (PP) vide this Department's OM No.26(3)EO/2004(ACC) dated 17.8.2005, subject to the condition that the person should be clear from the vigilance angle. The power to approve additional charge beyond six months vests with the ACC.
- The ACC has also approved that in the case of subsidiary CPSEs, the additional charge of the post of MD/CMD should be assigned to the senior most Functional Director of that subsidiary company having vigilance clearance. In case no such Functional Director is in position in the subsidiary CPSE, the additional charge of the post of MD/CMD of the subsidiary company could be automatically assigned to the CMD/ Functional Director of the holding company who is the nominee Director of the holding company on the Board of subsidiary company. However, this assignment should not result in



contravention of Section 316 of the Companies Act, 1956.

5.5 PRESCRIPTION OF QUALIFICATION/EXPERIENCE FOR VARIOUS BOARD LEVEL POSITIONS IN PSUs.

- 5.5.1 The issue of prescription of qualification/experience for various Board level positions in PSUs and laying down norms to infuse more transparency and objectivity in the PESB selections has further been considered by the Government and it has been decided that the Administrative Ministry concerned may, in consultation with the PESB, finalise the eligibility criteria in respect of various Board level positions in different PSUs under their control. Once the recruitment norms are finalized, such norms should have validity for a minimum period of 5 years. The finalised eligibility criteria should be open for the information of the general public.
- 5.5.2 In case of any disagreement or dispute between the PESB and the Administrative Ministry in relation to finalization of eligibility conditions, the matter should be referred to ACC for final orders.
- 5.5.3 As per the directions of ACC, all administrative Ministries/Departments have been requested on 8.4.2009 and 24.6.2009 to initiate action for review, updation/finalization of recruitment rules (RR) for Board level positions in PSUs and furnish the status report in this regard to DOPT with a copy to DPE and PESB.

5.6 PROCEDURE FOR SELECTION TO BOARD LEVEL POSTS IN CENTRAL PUBLIC SECTOR ENTERPRISES (CPSES)

- 5.6.1 Following the instructions of ACC, the guideline regarding Procedure for selection to Board level posts in Central Public Sector Enterprises (CPSEs) were issued on 20.7.2009. These guidelines prescribe revised procedure for obtaining CVC clearance in favour of candidates recommended by the Public Enterprises Selection Board (PESB) for Board level appointments in Public Sector Undertakings (PSUs) so as to reduce delays in the process.

5.7 EXTENSION/NON-EXTENSION OF THE TERM OF APPOINTMENT OF CHIEF EXECUTIVES/FUNCTIONAL DIRECTORS BEYOND THE TERM OF APPOINTMENT APPROVED BY THE APPOINTMENTS COMMITTEE OF THE CABINET (ACC).

- 5.7.1 In continuation to the Cabinet Secretariat's instructions dated 10.12.1986 regarding laying down the procedure for processing the proposals in regard to extension/non-extension of the term of appointment of Chief Executives/ Functional Directors beyond the term of appointment approved by the ACC, the competent authority has further approved that the administrative Ministry/Department should simultaneously process for CVC clearance and Joint Appraisal by PESB so that CVC comments are available by the time recommendation of Joint Appraisal is received by the Ministry/Department thereby, avoiding delays on account of non-availability of vigilance clearance. Instructions in this regard were issued on 15th September, 2009.

5.8 ANNUAL PERFORMANCE REVIEW (APR) OF TOP MANAGEMENT INCUMBENTS OF CPSEs

- 5.8.1 The issue of communication of entries in the APR has been considered by Supreme Court in the case of Shri Dev Dutt Vs. Union of India (Civil Appeal No.7631 of 2002). In compliance of the judgment of Supreme Court in this case and the decision of the Government, instructions were issued to all CPSEs to the effect that full Annual Performance Appraisal Report (APAR) including the overall grade shall be communicated to the concerned officer. It has also been provided that the concerned officer shall be given the opportunity to make any representation against the entries and final grading given in the report.
- 5.8.2 The Committee set up to review the existing formats and procedure for writing Annual Performance Review (APR) of top management incumbents of CPSEs completed their task and submitted their report on 31.12.2009.



Chapter 6

Permanent Machinery of Arbitration

- 6.1 Permanent Machinery of Arbitrators has been set up in Department of Public Enterprises for resolving commercial disputes, except taxation, between CPSEs inter-se as well as between a CPSEs and a Central Government Department/ Ministry. From 1993-94 disputes with Port Trusts were also included under the purview of PMA for arbitration. The Ministry of Railways were excluded from the purview of PMA vide DPE OM dated 12.2.97.
- 6.2 PMA guidelines were revised on 22.1.04. The disputes are required to be referred to Department of Public Enterprises for its reference to the Arbitrator of PMA. Secretary, Department of Public Enterprises on being satisfied with prima facie existence of dispute, refers the dispute to the Arbitrator of the PMA for Arbitration. The Arbitration Act, 1940 (now 1996) is not applicable in these cases. No outside lawyer is allowed to appear on behalf of either party for presenting/defending the cases. But the parties can take help of their own full time law officers.
- 6.3 The Arbitrator issues notices to parties concerned for submission of facts of the case and their claims and counter claims. The parties argue their case before him. Based on written records and oral evidence the Arbitrator gives an award. Both the disputing parties have to bear the arbitration cost equally. An appeal against the award of the Arbitrator can be made to the Secretary, Ministry of Law, for setting aside or revision of the award. The decision of Secretary, Ministry of Law is final and binding on the parties. No appeal can be made in the Court of Law/Tribunal against the decision of Secretary (Law).
- 6.4 There is one Arbitrator in the PMA. Ever since the PMA was created in 1989, 232 cases have been referred to the Arbitrators of PMA, out of which Awards in 179 cases have been published. The PMA is designed to be self supporting, and hence the PMA charges an Arbitration fee which is worked out by the Arbitrator based on the formula given in the guidelines.



Chapter 7

Wage Policy and Manpower Rationalization

- 7.1 The Department of Public Enterprises (DPE) functions as nodal Department 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 as well as at the Board level in CPSEs. The Department renders advice to the administrative Ministries/ Departments and the CPSEs in matters relating to the wage policy 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 and scales of pay are followed.
- 7.2 Industrial Dearness Allowance (IDA)**
- 7.2.1 Government policy relating to pay scales and pay pattern is that all employees of the CPSEs should be on IDA pattern and related scales of pay. Instructions had been issued by the DPE in July, 1981 and July, 1984 to all the administrative Ministries 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,' which included 'promotion' made on or after 01.01.1989 in CDA scales of pay, has to be in IDA scales of pay. There are 246 CPSEs (excluding Banks, Insurance Companies and newly set up CPSEs) under the administrative control of the Central Government. They employ approximately 15.35 lakh workmen, clerical staff and executives. Out of this, around 96.8 % of the workmen and executives are on IDA pattern and related scales of pay.
- 7.3 First Pay Revision Committee for the revision of scales of pay of Executives and non-unionised supervisors under IDA pattern of pay scales in CPSEs w.e.f. 01.01.1997.**
- 7.3.1 The pay revision for the IDA executives and non-unionized supervisors was carried out 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 periodicity of pay revision was for 10 years i.e. upto 31.12.2006 .
- 7.4 Second Pay Revision Committee for the revision of scales of pay of Executives and non-unionised supervisors under IDA pattern of pay scales in CPSEs w.e.f. 01.01.2007.**
- 7.4.1 The Second Pay Revision Committee (2nd PRC) headed by Mr. Justice M. Jagannadha Rao, retired judge of Supreme Court, for the revision of scales of pay of Board level and below Board level executives including non-unionised supervisors of CPSEs following Industrial Dearness Allowance(IDA) pattern scales of pay w.e.f. 01.01.2007, was constituted vide the Government of India Resolution dated 30.11.2006. The Government, after due consideration of the recommendations of the 2nd Pay Revision Committee issued orders on



26.11.2008 and 09.02.2009. The salient features of these orders are as follows:-

- i) Pay scales ranging from Rs. 12,600-32,500 for E-0 grade and to Rs. 80,000-1,25,000 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 Rs.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) An Anomalies Committee consisting of Secretaries of Department of Public Enterprises, Department of Expenditure and Department of Personnel & Training constituted to look into further 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.

7.4.2 Later on, a Committee of Ministers headed by the Home Minister looked into the issues of executives of Oil & Power Sector CPSEs. Based on the recommendations of the Committee of Ministers, government issued orders on 02.04.2009 to extend the following additional benefits:-

- i) Benefit of merger of DA with Basic Pay for the purpose of fitment raising the fitment from 68.8% to 78.2%.
- ii) Superannuation benefit upto 30% of basic pay + DA instead of basic pay alone.
- iii) Limiting the expenditure on infrastructure to recurring cost of running the facilities with a ceiling of 10% of basic pay.
- iv) 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.
- v) These benefit to be extended to all CPSEs. Benefits as given in these O.Ms to be viewed as a total package. No change need be made in O.Ms dated 26.11.2008 and 09.02.2009.

7.5 Policy on 7th Round of Wage Negotiations

7.5.1 DPE vide its O.M. dated 9.11.2006 has issued the 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 management of CPSEs have freedom to negotiate revision of pay scales for the workmen within certain conditions. The guidelines are broadly similar to the earlier policy on the Sixth Round of Wage Negotiations. The Guidelines, inter alia, broadly indicate that the wage settlement will be for a period of 10 years with 100% DA neutralization. The Government vide O.M. dated 01.05.2008, further, allowed the Administrative Ministries/ Departments (concerned with the CPSEs) take a decision on a case by case basis for the periodicity of Wage Settlement below 10 years but not less than 5 years, with the approval of their Minister.

7.6 Pay -revision of employees under CDA Pattern in CPSEs

7.6.1 CDA pattern pay scales are applicable to some of the clerical staff, unionized cadres and



executives of the 69 CPSEs who were on the rolls of these CPSEs as on 1.1.1986 and upto 31.12.1988 and were in receipt of 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 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. As per the recommendations of the High Power Pay Committee and Supreme Court directives thereon, the employees following CDA pattern of scales of pay in the Central Public Sector Enterprises would get pay revision only as and when similar changes are effected for the Central Government employees.

- 7.6.2 Accordingly, DPE vide its O.M. dated 14.10.2008, 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 that 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 Advisor. Vide O.M. dated. 20.1.2009 guidelines on revised allowances have also been issued.



Chapter 8

Categorization of CPSEs

- 8.1 The Public Sector Enterprises are categorized into four schedules namely 'A', 'B', 'C' & 'D'. The pay scales of chief executives and full time functional Directors of CPSEs are linked with the schedule of the concerned enterprise. Normally the Chief Executive of the enterprise is given the scale of pay attached to the schedule of the company while the functional Directors are allowed the scale of pay attached to the next below schedule. At times the posts of Chief Executives or functional Directors are upgraded on personal basis so that exceptionally capable executives are retained in the CPSEs where they had rendered meritorious service. Such arrangements also help in attracting talent to sick or high-tech enterprises.
- 8.2 The initial categorization of CPSEs in the mid-Sixties was made on the basis of their importance to the economy and complexities of their problems. Over the years the Department of Public Enterprises has evolved norms for the purpose of categorization/re-categorization of CPSEs. Categorization is based on criteria such as quantitative factors like investment, capital employed, net sales, profit, number of employees and qualitative factors like national importance, complexity of problems, level of technology, prospects for expansion and diversification of activities and competition from other sectors, etc. In addition, criteria relating to the strategic importance of the CPSE is also taken into account. The present procedure involves consideration of the proposals in the administrative Ministry concerned and the Department of Public Enterprises which consults the Public Enterprises Selection Board. At present (as on 31.1.2010) there are 59 Schedule 'A', 70 Schedule 'B', 45 Schedule 'C', 6 Schedule 'D' and 67 uncategorized PSEs. During the year, one CPSE has been upgraded from Schedule 'B' to 'A' and one CPSE has been upgraded from Schedule 'C' to 'B'. The schedule-wise list of CPSEs is given in Appendix-II. Apart from this, two Chief Executives have been given higher schedule on personal basis and four posts of Functional Directors have been created.

Chapter 9

Board for Reconstruction of Public Sector Enterprises (BRPSE)

- 9.1 In order to address, inter-alia, the problems relating to revival of sick CPSEs, Board for Reconstruction of Public Sector Enterprises (BRPSE) was constituted by the Government in December, 2004. BRPSE consists of Chairman in the rank of Minister of State, three non-official Members and three official Members. In addition, Chairman, Public Enterprises Selection Board (PESB), Chairman, Standing Conference of Public Enterprises (SCOPE) and Chairman, Oil and Natural Gas Corporation Ltd. (ONGC) are permanent invitees, while Secretary of the concerned administrative Ministry/Department is a special invitee to the meetings. There is also an exclusive Secretary to BRPSE in the rank of Additional Secretary to Government of India.
- 9.2 During the period April, 2009 to January, 2010, BRPSE held 8 meetings and considered the cases of 21 CPSEs (Appendix III). Out of these, there were fresh proposal of 4 CPSEs including 3 remitted cases of previous years. The Board has given its recommendation in respect of 2 CPSEs to the Government and remitted the balance two cases to the concerned administrative Ministries/Departments for resubmission. The Board reviewed the status of implementation of recommendations in case of 9 CPSEs and the implementation of approvals of Government in respect of 8 CPSEs. In addition, the Board also reviewed the status of revival proposal in respect of 2 CPSEs.
- 9.3 The recommendations of BRPSE in respect of the aforesaid 2 PSEs fall under the following broad categories.

Sl. No.	Category	No. of PSEs
1	Revival through take over by / transfer to PSEs/ Government Department	1
2	Closure	1
	Total	2

- 9.4 The first meeting of BRPSE was held on 16.12.2004. Since the inception of BRPSE and till January, 2010, 76 Board meetings have been held. The Board has considered proposals of 64 PSEs. Till January, 2010, the Board has given its recommendations in respect of 58 PSEs. In addition, the Board has also recommended to the Government to accord 'in principle' approval for reversal of its earlier decision to close the units of Fertilizer Corporation of India Ltd. (FCIL) and Hindustan Fertilizer Corporation Ltd. (HFCL) so as to explore various options for their revival.
- 9.5 The recommendations of BRPSE in respect of the 58 PSEs (Appendix V) fall under the following broad categories:

Sl. No.	Category	No. of PSEs
1	Revival through restructuring package	41
2	Revival through take over by State Govt./ joint venture with PSEs/Disinvestment	9
3	Revival through merger/ takeover	5
4	Closure	3
	Total	58



9.6 Other major recommendations of BRPSE:

- 9.6.1 Out of the 58 cases recommended, Government so far have approved the proposals of 39 PSEs. In addition, Government have also decided 'in principle' to examine the possibility of revival of FCIL and HFCL subject to the confirmed availability of Gas. The Government have further approved (i) revival of Barauni Unit of HFCL through Special Purpose Vehicle, (ii) constitution of Empowered Committee of Secretaries with the mandate to evaluate all options for revival of closed units and make suitable recommendations for consideration of Government, and (iii) in-principle approval for writing off GOI's loans and interest liabilities subject to finalization of a fully tied up investment proposal for revival of the closed units.



Chapter 10

Scheme of Counselling, Retraining and Redeployment

- 10.1 Restructuring of enterprises is a global phenomenon, particularly in the context of liberalized economy. There has been thrust on restructuring the central public enterprises both at macro as well as micro level. In the process, rationalization of manpower has also become a necessity. But this affects in some cases the interest of the workers. As such, the policy of the Government has been to implement reforms with a humane face and provide adequate safety net for the affected workers.
- 10.2 Considering the emerging need to have safety net, Government had established National Renewal Fund (NRF) in February, 1992 broadly to cover the expenses of VRS and to provide retraining to the workers in the organized sector. However, in the backdrop of on going restructuring exercise in the central enterprises, focus was given on the needs of CPSEs. The NRF was abolished in February, 2000. The retraining activity was administered by Department of Industrial Policy & Promotion till 31st March, 2001. The scheme for Counselling, Retraining and Redeployment (CRR) of rationalized employees of CPSEs is under implementation by Department of Public Enterprises since 2001-02.
- 10.3 The scheme for Counselling, Retraining and Redeployment (CRR) inter-alia aims:
- to provide opportunity for self employment.
 - to reorient rationalized employees through short duration programmes.
 - to equip them for new avocations.
 - to engage them in income generating self employment.
 - to help them rejoin the productive process.
- 10.4 The main elements of the CRR programme are Counselling, Retraining and Redeployment. Besides, a new element of sensitization programme has also been included under CRR programme.
- 10.5 **Counselling** helps the rationalized employees to absorb the trauma 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.
- 10.6 For monitoring the CRR programme the in-built mechanism involves field visits and inspections by the concerned officers of DPE. Coordination Committees at local level have also been formed. The Scheme also provides for inter-ministerial Review Committee under Secretary



(PE) with members from selected concerned Governments/agencies/CPSEs.

- 10.7 The Nodal Training Agencies are required to counsel VRS optees, impart training and reorientation, 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 Coordination Committee etc.
- 10.8 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.
- 10.9 During 2008-09, plan fund of Rs. 8.10 crore was allocated. In 2008-09, 19 nodal agencies were operational with 58 Employees Assistance Centres (EACs) located all over the country to meet the demand of training under the Scheme. Year wise number of persons trained under the scheme is shown as under:-

Year	No. 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
Total	146323

modifications include coverage of dependents of VRS optees, extended duration of training, separate amount of follow-up in the expenditure norm and effective targeting, monitoring and redeployment.

- 10.11 A list of operating nodal agencies is given at Appendix V

- 10.10 Under Zero based budgeting exercise, CRR Scheme was modified during 11th Five Year Plan. The scheme continues with revised guidelines issued in November, 2007 to all operating nodal agencies, Chief Executives of CPSEs, concerned administrative Ministries/Departments and nodal Ministries/Departments. The



Chapter 11

Expenditure Management- Economy Measures and Rationalization of Expenditure in Central Public Sector Enterprises (CPSEs)

Government has issued austerity measures vide Department of Expenditure's O.M. No. 7(1)/E. Coord/2009 dated 7th September, 2009. It was felt that Central Public Sector Enterprises (CPSEs) also have important role in controlling the expenditure particularly on foreign travel, office expenses, publicity, seminars, Petrol and other administrative expenditures. Department of Public Enterprises has issued an O.M. No. DPE/3(4)/2008-Fin dated 8.10.2009 directing CPSEs to adopt these measures relating to expenditure management in CPSEs.

Chapter 12

Official Language Policy

- 12.1 Hindi Cell of this Department is primarily responsible for implementation of various provision of the Official Language Act and the rules framed there under. Hindi Cell is also responsible for translation of documents required to be issued under Section 3(3) of the Official Language Act. As more than 80% of the staff of this Department knows Hindi, the Department has been notified under rule 10(4) of the Official Language Rules, 1976.
- 12.2 All notifications, resolutions, notices, circulars, papers laid on the Table of the house of Parliament etc., have been issued bilingually during the year 2008-09. Efforts were also made to promote original correspondence in Hindi. The Official Language Implementation Committee of DPE continues to function under the Chairmanship of the Joint Secretary.
- 12.3 With a view to create consciousness and accelerating the use of Hindi as Official Language, Hindi Pakhwada, was organized by the Department from 16th September, 2009 to 30th September, 2009. During the Pakhawada three competitions namely, Hindi Essay writing, Hindi Shrutlekh and Hindi Typing (on computer) were organized for the officers and staff. Cash prizes were distributed to the winners by the Secretary, Department of Public Enterprises.
- 12.4 The Department presents Annual "Public Enterprises Survey" on the working of Central Public Sector Enterprises in the Parliament every year. This is a voluminous and comprehensive document brought out by the Department simultaneously in English and Hindi.



Sh. Bhaskar Chatterjee, Secretary, Department of Public Enterprises presiding over the Prize Distribution function during Hindi Pakhwada-2009-10



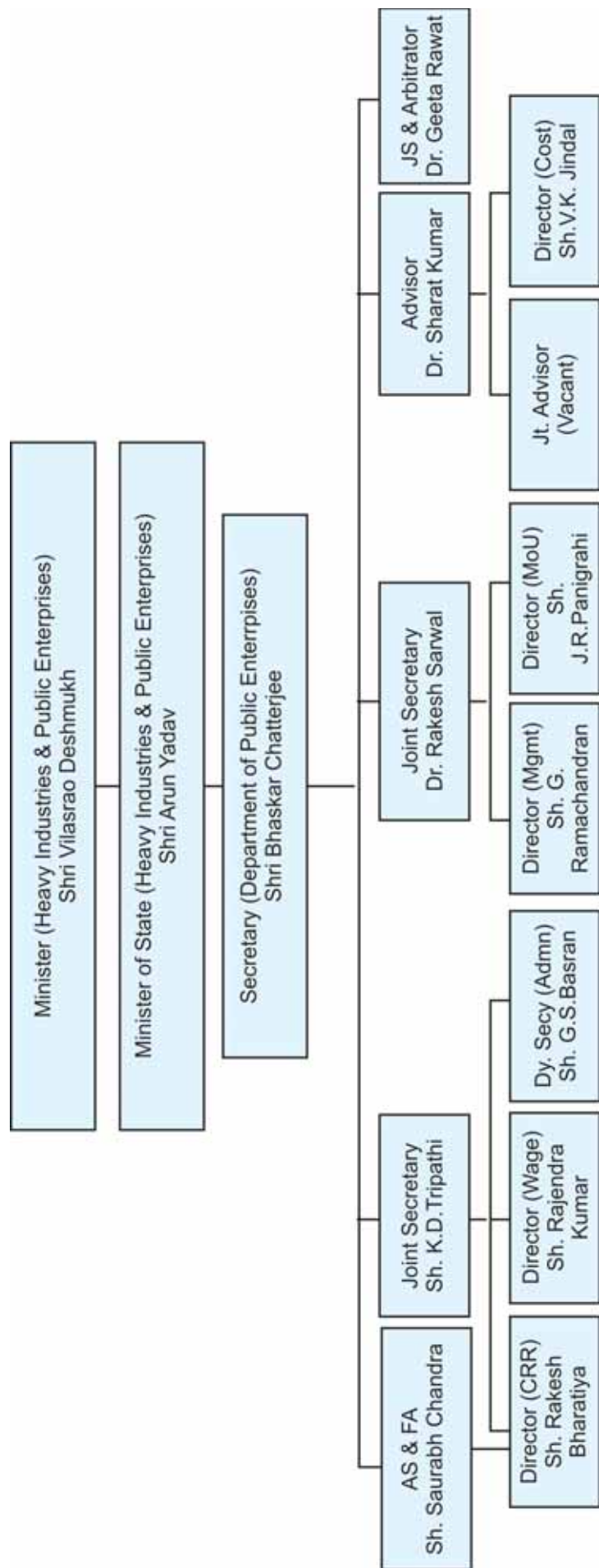
Chapter 13

Welfare of Women

- 13.1 The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favour of women. Within the framework of a democratic policy, our laws, development policies, plans and programmes have aimed at advancement of women in different spheres.
- 13.2 The Department has also set up a complaint committee under the chairmanship of a lady officer to ensure fair, safe and healthy environment at work place for women. The guidelines laid down by the Supreme Court relating to sexual harassment have been brought to the notice of all those working in this Department. Department of Public Enterprises vide their OM dated 29th May, 1998, has already issued detailed guidelines and norms to Chief Executives of PSEs for observance and prevention of sexual harassment of working women.
- 13.3 The Department of Public Enterprises is having a total sanctioned strength of 131. There are 84 officers/staff, in position, including 9 lady employees. The Department has made all possible efforts to create a healthy and congenial atmosphere so that women employees can perform duties with honour, dignity and without fear.



Organogram of Department of Public Enterprises





Appendix-II

Schedule-Wise List of Central Public Sector Enterprises

As on 31st January, 2010

Schedule - A

1. Airports Authority of India
2. Bharat Bhari Udyog Nigam Ltd.
3. BEML Ltd.
4. Bharat Electronics Ltd.
5. Bharat Heavy Electricals Ltd.
6. Bharat Petroleum Corporation Ltd.
7. Bharat Sanchar Nigam Ltd.
8. Central Warehousing Corporation.
9. Coal India Ltd.
10. Container Corporation of India Ltd.
11. Dedicated Freight Corridor Corporation of India Ltd.
12. Electronics Corporation of India Ltd.
13. Engineers India Ltd.
14. Fertilizers & Chemicals (Travancore) Ltd.
15. Food Corporation of India
16. GAIL (India) Ltd.
17. Heavy Engineering Corporation Ltd.
18. Hindustan Aeronautics Ltd.
19. Hindustan Copper Ltd.
20. Hindustan Paper Corporation Ltd.
21. Hindustan Petroleum Corporation Ltd.
22. HMT Ltd.
23. Housing & Urban Development Corporation Ltd.
24. I T I Ltd.
25. Indian Oil Corporation Ltd.
26. IRCON International Ltd.
27. Konkan Railway Corporation Ltd.
28. Kudremukh Iron Ore Company Ltd.
29. M M T C Ltd.
30. Mahanagar Telephone Nigam Ltd.
31. Mazagon Dock Ltd.
32. MECON Ltd.
33. Mumbai Railway Vikas Corporation Ltd.
34. National Aluminium Company Ltd.
35. National Aviation Company of India Ltd.
36. National Building Construction Corporation Ltd.
37. National Fertilizers Ltd.
38. NHPC Ltd.
39. National Mineral Development Corporation Ltd.
40. National Textiles Corporation Ltd.
41. NTPC Ltd.
42. Neyveli Lignite Corporation Ltd.
43. North Eastern Electric Power Corporation Ltd.
44. Oil & Natural Gas Corporation Ltd.
45. Oil India Ltd.
46. Power Finance Corporation
47. Power Grid Corporation of India Ltd.
48. RITES Ltd.
49. RailTel Corporation of India Ltd.
50. Rail Vikas Nigam Ltd.
51. Rashtriya Chemicals and Fertilizers Ltd.
52. Rashtriya Ispat Nigam Ltd.
53. Rural Electrification Corporation Ltd.
54. Satluj Jal Vidyut Nigam Ltd.
55. Security Printing & Minting Corporation of India Ltd.
56. Shipping Corporation of India Ltd.
57. State Trading Corporation of India Ltd.
58. Steel Authority of India Ltd.
59. Telecommunications Consultants (India) Ltd.

Schedule - B

1. Andrew Yule & Company Ltd.
2. Balmer Lawrie & Company Ltd.
3. Bharat Coking Coal Ltd.
4. Bharat Dynamics Ltd.
5. Bharat Heavy Plate & Vessels Ltd.
6. Bharat Pumps & Compressors Ltd.
7. Brahmaputa Crackers & Polymers Ltd.
8. Brahmaputra Valley Fertilizer Corporation Ltd.
9. Braithwaite & Company Ltd.
10. BBJ Construction Ltd.
11. Bridge & Roof Company (India) Ltd.
12. British India Corporation Ltd.
13. Burn Standard Company Ltd.
14. Cement Corporation of India Ltd.
15. Central Coalfields Ltd.
16. Central Electronics Ltd.
17. Central Mine Planning & Design Institute Ltd.
18. Chennai Petroleum Corporation Ltd.
19. Cochin Shipyard Ltd.
20. Cotton Corporation of India Ltd.
21. Dredging Corporation of India Ltd.
22. Eastern Coalfields Ltd.



23. Engineering Projects (India) Ltd.
24. Ennore Port Ltd.
25. Fertilizer Corporation of India Ltd.
26. Garden Reach Shipbuilders & Engineers Ltd.
27. Goa Shipyard Ltd.
28. Handicrafts & Handlooms Export Corporation Ltd.
29. Hindustan Cables Ltd.
30. Hindustan Fertilizer Corporation Ltd.
31. HLL Lifecare Ltd.
32. Hindustan Newsprints Ltd.
33. Hindustan Organic Chemicals Ltd.
34. Hindustan Shipyard Ltd.
35. Hindustan Steelworks Construction Company Ltd.
36. Hindustan Vegetable Oils Corporation Ltd.
37. HMT (International) Ltd.
38. HMT Machine Tools Ltd.
39. HMT Watches Ltd.
40. India Tourism Development Corporation Ltd.
41. India Trade Promotion Organisation
42. Indian Drugs & Pharmaceuticals Ltd.
43. Indian Railway Catering & Tourism Corporation Ltd.
44. Indian Railway Finance Corporation Ltd.
45. Indian Rare Earths Ltd.
46. Indian Renewable Energy Development Agency Ltd.
47. Instrumentation Ltd.
48. M S T C Ltd.
49. Madras Fertilizers Ltd.
50. Mahanadi Coalfields Ltd.
51. Mangalore Refinery & Petrochemicals Ltd.
52. Manganese Ore (India) Ltd
53. Mineral Exploration Corporation Ltd.
54. Mishra Dhatu Nigam Ltd.
55. National Jute Manufacturers Corporation Ltd.
56. National Projects Construction Corporation Ltd.
57. National Small Industries Corporation Ltd.
58. Northern Coalfields Ltd.
59. Numaligarh Refinery Ltd.
60. ONGC Videsh Ltd.
61. P E C Ltd.
62. Pawan Hans Helicopters Ltd.
63. Projects & Development India Ltd.
64. Scooters India Ltd.
65. South Eastern Coalfields Ltd.
66. Tehri Hydro Development Corporation Ltd.
67. Tyre Corporation of India Ltd.
68. Uranium Corporation of India Ltd.

69. W A P C O S Ltd.
70. Western Coalfields Ltd.

Schedule - C

1. Andaman & Nicobar Islands Forest & Plantation Development Corporation Ltd.
2. Artificial Limbs Mfg. Corporation of India
3. Bengal Chemicals & Pharmaceuticals Ltd.
4. Bharat Petro Resources Ltd.
5. Bharat Refractories Ltd.
6. Bharat Wagon & Engineering Company Ltd.
7. Biecco Lawrie & Co. Ltd.
8. Broadcast Engineering Consultants India Ltd.
9. Central Cottage Industries Corporation of India Ltd.
10. Central Inland Water Transport Corporation Ltd.
11. Central Railside Warehouse Company Ltd.
12. Educational Consultants (India) Ltd.
13. FCI Aravali Gypsum & Minerals (India) Ltd.
14. Ferro Scrap Nigam Ltd.
15. Hindustan Antibiotics Ltd.
16. Hindustan Insecticides Ltd.
17. Hindustan Photo Films Manufacturing Company Ltd.
18. Hindustan Salts Ltd.
19. HMT Bearings Ltd.
20. HMT Chinar Watches Ltd.
21. Hooghly Dock and Port Engineers Ltd.
22. HSCC (India) Ltd.
23. Hotel Corporation of India Ltd.
24. Jute Corporation of India Ltd.
25. Nagaland Pulp & Paper Company Ltd.
26. National Backward Classes Finance & Development Corporation.
27. National Film Development Corporation Ltd.
28. National Handicapped Finance & Development Corporation.
29. National Handloom Development Corporation Ltd.
30. National Minorities Development & Finance Corporation
31. National Research Development Corporation of India.
32. National Safai Karamcharis Finance & Development Corporation.
33. National SC Finance & Development Corporation
34. National ST Finance & Development Corporation
35. National Seeds Corporation Ltd.



36. NEPA Ltd.
37. North Eastern Handicrafts & Handloom Development Corporation Ltd.
38. North Eastern Regional Agricultural Marketing Corporation Ltd.
39. Rajasthan Electronics & Instruments Ltd.
40. Richardson & Cruddas (1972) Ltd.
41. STCL Ltd.
42. Sponge Iron India Ltd.
43. State Farms Corporation of India Ltd.
44. Triveni Structural Ltd.
45. Tungabhadra Steel Products Ltd.
25. East-North Interconnection Co. Ltd.
26. Export Credit Guarantee Corporation of India Ltd.
27. Fresh & Healthy Enterprises Ltd.
28. GAIL Gas Ltd.
29. Ghogarpalli Integrated Power Company Ltd.
30. Hooghly Printing Company Ltd.
31. IDPL (Tamilnadu) Ltd.
32. IL Power Electronics Ltd.
33. India Infrastructure Finance Co. Ltd.
34. Indian Oil Technologies Ltd.
35. Indian Vaccine Corporation Ltd.
36. Instrumentation Control Valves Ltd.
37. Instrumentation Digital Control Ltd.
38. Jagdishpur Paper Mills Ltd.
39. J & K Mineral Development Corporation Ltd.
40. Kanti Bijlee Utpadan Nigam Ltd.
41. Karnataka Trade Promotion Organisation
42. Kumarakuppa Frontier Hotels (P) Ltd.
43. Madhya Pradesh Ashok Hotel Corporation Ltd.
44. Maharashtra Elektros melt Ltd.
45. Millenium Telecom Ltd.
46. Narmada Hydroelectric Development Corporation Ltd.
47. National Informatics Centre Services Incorporated
48. NLC Tamil Nadu Power Ltd.
49. North Karanpura Transmission Company Ltd.
50. NTPC Electric Supply Co Ltd.
51. NTPC Hydro Ltd.
52. NTPC Vidyut Vyapar Nigam Ltd.
53. Nuclear Power Corp. of India Ltd.
54. Orissa Integrated Power Ltd.
55. PFC Consulting Ltd.
56. Pondicherry Ashok Hotel Corporation Ltd.
57. Punjab Ashok Hotel Company Ltd.
58. Ranchi Ashok Bihar Hotel Corporation Ltd.
59. REC Power Distribution Company Ltd.
60. REC Transmission Projects Co. Ltd.
61. Sakhigopal Integrated Power Company Ltd.
62. Sambhar Salts Ltd.
63. Sethusamudram Corporation Ltd.
64. Talcher-II Transmission Company Ltd.
65. Tamilnadu Trade Promotion Organisation
66. Utkal Ashok Hotel Corporation Ltd.
67. Vignyan Industries Ltd.

Schedule - D

1. Hindustan Fluorocarbons Limited
2. Hindustan Prefab Ltd.
3. Indian Medicines Pharmaceutical Corporation Ltd.
4. Karnataka Antibiotics & Pharmaceuticals Ltd.
5. Orissa Drugs & Chemicals Ltd.
6. Rajasthan Drugs & Pharmaceuticals Ltd.

Others - uncategorised

1. Akaltara Power Ltd.
2. AIL Airport Services Ltd.
3. Air India Air Transport Services Ltd.
4. Air India Charters Ltd.
5. Air India Engineering Services Ltd.
6. Airline Allied Services Ltd.
7. Antrix Corporation Ltd.
8. Assam Ashok Hotel Corporation Ltd.
9. BEL Optronics Devices Ltd.
10. Balmer Lawrie Investments Ltd.
11. Bharat Immunological & Biologicals Corporation Ltd.
12. Bharatiya Nabhikiya Vidyut Nigam Ltd.
13. Bhartiya Rail Bijlee Company Ltd.
14. Bharat Petro Resources JDPA
15. Bihar Drugs & Organic Chemicals Ltd.
16. Birds, Jute & Exports Ltd.
17. Bokaro Kodarma Maithon Transmission Company Ltd.
18. Brushware Ltd.
19. Certification Engineers International Ltd.
20. Coastal Karnataka Power Ltd.
21. Coastal Maharashtra Mega Power Ltd.
22. Coastal Tamil Nadu Power Ltd.
23. CREDA – HPCL Biofuel Ltd.
24. Donyi Polo Ashok Hotel Corporation Ltd.



Appendix-III

Details of CPSEs considered by BRPSE during the year

No./Date of the Meeting	Cases considered	Recommendations of BRPSE
69/26.6.2009	(i) ITI Ltd., (ii) Burn Standard Company Ltd.(BSCL)	(i) ITI was remitted (ii) BSCL- revival through transfer of two wagon manufacturing units to M/o Railways and transfer of one refractory unit to M/o Steel.
70/17.7.2009	(i) Hindustan Photo Films Manufacturing Company Ltd.(HPFL), (ii) Heavy Engineering Corporation Ltd.(HEC)	(i) HPFL was remitted (ii) HEC was reviewed
71/7.8.2009	(i) Hindustan Vegetable Oils Corporation Ltd. (HVOC), (ii) Central Inland Water Transport Corporation Ltd.(CIWTC)	(i) Closure of Breakfast Food Unit of HVOC. (ii) CIWTC was reviewed
72/28.8.2009	(i) Bengal Chemicals & Pharmaceuticals Ltd. (BCPL) (ii) Hindustan Copper Ltd (HCL)	BCPL & HCL were reviewed
73/22.9.2009	(i) Fertilizers & Chemicals Travancore Ltd (FACT), (ii) Brahmaputra Valley Fertilizer Corporation Ltd.(BVFCL), (iii) Madras Fertilizers Ltd.(MFL), (iv) Fertilizer Corporation of India Ltd.(FCIL), (v) Hindustan Fertilizer Corporation Ltd.(HFCL)	(i) - (v) were reviewed
74/27.10.2009	(i) Scooters India Ltd.(SIL), (ii) National Film Development Corporation Ltd.(NFDC)	The status of revival proposals was reviewed
75/26.11.2009	(i) Hindustan Cables Ltd.(HCL), (ii) Elgin Mills Company Ltd.(EMC)	HCL & EMC were reviewed
76/22.12.2009	(i) ITI Ltd., (ii) Hindustan Photo Films Manufacturing Company Ltd., (iii) HMT Machine Tools Ltd., (iv) HMT Bearings Ltd., (v) Praga Tools Ltd., (vi) HMT Ltd., (vii) HMT Watches Ltd., (viii) HMT Chinar Watches Ltd.	(i)-(viii) were reviewed



Appendix-IV

List of CPSEs whose proposals have been cleared by BRPSE

Sl. No.	Name of the Administrative Ministry/Department/CPSE	Broad Gist of the recommendation of BRPSE
Department of Heavy Industry		
1.	Hindustan Salts Ltd., Jaipur, Rajasthan	Revival as a PSE
2.	Bridge & Roof Co. (India) Ltd., Kolkata	Revival as a PSE
3.	BBJ Construction Co. Ltd., Kolkata	Revival as a PSE
4.	Tyre Corporation of India Ltd., Kolkata	Revival as a PSE
5.	HMT Bearings Ltd., Hyderabad, AP	Revival as a PSE
6.	Praga Tools Ltd., Secunderabad, AP	Revival as a PSE
7.	Braithwaite & Company Ltd., Kolkata	Revival as a PSE
8.	NEPA Ltd., Nepa Nagar, MP	Revival through Joint Venture/disinvestment
9.	Richardson & Cruddas Ltd., Mumbai	Revival through Joint Venture/disinvestment
10.	Tungabhadra Steel Products Ltd., Bellary, Karnataka	Revival through Joint Venture/disinvestment
11.	Bharat Pumps & Compressors Ltd., Allahabad, UP	Revival through Joint Venture/disinvestment
12.	Cement Corporation of India Ltd., Delhi	Closure of Non-operating units. Other 3 operating units will be revived as a PSE.
13.	HMT Machine Tools Ltd., Bangalore, Karnataka	Revival as a PSE
14.	Heavy Engineering Corporation Ltd., Ranchi, Jharkhand	Revival as a PSE
15.	Andrew Yule & Co. Ltd., Kolkata	Revival as a PSE
16.	Instrumentation Ltd., Kota, Rajasthan	Revival as a PSE
17.	Triveni Structurals Ltd., Allahabad, UP	Revival as a PSE
18.	HMT Ltd., Bangalore	Revival as a PSE
19.	HMT Watches Ltd., Bangalore	Revival as a PSE – Closure of Bangalore unit and transfer of Ranibagh unit to State Government before its closure
20.	Bharat Ophthalmic Glass Ltd.	Closure
21.	Bharat Yantra Nigam Ltd.	Closure
22.	Bharat Heavy Plate & Vessels Ltd.	Revival through financial restructuring & taken over by BHEL
23.	Hindustan Cables Ltd., Kolkata	Revival through Joint Venture/disinvestment
24.	HMT Chinar Watches Ltd., Jammu(Jammu & Kashmir)	Revival through either transferring to State Govt. of J & K or joint venture with any State / Central Govt. PSU/ Private Sector
25.	Burn Standard Company Ltd.	Revival through transfer of two wagon manufacturing units to D/o Railways and transfer of one refractory unit to M/o Steel
Ministry of Textiles		
26.	British India Corporation Ltd., Kanpur, UP	Revival through Joint Venture/disinvestment
27.	National Textiles Corporation Ltd. & its subsidiaries, Delhi and other states	Revival of 15 mills as PSE units and 19 mills through Joint Venture
28.	National Jute Manufactures Corporation Ltd.,	Revival as a PSE
29.	Elgin Mills Co. Ltd.	Revival of Elgin Mill No.2



	Deptt. of Fertilizers	
30.	Madras Fertilizers Ltd., Manali, Tamil Nadu	Revival as a PSE
31.	Fertilizers & Chemicals Travancore Ltd., Kochi, Kerala	Revival as a PSE
32.	Brahmaputra Valley Fertilizer Corporation Ltd. (BVFCL)	Revival as a PSE
	Ministry of Shipping	
33.	Central Inland Water Transport Corporation Ltd., Kolkata	Revival through Joint Venture/disinvestment
34.	Hindustan Shipyard Ltd., Delhi	Revival as a PSE
35.	Hooghly Dock & Port Engineers Ltd., Kolkata	Revival as a PSE
	Deptt. of Chemicals & Petrochemicals	
36.	Hindustan Organic Chemicals Ltd., Mumbai	Revival as a PSE
37.	Hindustan Insecticides Ltd., Delhi	Revival as a PSE
38.	Hindustan Fluorocarbons Ltd., Hyderabad, Andhra Pradesh	Revival as a PSE
	Deptt. of Pharmaceuticals	
39.	Hindustan Antibiotics Ltd., Pune, Maharashtra	Revival as a PSE
40.	Bengal Chemicals & Pharmaceuticals Ltd., Kolkata	Revival as a PSE
41.	Indian Drugs & Pharmaceuticals Ltd., Gurgaon, Haryana	Revival as a PSE
42.	IDPL (Tamil Nadu) Ltd., Chennai	Merger with IDPL
43.	Bihar Drugs & Organic Chemicals Ltd., Muzaffarpur, Bihar	Merger with IDPL
	Ministry of Coal	
44.	Eastern Coalfields Ltd., Burdwan, W. Bengal	Revival as a PSE
45.	Bharat Coking Coal Ltd.	Revival as a PSE
	Ministry of Mines	
46.	Mineral Exploration Corporation Ltd., Nagpur, Maharashtra	Revival as a PSE
47.	Hindustan Copper Ltd., Kolkata	Revival as a PSE
	Department of Scientific & Industrial Research	
48.	Central Electronics Ltd., Delhi	Revival as a PSE
	Ministry of Water Resources	
49.	National Projects Construction Corporation Ltd., Delhi	Revival as a PSE
	Ministry of Steel	
50.	MECON Ltd., Ranchi, Jharkhand	Revival as a PSE
51.	Bharat Refractories Ltd., Bokaro, Jharkhand	Revival through financial restructuring & merger with SAIL
52.	Hindustan Steelworks Construction Ltd., Kolkata	Revival as a PSE
	Deptt. of Agriculture & Co-operation	
53.	State Farms Corporation of India Ltd., Delhi	Revival as a PSE
	Ministry of Petroleum & Natural Gas	
54.	Biecco Lawrie Ltd.	Revival as a PSE
	Ministry of Railways	
55.	Konkan Railway Corporation Ltd., Delhi	Revival as a PSE
56.	Bharat Wagon & Engineering Co. Ltd., Patna, Bihar	Revival as a PSE
	Ministry of Housing & Urban Poverty Alleviation	
57.	Hindustan Prefab Ltd.	Revival as a PSE
	Department of Food & Public Distribution	
58.	Hindustan Vegetable Oils Corporation Ltd.	Closure of Breakfast Food Unit



Appendix-V

List of Nodal Agencies Operational in 2008-09

Sl. No.	Name of Agency
1.	Academy Suburbia, Kolkata
2.	Associated Chamber of Commerce & Industry, New Delhi
3.	Association of Lady Entrepreneurs of Andhra Pradesh, Hyderabad
4.	Central Institute of Plastics Engineering & Technology, Amritsar
5.	Central Institute of Plastics Engineering & Technology, Bhubaneswar
6.	Central Institute of Plastics Engineering & Technology, Chennai.
7.	Central Institute of Plastics Engineering & Technology, Guwahati
8.	Central Institute of Plastics Engineering & Technology, Panipat
9.	Electronics Service & Training Centre, Ramnagar
10.	Indian Council of Small Industries, (ICSI), Kolkata
11.	Institute of Entrepreneurship Development, Patna
12.	Institute of Labour Development, Jaipur
13.	Kalinga Centre for Social Development, Bhubaneswar
14.	Madhya Pradesh Consultancy Organisation, (MPCON), Bhopal
15.	MITCON Consultancy Services Ltd., Pune
16.	National Institute For Micro, Small & Medium Enterprises (NIMSEM), Hyderabad
17.	National School of Computer Education, Kolkata.
18.	North India Technical Consultancy Services Ltd., Chandigarh
19.	U.P. Industrial Consultants Ltd., (UPICO), Kanpur