ANNUAL REPORT
2008-2009
### Chapter CONTENTS Page No.

I HIGHLIGHTS 04

II THE INDIAN STEEL SECTOR : DEVELOPMENT AND POTENTIAL 12

III ORGANISATIONAL STRUCTURE AND FUNCTIONS OF THE MINISTRY OF STEEL 24

IV PUBLIC SECTOR 33

V PRIVATE SECTOR 50

VI RESEARCH AND DEVELOPMENT 58

VII ENERGY AND ENVIRONMENT MANAGEMENT 70

VIII DEVELOPMENT OF INFORMATION TECHNOLOGY 84

IX SAFETY 90

X SHIP BREAKING 96

XI WELFARE OF WEAKER SECTIONS OF SOCIETY 99

XII VIGILANCE 111

XIII GRIEVANCE REDRESSAL MECHANISM 119

XIV IMPLEMENTATION OF PROVISIONS OF PERSONS WITH DISABILITIES ACT, 1995 125

XV PROGRESSIVE USE OF HINDI 133

XVI EMPOWERMENT OF WOMEN 139

XVII NEW INITIATIVES / INNOVATIVE SCHEMES 145

XVIII RECOGNITION AND AWARDS 154

XIX PROMOTION OF STEEL USAGE 160

XX CORPORATE SOCIAL RESPONSIBILITY 164

XXI TECHNICAL INSTITUTES UNDER THE MINISTRY OF STEEL 174

XXII IMPLEMENTATION OF THE RIGHT TO INFORMATION ACT, 2005 176

XXIII DEVELOPMENT OF NORTH-EASTERN REGION 180

ANNEXURES 184

*The production, financial and other related figures for 2008-09 are provisional.*
Dr. Manmohan Singh, Hon’ble Prime Minister, laying the foundation stone for Modernisation & Expansion of SAIL’s Salem Steel Plant on September 5, 2008, in the august presence of Smt. Sonia Gandhi, Hon’ble Chairperson, UPA. Also seen in the picture are other prominent dignitaries (from left to right): Shri GK Vasan, the then Hon’ble Minister of State for Statistics and Programme Implementation; Smt. Subbulakshmi Jagadeesan, the then Hon’ble Minister of State for Social Justice and Empowerment; Shri Mani Shankar Aiyar, the then Hon’ble Union Minister for Panchayati Raj and Development of North East Region; Shri KV Thangka Balu, the then Hon’ble Member of Parliament, Salem; Shri Ram Vilas Paswan, the then Hon’ble Union Minister for Chemicals & Fertilizers and Steel; Shri PK Rastogi, Secretary (Steel), Govt of India; Shri SK Roongta, Chairman, SAIL; Dr. Anbumani Ramadoss, the then Hon’ble Union Minister for Health and Family Welfare; Shri TR Balu, the then Hon’ble Union Minister for Shipping, Road Transport and Highways; Shri Jitin Prasada, the then Hon’ble Union Minister of State for Steel; Shri Veerapandi S. Arumugam, Hon’ble Minister for Agriculture, Tamil Nadu; Dr. K. Ponmudi, Hon’ble Minister for Higher Education, Tamil Nadu and Shri BB Singh, Executive Director, SAIL’s Salem Steel Plant.
CHAPTER-I

HIGHLIGHTS

STEEL SECTOR TRENDS

- India remained the fifth largest producer of crude steel in the world during 2008.
- India also maintained its lead position as the world’s largest producer of direct reduced iron (DRI) or sponge iron with nearly 20 million tonnes production in 2008-09.
- As per the revised estimates, the country is likely to achieve a steel production capacity of nearly 124 million tonnes by the year 2011-12.
- The steel sector is expected to generate additional employment of around 4 million by 2020 for production of around 295 million tonnes of crude steel by 2019-2020.
- 222 MoUs have been signed with various States for planned capacity of around 276 million tonnes.
- Major investment plans are in the States of Orissa, Jharkhand, Chattisgarh, West Bengal, Karnataka, Gujarat and Maharashtra. The details of the break-up of the MoUs signed by the State Governments of Orissa, Chattisgarh, Jharkhand and Other States are given in the table below:

<table>
<thead>
<tr>
<th>State</th>
<th>No. of MoUs signed</th>
<th>Capacity (in million tonnes per annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orissa</td>
<td>49</td>
<td>75.66</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>65</td>
<td>104.23</td>
</tr>
<tr>
<td>Chattisgarh</td>
<td>74</td>
<td>56.61</td>
</tr>
<tr>
<td>West Bengal</td>
<td>12</td>
<td>21.00</td>
</tr>
<tr>
<td>Other States</td>
<td>22</td>
<td>18.20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>222</strong></td>
<td><strong>275.70</strong></td>
</tr>
</tbody>
</table>

* approximate

Highlights of 2008-09

- Crude steel production was at 54.52 million tonnes, a growth of 1.23% over last year with capacity utilisation at 89% during the year. It grew at more than 9% annually from 38.72 million tonnes (MT) in 2003-04.
- Production for sale of total finished steel was at 56.39 million tonnes, a growth of 0.6% as compared to last year. As against 40.71 MT in 2003-04, an average annual growth of 7.3% was registered.
- Total finished steel exports decreased by 26% as it reached an estimated 3.75 million tonnes while imports were at an estimated 5.77 million tonnes, a decline of 18%.
- At 51.85 million tonnes, domestic consumption of total finished steel declined marginally by 0.53%.
- The growth was driven by capacity expansion from 43.91 million tonnes per annum (MTPA) in 2003-04 to 64.40 MTPA in 2008-09.
- The induction furnace route accounted for 32% of total crude steel production during 2008-2009.

The total financial requirements covered in Demand No.91 of the Ministry of Steel for Budget Estimate (BE) 2008-09, Revised Estimate (RE) and Actuals for 2008-09, are summarised in the following table:
Major initiatives taken by the Ministry of Steel

The Inter Ministerial Group (IMG), under the Chairmanship of Secretary (Steel) has been conducting regular review and coordination meetings with the steel investors, Central Ministries/Departments and the State Governments concerned. During the year, review meetings with investors (July 2008 and September 2008), a meeting with State Government (May 2008 at Bhubaneswar) and two coordination meetings with Central Ministries and State Governments (October 2008 and December 2008) were held.

Steel Quality Control Orders to ensure availability of 17 critical steel products of certified quality to consumers were issued during 2008. The order has since been revised subsequently whereby three products have been excluded and implementation of the order on 8 products have been deferred.

Around 127 CDM projects from the iron and steel plants in India have been accorded Host Country Approval (HCA) by National CDM Authority in India. These projects will result in Green House Gas abatement worth 99 million tonnes of CO₂ equivalent, resulting in generation of 99 million tonnes of Certified Emission Reduction (CER) till the year 2012 which can be traded in the International Market for earning substantial foreign exchange.

Action taken to control inflation in the steel sector

Government took the following measures to contain steel prices to control inflation during the period April-June 2008:

<table>
<thead>
<tr>
<th>Demand No. 91</th>
<th>BE 2008-09</th>
<th>RE 2008-09</th>
<th>Actual 2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plan</td>
<td>Non-Plan</td>
<td>Total</td>
</tr>
<tr>
<td>Revenue Section</td>
<td>18.50</td>
<td>85.52</td>
<td>104.02</td>
</tr>
<tr>
<td>Capital Section</td>
<td>15.50</td>
<td>0.00</td>
<td>15.50</td>
</tr>
<tr>
<td>Total</td>
<td>34.00</td>
<td>85.52</td>
<td>119.52</td>
</tr>
</tbody>
</table>
Reduction in Custom Duty in respect of non-alloy steel products and Zinc, Metcoke and Ferro alloys.

The Counter Vailing Duty (CVD) on TMT rods and bars was reduced from 14% to NIL.

Export duty was imposed on the following steel categories w.e.f. May 10, 2008:
- Export Duty of 15% on Pig iron, sponge iron, steel scrap, steel ingots, and all categories of non-alloy semi-finished steel
- Export Duty of 15% on non-alloy Hot Rolled (HR) steel
- Export Duty of 10% on non-alloy Cold Rolled (CR) steel
- Export Duty of 5% on non-alloy Galvanised and Coated steel
- Export Duty of 10% on bars, rods, wire rods, angles shapes
- Export Duty of 10% on pipes and tubes

Export duty was modified on June 13, 2008 as follows:
- Export duty in respect of flat steel products was reduced from previous levels to NIL
- Export duties on bars and rods of non-alloy steel increased from 10% to 15%
- An ad-valorem export duty of 15% levied on iron ore of all categories and grades

Action taken to control demand and supply of steel

Action taken in October-November 2008 consequent upon the global financial crisis:
- Export duty on steel exports withdrawn w.e.f. October 31, 2008
- Duty Entitlement Pass Book benefit restored on steel exports w.e.f. November 14, 2008
- Import duty @ 5% imposed on import of non-alloy steel (except melting scrap) w.e.f. November 18, 2008
- Excise duty on steel products reduced from 14% to 10% w.e.f., December 07, 2008
- Excise duty on steel has been further reduced to 8% on February 24, 2009

Action taken to facilitate conservation of iron ore resource

As a result of consistent efforts of Ministry of Steel, export duty on iron ore was imposed. Imposition of Export duty on iron ore has been an important step for enhancing raw material security for the domestic steel industry.

Following rates of duty were imposed on iron ore exports in the Finance Bill 2007-08:
- Iron ore fines (iron content upto 62%) — Rs. 50 Per Metric Tonne (PMT)
- Iron ore fines (iron content 62% and above) — Rs. 300 PMT
- Iron ore lumps (all sorts) — Rs. 300 PMT
- Iron ore concentrates (all sorts) — Rs. 300 PMT

The matter of export of iron ore was further deliberated by a Group of Ministers (GoM) constituted to consider the National Mineral Policy. In the GoM meeting to consider National Mineral Policy, there was an agreement that iron ore resources of the country should be conserved for the use of domestic steel industry. It was decided that although conservation of iron ore resources of the country is of paramount importance, the same may not be achieved by banning or capping the export of iron ore but by taking recourse to appropriate fiscal measures. Accordingly, Government of India imposed an ad-valorem export duty of 15% on all varieties of iron ore, irrespective of Fe content w.e.f. June 13, 2008.

Subsequently, export duty on iron ore fines was amended to Rs. 200/Metric Tonne (MT) with effect from October 31, 2008, which was further modified to 8% ad-valorem with effect from November 7, 2008. The export duty on iron ore lumps remained at 15% ad-valorem.

Ministry of Finance vide notification dated December 7, 2008 has revised the rates of duty on iron ore exports in the following manner:
- a) Iron ore fines (all sorts): NIL
- b) Iron ore other than fines(including lumps and pellets) - 5% ad-valorem

Performance of PSUs and Companies under the Ministry

The companies under the Ministry of Steel have performed well in the last five years. Profit Before
Tax (PBT) of the Companies with this Ministry have gone up around four times, from Rs. 5298 crore in 2003-04 to Rs. 19,407 crore in 2008-09.

- The contribution to Central and State Government exchequer by way of excise duty, customs duty, dividend, corporate tax, sales tax, royalty etc. has gone up by 210 % from Rs. 5,829 crore in 2003-04 to Rs. 18,082 crore in 2008-09.

- The net worth of major PSUs under the Ministry of Steel took quantum leaps, indicating their robust financial health as summarised in the following table:

<table>
<thead>
<tr>
<th>PSU</th>
<th>Net worth as on 31.03.2004</th>
<th>Net worth as on 31.03.2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAIL</td>
<td>4,659.00</td>
<td>27,984.00</td>
</tr>
<tr>
<td>RINL</td>
<td>4,852.00</td>
<td>9,546.59</td>
</tr>
<tr>
<td>NMDC</td>
<td>1,967.00</td>
<td>12,147.00</td>
</tr>
<tr>
<td>MOIL</td>
<td>139.77</td>
<td>1,320.87</td>
</tr>
<tr>
<td>MSTC</td>
<td>83.00</td>
<td>343.20</td>
</tr>
<tr>
<td>KIOCL</td>
<td>1,389.16</td>
<td>2,106.65</td>
</tr>
<tr>
<td>MECON</td>
<td>(-) 257.91</td>
<td>34.85</td>
</tr>
</tbody>
</table>

### Major initiatives in the PSUs

- The steel PSUs are in the midst of ambitious expansion plans. The major thrust of the modernisation and expansion plans is to adopt the best modern technology, which in addition to being cost effective should also be energy efficient and environment friendly.
- The expansion plans would increase the capacity of SAIL from 14.6 million tonnes per annum hot metal production (in 2006-07) to 26.2 million tonnes by 2010-11.
- In the case of RINL, the expansion plan would increase its capacity from the present level of 3 million tonnes of liquid steel production per annum to 6.3 million tonnes by 2010-11 at an estimated cost of around Rs. 12,228 crore.
- NMDC plans to expand its iron ore production capacity from the present capacity of 30 million tonnes per annum to 50 million tonnes per annum by 2014-15 through capacity expansion of existing mines and by opening new mines.

*Hon'ble Prime Minister Dr. Manmohan Singh laying the foundation stone for expansion plan of Bokaro Steel Plant on April 22, 2008. To his right is seen the then Hon'ble Union Minister for Chemicals & Fertilizers and Steel Shri Ram Vilas Paswan. Also seen is the then Hon'ble Union Minister for Food Processing Shri Subodh Kant Sahay and the then Hon'ble Minister of State for Steel Shri Jitin Prasada (extreme left), SAIL Chairman Shri S. K. Roongta (right) and Bokaro Steel Plant Managing Director Shri V. K. Srivastava.*
NMDC has recently signed an MoU with the Government of Chattisgarh for setting up a green field integrated steel plant of 3 million tonne per annum capacity in Nagarnar, Chattisgarh at an estimated cost of around Rs. 16,000 crore.

Merger of steel PSUs – BRL with SAIL, SIIL with NMDC; procedures expected to be completed shortly

A Special Purpose Vehicle (SPV), International Coal Ventures Limited (ICVL), with equity participation to an extent of Rs. 3500 crore by SAIL, RINL, CIL, NMDC and NTPC for acquisition of metallurgical and thermal coal assets abroad has been incorporated. ICVL will function like a Navratna company with powers to clear proposals involving investment of up to Rs. 1500 crore. ICVL is being assisted by a panel of investment bankers to scout and advise on acquisition of coal assets abroad through equity purchase, JVs in existing mines or Greenfield projects in Australia, Canada, Indonesia, Mozambique, Russia and USA.

Corporate Social Responsibility policies of Steel Ministry PSUs being harmonised. At least 2% of distributable profits spent on CSR. Steel PSUs spent Rs. 229 crore during 2008-09 on CSR activities.

CSR activities include peripheral development and focus areas like health, education, women’s welfare and environment. ‘Steel Villages’ to be developed in the vicinity of steel producing PSUs.

149 villages are being developed as ‘Model Villages’ under CSR activities by SAIL, NMDC, RINL and MOIL.

More than 400 Medical/Health Camps organised by SAIL and other PSUs under CSR activities, benefiting more than 5 lakh people.

In order to ensure the availability of commonly used items of steel in the rural areas across the country, a decision was taken to have at least one dealer in each district. For this purpose, SAIL and RINL are expanding their distribution networks at a fast pace. By the end of 2008, SAIL had 2136 dealers in place covering 614 districts in the country against 1564 dealers a year back and as against 100 in 2003; and RINL has appointed 134 dealers as against nil in 2003.

SAIL has planned to set up Steel Processing Units (SPUs) at various locations in Bihar (Bettiah, Mahnar, Gaya); Uttar Pradesh (Lakhimpur-Kheri); Madhya Pradesh (Gwalior, Ujjain, Hosangabad); Himachal Pradesh (Kangra); Assam (Guwahati) and Jammu and Kashmir (Srinagar) to meet customers’ demand for supplying sized and finished steel near the point of consumption, particularly in states where there are no steel plants and where steel consumption is low compared to the national average. Out of these units envisaged, work has commenced at Bettiah in Bihar.

Indian Space Research Organisation has appreciated the efforts of SAIL for high quality products used in PSLV-C 11 Chandrayaan 1 mission.
Performance of major PSUs under the Ministry of Steel

STEEL AUTHORITY OF INDIA LTD (SAIL)

- During the year, SAIL recorded profit (before tax) of Rs. 9,403 crore and profit (after tax) of Rs. 6,175 crore.
- Record turnover of Rs. 48,681 crore in 2008-09, 6.9% higher year-on-year.
- The SAIL Board has recommended final dividend payment to company shareholders at 13% of paid-up equity, with total dividend payout (including interim dividend of 13%) for the year 2008-09 at 26% amounting to Rs. 1,074 crore.
- During 2008-09, SAIL produced 12.5 million tonnes of saleable steel by achieving 113% capacity utilisation, and produced 14.4 million tones of hot metal and 13.4 million tonnes of crude steel.
- Share of value-added steel in overall production grew to 30% during the year as compared to 27% in 2007-08.

Best-ever sales of 4.45 million tonnes of long products, with total sales of 11.32 million tonnes during 2008-09.
- Supplies to projects of national importance reached a new high during the year with sales to the power sector, telecom sector and the Railways growing by 44%, 58% and 4% respectively.
- 250 MW power plant in joint venture with NTPC at Bhilai, slab caster along with secondary steel making facilities at Bhilai, oxygen plant and cold dust injection in two blast furnaces at Durgapur, pipe coating plant at Rourkela, upgradation of hot strip mill and oxygen plant at Bokaro were also commissioned during the year.
- Coke rate at 521 kg/thm (2% improvement) and specific energy consumption at 6.74 Gcal/tcs (3% improvement) were best ever so far.

RASHTRIYA ISPAT NIGAM LTD (RINL)

- In order to meet the stiff competition among steel producers, RINL is in the midst of implementing an expansion plan to double its annual liquid steel making capacity from the present level of 3 million tonnes per annum (MTPA) of production to 6.3 MTPA at an estimated cost of Rs. 12,228 crore.
- RINL achieved a turnover of Rs. 10,458 crore in 2008-09 surpassing the level of Rs. 10,433 crore achieved in 2007-08.
Sales in domestic market were Rs. 10,379 crore and exports at Rs. 79 crore.
During 2008-09, 20.08 lakh tonnes of value added steel were produced.
RINL spent Rs. 22.83 crore towards CSR activities during 2008-09.
Financial assistance of Rs. 7 crore and medical services amounting to Rs. 1.71 crore was provided twice through teams of doctors for flood-affected areas in the State of Bihar.
In RINL, a total of 134 dealers have been appointed in almost all districts in the southern states and adjoining states in order to ensure wider availability and reach in interior parts of the country. During 2008-09, a total of 42,000 tonnes of steel was lifted by District Level Dealers.

Expansion of RINL: Visakhapatnam Steel Plant

The major thrust of the modernisation and expansion plan is on adoption of the best modern technology that will be cost effective, energy efficient and environment friendly. The major process equipment envisaged for commissioning in RINL are blast furnaces, sinter plants, raw material handling systems and steel melt shops. The project is expected to be completed by 2010-2011. Orders for all the major packages have been placed along with auxiliary packages.

NMDC LTD

NMDC produced 28.97 million tonnes of iron ore during 2008-09 compared to 29.82 million tonnes in the previous year 2007-08.
Domestic sales of iron ore registered 22.60 million tonnes during the current year as against 24.41 million tonnes during the previous year 2007-08.
The company exported 3.87 million tonnes of iron ore to Japan, South Korea and China valued at approximately Rs. 1,703 crore during the current year compared to 3.78 million tonnes valued at Rs. 875 crore during the previous year.
Total sales during the year was 26.47 million tonnes as against 28.18 million tonnes during the previous year.

MANGANESE ORE (INDIA) LTD (MOIL)

During 2008-09, the production of manganese ore was 11.75 lakh tonnes.
The production of Ferro Manganese was 10,120 tonnes.
The production of Electrolytic Manganese Dioxide was 1,240 tonnes showing 10% increase as compared to last year.
The sales turnover was Rs. 1284.84 crore registering an increase of 32% as compared to last year.
Profit Before Tax was Rs. 1006.76 crore registering an increase of 37% over last year.
Profit After Tax was Rs. 663.79 crore registering an increase of 38% over last year.

MSTC LTD

The volume of business, including e-procurement, for the period 2008-09 stood at Rs. 19, 356 crore which is a record.
In the e-auction front, MSTC did business to the tune of Rs. 6,512 crore during 2008.09. MSTC conducted e-business to the tune of Rs. 11,105 crore, including e-procurement of Rs. 4,593 crore which was a record.
Profit after tax stood at Rs. 91 crore during 2008-09.
HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

- Operational profit earned in 2008-09 is Rs. 52.52 crore against Rs. 40.21 crore achieved during 2007-08 — an increase of Rs. 12.31 crore.
- Overall turnover increased by Rs. 169.52 crore during 2008-09 over 2007-08.
- The order booking during 2008-09 stood at Rs. 871 crore against MoU target of Rs. 600 crore.

MECON LTD

- In September 2008, MECON has achieved a landmark by turning its negative net worth into positive. As on 31.03.09, the net worth of MECON stands at Rs. 34.85 crore. This is a significant achievement as compared to the company’s negative net worth of Rs. (-) 257.91 crore as on 31.03.04.
- During the year, consultancy business procured from the diversified sectors (other than metal) has been significant. In engineering and consultancy, the company’s order booking was 17.53% (previous year 24.81%) in the diversified sectors and 82.47% (previous year 75.19%) in metal sector.
- In case of supply/turnkey projects, it was 1.83% in the diversified sectors and 98.17% (previous year 100%) in metals sector.

BIRD GROUP OF COMPANIES (BGC)

Orissa Minerals Development Company (OMDC)

- During 2008-09, the sales turnover was Rs. 274.41 crore as compared to Rs. 246.31 crore during 2007-08, showing an increase of 11% as compared to last year.
- The profit before tax was Rs. 296.59 crore as compared to Rs. 224.46 crore during 2007-08, showing an increase of 32% as compared to last year.
- The profit after tax was Rs. 195.49 crore as compared to Rs. 148.84 crore during 2007-08, showing an increase of 31% as compared to last year.
At the time of independence in 1947, India had only three steel plants – the TATA Iron & Steel Company, the Indian Iron and Steel Company and Visveswaraya Iron & Steel Ltd and a few electric arc furnace-based plants. The period till 1947 thus witnessed a small but viable steel industry in the country, which operated with a capacity of about 1 million tonne and was completely in the private sector. From the fledgling one million tonne capacity status at the time of independence, India has now risen to be the 5th largest crude steel producer in the world and the largest producer of sponge iron.

As per official estimates, the Iron and Steel Industry contributes around 2% of the Gross Domestic Product (GDP) and its weight in the Index of Industrial Production (IPP) is 6.20%. From a negligible global presence, the Indian steel industry is now acknowledged for its product quality, reflected by trends of rising exports.

As it traversed its long history during the past 60 years, the Indian steel industry has responded to the challenges of the highs and lows of business cycles. The first major change came during the first three Five-Year Plans (1952-1970) when in line with the economic order of the day, the iron and steel industry was earmarked for state control. From the mid-50s to the early 1970s, the Government of India set up large integrated steel plants in the public sector at Bhilai, Durgapur, Rourkela and Bokaro. The policy regime governing the industry during these years involved:

- **Capacity control measures**: Licensing of capacity, reservation of large-scale capacity creation for the public sector units.
- **A dual-pricing system**: Price and distribution control for the integrated, large-scale producers in both the private and public sectors, while the rest of the industry operated in a free market.
- **Quantitative restrictions and high tariff barriers**.
- **Railway freight equalisation policy**: To ensure balanced regional industrial growth.

Pandit Jawaharal Nehru at the Bhilai Steel Plant on December 16, 1957.
Controls on imports of inputs, including technology, capital goods and mobilisation of finances and exports.

The large-scale capacity creation in the public sector during these years contributed to making India the 10th largest steel producer in the world as crude steel production grew markedly to nearly 15 million tonnes in the span of a decade from a mere 1 million tonne in 1947. But the trend could not be sustained from the late 1970’s onwards, as the economic slowdown adversely affected the pace of growth of the Indian steel Industry. However, this phase was reversed in 1991-92, when the country replaced the control regime by liberalisation and deregulation in the context of globalisation. The provisions of the New Economic Policy initiated in the early 1990’s impacted the Indian steel industry in the following ways:

- Large-scale capacities were removed from the list of industries reserved for the public sector. The licensing requirement for additional capacities was also withdrawn subject to locational restrictions.
- Private sector came to play a prominent role in the overall set-up.
- Pricing and distribution control mechanisms were discontinued.
- The iron and steel industry was included in the high priority list for foreign investment, implying automatic approval for foreign equity participation up to 50%, subject to the foreign exchange and other stipulations governing such investments in general.

- Freight equalisation scheme was replaced by a system of freight ceiling.
- Quantitative import restrictions were largely removed. Export restrictions were withdrawn.

The system, therefore, underwent marked changes. For steel makers, opening up of the economy opened up new channels of procuring their inputs at competitive rates from overseas markets and also new markets for their products. It also led to greater access to information on global operations/techniques in manufacturing. This, along with the pressures of a competitive global market, increased the need to enhance efficiency levels so as to become internationally competitive. The steel consumer, on the other hand, was now able to choose items from an array of goods, be it indigenously manufactured or imported.

This freedom to choose established the sovereignty of the consumer and galvanised steel
producers to provide products/service levels in tune with the needs of the consumers. With the opening up of the economy in 1992, the country experienced rapid growth in steel making capacity. Large integrated steel plants were set up in the Private Sector by Essar Steel, Ispat Industries, Jindal Group etc. TATA Steel also expanded its capacity. To sum up, some of the notable milestones in the period were:

- Emergence of the private sector with the creation of around 9 million tonnes of steel capacity based on state-of-the-art technology.
- Reduction/dismantling of tariff barriers, partial float of the rupee on trade account, access to best-practice of global technologies and consequent reduction in costs – all these enhanced the international competitiveness of Indian steel in the world export market.

After 1996-97, with the steady decline in the domestic economy’s growth rate, the Indian steel industry’s pace of growth slowed down and in terms of all the performance indicators – capacity creation, production, consumption, exports and price/profitability – the performance of the industry fell below average.

In foreign trade, Indian steel was also subjected to anti-dumping/safeguard duties as most developed economies invoked non-tariff barriers. Economic devastation caused by the Asian financial crises, slowdown of the global economy and the impact of glut created by additional supplies from the newly steel-active countries (the steel-surplus economies of erstwhile USSR) were the negative factors.

However, from the year 2002, the global industry turned around, helped to a great extent by China, whose spectacular economic growth and rapidly-expanding infrastructure led to soaring demand for steel, which its domestic supply could not meet. At the same time, recoveries in major markets took place, reflected by increase in production, recovery of prices, return of profitability, emergence of new markets, lifting of trade barriers and finally, rise in steel demand – globally. The situation was no different for the Indian steel industry, which by now had acquired a degree of maturity, with emphasis on intensive R&D activities, adoption of measures to increase domestic per capita steel consumption and other market development projects, import substitution measures, thrust on export promotion and exploring global avenues to fulfill input requirements.

The rapid pace of growth of the industry and the observed market trends called for certain guidelines and framework. Thus was born the concept of the National Steel Policy, with the aim to provide a roadmap of growth and development for the Indian steel industry. The National Steel Policy (NSP) was announced in November 2005 as a basic blueprint for the growth of a self-reliant and globally competitive steel sector. The long-term objective of the National Steel Policy is to ensure that India has a modern and efficient steel industry of world standards, catering to diversified steel demand. The focus of the policy is to attain levels of global competitiveness in terms of global benchmarks of
efficiency and productivity. The national policy seeks to facilitate removal of procedural and policy bottlenecks that affect the availability of production inputs, increased investment in research and development, and creation of road, railway and port infrastructure. The policy focuses on the domestic sector, but also envisages a steel industry growing faster than domestic consumption, which will enable export opportunities to be realised.

Production, consumption and growth of steel

The National Steel Policy 2005 had projected consumption to grow at 7% based on a GDP growth rate of 7-7.5% and production of 110 million tonnes by 2019-2020. These estimates will be largely exceeded and it is envisaged that in the next five years, demand will grow at a considerably higher annual average rate of over 10% as compared to around 7% growth achieved between 1991-92 and 2005-06. It has been assessed that, on a ‘most likely scenario’ basis, the steel production capacity in the country by the year 2011-2012 will be nearly 124 million tonnes.

The table below shows the trend in production for sale, import, export and consumption of total finished steel (alloy + non-alloy) in the country during the last six years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Production for sale</th>
<th>Import</th>
<th>Export</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>40709</td>
<td>1753</td>
<td>5207</td>
<td>33119</td>
</tr>
<tr>
<td>2004-05</td>
<td>43513</td>
<td>2293</td>
<td>4705</td>
<td>36377</td>
</tr>
<tr>
<td>2005-06</td>
<td>46566</td>
<td>4305</td>
<td>4801</td>
<td>41433</td>
</tr>
<tr>
<td>2006-07</td>
<td>52529</td>
<td>4927</td>
<td>5242</td>
<td>46783</td>
</tr>
<tr>
<td>2007-08</td>
<td>56075</td>
<td>7029</td>
<td>5077</td>
<td>52125</td>
</tr>
<tr>
<td>2008-09</td>
<td>56393</td>
<td>5775</td>
<td>3750</td>
<td>51850</td>
</tr>
</tbody>
</table>

Source: JPC

Crude steel production has shown a sustained rise since 2003-04 along with capacity. Data on crude steel production, capacity and capacity utilisation is given in the table below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity (‘000 tonnes)</th>
<th>Production (‘000 tonnes)</th>
<th>Capacity utilisation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>43910</td>
<td>38727</td>
<td>88</td>
</tr>
<tr>
<td>2004-05</td>
<td>47995</td>
<td>43437</td>
<td>91</td>
</tr>
<tr>
<td>2005-06</td>
<td>51171</td>
<td>46460</td>
<td>91</td>
</tr>
<tr>
<td>2006-07</td>
<td>56843</td>
<td>50817</td>
<td>89</td>
</tr>
<tr>
<td>2007-08</td>
<td>59845</td>
<td>53857</td>
<td>91</td>
</tr>
<tr>
<td>2008-09</td>
<td>64400*</td>
<td>54520</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: JPC * = 3 million tonne capacity added in December 2008

- The growth was driven by capacity expansion from 43.91 million tonnes per annum (MTPA) in 2003-04 to 64.4 MTPA in 2008-09.
- Crude steel production grew at more than 8.16% annually from 38.72 million tonnes in 2003-04 to 54.52 million tonnes in 2008-09.
- Production of finished steel at 56.39 million tonnes during 2008-09 as against 40.71 million tonnes in 2003-04 at average annual growth rate of 7.7%.
- With growth in production for sale lagging behind consumption growth, India has turned into a net importer of finished steel in 2008-09. Exports also declined to ensure greater domestic availability.
The above performance has been contributed largely by the strong trends in growth of the electric route of steel making, particularly the induction furnace route, which accounted for 32 per cent of total crude steel production in the country during 2008-09 and has emerged as a key driver of crude steel production.

The process route-wise production of crude steel in the country during 2003-04 and 2008-09 are shown in the table below and indicates the emergence of the electric route of production compared to the oxygen route:

<table>
<thead>
<tr>
<th>Crude steel production by Process Route</th>
<th>Percentage share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003-04</td>
</tr>
<tr>
<td>Basic Oxygen Furnace (BOF)</td>
<td>57</td>
</tr>
<tr>
<td>Electric Arc Furnace (EAF)</td>
<td>16</td>
</tr>
<tr>
<td>Induction Furnace (IF)</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: JPC, * = Provisional

India is also a leading producer of sponge iron with a host of coal based units, located in the mineral-rich states of the country. Over the years, the coal based route has emerged as a key contributor to overall production; its share has increased from 60% in 2003-04 to 75% in 2008-09. Capacity in sponge iron making has also increased over the years and currently stands at 31 million tonnes. The table below shows the production of sponge iron in the country in the last five years, indicating the break-up of the share of coal and gas based route of production:

<table>
<thead>
<tr>
<th>Production of sponge iron ('000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal based</td>
</tr>
<tr>
<td>Gas based</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: JPC, * = provisional

India is also an important producer of pig iron. Post-liberalisation, with setting up several units in the private sector, not only imports have drastically reduced but also India has turned out to be a net exporter of pig iron. The private sector accounts for nearly 87% of total production for sale of pig iron in the country. The domestic availability situation of pig iron is given in the table below:

<table>
<thead>
<tr>
<th>Pig iron domestic availability scenario ('000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production for sale</td>
</tr>
<tr>
<td>Import</td>
</tr>
<tr>
<td>Export</td>
</tr>
<tr>
<td>Consumption</td>
</tr>
</tbody>
</table>

Source: JPC, * = provisional

Global ranking of Indian steel

Global crude steel production reached 1.33 billion tonnes in 2008, a decline of 1.2 percent over 2007. China was the largest crude steel producer in the world with production reaching 502 million tonnes, a growth of 2.6% over 2007. India, which was the eighth largest producer in 2003, had emerged as the fifth largest producer in 2006. In 2008, the country retained its rank as the fifth largest crude steel producing country in the world. India also emerged as the largest sponge iron producing
country in the world in 2008, a rank it has held on since 2002. If proposed expansions plans are implemented as per schedule, India may become the second largest crude steel producer in the world by 2015-16.

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
<th>2008 (in million tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1</td>
<td>502</td>
</tr>
<tr>
<td>Japan</td>
<td>2</td>
<td>119</td>
</tr>
<tr>
<td>United States</td>
<td>3</td>
<td>92</td>
</tr>
<tr>
<td>Russia</td>
<td>4</td>
<td>69</td>
</tr>
<tr>
<td>India</td>
<td>5</td>
<td>55</td>
</tr>
<tr>
<td>South Korea</td>
<td>6</td>
<td>54</td>
</tr>
<tr>
<td>Germany</td>
<td>7</td>
<td>46</td>
</tr>
<tr>
<td>Ukraine</td>
<td>8</td>
<td>37</td>
</tr>
<tr>
<td>Brazil</td>
<td>9</td>
<td>34</td>
</tr>
<tr>
<td>Italy</td>
<td>10</td>
<td>31</td>
</tr>
</tbody>
</table>

*Source: World Steel Association*

**Plan outlay for 11th Five-Year Plan (2007-12)**

- For the 11th Five Year Plan (2007-12), the Planning Commission has approved total outlay of Rs. 45607.08 crore (i.e. Internal and Extra Budgetary Resources [I&EBR] of Rs. 45390.08 crore and Gross Budgetary Support [GBS] of Rs. 217 crore).
- During the 11th Five Year Plan, a new scheme viz. “Scheme for promotion of Research and Development in Iron & Steel sector” has been approved with a budgetary provision of Rs. 118 crore for implementation. The objective of the scheme is to develop path-breaking technologies in an environment friendly manner. The scheme has been approved by Expenditure Finance Committee/Ministry of Finance with the observation that the scheme may be initiated in the Financial Year 2009-10.

The Working Group on Steel Industry set up by the Planning Commission for the 11th Five-Year Plan (2007-12) has projected a total demand of 70.34 million tonnes for finished steel and a total production of 80.23 million tonnes of crude steel by the end of the 11th Plan, that is, 2011-12. Both the 11th Plan projections and the NSP targets are likely to be considerably surpassed.

The 11th Plan would be crucial for realising the objectives pronounced in the National Steel Policy 2005 of building a modern and efficient domestic steel industry of global standards with a capacity to cater to diversified product demands. The Working Group on Steel Industry has made recommendations consistent with the targets/objectives of the National Steel Policy, 2005.

The rejuvenated steel market in the country has already witnessed the announcements of mega expansion plans of leading domestic producers in the form of...
Greenfield and/or Brownfield projects in different parts of the country. The decision of Posco, South Korea, to set up their 12 million tonnes integrated steel plant in Orissa has given the Indian steel industry a feel of what ‘globalisation’ is all about. This was soon followed by Mittal Group’s announcement of plans to set up their 12 million tonnes integrated steel unit in Orissa.

However, the domestic Indian steel producers did not lag behind. Indian conglomerate TATA Steel’s $12 billion takeover of Anglo-Dutch giant Corus Group Plc, transformed TATA Steel Ltd. into the world’s 5th largest steel producer, which may well be regarded as a benchmark even in the history of the Indian steel industry. Such developments only prove that the Indian steel industry has entered a mature phase.

Steel: Key facts

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty (mt)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Finished Steel</td>
<td>56.39</td>
<td>0.6</td>
</tr>
<tr>
<td>Production for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>5.72</td>
<td>-19.0</td>
</tr>
<tr>
<td>Export</td>
<td>3.66</td>
<td>-28.0</td>
</tr>
<tr>
<td>Capacity Utilisation</td>
<td>89 %</td>
<td></td>
</tr>
</tbody>
</table>

Source: JPC; * = provisional
Besides achieving the rank of the 5th largest global crude steel producer, India has also made a mark globally in the production of Sponge Iron/Direct Reduced Iron. Courtesy a mushrooming growth of coal-based sponge iron units in key mineral-rich pockets of the country, domestic production of sponge iron increased rapidly, enabling the country to achieve and maintain the number one position in the global market. With a series of mega projects, either being implemented or at the proposal stage, which once operational will re-write the structure of the steel industry and its dynamics; and a domestic economy carrying forward the reform process further, the future of the Indian steel industry is definitely optimistic.

In this journey of progress, the Indian steel industry has also taken significant steps in improvement of productivity, conservation of natural resources and energy, import substitution, quality upgradation; environment management and research and development. Some of the notable developments are:

- **Introduction of Stamp Charging and Partial Briquetting of Coal Charge (PBCC) for production of metallurgical coke:** In this process, it has been made possible to replace part of the metallurgical coal requirements by non-coking/semi-coking coal, with higher strength of the coke and less emission.

- **Installation of energy recovery coke ovens to meet power requirements as well as to reduce emission:** Energy recovery type coke ovens have been set up by many steel companies like Sesa Goa, JSW Steel, VISA Steel, Neelchal Ispat Nigam Ltd. (NINL) and Gujarat NRE Coke Limited.

- **Use of non-coking coal in iron making:** Processes such as Corex have now been introduced in some of the steel plants to produce hot metal by predominantly using non-coking coal. The Coal Dust/ Pulverised Coal Injection System has been introduced in several blast furnaces to partially substitute coke. In addition, there has been large-scale growth of sponge iron units based on non-coking coal.

- **Use of Direct Reduced Iron (DRI)/Sponge iron in steel making:** Earlier, only scrap could be used as a feed material in electric arc furnaces. With growing scarcity of scrap, a replacement could be found in the form of DRI produced from iron ore with reformed natural gas/ non-coking coal as reductant.

- **Use of hot metal in electric arc furnaces:** Setting up of Basic Oxygen Furnaces is capital intensive and successful only at a large scale. However, with the advent of modern electric arc furnaces, steel could be produced in electric arc furnace by use of hot metal that substantially replaces steel scrap and results in huge savings in electricity consumption.

- **Adoption of continuous casting:** The first solidified form of steel in the melting shops used to be ingots. With the advent of continuous casting in the late 1970s, continuous cast blooms/billets/slabs resulted in significant energy savings as well as improved productivity. Adoption of thin slab casting has further resulted in additional energy savings in the hot strip mills.

- **Import substitution:** Till the early 1980s, Indian steel production was centered mostly on non-flat products. Critical flat products such as thin gauge Hot Rolled coils, Deep Drawing/ Extra Drawing grade Cold Rolled coils, thin gauge Galvanised Plain/ Galvanised Corrugated sheets and Tin Mill Black Plate used to be mostly imported. With the setting up of modern hot strip mills in the 1990s; cold rolling mills and galvanizing lines from the 1980s; and colour coating lines from the 1990s, India is now well equipped to produce various grades of flat products.

- **Value-added production:** Earlier, integrated steel plants had to earmark part of the hot metal production for production of pig iron for foundries. From the early 1990s, mini-blast furnaces were set up in the country that supplied pig iron to the foundries and enabled the integrated steel plants to concentrate on production of value-added steel items.

- **Increasing size/volume of blast furnaces:** Most of the blast furnaces of the steel plants were of small volume. In order to increase productivity, the blast furnaces in the steel plants have gradually been revamped or newly set up with bigger volumes. The biggest blast furnace in India at present is with JSW (4013 cubic metres), followed by TATA Steel Limited (TSL) (3814 cubic metres), and RINL (3200 cubic metres).

- **Reducing coke consumption in blast furnaces and improving productivity:** Indian blast furnaces used to consume as high as 850 kilograms of coke per tonne of hot metal and Blast Furnace productivity was hovering at less than one tonne per cubic meter per day. Introduction of modern technologies and practices, viz. high top pressure, high blast temperature, pulverized coal injection; attention to burden preparation and distribution; higher use of sinter in place of lumps etc. have resulted in reduced coke consumption and improved productivity. Today, coke rate in some of the blast furnaces is less than 500 kg/tonne hot metal and productivity exceeds 2 tonnes per cubic metre per day.
**Enhancing steel quality:** Earlier, the steel making furnaces used to complete the steel making within the furnaces themselves. With the introduction of modern steel making technologies/practices and secondary refining technologies such as ladle metallurgy, vacuum degassing etc., it is now possible to produce steel of much lower inclusion and much lower content of oxygen, nitrogen and hydrogen. The ladle furnace technology has also made it possible to cut down the steel-making time in converters or Electric Arc Furnaces and to enable production of steel of low sulphur and phosphorus content.

**Efforts to reduce energy consumption and emissions:** Iron and Steel making involves energy intensive processes. The international norm of energy consumption is 4.5 to 5.5 Giga calories per tonne of crude steel. With adoption of modern technology and equipment, beneficiation of raw materials and use of high grade imported coking coal, Indian Steel plants have been able to achieve energy consumption at the level of 6.5 to 7.0 Giga Calories only. Further, steps are being taken to achieve much lower energy consumption and corresponding lower Green House Gas (GHG) emission by the end of 11th Five Year Plan. With the growth of steel industry, increasing attention is being paid to environment management. Steps such as afforestation, installation of pollution-control equipment are likely to abate the pollution emanating from steel industry. The Indian iron and steel industry is taking advantages of the Clean Development Mechanism under the Kyoto Protocol, thereby improving energy efficiency and reducing GHG emission.

**Present growth scenario and future outlook**

India ranks as the fifth largest producer of crude steel in the world. Domestic crude steel production grew at a compounded annual growth rate of 7 per cent during 2004-05 to 2008-09. The increase in production came on the back of capacity expansion, mainly in the private sector plants, and higher utilisation rates. This growth was driven by both capacity expansion (from 47.99 million tonnes in 2004-05 to approximately 64 million tonnes in 2008-09) and improved capacity utilisation. India, the world’s largest producer of direct reduced iron (DRI) or sponge iron, is also expected to maintain its lead in the near future. Sponge iron production grew at a CAGR of 16% to reach a level of 20.80 million tonnes in 2008-09 compared to 12.36 million tonnes in 2004-05. India is expected to become the second largest producer of steel in the world by 2015-16, provided all requirements for fresh capacity creation are met.

**Trends in production, private/public sector**

Traditionally, Indian steel industry has been classified into Main Producers (SAIL plants, TATA Steel and Vizag Steel/RINL), Major Producers (plants with crude steel making capacity above 0.5 million tonnes — Essar Steel, JSW Steel and Ispat Industries) and Other Producers. The latter comprises of numerous steel making plants producing crude steel/finished steel (long product/flat product)/pig iron/sponge iron and are spread across the different states of the country. [The details of production of Main and Secondary producers may be seen in the Annexure-III. Other related details are reflected in the Annexures-IV to XI.]

The following table highlights the total as also the contribution of the private and public sector in crude steel production in the country:

<table>
<thead>
<tr>
<th>Indian Crude Steel production (in million tonnes)</th>
<th>2004-05</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector</td>
<td>15.912</td>
<td>16.964</td>
<td>17.003</td>
<td>17.091</td>
<td>16.374</td>
</tr>
<tr>
<td>Private sector</td>
<td>27.525</td>
<td>29.496</td>
<td>33.814</td>
<td>36.766</td>
<td>38.146</td>
</tr>
<tr>
<td>Total Production</td>
<td>43.437</td>
<td>46.460</td>
<td>50.817</td>
<td>53.857</td>
<td>54.520</td>
</tr>
<tr>
<td>% share of public sector</td>
<td>36.6%</td>
<td>36.5%</td>
<td>33.5%</td>
<td>32%</td>
<td>30%</td>
</tr>
</tbody>
</table>

*Source: JPC; * = provisional*
Foreign investments and private sector participation

Domestic and foreign investors have shown a great deal of interest in setting up steel capacities in the country. Prospective investors include the existing public sector as well as private sector manufacturers, reputed foreign manufacturers, sponge iron makers going in for forward integration, as well as small rolling mills trying to get into backward integration, among others. As per the latest information available in the Ministry of Steel, 222 MoUs have been signed in various states with intended capacity of around 275.70 million tonnes, with an investment of over Rs. 11 lakh crore. It appears that with major investment plans in the states of Orissa, Jharkhand, West Bengal and Chattisgarh, actual production may considerably exceed the 110 million tonnes annual steel production by 2019-20 envisaged in the National Steel Policy of November 2005.

Role of the Ministry of Steel

The pre-de-regulation phase has seen the Ministry of Steel in the key role of a regulator which was essential, given the operating economic conditions, the limited presence of industry and the scarcity of key raw material for steel-making at home. Through skillful and judicious decisions on allocation and pricing and formulating related policy measures, the Ministry of Steel had played an important role in taking the steel industry forward in this phase.

In the post-de-regulation period, the role of the Ministry of Steel has primarily been that of a facilitator for the Indian steel industry, being responsible for the planning and development of the iron and steel industry, development of essential inputs such as iron ore, limestone, dolomite, manganese ore, chromites, ferro alloys, sponge iron, and other related functions. In its present day role, the Ministry of Steel is extending all possible support for the development of the Iron and Steel Industry in the country, in matters like:
Facilitating expedited growth of steel capacity investments through active coordination and formulation of right policy directives. An Inter-Ministerial Group (IMG) is functioning in the Ministry of Steel, under the Chairmanship of Secretary (Steel) to monitor and coordinate major steel investments in the country.

- Providing linkage for raw materials, rail movement clearance etc. for new plants and expansion of existing ones.
- Facilitating movement of raw materials other than coal through finalisation of wagon requirements and ensuring an un-interrupted supply of raw materials to the producers.
- Regular interactions with entrepreneurs proposing to set up new ventures, to review the progress of implementation and assess problems faced.
- Identification of infrastructural and related facilities required by the steel industry.
- Promoting, developing and propagating the proper and effective use of steel and increasing the intensity of steel usage, particularly in the construction sector in rural and semi urban areas, through the setting up of the “Institute for Steel Development and Growth (INSDAG)” in Kolkata.
- Encouraging research and development activities in the steel sector. An Empowered Committee under the Chairmanship of Secretary (Steel) provides overall direction to research efforts on iron and steel in the country and approves specific research projects placed before it for funding, fully or partially, from the Steel Development Fund. Efforts are being made to further augment R&D activities in the country.

- Providing technical inputs to the Norms Committee in Director General of Foreign Trade (DGFT), Department of Commerce, to fix/revise input-output norms to facilitate export of iron, steel, ferro-alloy, refractories and engineering products.
- Facilitating improvement in performance of integrated steel plants through the Prime Minister’s Trophy scheme, giving recognition to the best performing steel plant in India.

Iron ore fines being stacked at the Bailadila mines of NMDC.
Addressing the problem of shortage of technically qualified manpower to sustain development and growth of the iron and steel industry in India.

The organisation of Steel Consumer Council under the Chairmanship of the Hon’ble Steel Minister provides a forum for interaction of all producers and consumers of steel in the country.

The Indian Steel Industry has withstood international competition despite the reduction of basic customs duty on steel from 25-30% in 2002-03 to 5% currently. The industry now operates in an open economy where exports and imports respond to increases or decreases in the domestic demand driven primarily by market signals.

While exports of finished steel were sustained at a level of 4-5 million tonnes per annum during the 10th Plan, imports sharply increased from about 1.75 million tonnes in 2003-04 to 5.78 million tonnes in 2008-09, not because of fall in competitiveness but to fill up supply-demand gap in the domestic market.

However, industry slipped into a slowdown phase in latter half of 2008, prompted by a massive sub-prime crisis which originated in the USA and impacted global operations in varying degrees throughout the world. Steel industry globally, saw cutbacks in production, decline in price and profitability, slowdown in demand and delays/shelving of proposed expansion projects. However, the steel industry in the country has successfully overcome the adverse effects of a global economic slowdown to register a positive growth in the January-March quarter of 2009. As a matter of fact, India and China are the only countries to have registered positive growth in steel production in January-March quarter of 2009. The financial year 2009-10 for the Indian steel sector has begun on a promising note, with production growth estimated at least in the range of 5-7%.
CHAPTER-III

ORGANISATIONAL STRUCTURE AND FUNCTIONS OF THE MINISTRY OF STEEL

The Ministry of Steel is under the charge of the Minister of Steel who is assisted by a Minister of State. The Ministry is responsible for the planning and development of iron and steel industry, development of essential inputs such as iron ore, limestone, dolomite, manganese ore, chromites, ferro-alloys, sponge iron etc. and other related functions. The list of subjects allocated to the Ministry may be seen in Annexure I. There are 10 public sector undertakings and one directly managed government company under the administrative control of the Ministry of Steel. The list of Minister-in-charge and the officers down to the level of Deputy Secretary is given in Annexure II.

Key functions of the Steel Ministry

- Development of Steel Plants in Public and Private Sectors, the re-rolling industry and ferro-alloys
- Policy formulation regarding production, distribution, pricing of iron & steel and ferro alloys
- Development of iron ore mines in the public sector and other ore mines like manganese ore, chrome ore, limestone and other minerals used in the iron and steel industry (but excluding mining lease or matters related thereto)
- Providing a platform for interaction of all producers and consumers of steel in the country
- Identification of infrastructural and related facilities required by steel industry
- Overseeing the performance of 10 PSUs, their subsidiaries and one Government managed company.

Allocation of responsibilities

The Ministry of Steel has a Secretary, three Joint Secretaries, five Directors, four Deputy Secretaries, one Joint Director and other supporting officers and staff. The Ministry also has a Financial Adviser in the rank of Additional Secretary and Economic Adviser and a Chief Controller of Accounts. A Technical Wing under the charge of an Industrial Adviser gives advice in respect of technical matters besides discharging some secretariat work of technical nature like Research and Development.
Functions of key Sections/Units in the Ministry

Administration

- General office administration and house-keeping
- Office equipment, procurement and maintenance
- Civil defence
- Departmental security
- Medical claims
- Issue of various items of contingencies to the officers/officials of the Ministry
- Protocol matters

Establishment

Matters relating to administrative/Personnel matters of all officers/officials in the Ministry of Steel, and issues related to the welfare of women.

Parliament Cell

Parliamentary matters relating to Ministry of Steel, including President’s Address and Budget; meetings of the Consultative Committee and Standing Committee; Visits of Parliamentary Committees/Study Group to PSUs/Projects under Ministry of Steel.

Library

The library looks after all matters relating to acquisition of books, manuals, newspapers, journals, other reference books and maintaining catalogues etc.

NIC

Information and Communication Technology (ICT) support to the Ministry. This includes design, development and implementation of e-Governance, Application and ICT-enabled services on Ministry-wide intranet portal, setting up and maintenance of ICT infrastructure, design, hosting and maintenance of the Ministry’s official website in National Informatics Centre (NIC) domain, capacity building in the area of information technology by conducting in-house training programmes for officials and staff of the Ministry and providing technical consultancy on ICT related matters to the Ministry, its PSUs and subordinate organisations.

Hindi Section

For implementation of the Official Language Policy, a Hindi Section functions in the Steel Ministry.

Right to Information Cell (RI Cell)

The work relating to implementation of the Right to Information Act, 2005 in the Ministry of Steel and monitoring its implementation in the Public Sector Undertakings and other offices under this Ministry, including submission of Annual Report relating to RTI activities to the Chief Information Commissioner.

Coordination Section

A section for the Ministry dealing with all matters requiring coordination in respect of the subjects allotted to various Sections/Desks and takes care of the following:

- Comments on the Drafts Cabinet Notes received from other Ministries/Departments
- Monitoring progress of CSR (Corporate Social Responsibility) activities undertaken by the PSUs under the Ministry of Steel
- Preparation of agenda/material for the monthly meeting of Secretary (Steel) with Senior Officers
- Preparation of Brief Note/Agenda for Press Conferences/meetings of Hon’ble Ministers
- Preparation of Induction Note for Minister/Secretary and material for President’s Address to Parliament
- Monthly report to the Department of Personnel and Training’s (DoPT’s) on implementation of Appointments Committee of Cabinet (ACC) proposals
- Monthly report to the Department of Public Enterprises (DPE) with regard to implementation of PESB recommendations
- Circulation of guidelines/orders/instructions relating to Public Sector Enterprises issued by various agencies from time to time
- Parliamentary Questions/Assurances of other Ministries/Departments pertaining to Ministry of Steel as a whole and Parliamentary Committee
- Preparation of Annual Report of Ministry of Steel

Vigilance Desk

- Identification of sensitive areas prone to malpractices/temptation and taking preventive measures to ensure integrity/efficiency in Government functioning
- Taking suitable action to achieve the targets fixed by the Department of Personnel & Training on anti-corruption measures
- Scrutiny of complaints and initiation of appropriate investigation measures
- Inspections and follow-up action on the same
- Furnishing the comments of Ministry to the Central Vigilance Commission (CVC) on the investigation reports of the Central Bureau of Investigation
- Appointment of Chief Vigilance Officers (CVOs) in the PSUs in consultation with CVC and Department of Personnel & Training

Iron ore being readied for despatch from a mechanised mine at NMDC.
Technical Wing

Entrenched with full-fledged secretariat/administrative work relating to R&D, Energy & Environment Management, rendering technical advice, besides judging winners for the Prime Minister’s Trophy for the best integrated steel plant.

Industrial Development Wing

Industrial Development Wing (IDW) is primarily concerned with the growth and development of iron and steel industry in the private sector.

SAIL OP, PC, CIP, RS Sections, RM-I and RM-II Sections, MF, VSP, and HSK Desks deal with matters pertaining to their respective PSUs including Parliamentary Questions, and policy issues.

DEVELOPMENT COMMISSIONER FOR IRON AND STEEL (DCI&S) CELL

On the recommendations of the Expenditure Reforms Commission (ERC), an administrative decision was taken to close down the office of the Development Commissioner for Iron and Steel (DCI&S), Kolkata along with its four Regional Offices located at Chennai, Mumbai, Kolkata and New Delhi with effect from 23.5.2003. The residual work except the collection of data from secondary sector, was transferred to the DCI Cell in the Ministry of Steel. The DCI&S Cell is handling matters relating to allocation of iron & steel items to Small Scale Industry (SSI) units through Small Scale Industries Corporations (SSICs)/National Small Industries Corporation (NSIC). Iron & Steel items are allocated to the State Small Scale Industries Corporations and National Small Industries Corporation in states where SSICs are defunct or non-existent for distribution to SSI units. In order to ensure that small-scale industries obtain raw materials at reasonable prices, the Government provides nominal handling charges of approximately Rs. 500 per tonne to the Corporations. The allocation of iron & steel items, during the last three years, for distribution to SSI units is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SSICs</td>
<td>612</td>
<td>430</td>
<td>447</td>
<td>582</td>
</tr>
<tr>
<td>NSIC</td>
<td>219</td>
<td>61</td>
<td>49</td>
<td>118</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>831</strong></td>
<td><strong>491</strong></td>
<td><strong>496</strong></td>
<td><strong>700</strong></td>
</tr>
</tbody>
</table>

* Position as on March 31, 2009

The distribution policy for the year 2008-09 is given on the Ministry of Steel’s website www.steel.nic.in.

OTHER RELATED ORGANS OF THE MINISTRY OF STEEL

Joint Plant Committee

The Joint Plant Committee (JPC) was established in 1964, following the recommendations of Dr. K.N. Raj Committee, for the purpose of formulating guidelines for production, allocation, pricing and distribution of iron and steel materials in the country. Indian steel industry was deregulated in 1992, which marked a turning point for the JPC. From that point onwards, the role, charter, and activities of the JPC changed considerably as it moulded itself into the role of data bank for the Indian steel industry, operating in a liberalised market-driven economy.

The JPC is headquartered at Kolkata with four regional offices in New Delhi, Kolkata, Mumbai and Chennai and an Economic Research Unit at New Delhi serving as a wing of JPC to carry out techno-economic studies. At present, the JPC comprises of the following members:
Chairman — Joint Secretary, Ministry of Steel, Government of India
Four representatives from Steel Authority of India Ltd. (SAIL)
One representative each from TATA Steel Ltd. and Rashtriya Ispat Nigam Ltd. (RINL) and;
One representative from Indian Railways, as an important consumer of steel

Economic Research Unit

The Economic Research Unit (ERU) is a part of the Joint Plant Committee (JPC). It was constituted in September, 1983 on the recommendations of the Bureau of Industrial Costs and Prices to assist the Ministry of Steel/JPC on economic policy and research. The ERU is mainly responsible for analysis of data collected by the JPC and for conducting specific studies/analysis entrusted to it by the Ministry of Steel.

ACTIVITIES OF JPC & ERU

The National Steel Policy, 2005 has laid down the long term Vision of Growth for the Indian steel industry, which is on the threshold of undergoing a major change, in terms of number, production, capacity and technology, among others. India has achieved the rank of being the fifth largest producer of crude steel in the world, besides being the world’s largest sponge iron producer. In such an environment, JPC, accredited with the ISO 9001: 2000 certification for its data/information services, has been pursuing a charter of jobs, keeping in mind the information needs of a rapidly changing industry.

Data & Information Services: JPC is officially empowered to collect data on the Indian iron and steel industry, resulting in the creation and maintenance of basic data bank on this industry. Major data items collected include:
- Capacity, Production and Stock of both Main and Secondary Producers of steel covering segments like crude steel, semi-finished steel, non-flat steel and the entire downstream range of flat steel;
- Domestic market prices of iron and steel;
- Export-import of iron and steel;
- Production, prices and reserves of raw materials for steel making;
- Production, availability and consumption of refractory;
- Consumption data of related category of iron & steel features in the database as a derived item.

Besides regular liaison with the units, segment-specific surveys form a major database maintenance activity for updating the population frame and aid policy decisions at the government level. Completed surveys include those on sponge iron, induction furnace/electric arc furnace and re-rolling units. A survey of pig iron industry and another of the refractory segment are being pursued.

**Dissemination of information:** Besides collection of data, dissemination of information to all stakeholders of Indian steel industry is another key activity of JPC. Major channels of information dissemination include:

- **JPC Bulletin on Iron & Steel:** Provides a monthly trend scenario of the Indian iron and steel industry in a global perspective.
- **Performance Review:** Iron & Steel: Encapsulates an exhaustive account of the developments in different aspects of the Indian iron and steel industry in the previous fiscal year.
- **Annual Statistics:** Provides a statistical profile of five-yearly database on different areas of Indian steel industry.
- **Survey Reports:** Include reports of various surveys conducted by JPC namely sponge iron, pig iron, Cold Rolled-Galvanised Plain/Corrugated, Electric Arc Furnace/Induction Furnace.
- **Special Publications:** Recently, JPC has released the ‘Guidelines for Entrepreneurs for Setting up of Iron & Steel Plants’. Prepared by MECON Ltd, the report (in CD format) compiles all the vital information sought by an entrepreneur wishing to set-up a steel plant in the country.
- **Through the website, www.jpcindiansteel.org:** Information on different aspects of the domestic iron & steel industry.

*Coils from a SAIL Plant ready for dispatch.*
Some of the key projects undertaken by the Economic Research Unit (ERU) include:

Estimating category-wise demand for the 11th Five Year Plan, estimating capacity and production in the Induction Furnace Sector (study undertaken on behalf of the Expert Group formed for revising JPC data), revision of targets of National Steel Policy in view of acceleration in economic growth, assessing adequacy of infrastructure for the proposed expansion in steel capacity in the 11th Plan with special reference to Orissa, Chattisgarh and Jharkhand and study on the prospects of Utilisation of Iron ore fines in India. Besides monthly analysis of market prices, formation of pre-budget proposals for the steel sector, studies on competitiveness of the Indian steel industry, ERU also functions as the Secretariat to the Steel Price Monitoring Committee and to the Sub-committee on relative movement of Hot Rolled Coil & Cold Rolled Coil prices.

Support services: Varied support was provided to the steel industry or the Ministry of Steel on different issues/activities, related to development of industry and/or spread of awareness on usage of steel. Some of the key activities here include:

- Organisational responsibility of the Steel Consumers’ Council meetings of the Ministry of Steel, which provides a forum for interaction between the producers and consumers of steel in the country.
- Showcasing the multifaceted usage of steel in daily life through organisation and participation (every year since 2002) in the ‘Steel Pavilion’ of the Ministry of Steel in the ‘India International Trade Fair’ (IITF), New Delhi.
- JPC took initiatives to propagate knowledge, awareness on the benefits of usage of steel and bridge the information gap between the producers and end-users of steel. This was achieved through lending support to, as well as organisation of seminars/workshops on technology, infrastructure, environment, market trends, budget, policymaking and other topical issues.

Secretarial functions of the SDF: JPC is the secretariat of the Steel Development Fund (SDF) Managing Committee, based on notification issued by the Government of India in the year 1978. Secretary, Ministry of Steel, is the Chairman, SDF Managing Committee. The other members are Secretary, Ministry of Finance, Department of Expenditure, Government of India, Secretary, Planning Commission, Government of India and the Joint Secretary, Ministry of Steel, Government of India is the Member Secretary, SDF Managing Committee. The Ministry of Steel has decided to promote Research and Development for which funds are earmarked every year, from SDF. This fund thus provides financial assistance to the industry from the interest of SDF corpus for taking up projects like, technology up gradation, measures connected with pollution control, activities related to Research & Development. Out of the SDF Corpus, JPC also renders assistance in matters relating to:

- Rebate to the Small Scale Industries Corporation (SSIC) engaged in the distribution of steel.
- Award of Prime Minister’s Trophy for the best integrated steel plant.
- Market Development Projects.
- Global Environment Facility/UNDP project for environment and pollution control in the iron and steel sector.

Ferrous Scrap Committee

Ferrous Scrap Committee (FSC) was established in 1979, vide notification of the Government of India, in the erstwhile Ministry of Steel, Mines and Coal, Department of Steel, No.S.O. 854 (E)/ESS/Comm/Iron & Steel dated the 19th December, 1979 and was re-constituted on 28th July, 1997. At present, it comprises of the following members:

- Chairman — Joint Secretary, Ministry of Steel, Government of India
- Director (Finance), Ministry of Steel, Government of India
- President, Iron, Steel Scrap & Shipbreakers Association of India
- Chairman and CEO, Gujarat Maritime Board

A review of activities during the last three years reveals that FSC has performed the following functions:

- Support to Infrastructure development conducive to ship breaking activities
- Support to Scrap handling / processing facilities
- Conducting studies on various aspects of ship breaking
<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Name of the Headquarters Subsidiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Steel Authority of India Ltd.</td>
</tr>
<tr>
<td></td>
<td>Ispat Bhawan, Lodi Road, New Delhi - 110003</td>
</tr>
<tr>
<td></td>
<td>Maharashtra Elektrosmelt Ltd., Chandamul Road, Chandrapur-442401, (Maharashtra)</td>
</tr>
<tr>
<td>2.</td>
<td>Rashtriya Ispat Nigam Ltd.</td>
</tr>
<tr>
<td></td>
<td>Administrative Building, Visakhapatnam - 530031, (Andhra Pradesh)</td>
</tr>
<tr>
<td></td>
<td>J&amp;K Mineral Development Corporation Ltd. 33 B/ B Ind Ext Gandhi Nagar, Jammu-180004 (J&amp;K)</td>
</tr>
<tr>
<td>3.</td>
<td>NMDC Ltd.</td>
</tr>
<tr>
<td></td>
<td>Khanij Bhawan, 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500028, (Andhra Pradesh)</td>
</tr>
<tr>
<td></td>
<td>J&amp;K Mineral Development Corporation Ltd. 33 B/ B Ind Ext Gandhi Nagar, Jammu-180004 (J&amp;K)</td>
</tr>
<tr>
<td>4.</td>
<td>Maganese Ore India (Ltd)</td>
</tr>
<tr>
<td></td>
<td>MOIL Bhawan, 1-A, Katol Road, Nagpur-440013, (Maharashtra)</td>
</tr>
<tr>
<td>5.</td>
<td>MSTC Ltd.</td>
</tr>
<tr>
<td></td>
<td>225-C, Acharya Jagdish Chandra Bose Road, Kolkata-700020 (West Bengal)</td>
</tr>
<tr>
<td></td>
<td>Ferro Scrap Nigam Ltd., FSNL Bhawan, Equipment Chowk, Central Avenue, Bhilai-490001, (Chattisgarh)</td>
</tr>
<tr>
<td>6.</td>
<td>Hindustan Steelworks Construction Ltd.</td>
</tr>
<tr>
<td></td>
<td>5/1, Commissariat Road, (Hastings), Kolkata - 700022 (West Bengal)</td>
</tr>
<tr>
<td>7.</td>
<td>MECON Ltd.</td>
</tr>
<tr>
<td></td>
<td>MECON Building, Ranchi-834002, (Jharkhand)</td>
</tr>
<tr>
<td>8.</td>
<td>Bharat Refractories Ltd.</td>
</tr>
<tr>
<td></td>
<td>Sector IV, Central Avenue, Bokaro Steel City-827004, (Jharkhand)</td>
</tr>
<tr>
<td>9.</td>
<td>Sponge Iron India Ltd.</td>
</tr>
<tr>
<td></td>
<td>Khanij Bhawan, 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500028, (Andhra Pradesh)</td>
</tr>
<tr>
<td>10.</td>
<td>KIOCL LTD</td>
</tr>
<tr>
<td></td>
<td>II Block, Koramangala Bengaluru-560034, (Karnataka)</td>
</tr>
<tr>
<td>11.</td>
<td>Govt. Managed Company — Bird</td>
</tr>
<tr>
<td></td>
<td>Group of Companies</td>
</tr>
<tr>
<td></td>
<td>FD-350, Sector-III, Salt Lake City, Kolkata-700106, (West Bengal)</td>
</tr>
</tbody>
</table>
PUBLIC SECTOR

The companies under the Ministry of Steel have performed well in the last five years. Profit before Tax (PBT) of the Companies with this Ministry has gone up around four times, from Rs. 5298 crore in 2003-04 to Rs. 19,407 crore in 2008-09. The details may be seen at Annexure-XIV. The contribution to Central and State Government exchequer by way of excise duty, customs duty, dividend, corporate tax, sales tax, royalty etc. has gone up by 210 % from Rs. 5,829 crore in 2003-04 to Rs. 18,082 crore in 2008-09. The details may be seen at Annexure-XV.

STEEL AUTHORITY OF INDIA LTD (SAIL)

The Steel Authority of India Limited (SAIL) is a company registered under the Indian Companies Act, 1956 and is an enterprise of the Government of India. It has five integrated steel plants at Bhilai (Chattisgarh), Rourkela (Orissa), Durgapur (West Bengal), Bokaro (Jharkhand), and Burnpur (West Bengal). SAIL has three special and alloy steels plants viz. Alloy Steels Plant at Durgapur (West Bengal), Salem Steel Plant at Salem (Tamil Nadu) and Visveswaraya Iron and Steel Plant at Bhadravati (Karnataka). In addition to these, a Ferro Alloy producing plant at Chandrapur is owned by Maharashtra Elektrosmelt Limited which is a subsidiary of SAIL. SAIL has seven central units viz. Research and Development Centre for Iron and Steel (RDCIS), Centre for Engineering and Technology (CET) and Management Training Institute (MTI), all located at Ranchi, Central Coal Supply Organisation (CCSO) located at Dhanbad, and Raw Materials Division (RMD) and Environment Management Division (EMD), located at Kolkata.

The Central Marketing Organisation (CMO), with its headquarters at Kolkata, coordinates the countrywide marketing and distribution network. The SAIL Consultancy Division (SAILCON) functions from New Delhi.
Capital structure

The authorised capital of SAIL is Rs. 5000 crore. The paid-up capital of the company was Rs. 4130.40 crore as on March 31, 2009, out of which 85.82% is held by the Government of India and the balance 14.18% by the financial institutions/GDR-holders/banks/employees/individuals etc.

Financial performance

The company recorded turnover of Rs. 48,681 crore in the financial year 2008-09. The post-tax net profit for the year was Rs. 6,175 crore. The company has paid interim dividend @ 13% of paid up equity capital for the year 2008-09. Further, subject to approval of shareholders, the Board of Directors has recommended a final dividend @ 13% of the paid-up equity, thus making the total dividend @ 26% of paid-up capital for the year.

Production performance

The details of the actual production is given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>2007-2008</th>
<th>2008-2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Metal</td>
<td>15199</td>
<td>14442</td>
</tr>
<tr>
<td>Crude Steel</td>
<td>13962</td>
<td>13411</td>
</tr>
<tr>
<td>Saleable Steel</td>
<td>13044</td>
<td>12503</td>
</tr>
</tbody>
</table>

Raw materials

During the year 2008-2009, the total iron ore production from captive mines of the company was 24.434 million tonnes as against 26.37 million tonnes in the year 2007-2008. The flux (limestone/dolomite) production of captive mines during the year was 2.416 million tonnes in comparison to 2.641 million tonnes in the year 2007-08.
Manpower

The manpower strength of SAIL (including ISP and MEL) as on March 31, 2009 was 1,22,044. The total reduction in manpower achieved during the year stood at 7,541. The manpower as on March 31, 2008 was 1,29,585.

MAHARASHTRA ELEKTROSMELT LTD:
A SUBSIDIARY OF SAIL

Maharashtra Elektrosmelt Limited is situated in Chandrapur, Maharashtra, and is a major producer of ferro manganese and silico manganese for captive use of SAIL plants.

The authorised and paid-up share capital of the company as on March 31, 2009 was Rs. 30 crore and Rs. 24 crore respectively. SAIL’s holding is approximately 99.12% of the paid-up capital.

Financial performance

During the year 2008-09, the company has recorded a turnover of Rs. 425.06 crore and made a net profit after tax of Rs. 40.88 crore. The turnover and net profit after tax of the company during 2007-2008 were Rs. 396.41 crore and Rs. 36.32 crore respectively.

Production performance

The production of all grades of ferro alloys during 2008-09 is as under:

<table>
<thead>
<tr>
<th>Material</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Carbon Ferro Manganese</td>
<td>64584</td>
<td>66789</td>
</tr>
<tr>
<td>Silico Manganese</td>
<td>37640</td>
<td>35640</td>
</tr>
<tr>
<td>Medium Carbon Ferro Manganese</td>
<td>1941</td>
<td>1763</td>
</tr>
</tbody>
</table>

RASHTRIYA ISPAT NIGAM LTD (RINL)

Visakhapatnam Steel Plant (VSP) is the first shore based integrated steel plant located at Visakhapatnam in Andhra Pradesh. The plant was commissioned in August 1992 with a capacity to produce 3 million tonnes per annum (MTPA) of liquid steel. The plant has been built to match international standards with state-of-the-art technology, incorporating extensive energy saving and pollution control measures. VSP has an excellent layout capable of expanding up to 16 MTPA. Presently expansion to 6.3 MTPA liquid steel is in progress. Within a short period of time since its commissioning, the plant achieved high levels of performance in production and technological norms. Right from the year of its integrated operation, VSP established its presence both in the domestic and international markets with its superior quality of products. VSP has been awarded all the three international standards certificates, namely, ISO 9001:2000, ISO 14001:1996 and OHSAS 18001:1999. The company has emerged as a good corporate citizen and has contributed substantially for the development of the region.

RINL registered a sale of Rs. 10,458 crore (estimated) during 2008-09 surpassing the level of Rs. 10,433 crore achieved in 2007-08. Sales in the domestic market stood at Rs. 10,379 crore and exports at Rs. 79 crore during 2008-09.

RINL recorded capacity utilisation of 104%, 105% and 102% in Hot Metal, Liquid Steel and Saleable Steel respectively during 2008-09.

By producing over 20.08 lakh tonnes of value added steel products during the financial year 2008-09, VSP registered a growth of 6% over the corresponding period of last year.
Special Steel sales volume of 19.81 lakh tonnes has been achieved for the year 2008-09, which is 8.4% higher than that of the last year i.e. 2007-08. During 2008-09, sales through District Level Dealers has been 42,000 tonnes, representing a growth of 23% over the last year, i.e., 2007-08.

During the current financial year 2008-09, based on the estimated figures, the company has registered a net profit of Rs. 1,307.76 crore (after tax).

The physical performance in terms of production and percentage achievement of rated capacities along with financial/marketing performance for the year 2007-08 and 2008-09 is given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (in million tonnes); Capacity utilisation (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot Metal</td>
<td>3.913 (115%)</td>
<td>3.546 (104%)</td>
</tr>
<tr>
<td>Liquid Steel</td>
<td>3.322 (111%)</td>
<td>3.145 (105%)</td>
</tr>
<tr>
<td>Saleable Steel</td>
<td>3.074 (116%)</td>
<td>2.701 (102%)</td>
</tr>
<tr>
<td>Financial &amp; marketing performance (Rs. in crore)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Turnover</td>
<td>10433.00</td>
<td>*10458.00</td>
</tr>
<tr>
<td>Profit After Tax</td>
<td>1942.74</td>
<td>1307.76</td>
</tr>
<tr>
<td>* Estimated figures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NMDC LTD

A Government of India enterprise and a Navratna company, NMDC was incorporated on November 15, 1958 and is engaged in the business of developing and harnessing mineral resources of the country (other than coal, oil, natural gas and atomic minerals). Presently, its activities are concentrated on mining of iron ore, diamonds and silica sand.

NMDC operates the large mechanised iron ore mines in the country at Bailadila (Chattisgarh) and Donimalai (Karnataka). The diamond mine is situated at Panna (Madhya Pradesh). The mining activities at Diamond Mine Project (DMP), Panna, were stopped w.e.f. August 22, 2005. Subsequently, several developments took place and recently, the Hon’ble Supreme Court has passed an order setting some conditions for reopening of this mine, which are being complied with by NMDC.
All the iron ore production units have been accredited with ISO 9001:2000 and ISO 14001:2004 certifications and the R&D centre of NMDC has also been accredited with ISO 9001:2000 certification.

**Finance capital structure**

The authorised share capital of the company is Rs. 400 crore. The paid up equity share capital is Rs. 396.47 crore. There are no outstanding loans from the Government of India.

**Financial performance**

The financial performance of the company for the year 2008-09 as against the previous year 2007-08 is as below:

<table>
<thead>
<tr>
<th>Item</th>
<th>2007-2008</th>
<th>*2008-2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Turnover</td>
<td>5711.31</td>
<td>7500</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>5010.93</td>
<td>6670</td>
</tr>
<tr>
<td>Profit/loss before tax</td>
<td>4947.47</td>
<td>6600</td>
</tr>
</tbody>
</table>

* Provisional

**MANGANESE ORE (INDIA) LTD (MOIL)**

Manganese Ore (India) Limited (MOIL) was established in 1962. It is the largest producer of Manganese Ore in India. At the time of inception, the Central Province Manganese Ore Co. Ltd. (CPMO) held 49% of shares and the remaining 51% were held in equal proportion by Government of India and the State Government of Madhya Pradesh and Maharashtra. Subsequently, in 1977, Government of India acquired the shares held by CPMO in MOIL and MOIL became a wholly owned government company with effect from October 1977. As on March 31, 2009, the paid up capital of the company is Rs. 28 crore. The Government of India holds 81.57% shares in MOIL with the State Governments of Maharashtra and Madhya Pradesh holding 9.62% and 8.81% shares, respectively.

MOIL produces and sells different grades of Manganese Ore. They are:
- High Grade Ores for production of Ferro manganese
- Medium grade ore for production of Silico manganese
- Blast furnace grade ore required for production of hot metal and
- Dioxide for dry battery cells and chemical industries.

MOIL has set up a plant based on indigenous technology to manufacture Electrolytic Manganese Dioxide (EMD). This product is used for the manufacture of dry battery cells. EMD produced by the Company is of good quality and well accepted by the market. A ferro manganese plant having a capacity of 10,000 MT per annum was also set up in 1998 by MOIL for value addition.
FINANCE

Authorised capital of the company is Rs. 100 crore and paid-up capital was Rs. 28 crore as on March 31, 2009.

Operational and financial results

The physical and financial performance of the company for the last three years i.e. 2005-06, 2006-07, 2007-08 and current year are given below:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Item</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Manganese Ore (‘000 Tonnes)</td>
<td>865.00</td>
<td>1047.00</td>
<td>1365.00</td>
<td>1175.00</td>
</tr>
<tr>
<td></td>
<td>b) E.M.D. (Tonnes)</td>
<td>1301.00</td>
<td>1312.00</td>
<td>1122.00</td>
<td>1240.00</td>
</tr>
<tr>
<td></td>
<td>c) Ferro Manganese (Tonnes)</td>
<td>6170.00</td>
<td>10200.00</td>
<td>11130.00</td>
<td>10120.00</td>
</tr>
<tr>
<td>2</td>
<td>Total Income (Rs. in crore)</td>
<td>356.19</td>
<td>451.82</td>
<td>1030.04</td>
<td>1407.98</td>
</tr>
<tr>
<td>3</td>
<td>Profit before tax (Rs. in crore)</td>
<td>169.00</td>
<td>210.21</td>
<td>734.91</td>
<td>1006.76</td>
</tr>
<tr>
<td>4</td>
<td>Reserves (Rs. in crore)</td>
<td>344.04</td>
<td>433.49</td>
<td>784.68</td>
<td>1292.87</td>
</tr>
<tr>
<td>5</td>
<td>Net Worth (Rs. in crore)</td>
<td>345.98</td>
<td>455.81</td>
<td>812.68</td>
<td>1320.87</td>
</tr>
<tr>
<td>6</td>
<td>Book value per share (Rupees)</td>
<td>2257.34</td>
<td>1604.46</td>
<td>2902.16</td>
<td>4717.40</td>
</tr>
<tr>
<td>7</td>
<td>Earning per share (Rupees)</td>
<td>747.25</td>
<td>479.31</td>
<td>1713.63</td>
<td>2370.69</td>
</tr>
</tbody>
</table>

Marketing

About 95% of manganese ore is used in steel industries. The year 2008-09, especially first half, was very good year for steel industries. During the first half of the current year 2008-09, the demand and prices of manganese ore, ferro manganese and silico manganese were quite attractive. However, since second half of the year, the economy of whole world is under pressure, and in particular, the steel industry has noted drastic fall in demand and production which is expected to extend further into next year. The total income and Profit after tax of the Company during the year 2008-09 were Rs. 1407.98 crore and Rs. 663.79 crore respectively.

Cost reduction plans

The Company has introduced the following cost reduction measures:

- Proper manpower planning and introduction of Voluntary Retirement scheme to reduce surplus manpower. Judicious mechanisation of various mining operations to improve the overall production and productivity thereby reducing cost per tonne ultimately.
- Implementation of benchmarks for consumption of major consumables such as Steel, Cement, Explosives, Spares etc.

MSTC LTD

MSTC Limited (formerly Metal Scrap Trade Corporation Ltd,) a Government of India enterprise, under the Ministry of Steel was set up on September 9, 1964 as a canalising agency for export of
scrap from the country. With the passage of time, the company emerged as the canalising agency for the import of scrap into the country. Import of scrap was de-canalised by the Government in 1991-92 and MSTC has since then moved on to the marketing of ferrous and miscellaneous scrap arising out of steel plants and other industries and importing coal, coke, petroleum products, semi-finished steel products like Hot Rolled (HR) coils and export of primarily iron ore. The company has also established an e-auction portal and undertakes e-auction of coal, diamonds and steel scrap.

Financial performance

The financial performance of the company for the last three years is given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Physical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Agency</td>
<td>3,491</td>
<td>4,634</td>
<td>6,577</td>
</tr>
<tr>
<td>(ii) Marketing</td>
<td>4,179</td>
<td>6,345</td>
<td>8,251</td>
</tr>
<tr>
<td>(iii) Total Volume of Business</td>
<td>7,670</td>
<td>10,979</td>
<td>14,828</td>
</tr>
<tr>
<td>B. Financial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Turnover</td>
<td>3,100</td>
<td>5,197</td>
<td>6,633</td>
</tr>
<tr>
<td>(ii) Operating Profit</td>
<td>93.40</td>
<td>138.33</td>
<td>141</td>
</tr>
<tr>
<td>(iii) Interest, Depreciation and Provision</td>
<td>2.53</td>
<td>3.863</td>
<td>-</td>
</tr>
<tr>
<td>(iv) Profit before Tax</td>
<td>90.87</td>
<td>134.47</td>
<td>137.97</td>
</tr>
<tr>
<td>(v) Profit after Tax</td>
<td>59.00</td>
<td>92.20</td>
<td>91.15</td>
</tr>
<tr>
<td>(vi) Dividend</td>
<td>54.0%</td>
<td>84.0%</td>
<td>-</td>
</tr>
</tbody>
</table>

* Provisional

FERRO SCRAP NIGAM LIMITED (FSNL)

FSNL is a wholly owned subsidiary of MSTC Ltd. with a paid up capital of Rs. 200 lakh. The Company undertakes the recovery and processing of scrap from slag and refuse dumps in the nine steel plants at Rourkela, Burnpur, Bhilai, Bokaro, Durgapur, Visakhapatnam, Dolvi, Duburi and Raigarh. The scrap recovered is returned to the steel plants for recycling/disposal and the Company is paid processing charges on the quantity recovered at varying rates depending on the category of scrap. Scrap is generated during iron and steel making and also in the Rolling Mills. In addition, the Company is also providing steel mill services such as scarfing of slabs, handling of BOF slag, etc.

Physical performance

The production performance of FSNL for the last two years and for the year 2008-09 (upto March 31, 2009) is given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery of scrap (lakh metric tonnes)</td>
<td>22.04</td>
<td>23.77</td>
<td>22.60</td>
</tr>
<tr>
<td>Market value of production (Rs. in crore)</td>
<td>969.68</td>
<td>1045.88</td>
<td>994.25</td>
</tr>
</tbody>
</table>

* Provisional
Financial performance

<table>
<thead>
<tr>
<th>Item</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total turnover</td>
<td>11062.80</td>
<td>12822.32</td>
<td>12933.00</td>
</tr>
<tr>
<td>Gross margin</td>
<td>1536.53</td>
<td>1586.00</td>
<td>1778.00</td>
</tr>
<tr>
<td>Interest &amp; depreciation</td>
<td>1228.65</td>
<td>1385.11</td>
<td>1470.00</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>307.88</td>
<td>200.89</td>
<td>308.00</td>
</tr>
</tbody>
</table>

* Provisional

HINDUSTAN STEELWORKS CONSTRUCTION LIMITED (HSCL)

Hindustan Steelworks Construction Limited (HSCL) was established in 1964, as a construction agency of the Government of India under the Ministry of Steel, to mobilise indigenous capability for putting up integrated steel plants in the country. The young organisation rose to the occasion and successfully met the challenge by bringing together competent human resources and mobilising a fleet of updated construction equipment. Since then, there has been no looking back. In the years that followed, almost every major steel plant in India was constructed by HSCL. As the company grew in resources and expertise, it diversified in other areas like power plants, mining projects, irrigation projects including dams and barrages, oil refineries, railways, airports, buildings and commercial complexes, rural roads, highways, flyovers, minor and major bridges for railways and road traffic, infrastructure for educational institutions, health centres and hospitals etc. The company undertook and successfully completed a number of turnkey projects also for various clients. Today, HSCL is an ISO 9001-2000 company and its capabilities cover almost every field of construction activities.

Starting with a modest Rs. 5 crore in 1965-66, the company achieved a turnover of Rs. 695.70 crore in 2008-09. The order book also is swelling every year. The order book stood at a healthy Rs. 1600 crore at the end of 2008-09. Turnover and order booking registered CAGR of 25% and 26% respectively.
during the last four years; much more than the envisaged industry growth of 6.5% during 2008-09. The company has so far executed orders worth more than Rs. 9180 crore since inception. The financial results also are improving with the company earning an operating profit of Rs. 52.52 crore during 2008-09.

Being in the public sector, HSCL pledges to comply with the framework of transparent corporate governance and considers it a primary responsibility to participate in the development of remote rural areas of the country under the government’s Bharat Nirman Programme.

**Capital structure**

The authorised and paid-up share capital are Rs. 150 crore and Rs. 117.10 crore respectively.

**Financial performance**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007-08 (Rs. in crore)</th>
<th>2008-09 (Rs. in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>526.18</td>
<td>695.70</td>
</tr>
<tr>
<td>Operational Profit (PBIDT)</td>
<td>40.21</td>
<td>52.25</td>
</tr>
<tr>
<td>Net Loss</td>
<td>*26.72</td>
<td>**17.59</td>
</tr>
<tr>
<td>Contribution to Govt. Exchequer</td>
<td>1.57</td>
<td>1.15</td>
</tr>
</tbody>
</table>

* The net loss includes Rs. 5.04 crore, towards voluntary retirement expenditure charged during the year, and Rs. 29.63 crore towards interest on GOI loan.
** The net loss includes Rs. 4.43 crore towards voluntary retirement expenditure and Rs. 68.75 crore towards interest on GOI loan.
# Provisional

**Order booking**

The order booking position during 2007-08 is as below:

- Steel Units = Rs. 271 crore (29%)
- Infrastructure Units = Rs. 669 crore (71%)
- Total = Rs. 940 crore

HSCL has secured orders of Rs. 871 crore during 2008-09. The break up is as below:

- Steel Units = Rs. 217 crore (25%)
- Infrastructure Units = Rs. 654 crore (75%)
- Total = Rs. 871 crore

**Manpower position**

- The manpower position as on April 1, 2008 = 1,480
- The manpower position as on April 1, 2009 = 1,248

**Separation on VRS**

- Employees separated on VRS during 2008-09 = 01
- Employees separated on VRS after restructuring in 1999 = 11,485
MECON LTD

MECON LTD is one of the leading multi disciplinary design, engineering, consultancy and contracting organisation in the field of iron & steel, chemicals, refineries & petrochemicals, power, roads & highways, railways, water management, ports & harbours, gas & oil, pipelines, non ferrous, mining, general engineering, environmental engineering and other related/diversified areas with extensive overseas experience. MECON, an ISO: 9001- 2000 accredited company, registered with WB, ADB, EBRD, AFDC and UNIDO, has wide exposure and infrastructure for carrying out engineering, consultancy and project management services for mega projects encompassing architecture & town planning, civil works, structural works, electric, air conditioning & refrigeration, instrumentation, utilities, material handling & storage, computerisation etc. MECON has collaboration agreements with leading firms from the USA, Germany, France, Italy, Russia, etc. in various fields. The authorised share capital of the company is Rs 10,400 lakh (previous year Rs 4100 lakh) against which the paid up capital is Rs 10313.84 lakh (previous year Rs 4013.84 lakh). All the shares are held by the Government of India.

Management initiative

Keeping in view the highly dynamic business scenario, a number of initiatives have been taken by the management in areas such as:
- Formation of Strategic Business Units in the area of Metals, Oil & Gas, Power and Infrastructure,
- Curtailment of expenditure in various areas of operation
- Right sizing of manpower, closing of unviable offices and down sizing of other offices for consolidating strength at main engineering office
- Focus on client and their project specific requirement
- Signing of MoUs/Agreements on technology & business promotion with reputed foreign companies for synergising mutual strengths and addressing the present market needs
- Consortium working philosophy with leading foreign and Indian Companies/institutions
- Entering into strategic alliances, multi-skilling of personnel for productivity improvement, and
- Enterprise wide networking for e-working, on-line work item allocation, on-line job card filling, e-archives project progress monitoring.

MECON is the first consultancy organisation in the country to be accredited with ISO-9001 certification. This certification for Consultancy, Design & Engineering, Procurement of Plant & Equipment, Construction & Project Management Services and Execution of Turnkey Projects is valid till January 2009. Recertification audit has been completed in the first week of December 2008 and the recommendation has been given by TUV.

Business diversification

In view of the cyclic demand / investments in the Steel Sector over the past several years, MECON has made forays into a number of diversified sectors of the economy especially Oil & Gas, Power and Infrastructure. The Company has gained substantial experience and recognition in some of these sectors and would like to build a strong portfolio of services to meet the growing demand of Clients. This would also help the Company in adjusting to the sectoral market fluctuations by aligning itself towards the sectors having higher opportunities in future.

During the year, consultancy business procured from the diversified sectors (other than metal) has been significant. In Engineering and Consultancy, the Company’s order booking is 17.53% (previous year 24.81%) in the diversified sectors and 82.47% (previous year 75.19%) in Metal Sector. In case of supply / turnkey projects, it is 1.83% in the diversified sectors and 98.17% (previous year 100%) in Metals Sector.
BHARAT REFRACTORIES LTD (BRL)

Bharat Refractories Ltd. (BRL), a Government of India undertaking, was incorporated on July 22, 1974 and at present, it has the following four units:
- Bhandaridah Refractories Plant at Bhandaridah
- Ranchi Road Refractories Plant at Ramgarh
- Bhilai Refractories Plant at Bhilai
- IFICO Refractories Plant at Ramgarh

The company is engaged in the manufacture and supply of various kinds of refractories, not only to the integrated steel plants, but also to the smaller steel plants.

Capital structure

The authorised share capital of the company as on March 31, 2009 was Rs. 246.00 crore against which the paid-up capital was Rs. 236.79 crore.

Production performance

The production performance of the different units of the company during 2007-08 and 2008-09 was as follows:

<table>
<thead>
<tr>
<th>Units</th>
<th>2007-08 Actual</th>
<th>2008-09 Actual</th>
<th>Qty. Value</th>
<th>Qty. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhandaridah Refractory Plant</td>
<td>26696</td>
<td>25000</td>
<td>71.24</td>
<td>64.11</td>
</tr>
<tr>
<td>Ranchi Road Refractory Plant</td>
<td>5672</td>
<td>8500</td>
<td>14.25</td>
<td>30.84</td>
</tr>
<tr>
<td>Bhilai Refractory Plant</td>
<td>31973*</td>
<td>30500</td>
<td>69.51</td>
<td>60.87</td>
</tr>
<tr>
<td>IFICO Refractory Plant</td>
<td>23610</td>
<td>31000</td>
<td>46.30</td>
<td>53.92</td>
</tr>
<tr>
<td>Total:</td>
<td>90951</td>
<td>95000</td>
<td>206.30</td>
<td>209.75</td>
</tr>
</tbody>
</table>

* Includes conversion job to SAIL Steel Plant.

Financial performance

During 2008-09, the profit before interest, depreciation and prior period/adjustment/tax amounted to Rs. 15.34 crore, and the company earned a net profit of Rs. 5.99 crore, in comparison to a net profit of Rs. 4.43 crore in 2007-08.

Foreign collaboration

Bharat Refractories Ltd. has been able to adapt successfully the technical know-how acquired for various items of high performance refractories. Except for spinel and magnesia spinel bricks, the technology of which could not be adapted due to constraints of firing facilities, commercial production of all other items, namely, magnesia carbon bricks, slide gate refractories, gunning repair materials and cast mixes of steel ladle, have already been established. Consequently, the company has emerged as one of the major suppliers of Magnesia Carbon Bricks (MCB) to SAIL steel plants. The company has also started commercial production of coke oven silica bricks, for which know-how was acquired from the Shinagawa Refractories Co. Ltd., Japan. The company has also entered into a foreign collaboration agreement with M/s PLIBRICO, France, for manufacture of castables for...
The company’s project for setting up facilities for production of refractories for continuous casting of steel is being pursued seriously.

**Merger with SAIL**

The merger of Bharat Refractories Limited (BRL) with the Steel Authority of India Limited (SAIL) under Section 396 of the Companies Act, 1956, is underway with the following major relief and concessions:

- Waiver of non-plan loan of Rs. 145 crore sanctioned in the year 2002-03 out of the total loan of Rs. 161.49 crore outstanding as on March 31, 2006.
- Waiver of interest of Rs. 40.91 crore accrued till March 31, 2006 on Government of India loans.
- Conversion of balance amount of plan loan of Rs. 16.50 crore as equity.
- To set off the accumulated loss of Rs. 22.31 crore outstanding in the books due to merger of IFICO with BRL against the paid up equity share capital of Rs. 227.19 crore (including loan converted to equity).
- To set-off the remaining accumulated loss of the company as on March 31, 2006 amounting to Rs. 173.73 crore also against the paid up equity share capital of Rs. 227.19 crore (including loan converted to equity).
- To set-off the additional loss of Rs. 30.00 crore on restructuring of current assets based on assessment by SAIL also against the paid up equity share capital of Rs. 227.19 crore.
- Waiver of non-plan loan of Rs. 30.46 crore along with the interest thereon provided to BRL in December 2006.
- To allow BRL to redeem the 7% non-cumulative preference shares worth Rs. 12.05 crore due for redemption on April 1, 2005 by fresh issue of (fully paid up) shares of equivalent amount as per provisions of Section 80 of the Companies Act, 1956.
- Transfer of the balance share capital held by the Government of India amounting to Rs. 20.25 crore after waivers/adjustment/set-offs to SAIL at a token value of Re.1.
- The merger would be deemed to have taken place with effect from April 1, 2007 and from that day onwards BRL would become a part of SAIL for all legal and accounting purposes.
- All taxes in respect of the profits and gains, including accumulated losses and unabsorbed depreciation and investment allowance of the business carried on by BRL before merger, be payable by SAIL subject to such concessions and relief as may be allowed under the Income Tax Act, 1961 (43 of 1961) as a result of the proposed merger.
- The merger has been approved by the shareholders of both the companies in their Annual General meetings. The scheme of merger, at present, is awaiting clearance of the Ministry of Corporate Affairs, Government of India.

**SPONGE IRON INDIA LTD (SIIL)**

Sponge Iron Plant of the company was initially established as a demonstration unit with a capacity of 30,000 tonnes per annum (tpa) with UNDP/UNIDO assistance to establish the techno-economic feasibility of producing sponge iron (a part substitute for ferrous scrap used by Induction and Electric Arc Furnaces) from lump iron ore and 100% non-coking coal. The unit, based on non-coking coal from Singareni Collieries Company Ltd. (SCCL) and iron ores available at various regions in Andhra Pradesh and neighbouring states, went into regular operations in November 1980. Several improvements and modifications were effected to the Sponge Iron Plant based on Rotary Kiln Process to suit the local raw materials and operating conditions. As a result, it has not only helped developing SIIL technology but also paved way for the development of Sponge Iron Industry in the Country. The Company doubled its capacity from 30,000 tonne per annum to 60,000 tonne per annum in October 1985.

**Capital structure**

The authorised share capital of the company stood at Rs. 66 crore as on March 31, 2009; paid up capital was Rs. 65.10 crore. (Rs. 64.27 crore held by Government of India and the balance of Rs. 0.83 crore by the Government of Andhra Pradesh).
Production

The Production and Financial Performance of the company during the last three years, together with provisional figures for 2008-09 is furnished in the table below:

<table>
<thead>
<tr>
<th></th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponge iron (tonnes)</td>
<td>48,302</td>
<td>55,194</td>
<td>43,331</td>
<td>30,489</td>
</tr>
<tr>
<td>Power generation (lakh Kwh)</td>
<td>49</td>
<td>56</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>Capacity utilisation (%)</td>
<td>81</td>
<td>92</td>
<td>72</td>
<td>51</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponge iron (tonnes)</td>
<td>48,215</td>
<td>54,670</td>
<td>44,447</td>
<td>25,235</td>
</tr>
<tr>
<td>Sales turnover (Net) (Rs. in lakh)</td>
<td>4,304</td>
<td>5,061</td>
<td>5,573</td>
<td>3,914</td>
</tr>
<tr>
<td>Generation of internal Resources (Rs. in lakh)</td>
<td>692</td>
<td>434</td>
<td>495</td>
<td>271</td>
</tr>
<tr>
<td>Net profit (Rs. in lakh) (PBT)</td>
<td>566</td>
<td>629</td>
<td>647</td>
<td>127</td>
</tr>
</tbody>
</table>

* Provisional

Project consultancy

- The Company has made a feasibility report for NMDC for their proposed Sponge Iron Plant at Nagarnar.
- The Company has taken up a consultancy contract with a Peruvian Company for supply of equipment for pollution control of Sponge Iron Plants.

Merger of SIIL with NMDC is expected to be completed shortly.

KIOCL LTD

KIOCL Limited (formerly Kudremukh Iron Ore Company Limited), a 100% export oriented unit, ISO 9001-2000, ISO 14001 and Four Star Trading House status holding company, was established in April 1976 to meet the long-term requirements of Iran. An iron ore concentrate plant of 7.5 million tonnes capacity was set up at Kudremukh. This project was to be financed in full by Iran. However, as Iran stopped further loan disbursements after paying $255 million, the project was completed as per schedule with funds provided by the Government of India. Following the Supreme Court’s verdict, mining was stopped at Kudremukh w.e.f. December 31, 2005.

While the project was commissioned on schedule, consequent upon the political developments in Iran, they did not lift any quantity of concentrate. As a diversification measure, the government approved the construction of a 3 million tonnes per year capacity pellet plant in Mangalore in May 1981. The capacity of the pellet plant was increased to 3.5 million tonnes with additions/modifications. The plant went into commercial production in 1987 and is now exporting iron ore pellets to China and also to domestic units such as Ispat Industries Limited, SAIL Steel Ltd and Rashtriya Ispat Nigam Limited. After mining was stopped at Kudremukh from December 31, 2005, the pellet plant is being operated with hematite iron ore purchased from NMDC.

The shareholders of the company in the Extraordinary General Meeting held on January 17, 2009 passed a special resolution recommending change of company name from Kudremukh Iron Ore Company Limited to KIOCL Limited.

Subsequently, the Registrar of Companies in Karnataka issued a fresh Certificate of Incorporation on January 22, 2009, changing the name of the company to KIOCL Limited. The company will now be called “KIOCL Limited” with effect from January 22, 2009.
Production

The target set for production during the year 2008-09 was 2.85 million tonnes of pellets. Actual production was 1.3168 million tonnes which amounts to 46% target achievement. There is shortfall in production of pellets during 2008-09. The shortfall was due to a shutdown of the pellet plant from October 7, 2008 to December 12, 2008 for annual maintenance and from January 11, 2009 to March 31, 2009 due to the depressed market condition. There was no demand for pellets and the company had a stock of 2.40 lakh tonnes of pellets at the end of March 2009.

The target set for production of pig iron, including auxiliary, during 2008-09 was 1,95,760 tonnes. Actual production was 1,18,059 tonnes which represents 60% of the target. There is shortfall in production of pig iron during 2008-09. The shortfall is on account of problems in the big and small bell of the furnace and no demand for pig iron due to the depressed market condition.

Sales

Budgeted sales for the year 2008-09 was Rs. 1,972.35 crore. Actual sales during the year was Rs. 1,228.98 crore, representing 61% of the target. Shortfall in financial performance during 2008-09 is due to lower despatch of pellets and pig iron on account of the global recession. The sales revenue during the last five years is as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>Concentrate</th>
<th>Pellets</th>
<th>* Blast Furnace Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>-</td>
<td>99410</td>
<td>23488</td>
<td>122898</td>
</tr>
<tr>
<td>2007-08</td>
<td>-</td>
<td>117385</td>
<td>35626</td>
<td>153011</td>
</tr>
<tr>
<td>2006-07**</td>
<td>-</td>
<td>26744</td>
<td>-</td>
<td>26744</td>
</tr>
<tr>
<td>2005-06</td>
<td>12091</td>
<td>111137</td>
<td>-</td>
<td>123228</td>
</tr>
<tr>
<td>2004-05</td>
<td>16050</td>
<td>169327</td>
<td>-</td>
<td>185377</td>
</tr>
</tbody>
</table>

* The erstwhile Kudremukh Iron & Steel Company Limited merged with KIOCL Ltd. with effect from April 1, 2007, hence information is furnished from the year 2007-08 only.

** Production of iron ore concentrates was stopped w.e.f. January 1, 2006, on the basis of the order of the Hon’ble Supreme Court.

Financial performance

An overview of the performance of KIOCL Ltd. during the year 2008-09 (provisional subject to audit) together with actuals for the previous three years, is indicated below:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total value of Sales</td>
<td>123228</td>
<td>26744</td>
<td>153011</td>
<td>122898</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>68706</td>
<td>5181</td>
<td>21174</td>
<td>6216</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>35630</td>
<td>1377</td>
<td>10816</td>
<td>1710</td>
</tr>
</tbody>
</table>

* Provisional

The erstwhile Kudremukh Iron & Steel Company Limited merged with KIOCL Ltd. with effect from April 1, 2007. Hence financial information furnished includes financial performance of the blast furnace unit for the year 2007-08 and 2008-09 only.
BIRD GROUP OF COMPANIES (BGC)

Consequent upon nationalisation of the Undertaking of Bird & Company in 1980, the following seven companies came under the administrative control of the Ministry of Steel, Government of India.
- The Orissa Minerals Development Company Ltd (OMDC)
- The Bisra Stone Lime Company Ltd (BSLC)
- The Karanpura Development Company Ltd. (KDCL)
- Scott & Saxby Ltd. (SSL)
- Eastern Investments Ltd (EIL)
- Burrakar Coal Company Ltd. (Burrakar).
- Borrea Coal Company Ltd. (Borrea).

The status of the companies is as under:

Burrakar and Borrea Coal companies become non-operational after nationalisation of coal mines. The two companies are under liquidation and the official liquidator has taken over the assets and liabilities of these two companies. EIL being an investment company is having major stakes in the equity shares of operating companies under the Bird Group. OMDC, BSLC, KDCL & SSL are operating companies under the Group.

At the time when the Bird Group of Companies came under the administrative control of the Ministry of Steel, Government of India, all of them were financially sick and burdened with various problems. With the financial support from the Government of India, problems relating mainly to excessive manpower, erosion of working capital and outstanding liabilities could be settled to a considerable extent.

Performance of the individual companies

THE ORISSA MINERALS DEVELOPMENT COMPANY LTD (OMDC)
Location of mines, activities and capital structure

The mines of the company are located around Barbil, Keonjhar district, Orissa. The activities relate to mining and marketing of iron ore and manganese ore. The authorised as well as paid up capital of the company is Rs. 60 lakh.

Performance

In view of buoyancy in the steel market, the demand for iron ore increased substantially. Due to higher production and better realisation, the company staged a turnaround in 2002-03. The performance of the company is given below:

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (`000 metric tonnes)</td>
<td>2268</td>
<td>1821</td>
<td>1697</td>
</tr>
<tr>
<td>Sales (Rs. in lakh)</td>
<td>29993</td>
<td>24631</td>
<td>27441</td>
</tr>
<tr>
<td>Gross margin before interest on Government loans and depreciation (Rs. in lakh)</td>
<td>26291</td>
<td>22787</td>
<td>29312</td>
</tr>
<tr>
<td>Net profit (Rs. in lakh)</td>
<td>17347</td>
<td>14883</td>
<td>19549</td>
</tr>
</tbody>
</table>

*Provisional
CHAPTER-IV

THE BISRA STONE LIME COMPANY LTD (BSLC)

Location of mines, activities and capital structure

The mines of the company are located around Birmitrapur in the district of Sundargarh, Orissa. The main activities of the company are mining and marketing of Limestone and Dolomite. The authorised as well as paid up capital of the company is Rs. 50 lakh.

Performance

With the change in steel making technology, demand of BSLC’s products declined sharply and consequently the company incurred heavy losses. With the financial support from the Government of India in the form of plan loan and non-plan loan, the company was in a position to keep its existence and take some steps for augmentation of production. Measures were taken to change the product-mix and improve upon the quality. The modification work was also undertaken for placing one rake of 58 BOX N wagons into two parts in order to avoid delay in loading of wagons and avoiding the demurrage for detention for earlier placing of rakes in three parts. An MoU has been signed with SAIL for steady dispatch of Limestone and Dolomite to eastern sector steel plants of SAIL. With such initiatives, the performance of company has maintained almost the same level as that of the previous year. The performance of the company is given below:

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production ('000 metric tonnes)</td>
<td>962</td>
<td>1113</td>
<td>1070</td>
</tr>
<tr>
<td>Sales (Rs. in lakh)</td>
<td>3770</td>
<td>4632</td>
<td>4878</td>
</tr>
<tr>
<td>Gross margin before interest on Government loans and depreciation (Rs. in lakh)</td>
<td>452</td>
<td>119</td>
<td>650</td>
</tr>
<tr>
<td>Net loss (Rs. in lakh)</td>
<td>-6665</td>
<td>-8161</td>
<td>-9069</td>
</tr>
</tbody>
</table>

*Provisional

THE KARANPURA DEVELOPMENT COMPANY LTD (KDCL)

Location of mines, activities and capital structure

The mines of the company are located around Sirka, Jharkhand and Bihar. The company produces limestone suitable for cement manufacture. The authorised and paid up capital of the company are Rs. 40 lakh and Rs. 20 lakh respectively.

Performance

The company markets its products mainly in the states of Jharkhand and Bihar. Demand of cement grade limestone in these states has been fluctuating thereby affecting the performance of the company. The company is taking steps to augment production by development of mines and exploring new markets to push up dispatch. The performance of the company is given below:

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production ('000 metric tonnes)</td>
<td>67.00</td>
<td>51.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Sales (Rs. in lakh)</td>
<td>178.00</td>
<td>152.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Gross margin before interest on Government loans and depreciation (Rs. in lakh)</td>
<td>-19.00</td>
<td>-13.00</td>
<td>1.61</td>
</tr>
<tr>
<td>Net loss (Rs. in lakh)</td>
<td>-221.00</td>
<td>-256.00</td>
<td>-296.00</td>
</tr>
</tbody>
</table>

*Provisional
SCOTT AND SAXBY LTD (SSL)
Location of mines, activities and capital structure

The company’s works are located in Kolkata and is mainly engaged in the activities of sinking of deep tube wells and mineral exploration. The authorised as well as paid up capital of the Company is Rs. 5 lakh.

Performance

The company’s performance is not satisfactory because of impediments like dearth of orders, old and worn out machinery and excessive manpower. The performance of the company is given below:

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (Rs. in lakh)</td>
<td>105.00</td>
<td>105.00</td>
<td>123.00</td>
</tr>
<tr>
<td>Gross margin before interest on Government loans and depreciation (Rs. in lakh)</td>
<td>-311.00</td>
<td>-108.00</td>
<td>-13.96</td>
</tr>
<tr>
<td>Net loss (Rs. in lakh)</td>
<td>-1347.00</td>
<td>-1148.00</td>
<td>-1554.00</td>
</tr>
</tbody>
</table>

*Provisional

The company is taking steps to augment the activity in the existing field of business i.e. sinking of deep tube wells in order to achieve the target. It is also exploring other areas of activities with the Group companies for development of workmen in order to add to revenue. The company is also contemplating further rationalisation of surplus manpower.
CHAPTER-V

PRIVATE SECTOR*

The private sector of the Steel Industry is currently playing an important and dominant role in production and growth of steel industry in the country. The private sector units consist of both major steel producers on one hand and relatively smaller and medium units such as Sponge iron plants, Mini Blast Furnace units, Electric Arc Furnaces, Induction Furnaces, Re-rolling Mills, Cold-rolling Mills and Coating units on the other. They not only play an important role in production of primary and secondary steel, but also contribute substantial value addition in terms of quality, innovation and cost effectiveness.

TATA STEEL LTD

TATA Steel has an integrated steel plant, with an annual crude steel making capacity of 6.8 million tonnes, located at Jamshedpur, Jharkhand.

The crude steel production of TATA Steel during the period 2008-09 was 5.6 million tonnes which is higher by 12% over the production of 5.0 million tonnes last year. The saleable steel production was at a higher level during the period April 2008-March 2009 (5.3 million tonnes) compared to the corresponding period last year (4.9 million tonnes).

TATA Steel has won the Deming Application Prize 2008.

As part of the Brownfield expansion project, TATA Steel has commissioned H Blast Furnace in May 2008, Caster #3 in October 2008 at the steel melting shop #1 and upgradation of Hot Strip Mill roughing mill as part of 1.8 million tonnes growth plan to reach capacity of 6.8 million tonnes. TATA Steel is continuing with its programme of expansion of hot metal and steel making capacity by 3 million tonnes to reach 10 million tonnes.

- Crude steel capacity as on March 31, 2009: 6.8 million tonnes (Jamshedpur works)
- Production of crude steel
  - 2007-2008: 5.0 million tonnes
  - 2008-2009: 5.6 million tonnes

Hon’ble Prime Minister Dr. Manmohan Singh releasing a postage stamp at the 100th anniversary of TATA Steel. Also seen are Shri B. Muthuraman, MD, TATA Steel and Shri Jyotiraditya Scindia, the then Hon'ble Minister of State for Communications & IT.

* Information as furnished by the respective companies.
JSW STEEL LTD

The JSW Steel Plant at Vijayanagar, has commissioned India’s largest Blast Furnace with 3 million tonne hot metal production per annum.

JSW Steel, Vijayanagar Works

JSW Steel is a 6.8 million tonnes per annum (MTPA) integrated steel plant, having a process route consisting broadly of iron ore beneficiation — pelletisation — sintering — coke making — iron making through blast furnace, as well as Corex process which entails steel making through the following process route: BOF-continuous casting of slabs — hot strip rolling — cold rolling mills.

JSW Steel has the distinction of being certified ISO-9001:2000 Quality Management System, ISO-14001:2004 Environment Management System and OHSAS 18001:1999 Occupational Health and Safety Management System. The Brownfield expansion plan of the Vijayanagar plant is in progress and is likely to be completed by 2010, with a total installed capacity of 9.6 MTPA.

JSW Steel, Tarapur and Vasind Works

JSW Steel Tarapur and Vasind Works specialise in down-streaming facilities which include: 1.0 MTPA cold rolling, 0.9 MTPA hot dip galvanising (HDG), 0.1 MTPA colour coating, 0.1 MTPA CRCA products and 0.3 MTPA hot rolled plates capacity. JSW Steel has a distinction of being certified to ISO-9001:2000 Quality Management System.

JINDAL STEEL & POWER LTD

Jindal Steel & Power Limited is one of the fast growing major steel units in the country. Raigarh plant of JSPL has a present capacity of 1.37 MTPA sponge iron plant, 2.40 MTPA Steel Melting Shop (SMS), 1.0 MTPA plant Mill, 2.30 sinter plant, 0.8 MTPA coke oven and a 330 mega watt captive power plant.
Capacity addition plan at Raigarh

Enhancement of the present steel capacity from 2.4 MT to 6.0 MT in a phased manner by 2010 will incorporate:

- 2.0 MT gas based DRI producing gas by coal gasification
- 4000 cubic metre blast furnace
- 3 MT steel melting shop with electric arc furnace route and thin slab caster.
- Hot strip mill (compact strip product technology)
- Cement plant to consume the blast furnace slag.
- 4X135 MW power plant increasing the capacity to 840 MW.

Jindal Steel and Power Ltd. has plans for expansion of its Raigarth plant to a capacity of 6.0 MTPA. It also has plans for two Greenfield projects in Orissa and Jharkhand with proposed capacity of 6.0 MTPA each, in the first phase.

ESSAR STEEL LTD (ESL)

Essar Steel Ltd., the Indian company of Essar Steel Holdings Limited, is the largest steel producer in western India, with a current capacity of 4.6 MTPA at Hazira, Gujarat, and plans to increase this to 8.5 MTPA. The Indian operations also include an 8 MTPA beneficiation plant at Bailadila, Chhattisgarh, which has the world’s largest slurry pipeline of 267 km to transport beneficiated iron slurry to the pellet plant, and an 8 MTPA pellet complex at Visakhapatnam. The Essar Steel complex at Hazira in Gujarat houses the world’s largest gas-based single location sponge iron plant, with a capacity of 4.6 MTPA. The complex also houses the steel plant and the 1.4 MTPA cold rolling complex. The steel complex has a complete infrastructure setup, including a captive port, lime plant and oxygen plant.

Essar Steel utilises Hot Briquetted Iron-Direct Reduced Iron (HBI-DRI) technology supplied by Midrex Technology, USA along with four 150 tonnes DC electric arc furnaces imported from Clecam, France. The Hazira unit of Essar Steel is equipped with 5.5 million tonnes per annum (MTPA) hot briquetted iron plant, 4.6 MTPA electric arc furnace, 4.6 MTPA continuous caster, 3.6 MTPA hot strip mill and 1.4 MTPA cold rolling mill. During the year 2007-08, Essar was awarded costs ISO/TS 16949 and OHSAS 18000 certification.
ISPAT INDUSTRIES LTD

Ispat Industries Ltd. (IIL) has set up one of the largest integrated steel plants in the private sector in India at Dolvi in Raigad district, Maharashtra, with a capacity to manufacture 3 million tones per annum of hot rolled steel coils (HRC). The Dolvi complex also boasts of an ultra modern blast furnace (set up by a group company Ispat Metallics India Limited) capable of producing 2.0 million tones per annum of hot metal/pig iron, 2.0 million tonnes capacity sinter plant (newly commissioned) and a DRI plant with a capacity of 1.6 MTPA.

The integrated steel plant uses the converter cum electric arc furnace route (CONARC process) for producing steel. In this project, IIL have uniquely combined the usage of hot metal and DRI (sponge iron) in the electric arc furnace for production of liquid steel for the first time in India. For casting and rolling of liquid steel, IIL has the state-of-the art technology called compact strip production (CSP) process, which has been installed for the first time in India and produces high quality and specifically very thin gauges of HRC.

MONNET ISPAT & ENERGY LTD

Monnet Ispat & Energy Limited (MIEL) is India’s second largest sponge iron manufacturing company with an annual production of 1 million tons per annum. Monnet manufactures and markets 1.6 million tons per annum of sponge iron, ferro alloys, mild steel billets and rolled products from its integrated plants at Raipur and Raigarh, with dedicated customers and distribution network throughout India. MIEL has plan to integrate the operations and expanding its steel capacities by taking up value-added segments like plates, Thermo Mechanically Treated (TMT) bars, wire rods and forging quality special steel etc. The company is presently operating ISO 9001-2000 certified plants at Raipur and Raigarh in Chattisgarh with production of finished steel and sponge iron. The company is in the advanced stage of capacity expansion at Raigarh, with blast furnace, EAF, TMT/rebar mill and plate mill under installation. The steel making capacity of the group will increase to 3.0 MTPA in 2010-2011. Greenfield units are coming up at Angul, Orissa, and Hazaribagh, Jharkhand, that will ramp up the steel making capacity to 5 MTPA by 2012.

BHUSHAN POWER & STEEL LTD

Bhushan Power & Steel Limited (BPSL), formerly Bhushan Limited (BL), is a closely held 36-year-old steel manufacturing and processing company. Presently, the company has five plants in Chandigarh and Derabassi, one plant in Kolkata and is now implementing an integrated steel plant at Sambalpur in Orissa in phases with an ultimate capacity of 2.8 MTPA.

The current configuration of the company at its Orissa plant is 1.0 MTPA sinter plant, 0.7 MTPA pig iron, 0.68 MTPA sponge iron, 0.45 MTPA coke oven and billet caster plant of .03 MTPA.

The company is adding 4 more kilns of 500 tonnes per day each and enhancing the production of H.R. Coil by June 2009. Further capacities for steel making are also being increased up to 2.8 million tonnes for which the work is going on.

BHUSHAN STEEL LTD

Bhushan Steel Limited (earlier known as Bhushan Steel and Strips Limited) (“Bhushan Steel” or “BSL”), was established in 1989, and is engaged in the business of steel manufacturing, steel processing and allied activities. It is the market leader in the secondary steel sector for cold rolled (CR) products and the third largest player in the CR segment in India.

Currently, the company is implementing the integrated steel plant with a capacity of 2.30 MTPA, of which production of 1.90 MTPA of Hot Rolled (HR) coils shall commence from the September 2009 quarter. The company is enhancing the capacity of the Orissa project from 1.90 MTPA of HR coils to 3.60 MTPA and total steel making from 2.20 MTPA to 4.50 MTPA.

The project has been undertaken to ensure optimum utilisation of infrastructure and resources at the existing plant and utilise the full capacity of existing HR mill which has the inherent capacity to produce HR coils up to 3.60 MTPA.
Electric Arc Furnace industry

Presently, there are 36 Electric Arc Furnace (EAF) based steel plants working in the country with an aggregate capacity of 13.81 million tonnes per annum. Apart from the working units there are three units, which are closed. Production of Ingots/Concast Billets by EAF units, which have been reporting their production to Joint Plant Committee, during 2008-09 was 10.43 million tonnes as compared to 10.80 million tonnes during 2007-08 – registering a decline of 3.4%. This sector continued to be under constraint of rising cost of inputs, increasing power tariffs, shortage of power and resource crunch.

Induction Furnace industry

During 2008-09, it is estimated that 1020 units with a capacity of 22.18 million tonnes were in operation. The total production of induction furnace units registered a growth of 6.3% during 2008-09, producing 18 million tonnes against a production of 16.93 million tonnes in 2007-08, as reported to the Joint Plant Committee (JPC).

Performance of EAF-based steel plants

- **Status** (updated on the basis of the Survey on Electric Arc Furnace Units 2004 undertaken by JPC):

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned units</td>
<td>39</td>
<td>13.86</td>
</tr>
<tr>
<td>Closed units</td>
<td>3</td>
<td>0.05</td>
</tr>
<tr>
<td>Working units</td>
<td>36</td>
<td>13.81</td>
</tr>
</tbody>
</table>

- **Production**

The production of electric arc furnace units as reported to the Joint Plant Committee is as under:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild steel</td>
<td>4.37</td>
<td>4.31</td>
<td>5.06</td>
<td>6.05</td>
<td>5.84</td>
</tr>
<tr>
<td>Medium/high carbon steel</td>
<td>1.35</td>
<td>1.50</td>
<td>1.76</td>
<td>2.72</td>
<td>2.63</td>
</tr>
<tr>
<td>Alloy steel</td>
<td>0.95</td>
<td>1.53</td>
<td>1.80</td>
<td>1.16</td>
<td>1.12</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>0.84</td>
<td>0.92</td>
<td>1.08</td>
<td>0.69</td>
<td>0.67</td>
</tr>
<tr>
<td>Others</td>
<td>0.05</td>
<td>0.04</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Total reported</td>
<td>7.56</td>
<td>8.30</td>
<td>9.75</td>
<td>10.67</td>
<td>10.31</td>
</tr>
<tr>
<td>Total estimated</td>
<td>0.28</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.12</td>
</tr>
<tr>
<td>Grand total</td>
<td>7.84</td>
<td>8.43</td>
<td>9.88</td>
<td>10.80</td>
<td>10.43</td>
</tr>
</tbody>
</table>

*Provisional

Hot rolled long products unit

- **Status** (updated on the basis of the Survey on Re-rolling Units 2004 undertaken by JPC):

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned units</td>
<td>2288</td>
<td>35.19</td>
</tr>
<tr>
<td>Closed units</td>
<td>644</td>
<td>5.68</td>
</tr>
<tr>
<td>Working units</td>
<td>1644</td>
<td>29.51</td>
</tr>
</tbody>
</table>
Production

Production of hot rolled long product manufacturing units as reported to the Joint Plant Committee is as under:

### Steel wire drawing units

#### Status

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total units</td>
<td>100</td>
<td>1.44</td>
</tr>
<tr>
<td>Closed units</td>
<td>65</td>
<td>0.73</td>
</tr>
<tr>
<td>Working units</td>
<td>35</td>
<td>0.71</td>
</tr>
</tbody>
</table>

#### Production

Production of steel wire drawing units, as reported to the Joint Plant Committee is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild steel</td>
<td>0.16</td>
<td>0.08</td>
<td>0.07</td>
<td>0.13</td>
<td>0.14</td>
</tr>
<tr>
<td>Medium/high carbon Steel</td>
<td>0.17</td>
<td>0.20</td>
<td>0.18</td>
<td>0.17</td>
<td>0.18</td>
</tr>
<tr>
<td>Alloy steel</td>
<td>0.01</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>0.04</td>
<td>0.17</td>
<td>0.14</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Total reported</td>
<td>0.39</td>
<td>0.49</td>
<td>0.43</td>
<td>0.46</td>
<td>0.49</td>
</tr>
<tr>
<td>Total estimated</td>
<td>0.03</td>
<td>0.01</td>
<td>0.11</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>0.42</strong></td>
<td><strong>0.50</strong></td>
<td><strong>0.54</strong></td>
<td><strong>0.56</strong></td>
<td><strong>0.60</strong></td>
</tr>
</tbody>
</table>

* Provisional
Hot rolled steel sheets/strips/plates units

■ Status

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned units</td>
<td>10</td>
<td>11.65</td>
</tr>
<tr>
<td>Closed units</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Working units</td>
<td>10</td>
<td>11.65</td>
</tr>
</tbody>
</table>

■ Production

Production of hot rolled steel sheets/strips, as reported to the Joint Plant Committee is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HR steel sheets/strips</td>
<td>6.95</td>
<td>7.45</td>
<td>8.56</td>
<td>9.30</td>
<td>10.05</td>
</tr>
<tr>
<td>Plates</td>
<td>0.33</td>
<td>0.65</td>
<td>0.89</td>
<td>1.37</td>
<td>1.45</td>
</tr>
<tr>
<td>Total reported</td>
<td>7.28</td>
<td>8.10</td>
<td>9.45</td>
<td>10.67</td>
<td>11.54</td>
</tr>
<tr>
<td>*Provisional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cold rolled steel sheets/strips units

■ Status

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total units</td>
<td>59</td>
<td>9.07</td>
</tr>
<tr>
<td>Closed units</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Working units</td>
<td>59</td>
<td>9.07</td>
</tr>
</tbody>
</table>

■ Production

Production of cold rolled steel sheets/strips units, as reported to the Joint Plant Committee is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild steel</td>
<td>4.18</td>
<td>4.87</td>
<td>5.48</td>
<td>5.26</td>
<td>4.64</td>
</tr>
<tr>
<td>Medium carbon steel</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High carbon steel</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alloy steels</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless steel</td>
<td>0.16</td>
<td>0.17</td>
<td>0.20</td>
<td>0.30</td>
<td>0.26</td>
</tr>
<tr>
<td>Others</td>
<td>0.07</td>
<td>0.09</td>
<td>0.08</td>
<td>0.08</td>
<td>0.07</td>
</tr>
<tr>
<td>Total reported</td>
<td>4.52</td>
<td>5.13</td>
<td>5.76</td>
<td>5.64</td>
<td>4.97</td>
</tr>
<tr>
<td>Total estimated</td>
<td>0.03</td>
<td>0.03</td>
<td>0.05</td>
<td>0.30</td>
<td>0.27</td>
</tr>
<tr>
<td>Grand total</td>
<td>4.55</td>
<td>5.16</td>
<td>5.81</td>
<td>5.94</td>
<td>5.24</td>
</tr>
<tr>
<td>*Provisional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Galvanised - Plain & Corrugated (GP/GC), PVC/Vinyl coated sheets/strips units

**Status**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned units</td>
<td>23</td>
<td>4.78</td>
</tr>
<tr>
<td>Closed units</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Working units</td>
<td>23</td>
<td>4.78</td>
</tr>
</tbody>
</table>

**Production**

Production of GP/GC sheets/strips units, as reported to the Joint Plant Committee:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GP/GC sheets/strips (incl. colour coated)</td>
<td>2.87</td>
<td>3.22</td>
<td>3.58</td>
<td>3.65</td>
<td>3.87</td>
</tr>
<tr>
<td>Total reported</td>
<td>2.87</td>
<td>3.22</td>
<td>3.58</td>
<td>3.65</td>
<td>3.87</td>
</tr>
</tbody>
</table>

*Provisional

**Tin plate units**

**Status**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned units</td>
<td>3</td>
<td>0.21</td>
</tr>
<tr>
<td>Closed units</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Working units</td>
<td>23</td>
<td>4.78</td>
</tr>
</tbody>
</table>

**Production**

Production of tin plate units, during the last few years and current year is as under:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil can size</td>
<td>0.14</td>
<td>0.15</td>
<td>0.16</td>
<td>0.17</td>
<td>0.19</td>
</tr>
<tr>
<td>Nonoil can size</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total reported</td>
<td>0.14</td>
<td>0.15</td>
<td>0.16</td>
<td>0.17</td>
<td>0.19</td>
</tr>
</tbody>
</table>

*Provisional
CHAPTER-VI

RESEARCH AND DEVELOPMENT

Major Research and Development (R&D) in Indian iron & steel sector over the years has remained confined to a few steel companies like Steel Authority of India Ltd. (SAIL) and TATA Steel Ltd. However, gradually, it has been picking up in newly commissioned main/major steel plants like Rashtriya Ispat Nigam Ltd (RINL), JSW Steel Ltd., Essar Steel Ltd., Ispat Industries Ltd. etc. Most of the R&D works in these plants however, relate to incremental research addressing the day-to-day problems of the steel plants or the industry, and investment in large-scale R&D work for development of path-breaking innovative technologies has been limited. Naturally, R&D investment in steel sector as a whole remains very meager and the actual investment in different steel companies as percentage of their turnover vary in the range of 0.15% to 0.25% which is roughly 1/10th when compared with known steel plants abroad.

To encourage and step up R&D investment in the steel sector, Government of India, Ministry of Steel has been extending financial assistance from the interest proceeds of Steel Development Fund (SDF). The empowered committee constituted under the chairmanship of Secretary (Steel) in the Ministry of Steel for this purpose has approved 59 R&D projects costing Rs. 408 crore, of which SDF contribution is Rs. 165 crore. So far approx. Rs. 13 crore has been disbursed and 26 R&D projects completed, and results implemented yielding benefits to the industry. During the year 2008-09, a sum of Rs 7.29 crore has been disbursed from SDF for different new and on-going R&D projects.

In addition to the above, Planning Commission, Government of India, has approved a new scheme viz. “Scheme for Promotion of R&D in Iron and Steel Sector” for which an amount of Rs. 118 crore has been allocated for the 11th Five Year Plan period. The Ministry is in the process of selection of specific R&D projects and agencies so as to start actual research work during the 2009-10.

Research and Development is a continuous process in the Steel industry.
Highlights of R&D initiatives by the Ministry of Steel and Associate Companies

Based on the report of the Working Group on Steel Industry, a new scheme for ‘Promotion of Research and Development in the Iron & Steel Sector’ was included in the 11th Plan (2007-12) with an outlay of Rs. 118 crore. The scheme was formally approved for implementation by the Expenditure Finance Committee (EFC) under Secretary (Steel) on 22.11.2008 and finally approved by Finance Minister on January 23, 2009. As per the approval, the scheme is to be effective from April 1, 2009. The scheme will focus on the following areas:

- Development of innovative/path-breaking technologies utilising Indian iron ore fines and non-coking coal.
- Improvement of quality of steel produced through induction furnace route.
- Beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. Pelletisation).

Budgetary provision of Rs. 26 crore has been allocated for the scheme in 2009-10 (BE).

STEEL AUTHORITY OF INDIA LTD (SAIL)

The Research & Development Centre for Iron and Steel (RDCIS), SAIL had undertaken 119 R&D projects in the year 2008-2009, out of which 79 projects were to be completed during the year. These projects provided technological inputs to SAIL plants/units with thrust on cost reduction, value addition, quality improvement and development of new products. All 80 projects were completed during the year. The centre filed 36 patents and 35 copyrights during the year and presented/published 161 technical papers. In addition, RDCIS undertook contract research work and provided significant consultancy services and know-how to organisations outside SAIL, yielding external earnings of Rs. 212.15 lakh. The centre bagged 10 national level awards including seven awards pertaining to National Metallurgist Day celebration 2008.
R&D efforts and achievements

Significant contributions made in some salient areas are mentioned below:

Productivity/quality improvement
- Improvement in Life of Decks of Cold Sinter Screen at Sinter Plant # 2 at BSP
- Auto Control of BF Charging Conveyors and Monitoring of Vibrators at Blast Furnace Charging Complex at BSL
- Optimisation of VAD Process Parameters for Sulphur bearing CSQ Grades at ASP
- Optimisation of Steel Refining Practice for Production of Special Steel through LF Route at DSP
- Introduction of Digital Field Control System in Skelp Mill at DSP
- Automatic Tail End Cutting System of Bar at Crop Shear before Entry of Finishing Stands of HSM at RSP
- Stabilisation of Roll Bite Lubrication in Hot Strip Mill at BSL
- Improvement in Productivity and Quality of CR Coils through PL 1-CR1 Route, CRM at RSP
- Enhancement in the Performance of Work Roll Bearings in Cold Rolling Mill at BSL

Energy conservation & environment control
- Introduction of Curtain Flame Ignition System in Sinter Machines # 2, 4 & 3 of Sinter Plant-2 at BSP
- Improvement in Performance of Combustion System of Annealing Furnace of CAL, CRM at BSL
- Improvement in the Performance of Reheating Furnace of Wire & Rod Mill at BSP
- Studies on Environmental Impact and Recycling of Selected Wastes at DSP

New products
- ASTM 537 Cl.1 Steel Plates at RSP for manufacture of bullet proof railway wagons
- Development of Fe 600 grade rock bolt quality TMT Rebars at DSP
- SUP 9 Grade Billets for Leaf Springs at DSP
- Value Added TMT Rebars and Structural at ISP
- Development of Medium carbon MC 40, MC55 and C30 Grades at RSP
- High Strength Formable Quality and High Strength LPG (EN P 310) Grades at BSL

Expenditure on R&D during the last three years

<table>
<thead>
<tr>
<th>Year</th>
<th>SAIL’s turnover (Rs. in crore)</th>
<th>R&amp;D expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Capital</td>
</tr>
<tr>
<td>2006-07</td>
<td>39189</td>
<td>5.55</td>
</tr>
<tr>
<td>2007-08</td>
<td>45555</td>
<td>2.24</td>
</tr>
<tr>
<td>2008-09*</td>
<td>46681</td>
<td>5.72</td>
</tr>
</tbody>
</table>

*Provisional
At RINL, R&D initiatives are undertaken keeping in view the present and future requirement of the plant based on thrust areas like process improvement, waste management, cost reduction, and environment protection.

Research activities undertaken during 2008-09

Significant achievements in the fields of R&D during the year are summarised below:

- **Process improvement**
  - Pilot oven test was conducted to study the suitability of usage of varying percentage of anthracite coal in coke making.
  - A project is undertaken to study the effect of iron ore micro fines in sinter making.
  - A project on “Technical Analysis and Optimisation of Continuous Casting at VSP using existing plant facilities” is in progress.
  - A project on “Water modelling of Continuous Casting Tundish for improvement of Yield and Metallurgical performance” has been taken up.

- **Waste management**
  - To improve the recycling of LD slag, a project was taken up on “Microbial removal of Phosphorous from LD Slag”. The project is in progress.
  - To recycle various metallurgical wastes generated in the plant, a project on briquetting of metallurgical waste was undertaken.
  - To improve the recycling of Gas Cleaning Plant (GCP) sludge of converter, a project on briquetting of GCP sludge was undertaken. After industrial trial, regular production of GCP sludge briquette is in progress.

- **Cost reduction**
  - A project has been taken up to study the effect of aluminium content in EQ grade wire rod coils with the help of Welding Research Institute, Trichy for better realisation of the product. The project has been completed.
  - A project on development of nano coatings on refractories was taken up for improving the refractory life.

- **Environment protection**
  - A project is undertaken to control the noise levels in mills and thermal power plant.
  - A project is undertaken on sequestration of CO₂ from flue gases.

- **Development of new grades/products**
  Keeping in view, the market demand and to cater to specific customer requirement, the following new grades were developed:
  - 40 mm rebar for the construction sector.
  - C20MMN for usage in high transmission tower lines
  - Steels for making helical springs & suspension springs for the automotive industry.

Academic collaboration/interactions

**Joint research projects**

To emphasise the need for effective interaction between industry and institutes, RINL has got collaborative projects with various premier educational institutes/research laboratories. The list of the research partners include Indian Institute of Technology, Kanpur and Chennai, Indian Institute of Science, Bengaluru, CSIR labs, National Institute of Technology, Trichy, Welding Research Institute, Trichy, Andhra University, Visakhapatnam.
Interactions with educational institutes/laboratories

To improve knowledge sharing between industry and institutes, a number of eminent professors/scientists visited RINL during the year. The visits were followed by technical discussions in various areas related to plant process parameters, technological developments etc.

Expenditure on R&D during last three years

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover (Rs. in crore)</th>
<th>R&amp;D expenditure (Rs. in crore)</th>
<th>R&amp;D expenditure % of turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>9131</td>
<td>11.68</td>
<td>0.13</td>
</tr>
<tr>
<td>2007-08</td>
<td>10433</td>
<td>17.93</td>
<td>0.17</td>
</tr>
<tr>
<td>2008-09*</td>
<td>10458</td>
<td>17.35</td>
<td>0.16</td>
</tr>
</tbody>
</table>

*Provisional

NMDC LTD

The major assignments taken up by NMDC during the year 2008-09 are as follows:

- With the technical collaboration between MISA (Moscow Institute of Steel and Alloys) and NMDC, facility is being created for preparation of Nano Crystalline Iron Powder from Blue Dust. Equipment have been procured. Civil works to house equipments are under progress.
- Pilot Plant of 300 TPA capacity for producing Carbon Free Sponge Iron Powder has been commissioned. A continuous trial run to see the smooth function of all equipments is under progress. The trial production is likely to start from 15th May, 2009.
- Studies have been completed for utilisation of Kimberlite tailings as a performance improver in cement industries in association with M/s National Council of Cement and Buildings Materials lab (NCCBM), Ballabagarh. Report has been submitted to BIS for including Kimberlite tailings as a performance improver in the manufacturing of cement.
- Apart from the works related to investigation/development/ production projects of NMDC, various projects sponsored by other companies/PSUs are also being regularly taken up.

MANGANESE ORE (INDIA) LTD (MOIL)

MOIL is engaged in exploration, exploitation, processing and marketing of Manganese Ore. It operates both Underground as well as Opencast Mines. The major portion of total production of Manganese ore comes from Underground Mines. The manganese deposits are mostly hosted by poor rock in various geological conditions. The company is also working the old dumps for secondary recovery of manganese ore employing advance beneficiation techniques. It also produces Electrolytic Manganese Dioxide (EMD) and Ferro Manganese processing the Manganese Ore produced from the mines.
Thrust areas for R&D activities

The thrust areas for the R & D efforts are therefore directed towards meeting the challenges of safe and cost effective mining practices in Underground mines with increasing depth. The thrust is also being given in the R & D activities for the development of beneficiation and upgradation techniques in addition to exploration of the new deposits. The main areas where the R&D efforts of the company have been directed are as follows:

- Development of safer and cost effective mining method.
- Development of new support system in underground workings and improving the existing supporting methods and practice.
- Introduction of controlled blasting practices for eco friendly mining.
- Sand stowing for filling underground voids fully with effective compactness.
- Technology development for production of Manganese based value added product.
- Development of cost effective beneficiation technique for upgradation of minerals.
- Technical upgradation and automation for activities for productivity enhancement and safety improvement.
- Exploration of new deposits.

Technology upgradation: Key areas

The technologies developed in-house and fully adopted are:

- Pre-mining ground re-enforcement by cable bolting in Underground Mines replacing the earlier post mining support.
- Introduction of hydraulic sand stowing in the Underground Mines, replacing the earlier system of manual filling.
- Introduction of post pillar methods of mining to reduce the consumption of timber and the cost of supports in underground.
- Introduction of Side Discharge Loader (SDL) for mechanical handling of ore in stopes.
- Use of steel for construction of ore passes and manways in underground replacing the RCC ore passes and man ways.
- Online Motion Weigh Bridge at mines of MOIL are presently operating in electro-mechanical and digital modes. For the last few years, MOIL was observing that the weighment recorded at platform weigh bridges at Railway Sidings was not always recording factual readings since they were very old mechanical type and had over the years developed wear which led to inaccuracies in weighment. In additional to incurring financial losses on account of the same, MOIL was made to pay punitive charges. The online in motion weigh bridges have the capacity of 120 metric tonnes.

The projects for technology upgradation under R&D stages are:

- Introduction of Open Stopping Method, signaling on an experimental basis in selected areas.
- Introduction of mechanical handling of ore with hanging type conveyer belt in SDL in working areas.
- Study for effective use of under size material generated during the process of mining.
- Optimisation of the process parameters in EMD and Ferro Manganese Plant.
- Upgradation of the low grade of ore by different techniques of beneficiation.
- Instrumentation for sand and water mixing in sand stowing plant.
- Introduction of pre-casted concrete slab for underground support.
- Mechanisation of ore loading into wagon.
- Automation of Signaling system in shaft
- Automation of Attendance Monitoring System.
- Introduction of “Energy Saving Device” in different Electrical Equipments.
- Rain Water Harvesting in selective areas.
- Exploration of Manganese Ore in the extended direction.
R&D programme for continuous improvement in the existing practices:

- Procurement of 3 X-ray Fluorescence Spectrophotometer for analysis of manganese ore: MOIL has introduced the instrumental analysis of Mn Ore in Manganese industry for the first time in India through the XRF (X-ray fluorescence spectrophotometer). The XRF is an analytical method to determine the chemical composition of all kinds of materials. In Manganese Ore (India) Limited XRF is used for analysis of Mn-ore samples like Mn, SiO₂, Phos, Fe, Ni, Cu, Pb, K etc. for fast controlling the quality of Manganese Ore & dispatch to the buyers.
- Rock Mechanics instrumentation land application of the recent advances in rock mechanics for monitoring ground behaviours in the underground mines.
- Diamond drilling to locate new manganese and to prove further reserves in the existing areas
- Pit slope stability studies in the open cast mines and optimisation of slope angles to reduce the development cost.
- Experimentation with mechanical handling of ROM in stops at Balaghat
- Blasting studies in the underground as well as open cast mines for optimisation of blasting parameters for reduction in explosive consumption and blasting cost with an improvement of fragmentation of the blasted materials.
- Beneficiation studies for upgradation of Dongri Buzurg and Balaghat ROM
- Design of new roof and ground system in underground having weak and soft rock in hand wall and footwall. This will help in improving safety & productivity of mine by providing the scope of mechanisation in the stop.
- Introduction of Electrical Winch, 0.5 MT capacity in under ground mine.

R&D expenditures

The following R&D expenditures have been incurred during the last four years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover</th>
<th>R&amp;D expenditure</th>
<th>(Rs. in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>R&amp;D expenditure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>% of turnover</td>
</tr>
<tr>
<td>2004-05</td>
<td>378.78</td>
<td>1.71</td>
<td>0.45</td>
</tr>
<tr>
<td>2005-06</td>
<td>334.09</td>
<td>1.28</td>
<td>0.38</td>
</tr>
<tr>
<td>2006-07</td>
<td>417.63</td>
<td>2.08</td>
<td>0.50</td>
</tr>
<tr>
<td>2007-08</td>
<td>973.36</td>
<td>2.79</td>
<td>0.28</td>
</tr>
<tr>
<td>2008-09*</td>
<td>1276.59</td>
<td>2.40</td>
<td>0.19</td>
</tr>
</tbody>
</table>

*Provisional

MECON LTD

MECON has an in-house R&D Lab since 1985-86 duly recognised by the Department of Scientific and Industrial Research, Government of India wherein the thrust on R&D activities has been design and development of engineering technologies and equipments in various sectors including iron and steel. Recently, MECON has successfully designed, developed and demonstrated the Infrared camera based ‘Slag Detection system’ for BOF converter in RSP, SAIL, Rourkela.

R&D projects completed during 2008-09

- Development of design and engineering for high efficiency, high temperature, and top fired stoves, funded by SDF, Ministry of Steel. Following successful development, commercialisation efforts are on for implementation of such stoves at IDCOL, Kalinga Iron Works Ltd., Orissa.
- Development of Coke Dry Cooling Technology (CDCT) for non-recovery of coke ovens, funded by SDF, Ministry of Steel.
On-going projects

- Development and Implementation of slag detection system for continuous caster, funded by SDF, Ministry of Steel.
- Development of continuous NOx monitoring system, funded by SDF, Ministry of Steel.

Patent under process

- Patent application filed for R&D project entitled “High Efficiency, High Temperature, Top Fired Stoves”.

Excellence and awards

MECON’S excellence in R&D activities are also recognised through various awards bestowed to the R&D scientists such as Young Scientist Award of Excellence, Best Paper Award etc. MECON has more than 32 patents and 105 technical papers on R&D published in national and international journals. MECON’S R&D engineers are also the regular referees of various international journals.

BHARAT REFRUCTORIES LTD (BRL)

The specific areas in which R&D activities were carried out by the company during the year 2008-09 were:
- Cost reduction
- Quality improvement
- Product development and application

The benefits derived as a result of the above R&D efforts are:
- Reduced cost per heat in respect of supply of bricks on guarantee basis
- Reduction in cost of raw materials, besides combating scarcity of imported raw materials
- Enhanced life of bricks leading to substantial order from steel plants

The R&D programmes identified for the next five years are as follows:
- Product development
- Product substitution
- Automation and computerisation

Expenditure on R&D

<table>
<thead>
<tr>
<th>Year</th>
<th>2007-08</th>
<th>2008-09* (in Rs. lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D expenditure</td>
<td>43.24</td>
<td>45.00</td>
</tr>
</tbody>
</table>

*Provisional

SPONGE IRON INDIA LTD (SIIL)

The R&D work at SIIL was limited to analysis of iron ore collected from different sources in the Karnataka region which helped the company to locate suitable iron ore for production of sponge iron.

KIOCL LTD

The main objective of R & D activities at KIOCL is quality improvement through process development/modifications to suit requirement of pellet plant to operate with hematite ore.
R&D (Ore preparation and processes)

- In order to get the required concentrate of the desired blaine number to produce good quality pellets, a series of tests was conducted in the filter plant at Mangalore to replace the existing disc vacuum filters with pressure filters.
- With the assistance of Met-Chem Canada Inc and Corem Laboratories, Canada, process and technological modifications for the use of hematite ore in grinding and pellet making have been incorporated.

**Development of infrastructure at Mangalore facilities for unloading, handling, blending, storage, and grinding of hematite ore sourced from different agencies involved the following:**
- Construction of railway siding adjacent to a pig iron complex of KIOCL for collecting the iron ore arriving in railway wagons.
- Creation of bulk material handling facilities for unloading, storage and transportation of the iron ore fines from the railway siding to the pellet plant storage sheds.

**Feasibility studies have been conducted for the following projects:**
- In order to meet the requirements of coke for the blast furnace unit and pellet plant, a coke oven plant has been planned at Mangalore. The coke oven plant will consist of coke preparation plant, coke making plant, coke sorting plant with necessary auxiliary facilities like steam and power generation unit, cooling and make up water system, instrumentation/control system and service facilities.
- In order to achieve better productivity in the pellet plant, it is proposed to introduce an after cooler with necessary accessories at the discharge side of the indurating machine.
- In view of the anticipated market for pellets, both domestic and international, there is a proposal to establish a 3.5 MTPA pellet plant at Mangalore near the existing pellet plant.

*Hot Rail on finishing stand.*
Mechanised Unloading System: Presently, KIOCL receives iron ore fines by ship from Bailadila and plans to continue procure iron ore from shore based suppliers. For unloading and shifting the ore to the storage yard quickly, it is proposed to have a mechanised unloading system at the Mangalore berth.

R&D feasibility studies expenditure (Rs. in crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover</th>
<th>R&amp;D expenditure</th>
<th>R&amp;D expenditure % of turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>267.44</td>
<td>0.60</td>
<td>0.22</td>
</tr>
<tr>
<td>2007-08</td>
<td>1530.11</td>
<td>1.41</td>
<td>0.09</td>
</tr>
<tr>
<td>2008-09*</td>
<td>1228.98</td>
<td>0.97</td>
<td>0.08</td>
</tr>
</tbody>
</table>

*Tentative

TATA STEEL LIMITED

TATA Steel has a well-equipped research and development laboratory with qualified human resource (40 PhDs, 62 MSc/MTech and two graduates) engaged in applied and basic research. Focus of these R&D activities is on following identified thrust areas:

- Economic mineral beneficiation and stretching the raw materials envelope.
- Next generation high strength steels and advanced coatings development.
- Low energy process for the production of ferro-chrome, hydrogen harvesting, viable photovoltaic coating system, energy efficient fluids etc.

Major highlights of 2008-09

- Chemical beneficiation process established at bench scale to produce less than 8% ash clean coal from the fines and pilot scale studies are in progress to establish techno-economics of the process.
- Based on detail characterisation study of iron ore slime, strategy for beneficiation of slime as well as utilisation of final reject has been formulated.
- A process flow sheet for the production of sponge chrome and chromite nugget has been developed.
- A new 6+1 hole lance has been designed to reduce phosphorus in BOF. Few trials have been carried out in BOF vessel at LD2. Initial results are encouraging.
- A new way of stirring from the bottom of BOF vessel called ‘Differential Flow’ has been found by water model experimentation. It has been implemented in two vessels at LD2. It was possible to improve the phosphorus partition by five points. This has also resulted in saving consumption of argon by 300 NM3/day/vessel.
- High strength steels with following properties have been developed at laboratory scale: YS – 350 MPa, UTS – 726MPa and Eln – 56% through TWIP route,
  UTS – 768 MPa, UTS – 962 MPa and Eln – 25% using TRIP route.
- Thin Organic Coated (TOC) GI wires have been successfully commercialised by the R&D and Wire Division, Mumbai with corrosion resistance more than two times the conventional GI Wire. The product is presently marketed as “Deluxe Wire”.
- Advanced nano-hybrid silica and titania coating have been developed on GI and CRCA steel sheet with significant (nearly 10 times) corrosion resistance and other functional properties such as hydro-phobicity, anti-finger print resistance, etc.
- TATA 600 grade processing 600 MPa TS min with 25% elongation has been developed.
- DP 600 GI trials have been successfully completed in CGL #2 as a part of CORUS integration project.
JSW STEEL LTD

Highlights of R&D in 2008-09

- Improvement in steel cleanliness through design modification of tundish.
- Optimisation of hot metal de-siliconisation and de-phosphorisation treatment adopting heat and mass balance model, which is one of its kind in India.
- Inclusion mapping in slab and its characterisation has been carried out using SEM, for improved understanding of the inclusion segregation during solidification.
- The blast furnace-1 productivity has been increased from 2.3 to 2.5 t/m³/d by optimisation of burden distribution/material discharge rate, soft blowing philosophy, and improvement in tapping practice.
- PCI rate was enhanced up to 90 kg/thm in BF#1 by improving permeability in the lower part of the furnace through technological interventions.
- An off-line heat model has been developed to predict the heat distribution inside the furnace.
- Reduction in fuel rate in Corex by 15 kg/thm through optimisation of slag regime by way of increasing slag Al2O3 from 17.5 to 18.0%.
- Optimisation of coal blend for recovery type coke ovens by developing blend specifications to achieve coke CSR > 65% consistently.
- Development of artificial neural network model to predict the RDI property of pellet in straight grate induration machine.
- R&D work carried in developing value added products in the form of 32 new grades to meet the specific requirements of various customers.

Patents

Following patent applications have been filed:

- Dust burner system in corex for injecting recycled-dust in melter-gassifier with increased dust load and longer life.
- A dust recycling system for enhanced availability of corex in Korea, China, S. Africa and Austria.
- A tundish adapted for reduction in residual metal losses and a method thereof.
- A multi function lance burner flame sensing system.
- A method for improving productivity of cold rolling, mills avoiding stickiness between wraps of coil

Copyrights

- Mass Heat Balance Model for corex
- Mass Balance Model for sinter plant
- Mission Vision Statement of JSW- Booklet
- Burden Distribution Model for blast furnace
- Heat Balance Model for blast furnace
- Mass Balance Model for blast furnace
- Iron Atlas

ESSAR STEEL LTD

Essar Steel has recently set up a dedicated laboratory with qualified engineers/experts for research & development to address the problems/issues concerning their production processes and products with particular emphasis on new product development. During the year, the company is reported to have developed 31 new steel grades/products for stringent applications including high strength CRCA steel sheet and high strength dent resistant IF steel for automotive applications, high strength
galvanised sheets for structural applications, stringent quality API grade steel for line pipes, ship building quality plates for hull structural application and for warship application for Indian Navy etc. Highlights of some of the specific R&D activities taken up during the year and benefits derived thereof are given below:

- Development of SPRC-35/40 CRCA steel for automobile application.
- High strength IF CRCA steel as per SPRC-45 for auto application.
- High strength steel plates equivalent to DOMEX 650 steel for automobile chassis application.
- In-house development of mathematical model for HSM-ROT temperature prediction and Micro-structure evolution model.
- Development of Dual phase steel- DP-600 (F+M) for automobile application.
- Development of API 5L X-80 grade steel for line pipe application with HTP concept.
- Development of API 5L X-65 line pipe steel for sour service application.
- Development of high strength plates as per caterpillar spec. 1E 1242, as import substitute.
- Cost reduction w.r.t ferro-alloys consumption, the approximate saving amounts to Rs. 22.0 crore (without affecting the quality parameters).
- Coal trial taken in modules to study the effects in reducing natural gas consumption.
- LPG extraction system commissioned leading to energy conservation.
- Commissioned the cold DRI pilot facility in module 3.

**MUKAND LTD**

Mukand is one of the known units in secondary steel sector having a well-established R&D laboratory. Some of specific areas in which research and development was carried out during the year 2008-09 are:

- Studies related to micro-structural improvement in duplex SS grade 2205 resulting in favourable mechanical properties and intergranular and interphase corrosion resistance.
- Developed required grade/microstructure in 17-4 PH precipitation hardening grade resulting in favourable properties for better processability of bars in the heat treated condition on bulk scale.
- Micro-alloyed steels developed for automotive component applications with desired mechanical properties.
- Studies carried out for inclusion characterisation for ball bearing steels through interaction with National Institute of Technology, Surathkal (Karnataka). This has helped in production of high cleanliness ball bearing steels.
- Studies related to machinability of EN1AL machining quality steel is being jointly carried out with NITK, Surathkal as a major project. The study aims to bring out the effect of sulphur, oxygen and silicon levels on machinability. Based on the results of this study, further research activities shall be planned to enhance machinability of this grade. First phase of project is already completed.

**Following QMS certifications were obtained during the year:**

- TUV ADW0: Merkblatt for stainless steel.
Environment management and energy efficiency constitute an important benchmark for assessing any sector or company both globally and domestically. The Ministry of Steel through various schemes and regulations of the Government is facilitating reduction in energy consumption and emission of environmental pollution in steel plants. Some of the steps/initiatives taken by the Ministry of Steel through various forums and mechanism during the year are:

**CHARTER ON CORPORATE RESPONSIBILITY FOR ENVIRONMENT PROTECTION (CREP)**

This is an initiative of the Ministry of Environment and Forests (MoEF)/Central Pollution Control Board (CPCB) in association with the Ministry of Steel and the main/major steel plants to reduce environment pollution, water consumption, energy consumption, solid waste and hazardous waste management etc. as per mutually agreed targets with the purpose to go beyond the compliance of regulatory norms for prevention and control of pollution.

A National Task Force in CPCB reviews the compliance of CREP action points and targets. At the instance of CPCB and the MoEF, the Ministry of Steel reviewed the compliance in respect of utilisation/recycling of steel making slag in the steel plants vis-à-vis the target of 100% utilisation/recycling. Having noted the technological constraints in 100% utilisation/recycling of such slag, the Ministry of Steel has submitted a roadmap to the MoEF towards recycling/utilisation of the slag.

**CLEAN DEVELOPMENT MECHANISM (CDM) UNDER KYOTO PROTOCOL**

Under this scheme, the Ministry of Steel is facilitating, through the National CDM Authority in the MoEF, adoption of energy efficient clean technologies in iron and steel plants. A large number of iron and steel plants have obtained host country approvals for availing carbon credit by adopting
energy efficient clean technologies. So far (as on March 31, 2009), 127 such projects amounting to reduction of 99 million tonnes of carbon dioxide equivalent have been approved by the National Clean Development Mechanism (CDM) Authority. Earlier, most of these projects were from the private sector. However, in pursuance of initiatives taken by the Government last year, Public Sector Undertaking (PSU) steel companies like SAIL and RINL have been developing/submitting CDM projects for host country approval.

**UNDP-Global Environment Facility (GEF) steel project**

Under this project, a scheme has been developed with contribution from the United Nations Development Programme (UNDP) and the Ministry of Steel to facilitate diffusion of energy efficient low carbon technologies in steel re-rolling mills in the country to bring down energy consumption, improve productivity and cost competitiveness together with a reduction in Green House Gas (GHG) emission and related pollution levels. Towards this objective, 34 model units have been identified and so far, technology packages have been commissioned in 15 units.

**NEDO model projects**

Ministry of Steel has been facilitating setting up of energy efficient, environment friendly projects known as Model Projects in different steel plants with financial assistance from Japan. These projects are implemented by New Energy and Industrial Technology Development Organisation (NEDO), Japan. So far one project has been commissioned at TATA Steel and one more project is under commissioning there. During 2008-09, one model project for sinter cooler waste heat recovery at Visakhapatnam Steel Plant of RINL has been approved and the Government is in the process of completing all formalities towards implementation of this project.

**ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE (APPCDC)**

Under this mechanism, seven countries namely, America, Australia, China, Canada, India, Japan and South Korea have joined together to promote energy efficient measures through supply of technology/equipment/fund in various sectors of the economy, including iron and steel. Accordingly, there are eight task forces including steel. In India, APPCDC is coordinated by the Ministry of Environment ad Forests (MoEF) and there are two members from the MoEF and one member from the Ministry of External Affairs in its apex body i.e. Programme and Implementation Committee (PIC). The Ministry of Steel is represented in the Steel Task Force as its Co-chair.

Under this mechanism, the Steel Task Force deputed an expert team led by NEDO, Japan to carry out performance diagnosis of three steel plants in India to assess the level of implementation of energy efficient environment friendly technologies and barriers/bottlenecks thereof. Performance diagnosis of TATA Steel Ltd. and Visakhapatnam Steel Plant (VSP) were carried out during 2008-09 and reports submitted to the Steel Task Force. The Indian steel companies and the Ministry of Steel have been pursuing for developing a mechanism for deployment of energy efficient/environment friendly technologies as well as a designated fund required for the purpose.

**National Action Plan on Climate Change**

This is a new initiative of the government to address the problem of climate change at the national level. Towards this objective, the Hon’ble Prime Minister released the National Action Plan document in June 2008 covering eight national missions. The National Mission for Enhanced Energy Efficiency (NMEEE) encompasses energy efficiency improvement in industrial sector including iron and steel. During the year, the Government initiated several actions and the Ministry of Steel coordinated with the concerned ministries/agencies towards fulfillment of the objectives of NMEEE.

Besides, the above initiatives of the Government, the iron and steel companies in the country have been addressing the problem of energy and environment management through various mechanisms. Highlights of energy conservation and environment management measures adopted and being adopted in the iron & steel sector are given below company-wise:
Corporate environmental policy of SAIL emphasises on the need to go beyond compliance. Accordingly, SAIL has been committed to the initiative of the Ministry of Environment and Forests (MoEF) national charter on “Corporate Responsibility for Environment Protection (CREP)”. SAIL plants have continued their efforts for further improvement in their environmental performance which can be evidenced by comparing the following indicators which are detailed below:

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate matter (PM) emission (Kg/tcs)</td>
<td>2.3</td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Specific water consumption (m³/tcs)</td>
<td>4.58</td>
<td>4.0</td>
<td>3.95</td>
</tr>
<tr>
<td>Solid waste utilisation (%)</td>
<td>75</td>
<td>77</td>
<td>78.6</td>
</tr>
<tr>
<td>Specific energy consumption (Gcal/tcs)</td>
<td>7.17</td>
<td>6.95</td>
<td>6.74</td>
</tr>
</tbody>
</table>

The continuous improvement in the above stated environmental performance have resulted in the reduction of emissions and discharge levels, utilisation of solid wastes, reduction in energy consumption, increase in green cover etc.

**Emission and consumption levels**

Particulate Matter (PM) emissions from stacks in SAIL has been progressively brought down from a level of 6.03 kg/tonne of crude steel (tcs) in 1998–99 to 1.6 kg/tcs in 2008-09 and the water consumption in SAIL steel works has reduced from 10.8 m³/tcs in 1998-99 to 3.95 m³/tcs in 2008-09. In Bhilai Steel Plant (BSP), consumption level at 3.0 m³/tcs is comparable with the best performance worldwide (CORUS: 2.97 m³/tcs, 2007).

All the SAIL plants are meeting the environmental quality norms with respect to effluent discharge and ambient air quality. With regard to PM emission from the major stack of the steel plants, 95% are complying with the norms laid down by the statutory bodies. For the non-complying stacks, respective plants have initiated actions.

**Solid waste management**

SAIL plants produced 13.41 million tonnes (MT) of crude steel during 2008–09, generating 5.83 MT of blast furnace (BF) slag, 1.34 MT of Steel Melting Shop (SMS) slag and 0.91 MT of other process wastes. Utilisation of most of these wastes is made through internal recycling and selling to outside agencies.

Major thrust has been given on the reduction of waste generation which has been lowered by taking care of reduction in silica and alumina content in iron ore through effective washing process, use of low ash imported coal in coal blend.

The wastes generated in the steel plants are being utilised mainly through their sinter plant. To further utilise the BF slag generated at BSP, SAIL has signed MoU with Jai Prakash Associates for the joint venture cement plant with a capacity of 2.2 MTPA. Similar kind of project has also been signed at Bokaro Steel Plant (BSL). As regards the management of hazardous waste, the authorisation for handling, storage and transportation of such wastes have been obtained for all the SAIL plants from the respective State Pollution Control Boards as per Hazardous Waste (Amendment) Rules, 2003.
Environmental plantation

Extensive afforestation programme are being followed in all the plants and mines. Since inception, over 20 million trees have been planted in SAIL. During 2008–09, 2.9 lakh saplings were planted as against 2.6 lakh during 2007–08.

Eco restoration of de-graded lands

- An agreement has been signed with Department of Biotechnology (DBT), Government of India (GOI) and Delhi University for eco-restoration of degraded areas of SAIL at a cost of Rs. 2.92 crore (Rs. 2.02 crore funded by DBT, GOI and Rs. 0.9 crore from SAIL).
- 200 acres have been restored through afforestation at Purnapani Limestone & Dolomite Quarry (PLDQ), Purnapani by planting saplings which includes horticulture species, forest species and eight types of grasses.
- Pisiculture has been done in the abandoned quarries at Purnapani and 8.0 lakh fishlings have been released in the quarry water.

Energy conservation

The specific energy consumption for SAIL during 2008-09 is 6.74 Giga calories (Gcal)/tcs as compared to the figure of 6.95 Gcal/tcs in 2007-08 registering an improvement of 2.7%.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Year</th>
<th>Generation of solid wastes ('000 tonnes)</th>
<th>Utilisation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2005–06</td>
<td>7962.63</td>
<td>70</td>
</tr>
<tr>
<td>2.</td>
<td>2006–07</td>
<td>7816.10</td>
<td>75</td>
</tr>
<tr>
<td>3.</td>
<td>2007–08</td>
<td>8028.72</td>
<td>77</td>
</tr>
<tr>
<td>4.</td>
<td>2008–09</td>
<td>8085.44</td>
<td>78.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSP</td>
<td>6.82</td>
<td>6.72</td>
<td>6.50</td>
</tr>
<tr>
<td>DSP</td>
<td>7.07</td>
<td>6.94</td>
<td>6.50</td>
</tr>
<tr>
<td>RSP</td>
<td>7.98</td>
<td>7.39</td>
<td>7.09</td>
</tr>
<tr>
<td>BSL</td>
<td>7.09</td>
<td>6.89</td>
<td>6.83</td>
</tr>
<tr>
<td>ISP</td>
<td>8.19</td>
<td>8.14</td>
<td>8.18</td>
</tr>
<tr>
<td>SAIL</td>
<td>7.16</td>
<td>6.95</td>
<td>6.74</td>
</tr>
</tbody>
</table>
Implementation of Environment Management System (EMS) Linked to ISO 14001

In accordance with National Environment Policy, SAIL is building a management system at its different plants and units for further environmental protection, including acquisition of certification under the international standard ISO 14001 and through internal environmental assessment system so as to reduce the environmental impact in all aspects of activities. So far, EMS certification have been accredited to the following units of SAIL:

- Bhilai Steel Plant (BSP, whole plant and township), Bokaro Steel Plan (BSL), Durgapur Steel Plant (DSP) and Salem Steel Plant (SSP, entire plant)
- Rourkela Steel Plant (RSP, silicon steel mill, sinter plant II, hot strip mill, plate mill, environment engineering department, Electric Resistant Weld (ERW) pipe plant, Spiral Weld (SW) pipe plant, special plate plant and RSP township)
- IISCO Steel Plant (ISP, rolling mill complex)
- Dalli Iron Ore Mine
- Meghahatuburu Iron Ore Mine
- Kiriburu Iron Ore Mine
- Bolani Ore Mine

Actions have been initiated for implementing EMS in the balance units of SAIL. Apart from EMS, Bhilai Steel Plant and Bokaro Steel Plant are accredited to SA 8000 and OHSAS 1800.

Initiatives for preservation of global environment

Phasing out of ozone depleting substances

SAIL along with UNDP took up an umbrella project for the replacement of Carbon Tetrachloride (CTC) used as cleaning solvent by Trichloroethylene at the six production units of SAIL viz. BSP, DSP, RSP, BSL, ISP and SSP. SAIL shall cease using ozone depleting substances in future production activities with equipment funded under the project in its works.

The objective of this project is to phase out the use of approximately 268 mt of CTC as cleaning solvent for electrical machines and oxygen plant (storage tank, cylinders, rotors, stators, piping etc.) used in the manufacturing of steel at the above said plants of SAIL. The approximate cost of the project is Rs. 16 crore. Till date, all the six plants have received the equipment supplied by UNDP.

Clean development mechanism

SAIL has taken the initiative of tapping the carbon benefits available under the Clean Development Mechanism (CDM) of the Kyoto Protocol agreement on climate change. SAIL has launched an ambitious CDM Programme. 71 potential projects have been identified for availing carbon credits.

Consultancy for taking up 38 projects (Category A) through the CDM cycle has already been awarded. The projects in this category cover the energy intensive coke oven, sinter plant and blast furnace operations of the SAIL plants. The Phase II of the CDM programme covering 33 potential schemes (Category B) focuses on covering basic oxygen furnace, rolling mill and downstream operations in the SAIL steel plants.

Out of 38 projects under Category A, SAIL has obtained host country approval for 17 projects to avail the carbon credit under the CDM schemes. Five projects are at different stages of registration and validation with United Nations Framework Convention on Climate Change (UNFCCC).

Overseas technical Cooperation/Partnership

Under the initiative of Ministry of Steel, India, SAIL is actively associated in the Asia Pacific Partnership amongst seven countries. SAIL is actively associated with International Iron & Steel Institute (IISI), now known as World Steel Association for uniform reporting of CO₂ under IISI sectoral approach.
Environmental awareness programmes


Environmental recognitions

SAIL plants have been awarded various prizes for environmental management in their plants viz. Greentech Platinum Award for BSP, Gold Award for DSP, RSP and BSL and Silver award for ISP. Golden Peacock Award for combating climate change was bagged by BSP. SAIL bagged the CII-ITC Sustainability Award 2008 and the prize of Good Green Governance (g3) G-Cube Awards 2007 at “Peace with Earth” and Golden Peacock Environment Management Award, 2007 for BSP.

RASHTRIYA ISPAT NIGAM LTD (RINL)

Energy management

Specific energy consumption at RINL is one of the lowest amongst the integrated steel plants in India. However, over the last few years, in spite of several energy consumption measures adopted by the company, its energy consumption is on an increase which is visible from the table given below.

<table>
<thead>
<tr>
<th>Year</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy consumption (GCal/tls)</td>
<td>6.08</td>
<td>6.15</td>
<td>6.21</td>
<td>6.46</td>
</tr>
</tbody>
</table>

*Provisional, tls: tonne of liquid steel

This increase in energy consumption is mainly because of use of relatively inferior grade of iron ore fines (with higher alumina content).

Measures taken for conservation of energy

- Specific heat consumption in Calcining & Refractory Material Plant (CRMP) decreased from 1546 M.cal/tonne of gross lime in 2007-08 to 1521 M.cal/tonne of gross lime in 2008-09 by optimal utilisation of kilns.
- Specific power consumption in Wire Rod Mill (WRM) reduced from 119.51 KWh/t of billet in 2007-08 to 119.31 KWh/t of billet in 2008-09 by optimal utilisation of HT drives.
- Specific power consumption in sinter plant reduced from 47.82 KWh/t of gross sinter in 2007-08 to 47.60 KWh/t of gross sinter in 2008-09 by minimising idle running of HT drives.
- Energy savers, timer control and translucent sheets (utilisation of day lighting) are provided to reduce lighting loads all over the plant.
- Gas recuperator and air recuperator of reheating furnace #2 were replaced in Medium Merchant Structural Mill (MMSM) to improve Sp. heat consumption.
- Variable frequency drives (VFDs) were installed for DE system of CDCP #1, 2 & 3, vibro feeders in SP and BF to reduce electrical energy consumption.
- Replacement of existing chiller with eco-friendly and energy efficient chillers in chilled water plant #3 was undertaken.
- Optimisation of cooling tower fans at CT-13, 14, 15 was done.
- Replacement of incandescent/fluorescent lamps with energy efficient tube lights was taken up all over the plant.

Other initiatives and plans for reduction in energy consumption

- Installation of waste heat recovery from sinter cooler as a NEDO model project.
Environment management

Pollution control

At VSP, utmost priority is given to environment management. All parameters of ambient air stack emissions, noise, fugitive emissions from coke oven batteries and effluents are within norms. About Rs. 110 crore per year was spent towards operation and maintenance of pollution control equipment and waste management in the last two years.

Some of the projects taken up during 2008-09

- Quality improvement project taken up for replacing asbestos insulation material with non-asbestos material.
- Replacement of bag filters in calcining kiln bag filter with Polytetra Fluoro Ethylene (PTFE) bags to reduce emission level below 50 G/NM3.
- Replacing ozone-depleting substances with non-ozone depleting substances.
- Development of exclusive waste dump bins for collection and storage of wastes like e-waste, oil soaked cotton waste, fused bulbs, tube lights etc.
- Four continuous ambient air quality stations and 20 on-line stack monitors and one weather monitoring station are installed.
- 100% coke sludge generated is sold out generating revenue for VSP.

The following are the environmental projects under implementation for improving environmental performance:
- Water recycling schemes to achieve near zero discharge at a cost of Rs. 114 crore is under implementation.
- Installation of secondary emission control system for the existing converters along with their revamping package is planned in 2010-2013 in phased manner.
- Networking of all Continuous Ambient Air Quality Monitoring Stations (CAAQMS) and online stack monitors to connect to a common facility.
- Bio-assay test on the treated effluents has been started in-house.
- Pulverised coal injection in blast furnaces is envisaged in 2010.
- Research and Development (R&D) project “Bio leaching of LD slag” to remove phosphorous is taken up with Institute of Mineral & Material Technology (IMMT), Bhubaneswar.

Solid waste management

The company has been adopting different measures to reduce solid waste generation and re-use/recycle of solid waste generated during the production process. The unit has its online slag granulation plant and 100% blast furnace slag is granulated and sold. However, recycling/re-utilisation of steelmaking slag is low at around 64% (2008-09) and the company is taking steps towards 100% recycling/re-use of such slag. The position on utilisation of fly ash is also dismal and the overall utilisation of solid waste in the plant over the last three years is given in the following table:

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total generation</td>
<td>3.929</td>
<td>3.62</td>
<td>3.54</td>
</tr>
<tr>
<td>Specific waste generation</td>
<td>1.089</td>
<td>1.088</td>
<td>1.13</td>
</tr>
<tr>
<td>Total utilisation (%)</td>
<td>80.76</td>
<td>87.08</td>
<td>86.92</td>
</tr>
</tbody>
</table>

(million tonnes)
MANGANESE ORE (INDIA) LTD (MOIL)

Environment, pollution control & solid waste management & energy conservation

MOIL took a lead through massive afforestation in the Company’s mines with special emphasis on reclamation and rehabilitation of spoil dumps, supported by exhaustive research and development. This has helped to improve the mine environment. An Integrated Biotechnological Approach has been adopted to achieve the goal of sustainable and eco-friendly mining.

A view of MOIL’s Wind Farm at Nagda Hills, Indore.

i) Strategy for afforestation

Eco-development and creation of massive green cover envisaged plantation of hard wood to meet the future timber need of the country, besides restoration of ecology. Additionally, certain areas have been covered by shrubs and grass for a greening effect and checking erosion. The company’s approach towards afforestation incorporates the following:

- A drive has been initiated for plantation of Jatropha saplings in arid/dry and waste dumps which when fully grown would provide seeds for production of bio-diesel.
- General afforestation in an around mines with appropriate scientific techniques with species suitable for the areas.
- Specific afforestation on mine spoil dump using integrated biotechnology.
- Rejuvenation of mine spoil dumps through Integrated Bio-technological Approach.

ii) Integrated bio-technological approach

Scientific studies were initiated as early as 1987 for evaluating physico Biotechnological in MOIL spoils dumps along with technological intervention to achieve appropriate ecosystem restoration. This indicated the need for development of supportive and nutritive rhisosphere through appropriate blending with presumed isolation endomycorrhizal fungi and inoculation of plants for profuse root development, development of specialised cultures of bio fertilisers, and establishment of eco-system spoil-plant microbial and restoration of carbon and nitrogen in degraded land.
iii) Status of afforestation and future plans

The total area covered under afforestation upto 2008-09 plantation seasons is 616.131 hectares which accounts about 34.09% of total lease hold area, about two third of which is on spoil dumps. More than 17.50 lakh saplings have been planted upto 2008-09 plantation seasons, and the survival rate is 80%. The major species planted are shishum, Casia, Teak, Neem Eucalyptus, Mangoes.

Almost three fourth of the total land available within the company’s leasehold area and separable for plantation activity has already been covered under plantation.

iv) Other parameters affecting the environment

- **Water Regime:** Only pure water is discharged to nearby nallas and agriculture land, after duly ensuring that the suspended solids are removed. The mine water has no toxic effects and is chemically harmless. Drinking water is provided to the employees both at the mine and residential areas from public water distribution system, tube well etc. Regular monitoring of water quality is done.

- **Airborne dust in open cast mines:** To keep air free from dust, company is regularly sprinkling the mine roads in a regular and systematic manner. Regularly monitoring of dust levels, Oxides Nitrogen and SO2 are carried out.

- **Noise:** Generally noise level on the mine is very much below the threshold limit and only at certain spots i.e. compressor house and drilling site, the noise level is high. To keep the level within the threshold limits, regular maintenance of machines is done. Employees at these sites are also provided with earplugs.

- **Vibrations:** Regular R&D inputs in respects of heavy blasting are done for reduction in blasting vibrations, improvement in regular fragmentation by engaging specialised research institutes and academic bodies such as CMRI and VRCE. Amplitude of ground vibrations due to heavy blasting is normally within threshold limits and is harmless for the type of structure located in the surrounding areas. Delay action Detonators and restricted charge per hole/per delay are used to limit the ground vibrations due to blasting and its effects.

- **Solid waste management:** MOIL is now systematically dumping solid waste separately for mangniferous rock and non-magniferous rock so that in future when technology for utilising the low-grade manganese ore is developed, these mangniferous dumps can be worked at much lesser cost to win low-grade manganese Ore.

Waste dumps are now planned in such a way that future handling and re-handling of these dumps are avoided. Dump height is now planned for 30 Mtrs covering 2 to 3 benches so as to occupy less space. The dump spoil already matured are now being systematically covered with either plantation or with shrubs/grass to prevent due to rain and give better aesthetic view.

To generate environmental awareness amongst mine employees, training programmes are organised and MOIL takes active part in observing Annual Mine Environment and Mineral Conservation Week every year under the auspices of Indian Bureau of Mines.

### Expenditure incurred on Pollution Control Measures

The expenditure incurred on Pollution Control Measures during the last three years is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs. in lakh</td>
<td>46.53</td>
<td>46.28</td>
<td>53.05</td>
</tr>
</tbody>
</table>

*Provisional

**MECON LTD**

MECON Ltd, being a consultancy organisation, the energy conservation and environment measures here are in-built in several assignments carried out by them for its client. In addition, MECON has undertaken several consultancy works specifically for energy and environment management viz.
preparation of: i) Project Idea Note (PIN) and Project Design Document (PDD) for availing CDM benefits, ii) Environmental norms and standards for sponge iron plants in the country in association with Central Pollution Control Board (CPCB), iii) Development of Comprehensive Industry Document (COINDS) and environmental standards for re-rolling mills iv) Development of guidelines for management of solid and hazardous waste generated in integrated iron and steel industry, v) Executing rebuilding job of coke oven battery 10 at ISP, Burnpur as consultant with Biological Oxidation and Dephenolisation (BOD) plant for degradation of coke oven effluents and also BOD plant for 2.5 mt expansion and modernisation of ISP, Burnpur, vi) Consultancy services for tailing pond and effluent treatment plant for two chrome ore beneficiation plants for Orissa Mining Corporation Ltd., at South Kaliapani.

**SPONGE IRON INDIA LIMITED**

**Energy management**

As a part of continuing efforts towards management of energy, the company has made significant improvement in energy efficiency of the operating units. Against normal range of 120 units of power consumption per tonne of sponge iron, the company achieved a consumption level of 110 units per tonne of sponge iron by March 31, 2009. In the sphere of consumption of process energy, company maintained a level of consumption of reductant at 1.38 tonnes per tonne of sponge iron in 2008-09 (Provisional) inspite of variations in the chemistry and physico chemical characteristics of coal.

As a measure to conserve energy, company has further invested an amount of Rs. 165 lakh for Waste Heat Recovery (WHR) and Captive Power Plant (CPP) towards renovation and modification works.

**Environment management and solid waste management**

All norms specified by Andhra Pradesh Pollution Control Board/Central Pollution Control Board are being maintained within the standards prescribed.

**Solid waste management**

- Iron Ore Fines: Internal Utilisation is only 40%. Balance sold to cement industries and other users.
- Char: Internal utilisation is approximately 80% as fuel in FBC boiler and balance is sold to brick making industries.

**KIOCL LTD**

**Energy conservation**

Due to measures taken, energy (power) consumption at pellet plant (incl. grinding, filtration and pelletisation), port facilities and captive power plant has reduced. However, due to present depressed market condition and low demand for pellets, operation of pellet plant is affected and in turn has resulted in high energy (fuel) consumption as is visible from the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>2006-07</th>
<th>2007-08</th>
<th><em>2008-09</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power consumption (KWH) per tonne of pellets</td>
<td>132</td>
<td>84</td>
<td>86.90</td>
</tr>
<tr>
<td>Heat consumption per tonne of pellets in '000 K calories</td>
<td>262.0</td>
<td>237.0</td>
<td>216.50</td>
</tr>
<tr>
<td>Coke rate in blast furnace (kg/THM)</td>
<td>721</td>
<td>756</td>
<td>711.00</td>
</tr>
</tbody>
</table>

*Provisional
TATA STEEL LIMITED

Energy management: Measures taken

- Installation of top gas recovery turbine at ‘H’ blast furnace.
- Upgradation of LD gas export system.
- Injection of propane in CO gas for better calorific value control of mixed gas supply to hot strip mill, thereby increasing the productivity of the furnace.
- Shutdown of old and inefficient blast furnaces.
- Improving the water rate at power house #3 and 4.
- Reduction in fuel rate at hot strip mill and new bar mill.
- Reduction in power rate at hot strip mill and ‘G’ blast furnace.

Besides the above, the company has envisaged/initiated long-term actions in various areas of production processes, which are expected to reduce its specific energy consumption by 0.733 GCal/tcs thereby reducing specific energy consumption to below 6 GCal/tcs by the FY 2011-12.

Environment management

- Environmental health and safety management system was upgraded and certified in compliance with as per ISO-14001: 2004 and OHSAS-18001:2007 standards by M/s. IRQS.
- Specific dust emission from stacks of steel plant was reduced by 5.8% to 0.81kg/tcs.
- Specific water pollutants from steel plant were reduced by 18% to 0.13kg/tcs.
- Waste utilisation was increased from 85.43 to 88.04%. Cast house granulation of BF slag was improved from 76% in previous year to 90% in the current year. LD slag utilisation was increased by 4% in the current year to level of 78.39%.
- New units (H-blast furnace and sinter plant 4) are operating with the stringent dust emission levels from stack of less than 50mg/m3.
- Secondary fume extraction system (ESP) at LD#1 was commissioned.
- Top Recovery Turbine (TRT) at H blast furnace was commissioned.
- Upgradation of environmental monitoring and analysis facilities at EMD laboratory.
- More than 6900 trees planted inside the steel works during the monsoon seasons of 2008 to improve the greenery.

Status of solid waste for steel works in tonnes and % utilisation

<table>
<thead>
<tr>
<th>Year</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total waste generation</td>
<td>3392048.00</td>
<td>3305384.00</td>
<td>3578540.00</td>
</tr>
<tr>
<td>% Utilisation</td>
<td>84.80</td>
<td>85.43</td>
<td>89.61</td>
</tr>
</tbody>
</table>

Capital expenditure on pollution control activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Amounts spent (Rs. in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>115.11</td>
</tr>
<tr>
<td>2006-07</td>
<td>133.70</td>
</tr>
<tr>
<td>2007-08</td>
<td>215.03</td>
</tr>
<tr>
<td>2008-09</td>
<td>Approx. 300.00 **</td>
</tr>
</tbody>
</table>

(**Includes pollution control equipment related to blast furnace and other facilities)**
JSW STEEL LTD

Highlights of energy management

JSW has achieved specific energy consumption of 6.704 Gcal/tcs in 2008-09 (Provisional) against 6.847 Gcal/tcs. The specific energy consumption has been reduced by 2.088%. This has been possible due to improvement in following:

- Coke rate at blast furnace has been reduced from 592 kg/thm to 571.19 kg/thm. This has been achieved by controlling the off blast and increasing pulverised coal injection from 48 kg/thm to 56.83 kg/thm.
- LD gas recovery at Basic Oxygen Furnace (BOF) has been improved from 70 Nm3/thm to 101.83 Nm3/thm. This has been achieved by making capital repairs to LD gas holder and changing the delivery mesh and also additional booster have been installed to take care of LD gas transport during booster shutdown.
- LPG consumption has been reduced from 12.61 tonnes/day to 8.98 tonnes/day by replacing LPG with corex gas in BF flare stack pilot, sand heating system in BOF, modifying the corex gas line in blast furnace boiler.
- Corex gas utilisation has been improved from 93% to 94.18% by controlling the valve opening in flaring system.
- Specific power consumption at sinter plant has been reduced from 45 Kwh/t of sinter to 40.52 Kwh/t of sinter by controlling power during idle/shutdown hours.
- Waste heat utilisation and by product gas utilisation has improved at non-recovery type coke oven based captive power plant resulting in increase of power generation from 59.16 mwh to 72.38 mwh.
- Power generation at captive power plant, which utilise by-product gasses i.e. corex gas and BF gas, has increased its power generation from 86.64 mwh to 93.35 mwh.

Highlights of environment management

During the year 2008-09, JSW Steel commissioned its new facilities under a seven million tonne per annum expansion project. In this expansion, state-of-the-art environment control technologies were installed. Some of these include:

- Top gas recovery turbine in blast furnace # 3.
- Waste heat energy recovery from the waste gases of SP#2 and BF#3.
- 100 % evacuation of dust through fume extraction system in BF and BOF.
- Water vapour condensation recovery from slag granulation for water conservation.
- Granulation facilities for BOF slag.
- State of the art four stage BOD plant for waste water treatment at recovery type coke oven plant.

The environment control facilities have been designed to meet the World Bank norms which are much stricter compared to the national standards.

- During the year several projects were initiated to control the fugitive dust emissions arising from the processing units. A total of 10 bag filters at a cost of Rs. 17 crore are under execution.
- In order to conserve water, several initiatives have been taken in the factory area.
- The makeup water utilisation has been brought down from 3.13 m3/tcs in 2007-08 to less than 3 m3/tcs in 2008-09. Further in order to utilise the blowdown water, a reverse osmosis plant of 125 m3/hr. capacity is under installation.
- Solid wastes: The solid waste utilisation for the year 2008-09 was 86.2%. Efforts are being made to maximise use of corex and BOF slurry in pellet plant and BOF slag in iron making.

ESSAR STEEL LTD

Energy management

The company has taken several energy conservation measures during the year 2008-09 as a result of which its specific energy consumption has come down from 5.99 Gcal/tonne of crude steel in 2007-08 to 5.81 Gcal/tonne of crude steel in 2008-09.
**Environment management**

Pollution Control: Because of several measures adopted, the plants complied with all the norms/ regulations prescribed by the state/central pollution control authorities.

**Solid waste generation and utilisation**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid waste generation</td>
<td>1,353,119 tonnes</td>
</tr>
<tr>
<td>Solid wastes recycled/reused</td>
<td>1,249,019 tonnes</td>
</tr>
<tr>
<td>Solid wastes Sold</td>
<td>104,100</td>
</tr>
<tr>
<td>% Utilisation</td>
<td>100%</td>
</tr>
</tbody>
</table>

**ISPAT INDUSTRIES INDIA LTD**

**Energy management**

The company has taken steps to reduce energy consumption at different stages as a result of which its specific energy consumption has gradually reduced as shown in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy consumption (Gcal/tcs)</td>
<td>5.25</td>
<td>5.23</td>
<td>5.21</td>
</tr>
</tbody>
</table>

**Specific measures taken/being taken for reduction in energy consumption**

- Installed soft starter-cum energy savers in partially loaded motors for energy saving.
- Installed intelligent energy saver for package AC’s to control the temperature to set value and switch off ACs at the preset time.
- Installed load point capacitor banks to improve power factor, reduce load current on the system.
- Use of electronic ballasts for fluorescent tube lights to reduce the energy consumption, improve power factor and to increase the life of tube light.
- Insulation of cold blast to conserve sensible heat of blast at blower outlet.
- Gas expansion turbine installed for power generation from high-pressure top gas of blast furnace.
- Recycling of BF gas in stove heating, sinter plant, coal injection plant and stock house (around 40%).
- Use of waste gas heat from 11.81 mw DG set to generate steam at 1.6 tonnes/hour.
- Use of waste gas heat from sinter circular cooler to generate steam at 4.0 tonnes/hour.
- Use of hot flue gases for preheating of natural gas, combustion air, and process gas from sponge iron plant reformer.
- Modification in compressed air system to reduce electrical energy consumption.
- Modification in coke drying unit using BF gas as fuel.
- Modification in torpedo ladle heating station using BF gas as fuel.
- Conducted awareness programme for reduction in energy consumption.

**Environment management and solid waste management**

Ispat has taken various actions to control the pollution level which include the following:

- Installation, commissioning and continuous operation of Gas Cleaning Plant (GCP) –I (A and B) for shell no. 1 and 2 (separately).
- Interconnection of duct between shell no. 3 and 4 of GCP-II with GCP-I (A and B) of shell no. 1 and 2. The roof emissions after completion of interconnection have been reduced drastically.
- Modification of combustion chamber of shell no.3 and 4 of GCP – II.
- Installation, commissioning and continuous operation of DRI/Lime/Super Sucker dedusting system for phase I and II.
- Installation, commissioning and continuous operation of continuous monitoring system of stack emission at major stacks and ambient air quality at three locations.
Solid wastes management

Solid wastes generated in major production centres (sponge iron plant, hot strip mill, blast furnace and sintering plant) are utilised/disposed off optimally in the following manner:

- Blast furnace (BF) Slag: 100% utilisation through slag granulation plant for use for manufacturing of cement at Indorama Cement Plant.
- Electric Arc Furnace Steel Making Slag: 40% used in sinter plant for making of sinter. Balance stored in designated place for future use.

MUKAND LTD

Energy conservation measures taken at the steel plant to reduce power consumption

- Automation of electro-magnetic stirrer of billet caster.
- Installation of additional plate heat exchanger in mould cooling system of bloom caster to reduce pumping requirement by 33%.
- Replacement of capacitor in the third bank.
- Replacement of inefficient pumps in pump house with efficient pumps.
- Induction motor and VVVF drive installed in new wire rod mill billet reheating furnace to reduce power consumption.
- Replacement of metal blades of cooling tower fans with fiber reinforced plastic blades.
- Installation of variable frequency drives for bell furnaces.

Energy conservation measures taken at rolling mill to reduce fuel oil consumption

- Optimising consumption of gases in cutting torch of continuous casting machine by control of torch speed and idle moments.
- Proper maintenance of air to fuel ratio in re-heating furnace.
- Ceramic coating on inner side of solution annealing and blooming mill furnace to reduce the heat loss.
- Installation of recuperator in billet re-heating furnace of wire rod mill.
- Use of heat resisting cloth curtain in billet reheating furnace to reduce radiation heat loss.

Due to various measures taken as described above, the electricity and furnace oil consumption has reduced per tonne of bars and rods as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>2006-07</th>
<th>2007-08</th>
<th>*2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Kwh /tonne</td>
<td>507</td>
<td>488</td>
<td>500</td>
</tr>
<tr>
<td>Furnace oil – litre/tonne</td>
<td>59</td>
<td>54</td>
<td>55</td>
</tr>
</tbody>
</table>

*Provisional
CHAPTER-VIII

DEVELOPMENT OF INFORMATION TECHNOLOGY

The Ministry of Steel and the PSUs under it constantly endeavour to be updated on matters relating to IT infrastructure, development and applications.

- The Computer Centre in the Ministry is equipped with Windows 2003 servers; Pentium based client systems, a scanner for document imaging operations and heavy-duty laser printers. In addition to these, the centre is also equipped with Local Area Network (LAN) equipment such as switches and hubs, which serve as a backbone for accessing information on Ministry-wide Local Area Network (LAN), Internet, as well as operating Intranet-based applications in the Ministry;
- Apart from the NIC Central facility, about 160 Pentium-based client systems capable of handling present day Windows based software and Office automation suits are operational with officials and Desks/Sections in the Ministry;
- A LAN of about 160 nodes is operational in the Ministry and is being extensively used for:
  - Electronic Dak and Diary
  - Sharing of files/documents
  - Collecting information/material on Annual Reports, Parliament Questions, Pendency, Tracking and Monitoring Applications (VIP References, Public Grievances, Parliament Assurances, Position of Vacant Posts, Appointments Committee of Cabinet (ACC) approvals, Review/Appeal cases, Draft Audit Paras) from Sections/Desks
  - Compilation and collection of replies to Parliament questions from Desks/Sections in the Ministry and their onward transmission through e-mail to the Rajya Sabha and Lok Sabha.
- Internet connectivity for access to the sectoral information has been provided to all officials/Desks/Sections in the Ministry.

E-Governance applications and promoting the concept of paperless office in the Ministry

- As part of e-governance programme, a ministry-wide Intranet portal is operational for sharing and disseminating information through a Bulletin Board services for Notices/Circulars/Office Orders among the users of the Ministry.
- The portal facilitates Electronic Dak/Diary movement of documents. The portal also facilitates E-filing and approval of note sheets and documents as a workflow and work routing application.
- The facility for downloading of forms for sanction of leave and advances, medical re-imbursement, Annual Confidential Report forms, Identity Card, staff car booking, Income Tax, telephone list, E-mail addresses, directory of Officials/Sections/Desks in the Ministry, organisation chart, activity list are also provided on the Intranet portal for the Officials/Staff of the Ministry.

The Ministry of Steel and its PSUs constantly endeavour for IT development.
Ministry.

- Personal Corner for employee’s profile, salary statement, GPF statement, Bulletin Board Services for Office Memoranda, Office Orders and Office Circulars and flash of deputation vacancies/posts in Government of India are available on the portal.
- The Intranet portal also provides a single window interface for accessing computer based systems in the area of tracking and monitoring of important references, parliament assurances, public grievances, position of vacant posts and their status in the Ministry and its PSUs, Pending Review/appeal cases, court cases, Audit Paras etc. to minimise pendency and improve delays in decision making.
- As a part of e-Governance plan of the Government of India, the following Web Based systems are being implemented in the Ministry:
  - RTI-MIS facilitates monitoring of Requests & Appeals received under RTI Act, 2005. The system is fully implemented in the Ministry and its PSUs. The system has been developed by the Central Information Commission (CIC) as central facility to all Government ministries/Departments/Sub-ordinate and attached offices/PSUs etc.
  - The Centralised Public Grievance Redressal and Monitoring System (CPGRAMS) has been implemented for facilitating redressal of public grievances in the Ministry and its PSUs. The system has been developed by the Department of Administrative Reforms & Public Grievances.

**Ministry’s official website**

The Ministry’s official website (http://steel.gov.in), in bilingual format, provides information on aspects of the Ministry, its policies, administrative set-up, major programmes and initiatives of the Ministry (since June 2004), Indian iron and steel producers and processors, the Right to Information Act 2005, Annual Reports, Outcome Budget, and Tenders. Links to the Ministry’s PSUs have also been provided to give a wide coverage to the steel sector.

**Video conferencing facility**

- A video conferencing facility has been set up between the Ministry and its PSUs to conduct important meetings, speed up decision-making, improve use of executive time and reduce travel cost.
- An Executive Video Conferencing System (EVCS) has been installed in the chamber of the Secretary (Steel). The EVCS based on NICNET has been set up on the desks of all the Secretaries to the Government of India and Chief Secretaries of State Governments and Union Territories for inter-departmental consultations as an effective mode of communication in order to carry forward e-governance as a practical and efficient tool.

**STEEL AUTHORITY OF INDIA LTD (SAIL)**

In order to maintain its position and achieve its business goals and objectives, SAIL has embarked upon various project initiatives within the organisation for enabling SAIL’s competitiveness in the market place. Information Technology (IT) is one of the key initiatives that SAIL has undertaken in this direction.

**Enterprise Resource Planning (ERP)**

SAIL started the process of implementing ERP and Bhilai Steel Plant (BSP) took the lead in SAP-ERP implementation.
- IT strategy and ERP rollout strategy has been prepared for SAIL.
- Substantial progress has been made in the implementation of the SAP-ERP at BSP and the project has gone live from April 1, 2009.
- ERP implementation is in progress at Bokaro Steel Plant and Durgapur Steel Plant.
- Unified codification system is being implemented in SAIL in the areas of material codes, party codes and service codes.
Networking

SAIL has a SAIL Wide Area Network (WAN) connecting all the ISP’s unit offices and various marketing offices using BSNL/MTNL leased lines, VPN network backed up by ISDN and VSATs. All ISPs are having fiber optic based Local Area Network (LAN).

E-commerce

- **E-procurement System (EPS)**
  
  E-procurement System (EPS) was implemented initially at BSP and RSP in 2006-2007 and subsequently at all other plants to facilitate reduction in lead-time of acceptance of tender and expedite exchange of information between SAIL and vendors in a secure and transparent manner.

- **E-Buying (e-procurement through reverse auction)**
  
  With the benefit of transparency in negotiation and purchasing at best available market price, SAIL was the first PSU to implement E-buying in 2001–02. The transaction has grown steadily from Rs 19 crore in 2001-02 to Rs 1,568 crore in 2007-08. In the current year, e-procurement worth Rs 3,306 crore has been transacted.

- **E-Selling (sale through forward auction)**
  
  E-selling started in SAIL in 2002-03 and has increased from Rs. 53 crore in 2002-03 to Rs. 2,366 crore in 2007-08. In the current year, e-selling worth Rs. 3,260 crore has been transacted.

**Tender website**

Tenders and related information are being published on the website for easy access and download by interested vendors for wider advertisement and increased competition.

**E-payment**

- E-payment of salaries to employees in SAIL is being done through SBI and ICICI Bank.
- Provided facility of E-payment to suppliers.

**Video conferencing**

- Commissioned in May 2006, multi-point video conferencing across SAIL was successfully implemented and stabilised for clarity and performance on IP and ISDN platforms. It is being used to conduct important meetings, speed up decision-making, improve use of executive time and reduce travel cost.
- Video-conferencing service which was originally implemented in 13 locations was extended to 20 more locations at MTI, RDCIS, CET and CMO offices.

**Project monitoring**

SAIL has embarked on a major expansion programme to almost double the current capacities in all the plants simultaneously by making massive investments. Most of the SAIL plants have either tendered out the projects or have already selected the supplier for implementation. The next challenging phase is the process of monitoring and controlling the execution of all the projects within time and budget. To meet this requirement, SAIL has procured and installed 119 licences of Primavera software at plants and corporate office, which will provide an integrated system wherein progress related to projects at each plant/unit can be viewed/monitored online and on real-time basis. The system development according to the requirement of SAIL is under progress by M/s KLG. Primavera training has been imparted to project personnel of SAIL.

**New software applications developed at plants/units**

Developed and implemented online ‘Employees Performance Management System (EPMS)’ for all executives of SAIL for filling up Key Performance Areas (KPA), development needs, performance diary on a regular basis, provision to mark the highlights, mid-year review, online performance review...
discussion, final review assessment for self, reporting officer and reviewing officer, competencies assessment and assessment of assessors.

- Freight Operation Information System (FOIS) implemented and inaugurated for accessing wagon information on the internet.
- Password-based system developed for suppliers to view their bill details on the SAIL homepage www.sail.co.in.
- Online application developed for tour approval and advance, medical referral, bilingual feedback, submission of annual savings, LLTC and LTC encashment and online leave application for employees of corporate office.
- Computerisation of the Nehru Award Scheme, contract labour system, online procurement budget control system with shop level responsibility code, generation of supplementary invoices raised for supplies made to railways; monthly attendance reports and leave cards of 23,000 employees of works area have been replaced with automated system in the Bhilai Steel Plant.
- Instantaneous display of major production parameters at the desktops of senior executives for monitoring, integration of ladle furnace, bloom caster and converter VAX systems for information sharing and quick tracking leading to improved coordination of production activities.
- Development of online e-bidding software for ITD and price checking module for audit department are some of the major achievements of CMO.

RASHTRIYA ISPAT NIGAM LTD (RINL)

E-initiatives

Several e-initiatives were taken up like implementation of reverse e-auction for materials, on-line recruitment process, development of departmental portals for safety, environment management, general administration etc. Status of PC procurement, and network connections are made available on-line and also vendor registration system was developed.

Security initiatives

An IT security audit was conducted by an external agency to identify the gaps and audit recommendations are in the process of implementation.

Standards initiatives

To match with international software development standards, VSP chose Capability Maturity Model Integrated (CMMI) for which an assessment agency has been fixed. All CMMI Level 3 activities/process have been deployed. At present the internal audits are under way as a final run-up to ‘Assessment by the International Certification Authority’. A second checkpoint audit, as part of CMMI assessment, has also been completed.

Business applications implemented

Information systems were developed for generating MIS reports for various departments. Weighbridge systems were put in place for New Stock Yard & Pig-iron Stock-Yard. A computerised gate pass system was implemented for the expansion project. A ward management system in the company’s general hospital was introduced. Contracts billing system was developed for the town administration department. Pre-dispatch inspection and demand registration systems were also developed.

Infrastructure initiatives

The intranet computer network was expanded from 2400 to 3200 nodes and 400 PCs were added to the existing network. The IP address scheme was revised. SPAM filters were introduced for emails and unified threat management is being procured for network security.
Process control initiatives

SMS Level-2 upgradation (for M/c 2, Converter) was started. Interface was provided between PPC System and Auto-Gauge of LMMM during capital repairs for effective process control.

Special initiatives

Thrust was given on integrating the PPC application with production control computers of rolling mills. Corporate Business Intelligence System (CBIS) – a business intelligence package using data warehousing technologies is under development.

NMDC LTD

- e-procurement is being done regularly through the Andhra Pradesh Government portal.
- Development of integrated web-based packages for HRMS & FAS is on hand.
- Web-enabled existing online IMS is under implementation.
- Facility for lodging complaints filed by members of the public and tracking the status of the complaints is provided on the company’s website (www.nmdc.co.in)
- Online submission of annual property returns by executives for the year 2008 facilitated.

MANGANESE ORE (INDIA) LTD (MOIL)

The Company has set-up a full-fledged Systems Cell in order to ensure an effective Computerisation of all the functional areas of the Company. The Department is headed by Director (Commercial). In order to ensure an adequate IT infrastructure, Steps taken by the System Department are as under:
- Installation of 172 no. of Computers, out of which 74 Computers are at Headquarter and 98 Computers are distributed in Maharashtra and Madhya Pradesh Mines.
- Designed, developed & implemented Computer based applications to meet Computing & Data Processing needs of the various Departments viz, Sales & Marketing, Purchase & Stores, HR & Personnel, Production and Quality and Cost & Finance of the Company.
- Local area Networks (LAN) on NOVELL 4.2 and on WINDOWS-2003 Platform are in place at HO as well as at two o the Major mines viz. Balaghat & Dongri Buzurg. LAN development at other mines is in progress.
- Designed, developed & hosted a dynamic internet website on NIC Server.
- Designed, developed & hosted a dynamic intranet website on in-house MOILNET Server.
- For effective sharing of databases/information and other resources on regular basis all the remotely located production units and HO are connected through VSAT.
- Conversion of legacy systems to a client server environment is progress.
- For continuous knowledge acquisition, e-mailing and for data transfer facilities, all the concerned officials have been provided with internet connection through a shared 1 mbps broadband line.

MSTC LTD

During the year 2008-2009, MSTC made a number of developments as far as IT infrastructure is concerned. The following developments have taken place:
- Achieved ISO 27001 certification
- Embedded digital signing in e-procurement portal
- Embedded time stamping in e-procurement portal
- Became Sub-CA (Sub Certifying Authority) of TCS for enabling digital signatures.
- Performed penetration and vulnerability testing of applications and systems.
- Auto wake-up of disaster recovery site in case of primary site failure.
- For increasing the availability (i.e. uptime) of e-commerce portal, upgradation of e-commerce server has been done by installing Redundant Array Independent Disk (RAID), fail over UPS and
redundant network switch.
- For the purpose of minimising security threats from virus and other malicious code, gateway anti-virus has been installed.
- Leased line has been enhanced from 16 Mbps to 20 Mbps.
- Migrating to AIX from SUSE LINUX operating system.

FERRO SCRAP NIGAM LTD (FSNL)
- The various departments of corporate office and units have been provided with computers.
- The areas related to payroll, financial accounting, materials management have been computerised.
- MIS is being generated out of application packages.
- Units are linked up through internet connections.
- The installation of Wide Area Network (WAN) and implementation of Entrepreneur Resource Planning (ERP) is under progress.
- Fulfilment of statutory compliance of the company such as PF, income tax, tendering, e-filing, etc.

HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

The company has its own website at www.hscl.co.in through which it conducts its business activities in a transparent manner and complies with all statutory guidelines in the Right to Information Act.

MECON LTD

MECON has installed Entrepreneurs’ Resource Planning (ERP) system in all its offices, design units and field units. Most of the operations of MECON are computerised and networked.

BHARAT REFRACTORIES LTD (BRL)

An online integrated application software developed by M/s ECIL is functioning at one of the units of the company at Ramgarh. The computerisation of the provident fund account of BRL at Bhandaridah is in the final stage and will be launched shortly.

SPONGE IRON INDIA LTD

The company currently has the software version of SUN SERVER-280 R facility having Oracle Back End and IDS on Front End which caters to all the needs of the company online. Since SIIL is merging with NMDC, no new initiatives on this front are being taken up.

KIOCL LTD

The company has amended the Object clause of the Memorandum of Association in order to venture into IT/BPO and other related areas.

BIRD GROUP OF COMPANIES (BGC)

Online tendering of iron ore and manganese ore is being conducted through e-auction mode. OMDC disburses salaries through the E-payment mode through SBI. E-payment is also used to make tax payments.
SAFETY

Safety is an important aspect in the functioning of any industry. It is important not only for its employees and workers but also for the environment and the nation. Iron & Steel production being a complex and hazardous activity, needs to prevent injuries and accidents, provide a healthy working environment and guard against all possible hazards and risks to be adequately recognised and taken care of. This chapter highlights the emphasis on safety by the PSUs under the Ministry.

STEEL AUTHORITY OF INDIA LTD (SAIL)

Iron and steel production being a complex and hazardous activity, SAIL recognises its economic, social and legal obligation to prevent injuries and accidents. It is deeply committed to providing a healthy working environment by guarding against all possible hazards and risks.

SAIL has a comprehensive safety policy, which underlines the commitment of the top management towards this vital issue concerning the most valuable resources i.e. human resource.

In SAIL, safety is taken care of at corporate units and shop levels. A corporate safety unit named SAIL Safety Organisation (SSO) exists to coordinate, monitor promote and enhance the operational/fire safety activities undertaken at the different plants/units and to provide appropriate corporate thrust on safety management in the company. In addition, each plant/unit of SAIL has a full-fledged Safety Engineering Department (SED) to look after safety management of the respective plant and unit. Safety at the shop floor is closely taken care of by departmental safety officers.

The following efforts are being made in different plants/units as well as at SSO level:

- Safety is designed and built into every job before any job is executed. Safety aspects have been incorporated in the Standard Operating Practices (SOP) and the Standard Maintenance Practices (SMP).
- Annual Performance Plans (APP) in the areas of safety and fire services are formulated and review of implementation of APP is done by plants and SSO.
- Internal and external safety audits of major departments, particularly in hazardous areas, are

Safety is the top most priority in SAIL’s Steel Plants.
conducted as per schedule and points arising from these audits are liquidated. Pre-audit compliance is being ensured before taking up re-audit of a particular department.

- All the necessary Personal Protective Equipments (PPE) like safety shoes, safety helmets, hand gloves etc. are provided free of cost to all regular employees. PPEs are supplied by the contractor to their workers as per the terms of contract. In case of failure to do so, these are issued by SAIL on a cost recovery basis.
- All major capital repairs/shut downs are closely monitored round the clock to prevent accidents.
- Regular preventive inspections of unsafe acts and conditions are being done on the basis of checklist and corrective actions are taken.
- Inspection of cable galleries and underground cellars are done and their upkeep is ensured to negate the chances of fire.
- Work-permit/protocol system is in vogue for hazardous jobs where multiple agencies are involved like jobs on gas lines, steam lines, pressure vessels, lifting equipments, electrical installations, electrically powered machines, hydraulic lines, while working in confined space, working at height etc.
- Job/area specific safety communications are displayed at vulnerable locations to caution employees about hazards and take precautionary measures. Periodic campaigns are conducted to inculcate safety awareness up to the grassroots level. Regular publications are being brought by SSO and plants/units in the form of journals, manuals, reports, booklets etc. containing wide range of information pertaining to safety, health and environment.
- As a new initiative, a training programme on ‘Behaviour Based Safety’ is being organised at the SSO and plants/units to bring a shift in the existing mindset of employees towards safety.
- Onsite disaster management plans have been prepared and mock drills as an emergency preparedness are conducted regularly.
- All accidents are investigated and remedial actions are taken to prevent their recurrence.
- Safety training by the safety engineering department has been made mandatory for contractor workers before issue of gate pass to them. In addition, job specific safety training is imparted at site by the executing agency before starting the job.
- HRD intervention in the area of safety covers heads of departments, line managers and departmental safety officers. Besides, area specific workshops are conducted at different locations on important topics like gas safety, rail/road safety, safety in iron, steel and coke making etc. for sharing of best practices in safety management.
- Skill-oriented job specific safety training is being imparted to various target groups like crane operators, loco operators, porters, riggers, welders, gas cutters, electricians, heavy earth moving equipment operators etc.
The movement of heavy vehicles is restricted during shift change hours to avoid any road accident. No one riding a two-wheeler is allowed entry inside plant premises without a crash helmet. In addition, surprise checks are being carried out for ensuring the same.

A bipartite forum named Joint Committee on Safety, Health and Environment for Steel Industry (JCSSI) headed by Director (Technical), SAIL as its Chairman and Executive Director (Safety), SAIL as Vice Chairman and having representatives from steel plants and units of SAIL, RINL, TISCO, Ispat Group, ESSAR, NINL and central and plant level trade unions is functioning at the national level. With a view to inculcating safety consciousness, JCSSI organises seminars, workshops, training programmes, and safety competitions for member organisations. JCSSI, with the co-operation and support of trade union representatives, formulates policies and guidelines for its member plants and monitors the implementation.

RASHTRIYA ISPAT NIGAM LTD (RINL)

Continuous efforts on implementation of safety standards, monitoring of risk control measures and other pro-active measures have resulted in reduction/elimination of potential hazards. Highlights for 2008-09:

- Crash Helmet Campaigns were conducted at main gate and Bala Cheruvu (BC) gate by Central Safety Committee members, Steel Executive Association members and separately by the Departmental Safety Committee members of some production and service departments.
- Safety debate, essay writing and poster painting competitions on safety issues were conducted for all school children of Ukkunagaram.
- A training programme on “Behavioural Based Safety” was organised in Centre for Human Resources Development for all Occupational Health and Safety Management System (OHSAS) coordinators and auditors.

NMDC LTD

NMDC has its training centers in all its projects. They are equipped with infrastructure as required under the Mines Vocational Training Rules. These centers cater to the needs of basic training, refresher training, and training for skilled workers and also for those injured on duty.

In each mining project of the NMDC, sufficient numbers of workmen inspectors are nominated/appointed for mining operations, mechanical and electrical installations as per statutory requirements.

Mine Level Tripartite Safety Committee meetings have been conducted in each of the operating mines. Except DMP, Panna, all the projects have conducted the meetings this year. These meetings are conducted once in a year at the project level with senior officials, union representatives and DGMS officials. At the meetings, safety performance and appraisal is made and the recommendations are implemented. Tripartite Safety Committee meetings are held regularly once a year at the head office. The 21st Tripartite Safety Committee Meeting was held on July 9, 2008 for the Donimalai Iron Ore Mine and on October 25, 2008 for the Bailadila Iron Ore Mine.

Safety committees have been constituted in every operating mine and pit. Safety meetings are held every month where safety matters and corrective actions related to the work atmosphere are discussed. The number of man-days lost per 1,000 man-days worked for the year 2008-09 is 5.68 compared to 11.73 during previous year.

OHS activities

Occupational Health Services (OHS) have been provided with adequate manpower and infrastructure and these have been put in place in full-fledged manner at all the projects, headed by qualified doctors trained in OHS at the Central Labour Institute, Mumbai. Periodical medical examination under statute is carried out regularly in all the projects, with a planned programme. All the results are computerized and individual files are being maintained.
MANGANESE ORE (INDIA) LTD (MOIL)

All the Mine working is being regularly supervised by Competent Supervisors like Mine Mate, Mine Foremen & qualified Mining Engineers. Safety Inspections are also being carried out during the working shift by workmen, Inspectors, Safety Officer, Mine Manager & Agents. Internal Safety organization headed by General Manager (Safety) at H.O. Level is co-ordinating with Directorate General of Mines Safety (DGMS) & inspecting the mine time to time.

Regular Safety Committee meetings are held at mines where day-to-day Safety aspects are discussed with the participation of workers representative. Unsafe Acts and Mine Accidents are analyzed in details to avoid any recurrence.

The Accident Statistics for 2007 and 2008 is given below:

<table>
<thead>
<tr>
<th>Particular</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Serious</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Reportable</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

Regular occupational health check ups are being done as per the guideline of DGMS. The number of persons examined & tested for Initial Medical Examination, Periodical Medical Exam, Audimetry, Lung Function test for the year 2008 are as under:

<table>
<thead>
<tr>
<th>IME</th>
<th>PME</th>
<th>Audimetry Test</th>
<th>PET Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept</td>
<td>Cont</td>
<td>Target</td>
<td>Actual</td>
</tr>
<tr>
<td>49</td>
<td>28</td>
<td>330</td>
<td>240</td>
</tr>
</tbody>
</table>

Safety policy for the company, crafted as per recommendation of the 9th Safety Conference, has further improved the safety standard of the mine. The company has introduced study of health safety management through risk assessment for Dongri Buzurg mine and Balaghat mine of the company. Recommendations of the study are being implemented. Regular training is imparted to workmen inspector and workers in the training centre, Munsar. All these concerted efforts have reduced the frequency of mine mishaps. The Director and the CMD closely monitor safety issues and standards.

The following mines have been selected for National Safety Awards:

<table>
<thead>
<tr>
<th>Mines</th>
<th>Category</th>
<th>Year 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dongri Buzurg Mine</td>
<td>Longest Accident Free Period</td>
<td>Winner</td>
</tr>
<tr>
<td>Beldongri Mine</td>
<td>Longest Injury Frequency Rate</td>
<td>Runner-up</td>
</tr>
</tbody>
</table>

FERRO SCRAP NIGAM LTD (FSNL)

Special programmes on safety and allied areas are incorporated in the training calendar prepared for the whole year.

Such programmes are arranged through National Safety Council and other such reputed agencies for the benefit of the employees.
In addition to the training programmes, safety day celebrations are also held in the company wherein safety debate competitions, etc. are organised and the employees participate in such competitions with great enthusiasm. Winners of such competitions are awarded suitable prizes.

HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

HSCL has formulated safety code and adequate steps have been taken for its implementation. In addition, HSCL complies with all safety norms connected with construction activities. The company has full-fledged safety departments in steel plant units where more than 97% of its workmen are posted.

MECON LTD

MECON has design and consultancy offices and does not have an industrial unit. However, at project sites all necessary safety related precautions are being taken and as a result no accident has been reported during the year.

BHARAT REFRACTORIES LTD (BRL)

Effective measures have been taken to ensure adequate safety in all the plants.

Safety gears in use at the shop floor of a steel plant.
SPONGE IRON INDIA LTD (SIIL)

During the year, efforts were made to take measures required for the safety and security of the workforce in all areas. A safety committee was constituted and the National Safety Day was celebrated on March 4, 2009 to inculcate safety discipline among the employees of the company with a view to educate them to develop safe working practices to avoid accidents. First-aid training classes were conducted for some employees on February 27-28, 2009. There were no accidents during the year.

KIOCL LTD

- The safety departments are functioning effectively in all the locations. The company gives utmost importance to occupational safety and health of its staff. Although mining activity at Kudremukh mine has been stopped with effect from January 1, 2006, as per the Hon’ble Supreme Court’s verdict, regular safety inspections are being done to ensure safety and occupational health of employees engaged in the upkeep and maintenance of mining equipment, and essential services like water pumping, watch and ward etc. Safety awareness training is being imparted to new contract labourers who come for dismantling structures and other related work at Kudremukh.
- Workers’ participation in the Safety Management System is an important criterion adopted by the company. Area-wise safety committees have been formed, ensuring workers’ participation as well.
- Safety inspections are carried out regularly by the Safety Officer along with the Safety Committee members. Safety points are discussed in the safety meetings held every month. Suitable action is taken to remedy shortfalls.
- Various training programmes are being conducted to inculcate safety consciousness and develop human resources. Refresher training courses, first-aid training, fire-fighting, positive thinking modules, awareness programmes on environment, and quality and safety management courses are conducted regularly.

BIRD GROUP OF COMPANIES (BGC)

Mining companies under the Bird Group take safety measures according to Directorate General of Mines Safety (DGMS) guidelines such as maintaining mines and haulage roads as per safety regulations, providing safety accessories to the employees working in the mines, first aid training, display of safety slogans, arrangement for fire fighting demonstration, vocational training to mine workers and celebration and participation in Annual Mines Safety Week.
CHAPTER-X

SHIP BREAKING

Like many industries, the ship breaking industry has grown and expanded, in the past three to four decades, all over the world. The ship breaking industry supplies substantial quantity of re-rollable and scrap steel for the iron and steel industry. It increases the availability of semi-finished material, which otherwise would have to be produced by using the ore. Thus, it helps in conservation of natural resources.

Ship breaking, as a regular commercial activity, started in some of the industrially advanced countries like the U.K., U.S.A. and Germany during the post World War II period. By 1960, the activity shifted from the industrialised countries to other areas in Europe and Far East. However, more than 90% of shipbreaking in the world during the last 10 years has taken place in India, Bangladesh, Pakistan and China.

Inter Ministerial Committee on ship breaking

■ The Ministry of Steel is concerned with ship breaking as per allocation of work (please refer Annexure I). Ship breaking is mainly carried out at Alang, Gujarat. More than one lakh people are employed in ship breaking industry. Ship breaking industry also contributes to the availability of steel scrap in the country and also heavy revenues are received in the form of duty tax by the nation.

■ The general issue of control and management of hazardous waste has been under consideration in the Hon’ble Supreme Court following the writ petition no. 657 of year 1995 filed by Research Foundation for Science Technology National Resource Policy. The applicant sought the implementation and other remedial measures in respect of hazardous waste (Management and Handling Rules 1989) framed by the Ministry of Environment & Forests; and the general issue of control and management of industrial waste. The various State Governments/Central Ministries were affected in this case and Ministry of Environment and Forests (MoEF) was the nodal Ministry.

■ During the course of deliberation, the Hon’ble Supreme Court issued various orders, the first important order being on October 14, 2003. The order mentions that an Inter-Ministerial Committee comprising the Ministry of Surface Transport, the Ministry of Steel, the Ministry of Labour and the Ministry of Environment should be constituted with the involvement of labour and environment organisations and representatives of the ship breaking industry.
The Ministry of Steel set up an Inter-Ministerial Committee (IMC) vide an order of January 12, 2004 under the chairmanship of Additional Secretary and Financial Advisor with members of Ministry of Shipping, Ministry of Environment & Forests (MoEF), Ministry of Labour, Gujarat Maritime Board, Gujarat State Pollution Control Board, Central Pollution Control Board, Labour Association, Steel Scrap and Ship breakers Association etc. for the implementation of the Hon’ble Supreme Court Orders and also for following functions:

(i) Review of regulatory measures to ensure effective action against hazardous wastes associated with the activity of ship breaking.
(ii) Monitoring of ship breaking activity so as to ensure adherence to all Central Pollution Control Board (CPCB) guidelines and safeguards pointed out by the High Powered Committee before the Supreme Court.
(iii) Monitoring development of infrastructure at Alang and other major ship breaking sites so as to facilitate smooth operation.
(iv) Review and institute measures to improve working condition of labours as well as provision of residential housing and attention to their health needs, education needs etc.

So far, IMC has held 10 meetings; co opted members of other organizations; discussed various issues pertaining to ship breaking industries and issued a large number of directions to implement Supreme Court Orders.

Further the Supreme Court judgment dated 6-9-07 mentions that Supreme Court vide its order dated 17-2-06 directed to set up a Committee of Technical Experts on ship-breaking. MoEF set up the committee on 24-3-06 to be headed by the Secretary, MoEF, and experts from various other organisations/pollution control boards. The Committee made various recommendations which have been accepted by the Supreme Court vide its judgment dated 6-9-07.

The Supreme Court vide its judgment dated 6-09-07 stated that the Government of India shall formulate a comprehensive code incorporating the recommendations and the same has to be operative until the concerned status are amended to be made in line with the recommendations. Until the Code comes into play, the recommendations shall be operative by virtue of the judgment dated 6-9-07. The code is under formulation in the Ministry of Steel.
Private entrepreneurs handle the task of shipbreaking in India. It is labour-intensive job and India having abundant human resource finds it a cost efficient activity. Till the sixties, ship breaking in India was confined mainly to dismantling of small barges and coastal wrecks. This activity grew into a full-fledged industry by 1979.

**Ship breaking statistics**

The ship breaking statistics during the last five years are as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Year</th>
<th>No. of ships beached</th>
<th>*LDT weight (MT) (Light Displacement Tonnage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2004-05</td>
<td>214</td>
<td>0.90</td>
</tr>
<tr>
<td>2.</td>
<td>2005-06</td>
<td>110</td>
<td>0.50</td>
</tr>
<tr>
<td>3.</td>
<td>2006-07</td>
<td>142</td>
<td>0.76</td>
</tr>
<tr>
<td>4.</td>
<td>2007-08</td>
<td>140</td>
<td>0.60</td>
</tr>
<tr>
<td>5.</td>
<td>2008-09</td>
<td>267</td>
<td>1.97</td>
</tr>
</tbody>
</table>

(*LDT is unit of physical weight of ship)

# Statistics as furnished by the Iron Steel Scrap & Shipbreakers Association of India.

**Location of present ship breaking yards**

- Alang and Sosiya yards in Gujarat
- Sachana in Gujarat
- Mumbai

**Alang and Sosiya ship breaking yards:** Alang and Sosiya are two villages situated on the coast of the Arabian Sea in the district of Bhavnagar in Gujarat where 90% of the shipbreaking activity in the country is concentrated.

**Contribution of ship breaking**

Ship breaking process is an industrial activity, which not only generates re-rollable steel but also helps create direct and indirect employment. Steel produced through the ship breaking route saves natural resources like iron ore, coal, etc. which are used for production of steel through integrated steel plants. The steel generated from ship recycling contributes to around 1% to 2% of the domestic steel demand. Some of the key points related with the ship breaking industry are:

- A population, both direct and indirect, of more than 1 lakh depends on the ship breaking industry.
- As ship plates need to be reheated only upto 1000°C for re-rolling, the scale formation at this is minimal for re-rollers.
- Occurrence of physical defects like seams, internal cracks, porosity, slag inclusion and furnace burns are less frequent in shapes and sections re-rolled from ship plates.
- Improved ductility due to slightly lower carbon and freedom from inclusions allow more intensive cold twisting of rebars from steel obtained out of ship breaking.
- Fine grains of ship steel ensure greater resistance to corrosion especially surface pitting.
CHAPTER-XI

WELFARE OF WEAKER SECTIONS OF SOCIETY

The Ministry of Steel and the public sector undertakings under it, comply with the Government guidelines with regard to welfare of weaker sections of the society.

Statement Showing the Number of SC/ST/OBC/Ex-Servicemen/Employees as on March 31, 2009 in respect of Ministry of Steel:

Representation of SCs, STs and OBCs in the ministry

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>SCs</td>
</tr>
<tr>
<td>Group A</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>Group B</td>
<td>106</td>
<td>13</td>
</tr>
<tr>
<td>Group C</td>
<td>54</td>
<td>12</td>
</tr>
<tr>
<td>Group D</td>
<td>67</td>
<td>31</td>
</tr>
<tr>
<td>Excluding Safai Karamcharis</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>269</td>
<td>62</td>
</tr>
</tbody>
</table>

STEEL AUTHORITY OF INDIA LTD (SAIL)

Steel Authority of India Limited consists of five integrated steel plants at Bhilai, Durgapur, Rourkela, Bokaro and Burnpur and three special steel plants at Durgapur, Salem and Bhadravati; a raw materials division with mines at Jharkhand, Orissa, Chattisgarh and West Bengal. The Central Marketing Organisation has an all-India network. The Ranchi-based Research and Development Centre for Iron and Steel, Centre for Engineering and Technology and Management Training Institute are also part of SAIL.

While plants located at Bhilai, Rourkela and Bokaro are situated in tribal belts, the steel plants at Durgapur and Burnpur are located in the area predominantly belonging to schedule castes and weaker sections of the society. Needless to say, most of the mines are situated in the tribal areas of Jharkhand, Orissa, Chattisgarh, and West Bengal. The research and training units are also based in the tribal belt of Ranchi.

By virtue of location itself, SAIL has helped in the development of SC/ST communities in the following obvious ways:

- Since recruitments of non-executives are carried out mainly on a regional level, a large number of SCs/STs and other weaker sections of the society get the benefit of employment in SAIL.
- For project work and other temporary jobs, generally contractors employ workmen from the local areas, which again provides an opportunity for employment of local SC/ST candidates.
- Over the years, a large group of ancillary industries have also developed in the area. This has created opportunities for local unemployed persons for jobs and development of entrepreneurship.
- Steel townships developed by SAIL have the best of medical, education and civic facilities and are like oasis for the local tribals and other population who share the fruits of prosperity along with other SAIL employees.
Benefits being extended in SAIL for welfare of SC/ST community

Besides the measures adopted as per the directives of government, SAIL has undertaken several initiatives for the socio-economic development of SCs/STs in general and other weaker sections. Some of the important initiatives are as under:

- No tuition fee is charged from SC/ST students studying in the company-run schools, whether they are SAIL employees’ wards or non-employees’ wards. This has benefited around 19,000 students. The number of non-employees’ wards getting this benefit is around 8,000.
- SAIL awards 432 scholarships to encourage meritorious and deserving students. A total of 132 of these scholarships are awarded to SC/ST students.
- In last 4 years, 379 SC/ST posts have been filled under special recruitment drives.
- SAIL plants have adopted 124 SC/ST students belonging to BPL families/ primitive tribes. They are being provided free education, boarding, loading and medical facilities for their overall growth.
- An ITI has been opened at Gua mines on September 13, 2007. As the local population comprises of mainly SCs/STs, this initiative will benefit them in acquiring employment-oriented essential technical skills.
- The company has provided land for construction of school buildings in some of the steel townships, as well as in other places for spreading education among the local population. Bokaro Steel Plant has allotted 12 room hostels for SC/ST students.
- A total of 51 tribal students are taught free of cost in the company-sponsored DAV school at Chiria.
- Further, DSP, ASP and ISP have constructed low-cost individual sanitation units in model steel villages for the benefit of society at large.
- SAIL steel plants organise functions every year for the celebration of the birth anniversary of Dr. B.R. Ambedkar. Various programmes are organised on this day to propagate the message of Dr. B.R. Ambedkar among the children and general masses.
- SAIL’s Tribal Sports Festival 2007 was organised at DSP on December 31, 2007 in which 1458 villagers from 16 villages participated in different games.
- SAIL has set up five sports academies viz. a hockey academy at Rourkela, an athletics academy for boys at Bhilai, an athletic academy for girls at Durgapur, a football academy at Bokaro and an archery academy at Kiriburu iron ore mines. Continuous emphasis on sports activities has helped to develop...
players of national and international repute. SAIL also sponsors various major sporting events.

- At each of the main integrated steel plant location, one school has been opened to provide free primary education to the children of economically weaker sections living below the poverty line. They are being provided free uniforms, books and other stationary items, besides mid-day meals to encourage them to attend schools.

- SAIL plants organise free medical camps for the welfare of villagers living in the peripheral villages of steel townships.

- SAIL has adopted 79 villages across eight states (Chattisgarh, West Bengal, Orissa, Bihar, Jharkhand, Karnataka, Tamil Nadu and Madhya Pradesh) and they are being developed as model steel villages in a phased manner. These villages are being provided with infrastructural facilities like developed roads, electricity and water facility, sanitation, community centers, schools for providing educational facility, family welfare facilities, training to villagers for income generation, etc. Around 40% of the population of these villages belongs to the SC/ST category. Out of the 79 villages, which will be developed as model steel villages, 24 villages have been completed.

Special recruitment drive for SC/ST

Special recruitment drives are being conducted on a regular basis to clear the backlog of vacancies. Out of 87 vacant posts, 76 vacancies were filled up in the year 2008.

Other important information

Internal workshops for liaison officers for SC/ST and other dealing officers of SAIL plants/units are conducted on a regular basis through an external expert to keep them updated on the reservation policy for SC/ST and other related matters.

A separate grievance register is maintained for SC/ST employees at all plants/units. On the advice of the National Commission for Scheduled Castes, SAIL SC/ST employees have taken the initiative to form a representative body at each plant/unit by amalgamation of different outfits. A federation has been formed at the central level also. Regular meetings are held with these representative bodies.

At the central level, meetings with the SAIL SC/ST Employees’ Federation are conducted on six monthly basis. The last meeting with the Federation was held on December 20, 2008, where Chairman SAIL, Director (Personnel) and other senior officers were present.
Groupwise representation of SC/ST and other employees

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>SCs</td>
</tr>
<tr>
<td></td>
<td>By direct recruitment</td>
<td>By promotion</td>
</tr>
<tr>
<td>A</td>
<td>5218</td>
<td>867</td>
</tr>
<tr>
<td>B</td>
<td>2451</td>
<td>397</td>
</tr>
<tr>
<td>C</td>
<td>6986</td>
<td>1137</td>
</tr>
<tr>
<td>C (SK)</td>
<td>2610</td>
<td>417</td>
</tr>
<tr>
<td>D</td>
<td>17225</td>
<td>2818</td>
</tr>
</tbody>
</table>

RASHTRIYA ISPAT NIGAM LTD (RINL)

WELFARE OF SC/ST AND OBCs

As on March 31, 2009, group-wise representation of SC/STs and OBCs in the overall manpower is furnished below:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Total SCs</th>
<th>STs</th>
<th>OBCs</th>
<th>No. of employees (as on 31-3-2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 'A'</td>
<td>275</td>
<td>22</td>
<td>103</td>
<td>867 396 903</td>
</tr>
<tr>
<td>Group 'B'</td>
<td>1426</td>
<td>257</td>
<td>59</td>
<td>397 125 512</td>
</tr>
<tr>
<td>Group 'C'</td>
<td>454</td>
<td>73</td>
<td>65</td>
<td>1137 557 1318</td>
</tr>
<tr>
<td>Group 'D'</td>
<td>108</td>
<td>12</td>
<td>5</td>
<td>417 181 637</td>
</tr>
<tr>
<td>(Excluding Safai)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karamcharis (Safai)</td>
<td>32   7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Dr. Babu Jagjevan Ram Jayanthi celebrations on April 5, 2008, Dr. B. R. Ambedkar Jayanthi on April 14, 2008 and Shri T Amrutha Rao Jayanthi celebrations on October 21, 2008 were organised.
- Statue of (Late) Shri T. Amrutha Rao was unveiled on April 21, 2008 on the occasion of his Vardhanthi Ceremony.
- A certain percentage of quarters (10% for A & B types and 5% for C & D types) have been reserved for and allotted to the SC/ST employees in township.
- Bharat Ratna Dr. B R Ambedkar, annual merit cash awards are being awarded to students from SC/ST communities since 1991. Based on the results of the X/SSC Examination (2007-2008), 14 cash merit awards of Rs. 500 each and 14 cash merit awards of Rs. 250 each were given to the first and second rank holders among the SC/ST communities, respectively, from each of the schools of VSP.
- RINL/VSP has raised the number of scholarships from 10 to 18 per year exclusively for the children of SC/ST Employees (12 for SCs and 6 for STs) from the academic year 2008-2009 onwards. Under this scholarship scheme, six scholarships of Rs. 1,500 per month and six scholarships of
Rs. 750 per month and six scholarships of Rs. 400 per month will be awarded to the meritorious students among SCs/STs every year.

- 65 candidates joined as management trainees (Technical) in January/February/March 2009 against special recruitment drive for ST candidates. Further, 1,019 persons at different levels were appointed during the year 2008-09, out of which 316 belong to SC/ST category.

**NMDC LTD**

The total number of employees in NMDC as on March 31, 2009 was 5,652 out of which 1,018 belong to Scheduled Castes (18.01%), 1,229 to Scheduled Tribes (21.74%) and 649 to OBCs (11.48%):

### Representation of SCs, STs and OBCs in NMDC

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
<th>By direct recruitment</th>
<th>By promotion</th>
<th>By other methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>SCs</td>
<td>STs</td>
<td>OBCs</td>
<td>Total</td>
</tr>
<tr>
<td>Group A</td>
<td>977</td>
<td>141</td>
<td>53</td>
<td>88</td>
<td>86</td>
</tr>
<tr>
<td>Group B</td>
<td>1140</td>
<td>170</td>
<td>253</td>
<td>68</td>
<td>21</td>
</tr>
<tr>
<td>Group C</td>
<td>2282</td>
<td>406</td>
<td>553</td>
<td>725</td>
<td>124</td>
</tr>
<tr>
<td>Group D</td>
<td>1881</td>
<td>200</td>
<td>369</td>
<td>238</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>(Excluding Safai Karamcharis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group D</td>
<td>39</td>
<td>39</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(Safai Karamcharis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5652</td>
<td>1018</td>
<td>1229</td>
<td>649</td>
<td>432</td>
</tr>
</tbody>
</table>

**MANGANESE ORE (INDIA) LTD (MOIL)**

Manganese Ore (India) Ltd. is a Labour Intensive Organization with 6823 employees on its roll. About 72.37% i.e. 4938 of the total strength belongs to SC/ST/OBC out of which approx. 60.90% i.e. 3007 belong to SC/ST. MOIL has undertaken several measures for the Welfare of the SC/ST & OBC Section. Some of them are as listed under:

- Adoption of Tribal villages for upliftment of SC/ST.
- Training in Sericulture for economic development of SC/ST section near by mines area.
- Help to the Schools in surrounding mines.
- Grant of subsidy to Gram Panchayat for water supply scheme for providing wholesome water.
- Giving financial assistance to Social Institutions who are working for the rehabilitation of the aged and handicapped persons.
- Donated tricycles to handicapped persons. Provided Sewing machines for development and upliftment of the tribal women.
- MOIL constantly upgrades various welfare measures provided to the SC/STs and weaker sections with a view to improve the quality of life.
- Adoption of villages and providing drinking water, medical facilities, approach roads etc.
- Creation of self help group of tribal women and educating them to be self reliant by conducting classes of stitching which includes providing sewing machines, making of candles, washing powder, soaps etc.
The composition of the work force of the Company as on 31.03.2009 is as under:

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>By Direct Recruitment</td>
</tr>
<tr>
<td></td>
<td>Total* SCs STs OBCs</td>
<td>Total* SCs STs OBCs</td>
</tr>
<tr>
<td>Group A</td>
<td>218 29 8 36</td>
<td>3 1 - 4</td>
</tr>
<tr>
<td>Group B</td>
<td>183 29 4 43</td>
<td>2 1 - 1</td>
</tr>
<tr>
<td>Group C</td>
<td>1197 351 233 365</td>
<td>5 1 1 3</td>
</tr>
<tr>
<td>Group D (Excluding Safai Karamcharis)</td>
<td>4770 866 1432 1459</td>
<td>25 9 3 13</td>
</tr>
<tr>
<td>Group D (Safai Karamcharis)</td>
<td>55 55 - -</td>
<td>0 - - -</td>
</tr>
<tr>
<td>Total</td>
<td>6823 1330 1677 1931</td>
<td>37 12 4 21</td>
</tr>
</tbody>
</table>

*Total of SCs+STs+OBCs
Total employees of MOIL are 6823. Out of the above, 890 are women employees.

MSTC LTD

The Presidential Directives issued from time to time pertaining to policies and procedures of the Government in regard to reservation, relaxation, concession, etc. for the SC/ST/OBC/Physically Handicapped candidates have been kept in view while taking actions/decisions on any matter laid down therein.

Efforts have been made to comply with the directives in matters concerning recruitment and promotion. Adequate representation of SC/ST/OBC members was made available in both Departmental Promotion Committees as well as Selection Committees (in case of recruitment).

In order to improve the efficiency of the employees belonging to the reserved categories and to prepare them to take up higher positions in the future, special attention was paid to their training and development in their respective fields of function. During the year 2008-2009 (till March 31, 2009), 10 SC and 5 ST employees of the company were sponsored for training programmes, both in-house and institutional. The ward of one SC employee was awarded scholarship by the company for pursuing higher studies. Apart from this, all welfare facilities provided to other employees of the company are also extended to them.

In addition, all possible cooperation and assistance was provided to the MSTC SC/ST Employees' Council, which functions primarily to safeguard the interests of the reserved section of employees of the Company.
**FERRO SCRAP NIGAM LTD (FSNL)**

For the uplift of the weaker sections of society, the Company ensures suitable reservation of posts for the Scheduled Caste, Scheduled Tribe and other backward class communities, as per the Government directives in this regard. As regards promotions and welfare of the weaker sections, the Company has evolved a promotion policy and implemented various welfare schemes for its employees as a whole, which adequately cover the employees belonging to SC/ST/OBC communities also. The overall percentage of SC and ST categories of employees in FSNL is 17.61% and 11.07%.

**HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)**

- HSCL had been assisting in providing schools in areas where SC/ST/OBC and physically handicapped employees mostly reside.
- Assistance is given for supply of drinking water.
- Plots were allotted to workers for making hutment in the land allotted at sites of client with electricity, water supply and sanitation arrangement etc.
Children of SC/ST, OBC and physically handicapped employees get due preference in the matter of schooling at projects.

Directives of the Central Government with regard to recruitment and promotion in respect of SC/ST/OBC and physically handicapped employees are implemented.

All along the above points had been followed in HSCL, but due to prevailing critical ways and means situation, austerity measures are being followed and avoidable expenditure is being curtailed.

### Representation of SCs, STs and OBCs in HSCL

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>By direct recruitment</td>
<td>By promotion</td>
</tr>
<tr>
<td></td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
</tr>
<tr>
<td>Group A</td>
<td>210 19 1 19</td>
<td>- - -</td>
</tr>
<tr>
<td>Group B</td>
<td>193 8 1 12</td>
<td>- - -</td>
</tr>
<tr>
<td>Group C</td>
<td>441 116 71 45</td>
<td>- - -</td>
</tr>
<tr>
<td>Group D</td>
<td>39 6 4 3</td>
<td>- - -</td>
</tr>
<tr>
<td>(Excluding Safai Karamcharis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group E</td>
<td>2 - - -</td>
<td>- - -</td>
</tr>
<tr>
<td>(Safai Karamcharis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1248 149 77 79</td>
<td>- - -</td>
</tr>
</tbody>
</table>

### MECON LTD

The employment pattern of weaker sections of society (SC/ST and OBCs) is as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>By direct recruitment</td>
<td>By promotion</td>
</tr>
<tr>
<td></td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
</tr>
<tr>
<td>Group A</td>
<td>1656 226 103 181</td>
<td>249 44 22 29</td>
</tr>
<tr>
<td>Group B</td>
<td>52 8 12 16</td>
<td>- - -</td>
</tr>
<tr>
<td>Group C</td>
<td>133 29 50 20</td>
<td>5 - 1</td>
</tr>
<tr>
<td>Group D</td>
<td>16 3 6 4</td>
<td>11 3 3 4</td>
</tr>
<tr>
<td>(Excluding Safai Karamcharis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group D</td>
<td>1 - 1 -</td>
<td>- - -</td>
</tr>
<tr>
<td>(Safai Karamcharis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1838 266 172 221</td>
<td>265 47 26 33</td>
</tr>
</tbody>
</table>

### Welfare activities

Community Development Committee of MECON has adopted poverty alleviation programme/schemes such as community education/vocational training, afforestation, community medicine, model village, resource generation schemes in the tribal villages of Ranchi district including persons with disabilities for welfare of weaker sections of the society (SC/ST and OBC and persons with disabilities). Steps are being taken to encourage the SC/ST/OBC employees through scholarship scheme that has been introduced for their children for higher studies.
BHARAT REFRACTORIES LTD (BRL)

Manpower (as on March 31, 2009)

<table>
<thead>
<tr>
<th>Company</th>
<th>Total no. of employees</th>
<th>SC</th>
<th>ST</th>
<th>Ex-servicemen</th>
<th>Physically handicapped</th>
<th>Women</th>
<th>OBC</th>
<th>Minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bharat Refractories Limited (BRL)</td>
<td>1589</td>
<td>171</td>
<td>195</td>
<td>07</td>
<td>13</td>
<td>115</td>
<td>669</td>
<td>73</td>
</tr>
</tbody>
</table>

Representation of SCs, STs and OBCs in BRL

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
<th>By direct recruitment</th>
<th>By promotion</th>
<th>By other methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
</tr>
<tr>
<td>Group A</td>
<td>230 14 10 39</td>
<td>- - - -</td>
<td>45 04 01</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>307 26 29 115</td>
<td>- - - -</td>
<td>09 - -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Group C</td>
<td>783 83 111 391</td>
<td>- - - -</td>
<td>117 18 07</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Group D (Excluding Safai Karamcharis)</td>
<td>260 39 45 124</td>
<td>- - - -</td>
<td>32 03 09</td>
<td>30(*) 01 06</td>
<td></td>
</tr>
<tr>
<td>Group D (Safai Karamcharis)</td>
<td>09 09 - -</td>
<td>- - - -</td>
<td>01 03 -</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1589 171 195 669</td>
<td>- - - -</td>
<td>206 28 17</td>
<td>36(<em>) 01(</em>) 06(*)</td>
<td></td>
</tr>
</tbody>
</table>

* By other methods — Under group D 36 dependents of deceased employees have been appointed as per tripartite agreement out of which 1 No. SCs and 6 No. ST.

Contract Labour

Contract labourers are engaged occasionally on non-perennial jobs only. They are being paid statutory wages. In addition, they are provided other benefits like provident fund, medical facilities, leave etc.

SPONGE IRON INDIA LTD (SIIL)

Manpower (as on March 31, 2009)

The total number of employees as on March 31, 2009 was 304, out of which 62 employees belong to SC category (20.39%), 23 to the ST category (7.66%) and only one person belongs to the OBC (0.32%) category. There are 20 women (6.57%), and four physically handicapped persons (1.31%).
Representation of SCs, STs and OBCs in SIIL

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total SCs STs OBCs</td>
<td>By direct recruitment</td>
</tr>
<tr>
<td>Group A</td>
<td>56 16 2 NIL</td>
<td>- - -</td>
</tr>
<tr>
<td>Group B</td>
<td>49 9 3 NIL</td>
<td>- - -</td>
</tr>
<tr>
<td>Group C</td>
<td>127 24 6 1</td>
<td>3 1 - 1</td>
</tr>
<tr>
<td>Group D (Excluding Safai Karamcharis)</td>
<td>66 8 11 NIL</td>
<td>2 - -</td>
</tr>
<tr>
<td>Group D (Safai Karamcharis)</td>
<td>6 5 1 NIL</td>
<td>- - -</td>
</tr>
<tr>
<td>Total</td>
<td>304 62 23 1</td>
<td>3 1 - 1</td>
</tr>
</tbody>
</table>

Employees’ Participation in Management

In accordance with government guidelines, various committees have been constituted providing participation of workers and officers in all activities of the company. The areas of participation of employees was decided as under:

- Items relating to planning, modification, house keeping, better inventory control, targets, working result, etc
- Items relating to operation and safety
- Items relating to welfare of the employees

A number of committees at the plant level, shop-level and other committees like safety committee, canteen committee, games and sports committee, communal harmony committee are functioning, thereby ensuring employees’ participation in the process of decision-making in different areas. The suggestions made by the officers and employees in the said forums are reviewed and implemented wherever they are found to be feasible. This has yielded good results.

Welfare schemes for development of SC/ST/OBC employees

**Recruitment and Promotions**

In the matter of recruitment and promotions to various posts, SC/ST candidates are being given benefits and concessions as per government directives. In respect of OBC candidates, too, government directives are being followed during recruitment. The directives issued by the government of India from time to time relating to reservation of posts for SC/ST/OBC have been complied with by the company. There was no backlog of vacancies reserved for SC/ST/OBC candidates.

**Training**

In view of the fact that SIIL is situated predominantly in a tribal area and there is a dearth of qualified SC/ST candidates, freshers from institutes are being recruited in different disciplines and job training is being given to the SC/ST employees so as to enable them to acquire the required skills for possible absorption in regular posts after the training.

**Social activities**

To look after peripheral developmental activities in the nearby areas, the company has set up a small medical cell. Recognising its social responsibilities, the company undertakes programmes from time to time for the benefit of the tribal people in the local areas. As part of this, free medical camps
were conducted by SIIL with the help of local doctors in the nearby villages and medicines were distributed.

**Education**

The company has been running a high school in both Telugu and English mediums in its campus to cater to the needs of children who are not only of SIIL employees, but also children from the neighbouring tribal villages. Local children, particularly those from the SC/ST/OBC categories, are availing better education facilities without going to outside places which involves considerable expenditure.

**Medical facilities**

Since the plant is predominantly in the tribal area, it is catering to the medical needs of the nearby tribal villages, particularly those belonging to SC/ST/OBC categories and the downtrodden.

**Social amenities**

Other social amenities such as post office, banks, LPG outlets are made available for the benefit of locals within the company’s premises.

**Award of contracts**

Preference is being given to local contractors, particularly those belonging to SC/ST/OBC categories, in the matter of petty contracts of urgent nature. Besides this, the contractors are asked to engage local SC/ST/OBC candidates for various contract works of temporary nature in the company’s premises.

**Drinking water**

Free chlorinated drinking water is being provided to the locals residing in and around the factory. The water is brought from the Kinnerasani drinking water reservoir.

**KIOCL LTD**

**Manpower (as on March 31, 2009)**

The total number of employees in KIOCL as on March 31, 2009 is 1,620 as per the break-up given in the table below:

**Representation of SCs, STs and OBCs in KIOCL**

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of appointments made during the year</th>
<th>By direct recruitment</th>
<th>By promotion</th>
<th>By other methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
<td>Total SCs STs OBCs</td>
</tr>
<tr>
<td>Group A</td>
<td>450 52 10 15</td>
<td>5 - - -</td>
<td>152 13 4 - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>29 1 2 -</td>
<td>- - -</td>
<td>3 - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group C</td>
<td>1020 155 44 70</td>
<td>- - -</td>
<td>226 30 20 - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group D</td>
<td>93 21 10 6</td>
<td>- - -</td>
<td>26 8 - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Excluding Safai Karamcharis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group D (Safai Karamcharis)</td>
<td>28 20 2 1</td>
<td>- - -</td>
<td>7 5 1 - - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1620 254 68 92</td>
<td>5 - - -</td>
<td>414 56 25 - - -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Welfare measures

- The company has set up full-fledged facilities at Kudremukh and Mangalore by establishing a modern township, hospital, recreation facilities etc. Ten percent of type “A” and “B” quarters and 5% of “C” & “D” type quarters are reserved for SC/ST employees.
- During the financial year 2007-08, 15 merit scholarships and 40 merit-cum-means scholarships were sanctioned to the children of employees. Out of 55 scholarships, 20% of the scholarships, that is, 11 have been reserved for children of SC/ST employees. During the year, only 10 applications were received from children of SC/ST employees and all of them were sanctioned scholarships. Eligibility standards, that is, either a first class or 60% pass, whichever is higher, is relaxable to 50% for sanction of scholarship to children of SC/ST employees.

Recruitment

During the calendar year 2008, five candidates (general category) were recruited in Group ‘A’ (Executives).

Periodic meetings with SC/ST representatives

There is regular interaction with the management and SC/ST Welfare Association at Kudremukh, Mangalore and Bengaluru. The grievances of SC/ST employees are discussed and appropriate action is taken to redress their grievances. Dr. Ambedkar Jayanthi was celebrated at all locations on April 14, 2008.

BIRD GROUP OF COMPANIES (BGC)

The number of SC/ST/OBC/Ex-Servicemen/ Men and Women as on March 31, 2009 are as below:

<table>
<thead>
<tr>
<th>Group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>PH*</th>
<th>Ex-servicemen</th>
<th>General</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive</td>
<td>141</td>
<td>7</td>
<td>148</td>
<td>3</td>
<td>3</td>
<td>27</td>
<td>NIL</td>
<td>2</td>
<td>113</td>
<td>148</td>
</tr>
<tr>
<td>Non-Executive</td>
<td>1680</td>
<td>314</td>
<td>1994</td>
<td>427</td>
<td>1007</td>
<td>319</td>
<td>3</td>
<td>NIL</td>
<td>238</td>
<td>1994</td>
</tr>
<tr>
<td>Total</td>
<td>1821</td>
<td>321</td>
<td>2142</td>
<td>430</td>
<td>1010</td>
<td>346</td>
<td>3</td>
<td>2</td>
<td>351</td>
<td>2142</td>
</tr>
</tbody>
</table>

*PH-Physically handicapped

Welfare activities

Providing educational facilities: OMDC and BSLC under the BGC extend aids to peripheral schools and colleges. The companies extend aid in the form of construction of buildings, arranging study materials, providing furniture, school buses etc.

Hospital Facilities: OMDC and BSLC run hospitals mainly for the treatment of people and employees belonging to the weaker sections.

Drinking Water: Providing drinking water by dug wells, tube wells etc. for the employees belonging to weaker sections and also nearby villages.

Occupational Health Surveillance: The company undertakes programmes for malaria eradication, pulse polio etc. through the hospitals of OMDC and BSLC mainly, for the weaker sections. Occupational health surveillance covers facilities like X-rays, pathological laboratories, audiometry tests, ECG, lung function tests, dental clinics, operation theatres etc. for employees belonging to the weaker sections, and for residents of nearby villages.
CHAPTER-XII

VIGILANCE

ACTIVITIES AND ACHIEVEMENTS OF VIGILANCE DIVISION OF THE MINISTRY OF STEEL

The Vigilance unit of the Ministry is headed by a Chief Vigilance officer (CVO) of the rank of Joint Secretary appointed on the advice of the Central Vigilance Commission (CVC). The CVO with one Director, one Under Secretary and supporting staff, functions as the nodal point in the vigilance set-up of the Ministry. The vigilance unit is inter-alia responsible for the following in respect of the Ministry of Steel and the PSUs under its administrative control:

- Identification of sensitive areas prone to malpractices/temptation and taking preventive measures to ensure integrity/efficiency in Government functioning;
- Taking suitable action to achieve the targets fixed by the Department of Personnel & Training (DoPT) on anti-corruption measures;
- Scrutiny of complaints and initiation of appropriate investigation measures;
- Inspections and follow-up action on the same;
- Furnishing the comments of the Ministry to the Central Vigilance Commission (CVC) on the investigation reports of the Central Bureau of Investigation (CBI);
- Taking appropriate action in respect of departmental proceedings on the advice of the CVC or otherwise;
- Obtaining first and second stage advice of the CVC, wherever necessary
- Appointment of CVOs in the PSUs in consultation with CVC and DoPT
- Examination of complaints regarding allegations against the officials/officers of the PSUs under this Ministry for appropriate action;
- Maintenance and scrutiny of immovable property returns of officers and staff working in this Ministry.
- Ten PSUs are functioning under the administrative control of the Ministry. The Vigilance Unit in all PSUs is headed by a CVO appointed by this Ministry in consultation with the CVC and the DoPT.

The Ministry reviews the vigilance activities in the PSUs through formal quarterly meetings and through periodic returns and statements sent by the CVOs. Other than this, depending on the backlog of pending references, the Ministry also held discussions with the CVOs of concerned PSUs on need basis. During the year, one meeting of the CVOs of the PSUs under the administrative control of this Ministry was convened, wherein the overall performance of the PSUs was reviewed. A special emphasis was laid on preventive vigilance and system improvement processes in the PSUs. All circulars containing instructions and guidelines on different aspects of vigilance management received from the CVC, were also circulated to the PSUs for strict compliance. Progress thereon, in the form of follow up action taken, was monitored.

During the year 2008-09 the CVOs of the PSUs were directed to:

- Actively participate and co-ordinate and monitor the process of implementation of the Integrity Pact in their respective PSUs and also to review its effectiveness as a preventive measure;
- Duly comply with CVC’s guidelines relating to leveraging of technology and
- Provide inputs from vigilance perspective to achieve adoption of E-Commerce including e-procurement and e-payments to the extent possible in their respective PSUs.

ISO certification

In pursuance of the directions given by the Ministry, the Vigilance Departments of all the PSUs have obtained ISO Certification.
Integrity Pact

With a view to bring about transparency and normativeness in the transactions, broadly in the areas of procurement and sales and tendering process, a decision was taken that the Integrity Pact be put in place in all PSUs. Integrity Pact being a tool developed during the 1990s by Transparency International India (TII) to help governments, businesses and civil society which are prepared to fight corruption in the field of public contracting. It consists of a process that includes an agreement between the organization and the bidders for public sector contract. It contains rights and obligations to the effect that neither side will pay, offer, demand or accept bribes or collude with competitors to obtain the contract, or while carrying it out and also the bidders will disclose all commissions and similar expenses paid by them to anybody in connection with the contract and that sanctions will apply when violations occur. These sanctions range from loss or denial of contract and forfeiture of the bid or party’s bond and liability for damages, blacklisting for future contracts on the side of the bidders, and criminal and disciplinary action against employees of the organisation. In other words, the Integrity Pact allows the organization to refrain from bribing in the knowledge that their bidders are bound by the same rules and also to reduce the hidden cost of corruption on procurement. Keeping all these beneficial aspects in view, a need to implement Integrity Pact by all the PSUs was emphasised. Inspired by the concerted efforts initiated by the Ministry of Steel, all the PSUs under the Ministry of Steel have signed Memorandum of Understanding (MoU) with the Transparency International India (TII) on 24.9.2007 with the commitment to implement the Integrity Pact in all such transactions in their respective organisations in letter and spirit. The progress of implementation of the Integrity Pact in the PSUs was closely followed up during 2008-09.

STEEL AUTHORITY OF INDIA LTD (SAIL)

SAIL is laying emphasis on preventive and proactive activities along with punitive actions to facilitate an environment enabling people to work with integrity, efficiency and in a transparent manner, upholding the highest ethical standards for the organisation. Accordingly, the following activities were undertaken during the period April 2008-March 2009.

- The vigilance department published its regular half-yearly in-house publication ‘Inspiration’. Case studies, experiences etc. that are published help in spreading awareness among the employees.
- Intranet web page “Suvidha” was launched during the Vigilance Awareness Week 2008 for enhancing vigilance awareness among SAIL employees.
- QMS was been implemented in SAIL Vigilance in 2005 and ISO 9001:2000 certification conferred on February 17, 2006. After conducting external audit by certification agency, ISO 9001:2000 certificate dated February 25, 2009 has been received regarding re-certification of all vigilance departments of SAIL.

Shri S.K. Roongta, Chairman, SAIL, with Shri Venugopal K. Nair, CVO, SAIL, addressing the gathering during the Vigilance Awareness Week at Ispat Bhawan, New Delhi, on November 7, 2008.
- Half-yearly audit of the vigilance activities performed by the vigilance department of all plants and units was carried out. This has lead to formulation of uniform vigilance related systems and procedures of the units and plants.
- Purchase/contract procedure-06 was formulated by the vigilance department in 2006 based on feedback from different stakeholders. As it is a dynamic document, constant interaction is maintained with operating agencies for clarifications/amendments etc. The PCP-06 was revised in September 2007 after consultation with stakeholders. Further, suggestions of stakeholders were obtained in a workshop held on March 16, 2009 and it was also decided to issue a modified purchase / contract procedure based on discussions.
- On vigilance initiative, procedure for centralised procurement of medicines for SAIL hospitals has been formulated and implemented.
- The Integrity Pact was implemented by SAIL with effect from August 16, 2007 for all purchase and contracts above Rs. 100 crore. Subsequently, the threshold limit has been reduced from Rs. 100 crore to Rs.50 crore with effect from January 27, 2009.
- Vigilance awareness sessions and workshops were regularly held at the various plants and units. Over 130 workshops, involving 3,574 participants, were held for enhancing vigilance awareness on purchase/contract procedures, RTI Act, conduct and discipline rules etc.
- Periodic surprise checks, including joint checks, were conducted regularly in vulnerable areas of the company. A total of 3,712 periodic checks, including 351 joint checks, were conducted at different plants/units. Savings of approximately Rs. 6.89 crore accrued from the preventive vigilance activities, mainly on account of these surprise checks.
- A total of 12 cases were taken for intensive examination at different plants / units. During intensive examination, high value procurement / contracts are scrutinised comprehensively and necessary recommendations are forwarded to the departments concerned for implementing suggestions for improvement in future.
- SAIL has maintained thrust on increasing e-commerce in the company. Between April and March 2009, 2,304 forward auctions worth Rs. 3,034 crore and 812 reverse auctions worth Rs. 3,602.6 crore have been conducted.

The following System Improvement Projects (SIPs) were undertaken at different plants/units of SAIL. Out of these, five SIPs have been implemented and the rest are under implementation.

- A study was undertaken on the possibility of taking delivery of imported cargo through inland container depot/container freight station, Raipur, at the Bhilai Steel Plant.
- A system study was undertaken on the existing practice of deployment, utilisation and maintenance of locomotives by the traffic department, including re-fuelling schedule, system of dispensing HSD to locos and related documentation at the Durgapur Steel Plant.
- Proper yard management of shipping sections of HRCF and CRM for faster dispatch of finished hot rolled and cold rolled products at Bokaro Steel Plant.
- Study of the existing system of return of EMD and its possible improvement for better coordination and service to the customers at the Alloy Steels Plant.
- Study of secondary steel scrap storage, receipt and dispatch accounting system in the disposal section of the Central Stores Department at the Salem Steel Plant.
- Standardising the processing, award and execution of civil contracts across the mines of the raw material division.
- Study regarding transportation manual for incoming raw materials by road at Maharashtra Electrosmelt Ltd.

**RASHTRIYA ISPAT NIGAM LTD (RINL)**

Vigilance Department of RINL took various measures to promote preventive vigilance. Measures like review of procedures, identification of sensitive posts, conducting surprise/quality checks, surveillance and rail/road weighments and re-weighments were undertaken. The vigilance observations were brought to the notice of the concerned for taking corrective actions/improvement in existing procedure systems wherever required.

In compliance with the directives of the CVC on e-governance, thrust has been given to e-commerce and e-payment. During 2008-09, around 70% of the payments were released through electronic form. Freight payments to East Coast Railways and East Central Railways for all outward traffic and inward traffic are made through e-payment under tripartite agreement.
Web based online submission of applications, downloading of admit cards, display of list of selected candidates, date of interview and medical test through the web for recruitment of personnel was introduced. Comprehensive web based “Online Vigilance Complaints Handling system” was developed in-house and placed on the web. Status of the complaint also can be seen through web with an individual password provided at the time of lodging the complaint. Relevant CVC circulars were placed in the Vigilance portal at VSP intranet for the convenience of dealing officers. Vigilance Awareness Week was observed from November 3-7, 2008 as per CVC guidelines.

In RINL, Integrity Pact Programme has been implemented with effect from April 1, 2007. Proactive Vigilance work was done in the areas of estimation, award and execution of contracts pertaining to operation, maintenance, procurement and marketing and management exhibited positive attitude towards the suggestions of the Vigilance. Sensitive posts in the various departments in RINL have been identified and finalised for the year 2008-09. Rotation of executives is being done.

**NMDC LTD**

The NMDC Vigilance Department, during the year, made good progress in the monitoring of e-commerce initiatives as per the circulars received from CVC from time to time.

The Vigilance department issued circulars with regard to tender procedures, including single tender and procurement on nomination basis, disciplinary proceedings, updation of vendors’ list and recruitment and promotion rules.

The Integrity Pact had been implemented in NMDC initially with threshold limits of Rs. 50 crore in respect of Civil Works and Contracts and Rs. 15 crore for procurement. The clause of Integrity Pact has been incorporated till date in 7 tenders with a value of Rs. 280.54 crore. This has resulted in improved transparency, expediting of the tendering process, reduced external interference and lower procurement costs. It has also improved the image of NMDC among customers. Implementation of the Integrity Pact in NMDC had brought about tangible and intangible gains.

The Vigilance Department in NMDC had received ISO certification in the year 2006 and after the completion of the second mandatory surveillance audit for the year 2008, ISO certification has been renewed for another one year. The Vigilance Department was instrumental in formulating the procedure for appointment of advisors.

Shri P. K. Bishnoi, CMD, RINL, addressing the employees on the occasion of Vigilance Awareness Week - 2008.

The Vigilance Department conducted various training programmes to bring about awareness among the employees about various CVC circulars, conduct rules of the corporation, submission of annual property returns, property transactions etc. It also conducted talks by eminent personalities in the field.

The Vigilance Department has provided the facility for online lodging of complaints through the company’s website. It has also provided the facility for online submission of annual property returns by employees.

Shri JM Lyngdoh, Former Chief Election Commissioner, inaugurating the ‘Online Complaint Lodging Mechanism’ during the Vigilance Awareness Week in NMDC.
During the year 2008, the emphasis was on more to utilize the information and communication technology to ensure transparency as per the guidelines issued by Central Vigilance Commission and the Ministry of Steel from time to time. MOIL has ISO 9001-2000 Certification for Vigilance Department.

The major work done is enumerated below

- Surveillance Audit in December 2008 of ISO 9001-2000 Certification for Vigilance Department
- Issuance of 6 circulars for improvement in tender processing & bring more transparency.
- Posting of NIT, employment notification and finalised tenders on MOIL’s Official Website on regular basis.
- Updation Work, Purchase & Contract Manuals has been completed and got approved by the Board and have been uploaded to MOIL’s website.
- Eight numbers of surprise checking of Cash, Inventory, OSM, Magazine etc. have been carried out.
- Punitve action has been taken against two employees on account of submitting false LTC Claim (one at Dongri and One at Kandri Mine).
- The Web based software “DCM & MIS” application is implemented in the company and is being used effectively.
- Sensitive posts both at Executive and at non-executive levels were finalised.
- Initiations have been taken for e-procurement through reverse e-auction for Explosive Materials valuing Rs.30 Crore.

MSTC LTD

The performance of the Vigilance Department during the year 2008 is detailed below:

ISO certificate

ISO certificate 9001-2000 for the Vigilance Department was obtained from URS Certification Ltd., UK, in July 2008.

Integrity pact

The Integrity Pact was implemented from the year 2007-08 and in all the contracts of over Rs. 2 crore in case of the Marketing Department and Rs. 50 lakh in case of selling agency business. Both buyers/vendors are signing the pact. External Independent Monitors have been appointed as per the advice of the Ministry and they are holding meetings with senior officers from time to time.

Meeting with Chief Executive

The Vigilance Department held monthly meetings with CMD and the minutes were also recorded.

Agreed and doubtful List

For the year 2008, an Agreed List had been prepared and signed by CBI, Anti-Corruption Bureau (ACB), Kolkata and CBI, ACB, New Delhi.

Suspension cases

At present, three employees, including two executives, are under suspension. Their cases are under investigation by CBI/Vigilance Department.
Departmental proceedings

Chargesheets have been initiated against two officers. They have replied and their replies are under consideration for further necessary action.

FERRO SCRAP NIGAM LTD (FSNL)

The Vigilance Department has laid special emphasis on preventive vigilance and analysis of existing system for system improvement. Strict vigil was kept within the organisation through creation of vigilance consciousness among the employees, investigation of complaints received from various sources, preventive checks at periodical interval, etc. Employees posted in sensitive areas are rotated as per rules. Compliance of officer orders, circulars, memoranda and instructions etc. issued by CVC and Ministry from time to time are made by the company. A campaign for creating awareness was taken up by organising the Vigilance Awareness Week celebration from November 12-16, 2008 during which various activities like essay competition, slogan competition, taking of pledge, etc. were conducted in all units including corporate office. An interaction with vendors/customers was also held at corporate office. A page on vigilance was hosted on the company’s website. An MOU is now in place with Transparency India Ltd. for implementation of Integrity Pact for all major contracts and purchases valuing Rs. 1 crore and more.

HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

- The Vigilance Department of the Company is headed by a CVO.
- Registered cases during April 2008 to March 2009: NIL.
- Vigilance Management: Website www.cvohscl.org exists for lodging complaints on website.
- Routine monthly and quarterly reports on vigilance activities and others have been sent to the Ministry of Steel /CVC as per directive of CVC.
- Circulars have been issued for systematic improvement in the organisation.
- Vigilance Awareness Week for 2008 was observed from November 3-7, 2008 and report was sent to the CVC.

MECON LTD

The Chief Vigilance Officer (CVO) supported by the Vigilance Department handles the Vigilance setup of MECON. The vigilance set-up is responsible for the following:
- Identification of sensitive areas prone to malpractices/temptation and taking preventive measures to ensure integrity/efficiency in MECON.
- Scrutiny of complaints and initiation of appropriate investigation measures.
- Inspections and follow-up action on the same.
- Furnishing the comments to the Central Vigilance Commission (CVC) on the investigation reports.
- Advising appropriate action in respect of departmental proceedings.
- Obtaining first and second stage advice of the CVC, wherever necessary.
- Examination of complaints regarding allegations against the officials/officers for appropriate action.
- Maintenance and scrutiny of immovable property return of officers and staff of MECON.

In compliance with the above functions, the following actions were initiated and implemented

- The company adopted a pro-active approach to bring vigilance awareness among employees by nominating concerned employees for training and organising programmes. Circulars issued by CVC and other authorities are given wide circulation for the benefit of the employees.
Vigilance Awareness Week was observed from November 3-7, 2008. In the Vigilance Awareness Week, presentation-cum-interaction sessions were held for executives on the subject covering “Need for efficiency and transparency in public spending, important features of public interest disclosure and protection of informer resolution” etc.

Through surprise checks and regular inspections, system improvements were recommended in some of the areas, particularly in tendering and procurement, personnel (establishment rules), finance (suppliers bill, TA bills, LTC).

On the preventive vigilance front, greater thrust was laid on examination of tenders with a view to modify certain restrictive tender clauses to increase competition.

Proactive vigilance work was done in the areas of award and execution of contracts pertaining to operation and maintenance. Management exhibited positive attitude towards the suggestions of the Vigilance Department.

Close interaction is being maintained with the CBI. Pending cases were reviewed periodically. All the periodical statistical returns/reports were submitted to the Ministry of Steel, CVC and CBI on time.

As per CVC circular, action is taken to ensure that tenders/contracts issued are being posted on the website regularly every month and a strict monitoring of the same is being done. IT usage in tendering, commercial activities, etc is being steadily implemented. All significant tenders for materials, products, services, etc. are put on the website of the company, in addition to NIT in newspapers, for wider access and greater transparency.

Payments to suppliers are being made through ETF to increase transparency and efficiency. Vendor registration, application for recruitment is done online to promote transparency.

A total of 12 posts were rotated/shifted under the job rotation scheme in sensitive location during 2008, in areas like civil works, commercial, contracts, medical wing, purchase, stores, etc. Assessment and identification of sensitive posts is a continuous process.

Scrutiny for 25% of property returns was completed for the year, and further scrutiny is in progress.

MOU has been signed with Transparency International for implementation of integrity pact. Integrity pact has been signed for five projects with vendors.

MECON has achieved ISO certification for its Vigilance activities from M/s TUV India Limited.

**Bharat Refractories Ltd (BRL)**

The main focus was on transparency and expeditious decision-making. In order to enhance the confidence of the employees and public at large in the vigilance function, the department is in the process of adopting quality management system for accreditation with ISO 9001-2000 certificate. The Vigilance Department maintained the thrust on e-governance as a result of which all open tenders of the company are now posted on the website.

**Sponge Iron India Ltd (SIIL)**

The directives issued by the Central Vigilance Commission (CVC) from time to time have been followed. As per the directives of the CVC, the Vigilance Awareness Week was celebrated from November 3-7, 2008 and the suggestions of CVC/MOS received from time to time were implemented.

The company has initiated the process of e-payments. The salaries to employees and other payments like VAT, service tax and income tax are made through the bank by e-payment, whereas the company has tried marketing of sponge iron through e-auction with the help of MSTC. However, it was not successful as the rates offered by customers were much lower than the then ruling price of material through direct sale. The Board decided to continue the marketing of sponge iron on its own till awareness is created among buyers to buy sponge iron through e-auction.

The major purchases are coal from the Singareni Collieries Company Ltd., which is a government undertaking, iron ore from the Karnataka region through open tenders and oils and lubricants from the Indian Oil Corporation. Other purchases are very small in value and are being procured through limited tender basis.

Information pertaining to the contracts concluded and details of bill payments made to the contractors that are over Rs. 5 lakh are displayed on the company’s website.
**KIOCL LTD**

**Integrity Pact Programme**

The Integrity Pact programme was introduced in KIOCL on January 1, 2008. A meeting was held with Independent External Monitors, on August 26, 2008 at the Corporate Office, Bengaluru. Various points such as role/scope of IEM, reimbursement of incidental expenditure, threshold value, periodic meetings etc., were discussed. Till March 2009, as many as 47 contracts bound with IP have been issued. However, so far no complaints have been received by the IEMs.

**ISO 9001-2000**

The Vigilance Department conducted three internal audits in the current calendar year under Quality System Standard (ISO 9001). Det Norske Veritas (DNV) carried out a second periodic audit on November 25, 2008. They appreciated the company's vigilance in adopting IP and conducting training classes as a measure of preventive vigilance. There was only one minor observation which has been complied with.

**Inspections**

A total of 35 CTE type inspections, 10 surprise checks, 13 general inspections and 56 scrutiny of files were carried out during the period under review, that is, April 2008 to March 2009.

**Complaints and cases**

Nine complaints were received during the financial year. Four of them were anonymous and no action was taken as per CVC guidelines and closed. Action was taken on two complaints and closed. Two complaints are under process and another complaint received from the CVC has been investigated and report sent. Five cases were registered during the period and three of them stood closed as on March 31, 2009, and enquiry is in progress in the remaining two cases.

**Training programmes**

The Vigilance Department conducted as many as 11 training programmes at three different locations. About 460 employees have participated in these programmes. Important topics such as the Integrity Pact, leveraging technology, improving transparency, effective use of the web, lodging of complaints under Public Information Disclosure Scheme (PIDS), lodging complaints, protection of the whistle blower, and CVC guidelines on tenders/contracts were covered.

**BIRD GROUP OF COMPANIES (BGC)**

After review of the sensitive areas of work, the following decisions have been taken:

- All the payments to be made through electronic medium, MIS system at the headquarter to be streamlined in order to maintain a daily record of production and sales of minerals from different production points in different companies under the BGC. The database for production and delivery of minerals sold from different mines to be maintained in every mine in the computer on a daily basis. It is being implemented in a phased manner as per available infrastructure.
- Installation of weighbridges at the exit of each production point/quarry and such weighbridge to be connected with computer in order to ensure automatic recording of minerals received at the railways siding to be reconciled every day. It is being implemented in phased manner.
- Use of NIC portal to give order for the advertisements of sale of minerals. Minerals to be sold only through e-auction even in case of ‘NIL’ response to the e-auction. Sale of iron ore and manganese ore is being made through e-auction only.
- BGC observed its Vigilance Awareness Week in the month of November 2008.
CHAPTER-XIII

GRIEVANCE REDRESSAL MECHANISM

MINISTRY OF STEEL’S GRIEVANCE CELL

Steel Minister’s Grievance Cell has been functioning in the Ministry of Steel since July 2004 to coordinate and monitor the grievances/complaints/suggestions of public and consumers relating to steel and steel products, received either in the office of Minister of Steel or directly in the Cell. In addition, a Joint Secretary rank officer is designated as the Grievance Officer of the Ministry to receive and dispose off petitions from the public.

Centralised Public Grievances Redressal and Monitoring System

Centralised Public Grievance Redressal and Monitoring System (CPGRAMS) has been implemented for facilitating public grievances in the Ministry and its PSUs. The CPGRAMS, is an online web-enabled system over NICNET developed by NIC in association with the Department of Administrative Reforms and Public Grievances (DARPG) with an objective of speedy redressal and effective monitoring of grievances by Ministries/Departments/Organisations of Government of India.

The entire life cycle of the grievance redressal operation is (i) Lodging of the grievance by a citizen. (ii) Acknowledgement of acceptance of grievance by organisation. (iii) Assessment of grievance regarding follow up action. (iv) Forwarding and transfer. (v) Reminders and clarification. (vi) Disposal of the case. The details of grievances dealt with in the CPGRAMS are as under:

<table>
<thead>
<tr>
<th>Grievance source</th>
<th>Opening balance</th>
<th>Receipt during the period</th>
<th>Total</th>
<th>Yet to be assessed as on 31/03/2009</th>
<th>Taken up within office</th>
<th>Forwarded to SO*</th>
<th>No action required</th>
<th>Cases disposed of during the period</th>
<th>Closing balance as on 31/03/2009</th>
<th>Reply sent to DPG/DARPG</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPG**</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DARPG</td>
<td>21</td>
<td>16</td>
<td>37</td>
<td>0</td>
<td>16</td>
<td>0</td>
<td>25</td>
<td>12</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Local/Post/Internet</td>
<td>0</td>
<td>32</td>
<td>32</td>
<td>0</td>
<td>28</td>
<td>4</td>
<td>6</td>
<td>22</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>48</td>
<td>69</td>
<td>0</td>
<td>44 (64%)</td>
<td>4</td>
<td>31 (45%)</td>
<td>34</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

* Subordinate organisation ** Directorate of Public Grievances

A visit by the Parliamentary Committee on Coal and Steel to RINL steel plant.
STEEL AUTHORITY OF INDIA LTD (SAIL)

An effective internal grievances redressal machinery exists in SAIL plants and units, separately for executives and non-executives. The grievance procedure in SAIL has evolved after sustained deliberations and consent of employees, trade unions and associations.

The grievances in SAIL plants/units are dealt in 3 stages and employees are given an opportunity at every stage to raise grievances relating to wage irregularities, working conditions, transfers, leave, work assignments and welfare amenities etc. Such issues are effectively settled through the time-tested system of grievance management. However, majority of grievances are redressed informally in view of the participative nature of environment existing in the steel plants. The system is comprehensive, simple and flexible and has proved effective in promoting harmonious relationship between employees and management. The status of public grievances/staff grievances for the period April 1, 2008 to March 31, 2009 is as under:

<table>
<thead>
<tr>
<th>Grievances outstanding as on 1.4.2008</th>
<th>No. of grievances received during the period</th>
<th>No. of grievances disposed of</th>
<th>No. of grievances pending as on 31.3.2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>3935</td>
<td>3597</td>
<td>468</td>
</tr>
</tbody>
</table>

SAIL Chairman Shri S.K. Roongta interacting with employees at Bhilai Steel Plant.

RASHTRIYA ISPAT NIGAM LTD (RINL)

RINL/VSP is complying with the basic components as prescribed in the Citizen’s Charter.

Grievance redressal mechanism

Public grievances

The system of redressal of public grievance has been streamlined, and its scope broadened to include complaints of suppliers, customers etc., and systematic recording of receipt and disposal of such grievances are being carried out. To provide requisite thrust in this area, one senior executive
in the rank of General Manager has been nominated as Officer on Special Duty (OSD) to handle and monitor the public grievances centrally. All heads of the departments have been advised to accord due priority for redressal of public grievances within the time frame, and in each department, one executive in the rank of Deputy Chief Manager/Assistant General Manager has been nominated to coordinate redressal of grievances.

**Staff grievances**

RINL has a well laid down procedure for handling staff grievances through committee systems viz. Area Grievance Redressal Forum and Central Grievances Redressal Forum. The redressal of staff grievances are coordinated by the zonal personnel executives, who send monthly progress report on the number of employees’ grievances received and redressed etc. for compilation, computerisation and monitoring. The entire system of redressal of grievances is monitored centrally by Personnel-Coordination section. The information regarding the staff grievances for the year 2008-09 is furnished below:

<table>
<thead>
<tr>
<th>Name of the Organisation/ PSU</th>
<th>Grievances outstanding as on 1.4.2008</th>
<th>No. of Grievances received during the period</th>
<th>No. of cases disposed of</th>
<th>No. of cases pending as on 31.3.2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>RINL, VSP</td>
<td>2</td>
<td>18</td>
<td>18</td>
<td>2</td>
</tr>
</tbody>
</table>

There are no public grievances outstanding with RINL.

**NMDC LTD**

The grievance redressal machinery in NMDC is headed by an Executive Director in the head office and by head of projects in each of the four production projects. The CVO has been nominated as the nodal officer for monitoring the grievance redressal machinery which is working satisfactorily. However, the volume of grievances handled is very low, as computerisation has not been done. Public dealing in the organisation being minimal, no time norms etc. have been fixed. However, as and when any public grievance (including in the press) is received, the same is promptly attended to. Monthly and quarterly reports on staff/public grievances are sent to the Ministry indicating the position.

**MANGANESE ORE (INDIA) LTD (MOIL)**

- Employees grievances: MOIL has its own grievance redressal procedure for Executives as well as non-executive employees. The grievances of employees are accordingly dealt with as per the rule.
- The redressal of grievance machinery in MOIL consists of one Grievance Officer nominated for the purpose at each unit. The Grievance Officer nominated at Head Office co-ordinates with the Grievance Officers at the units for their effective performance.
- Public Grievance: All Grievance officials have been apprised of the manner in which the Public Grievance received at this end are to be disposed. The system adopted for dealing the grievance of Public was constituted on the basis of instructions received from various authorities in the past.
- Monitored at Head Office on the basis of assessment of data received from unit, Grievance Officer through the monthly report as well as through inspection by Head Office authorities.

**MSTC LTD**

A public grievance cell has been constituted with three senior and middle level executives to deal
with any grievance of any member of the public relating to the functioning of the company. This grievance cell also handles grievance of the executives and non-executives of the Company. Subsequently, this cell has been expanded to include the Regional Managers and Branch Managers in the Grievance Cell. Constitution of this cell has been widely circulated to all the offices of the MSTC. The grievance received is examined by the cell in consultation with the head of department (HOD) concerned. MSTC being a very small organisation, with a maximum of 20 to 30 staff in each department/office, the staff have easy access to the Head of Departments and even the CMD. Therefore, no necessity has been felt for setting up of a formal machinery for redress of employees’ grievance. The Personnel Department addresses formal/informal grievances received in consultation with the HOD concerned and sometimes with the staff union if the grievance is of a collective nature. Besides, in line with the Supreme Court judgement, a Committee has also been constituted for prevention of sexual harassment of women at the work place.

Following are the details of grievances during the period April 1, 2008 to March 31, 2009 in respect to MSTC LTD:

<table>
<thead>
<tr>
<th></th>
<th>Received</th>
<th>Disposed of</th>
<th>Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Grievances</td>
<td>45</td>
<td>31</td>
<td>14</td>
</tr>
<tr>
<td>Staff Grievances</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

**FERRO SCRAP NIGAM LTD (FSNL)**

FSNL is engaged in rendering specialised services to the integrated steel plants in scrap recovery and processing operations. Hence, no direct public dealings are made by the company. However, in case any public grievances are received, the same are redressed without any delay.

For redress of staff grievance, a grievance redressal scheme exists wherein the grievances are redressed to the entire satisfaction of the individual concerned, in a time-bound schedule, the salient features of which are as under:

- In all the units/corporate office, FSNL has placed boxes, viz., “Grievance/Suggestion Box”, which is kept at the reception counter of the units/corporate office, keeping in view the easy accessibility of these boxes to the public in general and the staff. It is worthwhile to mention here that so far no public grievance has been received.
- The suggestions/grievances so received, are endorsed in a register called “Suggestion/Grievance Register”, on every Friday, in the presence of public/staff grievance officers, nominated for this purpose.
- Under stage-I, if an employee/public has some grievance, he gets an opportunity to meet the public/staff grievance officer nominated for this purpose, who patiently hears the grievance, and if necessary, makes enquiries and gives the complainant a verbal answer within three working days from the date of hearing the grievance.
- Under stage-II, in case the employee/public is not satisfied with the answer given by the public/staff grievance officer, or if he does not get any reply within three working days' time, or if his grievance does not get redressed satisfactorily at the level of public/staff grievance officer, the complainant gets an opportunity to meet the unit heads at the units and General Manager (Operations) at the corporate office, who patiently hears the grievance, gets the feed-back from the concerned persons and gives his decision on the grievance, or sends a reply to the complainant. Under stage-III, if the employee/public is not satisfied with the outcome of stage-II, he gets an opportunity to meet Chief General Manager of the company at the corporate office, who patiently hears the grievance, analyses the same and redresses it, in case he is not satisfied with the decision taken at stage-II.
- If the employee/public is not satisfied with the result of Stage-I, II, and III, he can make an appeal to the Managing Director of the company, who will, in turn, re-examine the action taken in all the above three stages, analyse the grievance and communicate his decision to the concerned employee/public, within 15 days' time from the date of receipt of the appeal.
The following are the details of grievances during the period April 1, 2008 to March 31, 2009 in respect of FSNL:

<table>
<thead>
<tr>
<th></th>
<th>Outstanding as on 1.04.08</th>
<th>Received during the period</th>
<th>Disposed of</th>
<th>Pending as on 31.03.09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Grievances</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Public Grievances</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

**HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)**

Compliance with regard to public/staff grievance redress has been made during 2007-08 and 2008-09. The provisions of RTI act are in place. The information regarding the Public and Staff grievances for the year 2008-2009 is furnished below:

- No of grievances received : 4
- No of cases disposed of : 4

**MECON LTD**

**Public grievances**

By and large, MECON does not have dealings with the public in general. But any specific complaint relating to any kind of harassment is treated as a grievance. Complaints from customers are taken very seriously and attended to. There is no grievance pending from the contractors/customers or public in general. A notice has been put up near the reception at the main gate mentioning the details of contact official whom the public can contact for the above purpose. Representatives of the public in general have access to meeting the concerned officials of the department and also designated officials mentioned on matters relating to public grievances. MECON has also designated officials under Right to Information Act, 2005 for handling public grievances and the same has been given wide publicity through press and electronic media for information of general public.

**Staff grievances**

In MECON, there is a three-tier grievance procedure for redress of employees’ grievance. A Grievance Advisory Committee consisting of representatives of executive and non-executive employees is operative to consider grievance of employees and recommend for redress. In addition to above, there is a committee constituted with a senior lady engineer as its chairman to look into the grievance or complaints of women employees in the company. Further, there is a separate cell for redress of grievances of SC/ST/OBC employees. At present, there is no staff grievance from any quarter.

Suggestion/complaint boxes have been placed at various floors/offices, which can be utilised by the employees for placing their grievances/point of view before the management. Generally employees prefer to take up their issues/grievances through their elected representatives of MECON Employees Union in respect of non-executive employees and MECON Executives Association in respect of executive employees, both of which are recognised by the company.
BHARAT REFRACTORIES LTD (BRL)

The company has introduced a three-tier grievance handling machinery for its employees. The grievances are redressed under the procedure laid down therein. The management has been making efforts to dispose of all grievances procedurally with a view to ensuring justice and satisfaction for employees in general.

Industrial relations

During the period from April 2008 to March 2009, industrial relations were by and large peaceful.

SPONGE IRON INDIA LTD (SIIL)

During the year, a committee was constituted with two senior officers of the company for redressal of public grievances relating to company matters. The committee has been attending to public grievances regularly.

KIOCL LTD

Citizen Charter and Grievance Redressal Mechanism

KIOCL has framed a well-defined procedure to address grievances evolved under the code of discipline in March 1977 which covers all employees, both executives and non-executives. Ever since its introduction, the scheme has worked satisfactorily without any complaint from any corner, either from the recognised union or officers’ association. In view of the limited number of employees in the organisation, the grievances are easily identified and redressed at the grassroots level itself.

Public grievances received by the company in writing are acknowledged promptly. These grievances are examined in detail and analysed for quick and prompt action. Two directors, one general manager, and one deputy general manager are designated as directors for redress of the public/staff grievances.

- Status of Staff Grievances for the Period April 1, 2008 to March 31, 2009: Nil
- Status of Public Grievances for the Period April 1, 2008 to March 31, 2009: Nil

BIRD GROUP OF COMPANIES (BGC)

Regarding the status of grievances in BGC, there are no pending grievances as on March 31, 2009.
IMPLEMENTATION OF PROVISIONS OF PERSONS WITH DISABILITIES ACT, 1995

MINISTRY OF STEEL

The Ministry of Steel and all the PSUs under it follow the Government rules with regard to the implementation of provisions of the Disabilities Act, 1995.

Status of implementation of the Persons with Disabilities Act, 1995 during the year 2008-09 (as on March 31, 2009) in the Ministry of Steel:

<table>
<thead>
<tr>
<th>Group</th>
<th>No. employees</th>
<th>Number of disabled persons</th>
<th>Total (BL+HI+LD)</th>
<th>% age of disabled persons (Col 3 &amp; Col 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>42</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>106</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C</td>
<td>54</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>67</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* BL – Blindness or low vision ** HI – Hearing impairment # LD – Locomotor disability

STEEL AUTHORITY OF INDIA LTD (SAIL)

Representation of persons with disabilities

(As on 31.03.2009)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>VH</td>
<td>HI</td>
</tr>
<tr>
<td>A</td>
<td>1594</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>453</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>597</td>
<td>26</td>
<td>38</td>
</tr>
<tr>
<td>C(SK)</td>
<td>965</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1220</td>
<td>44</td>
<td>53</td>
</tr>
</tbody>
</table>

(i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)
(ii) HI stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH stands for Orthopaedically Handicapped (persons suffering from locomotive disability or cerebral palsy)

Welfare schemes/policies being administered by SAIL for physically disabled persons

- SAIL has contributed an amount of Rs. 20 lakh to the Sankar Foundation, Vishakhapatnam, towards the cost of setting up of a water treatment plant at the Sankar Foundation’s Eye Hospital.
- SAIL has contributed an amount of Rs. 15.90 lakh to Deepalaya, New Delhi, for a well-equipped...
A mobile bus with all facilities for a project to make education accessible to the differently-abled by taking education at their doorsteps.

- SAIL has provided financial assistance of Rs. 10 lakh to the Narayan Sewa Sansthan (Trust), Udaipur, for performing surgeries of 1,000 polio patients.
- SAIL has provided an amount of Rs. 7 lakh to the National Centre for Promotion of Employment for Disabled People on World Disability Day – 2008.
- SAIL has contributed an amount of Rs. 4.24 lakh towards medicine/pathological testing/other investigation of patients of the Rehabilitation Centre, SEVAC, in Kolkata.
- SAIL has committed an amount of Rs. 6.10 lakh to Cankids-Kidscan, Delhi, towards the running and maintenance costs of Home Away from Home, and the transportation cost from hospital to HAH.
- SAIL has provided fund of Rs. 6 lakh to Cry, Child Rights and You for the “Chote Taray” project in Jammu and Kashmir for differently-abled children of two villages and nine mohallahs of Srinagar and Budgaum.
- SAIL has contributed an amount of Rs. 7 lakh to the Rajiv Gandhi Foundation towards the cost of 10 bingos for handicapped people.
- SAIL has contributed an amount of Rs. 2.50 lakh to Swaminarayan Akshardham, New Delhi, towards educational tour fee for 5,000 handicapped poor students (@ Rs. 50 per child for 2008-09.
- SAIL has provided an amount of Rs. 5 lakh to the Life Line Care organisation, New Delhi, towards the capital/fixed/non-recurring expenditure of computer training/vocational training centre for visually impaired persons.
- SAIL has provided an assistance of Rs. 2.5 lakh to the Gunjan Foundation for organising a free camp for the physically challenged people from October 15-18, 2008.
- SAIL has provided Rs. 0.17 lakh to the United Physically Handicapped School, Coimbatore, towards supporting two orphan children.

**RASHTRIYA ISPAT NIGAM LTD (RINL)**

The status of implementation of Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 during the 2008-09 (Up to March 31, 2009) is furnished below:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees appointed after the Act came into force (i.e.,7-2-1996)</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total VH HH OH</td>
<td>No. of vacancies reserved</td>
<td>No. of appointments made</td>
</tr>
<tr>
<td>Group A</td>
<td>108* 1 1 2</td>
<td>- - -</td>
<td>31* 18 18</td>
</tr>
<tr>
<td>Group B</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Group C</td>
<td>783 7 8 8</td>
<td>3# 3# 2#</td>
<td>406 3+15 7 4+28</td>
</tr>
<tr>
<td>Group D</td>
<td>190 2 3 2</td>
<td>1# 1# 1#</td>
<td>106 15 28</td>
</tr>
<tr>
<td>Total</td>
<td>1081 10 12 12</td>
<td>4# 4# 4#</td>
<td>773 3+28 7+38 4+28</td>
</tr>
</tbody>
</table>

* Posts identified for disabled.  
- Recruitment under process.  
- Posts were notified prior to 1-4-2008 but joinings took place after 1-4-2008  
(i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)  
(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)  
(iii) OH stands for Orthopaedically Handicapped (persons suffering from locomotive disability or cerebral palsy)
Currently, NMDC has 35 employees with disabilities in various posts. In order to appoint persons with disabilities against identified posts, 10 posts are being filled for which offer of appointments have been issued. The details are as furnished below:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of vacancies</td>
<td>No. of appointments</td>
<td>No. of vacancies</td>
</tr>
<tr>
<td></td>
<td>reserved</td>
<td>made</td>
<td>reserved</td>
</tr>
<tr>
<td></td>
<td>Total VH HH OH</td>
<td>VH HH OH Total VH HH OH</td>
<td>VH HH OH</td>
</tr>
<tr>
<td>Group A</td>
<td>977 0 0 3</td>
<td>0 0 1</td>
<td>32* 0 0 0</td>
</tr>
<tr>
<td>Group B</td>
<td>1140 0 0 5</td>
<td>0 0 0</td>
<td>0* 0 0 0</td>
</tr>
<tr>
<td>Group C</td>
<td>2292 0 1 20</td>
<td>1 1 3</td>
<td>124 0 0 2*</td>
</tr>
<tr>
<td>Group D</td>
<td>1243 0 0 6</td>
<td>4 4 3</td>
<td>199 0 0 0</td>
</tr>
<tr>
<td>Total</td>
<td>5652 0 1 34</td>
<td>5 5 7</td>
<td>355 0 0 2</td>
</tr>
</tbody>
</table>

(i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)
(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH is Orthopaedically Handicapped (Persons suffering from locomotive disability or cerebral palsy)
(iv) (*) For group A & B posts, recruitment in identified posts where reservation is applicable have been shown
(v) (**) Promotions in identified posts are time bound.
(vi) In Group D, posts where recruitment is made are non identified posts. There has been no recruitment in identified posts which are very few.
(vii) (+) In group C, in addition to the appointments made, a special recruitment drive to fill 10 identified posts for PWD was made in 2008 and persons with disabilities selected have since joined in 2009. Out of them, 5 are OH, 1 VH and 3 HH.

MANGANESE ORE (INDIA) LTD (MOIL)

Representation of persons with disabilities

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of vacancies</td>
<td>No. of appointments</td>
<td>No. of vacancies</td>
</tr>
<tr>
<td></td>
<td>reserved</td>
<td>made</td>
<td>reserved</td>
</tr>
<tr>
<td></td>
<td>Total VH HH OH</td>
<td>VH HH OH Total VH HH OH</td>
<td>VH HH OH</td>
</tr>
<tr>
<td>Group A</td>
<td>218 - - -</td>
<td>- - -</td>
<td>0 - - -</td>
</tr>
<tr>
<td>Group B</td>
<td>183 - - 2</td>
<td>- - -</td>
<td>1 - - 1</td>
</tr>
<tr>
<td>Group C</td>
<td>1597 2 - 6</td>
<td>- - -</td>
<td>1 - - 1</td>
</tr>
<tr>
<td>Group D</td>
<td>4825 2 2 1</td>
<td>- - -</td>
<td>0 - - -</td>
</tr>
<tr>
<td>Total</td>
<td>6823 4 2 9</td>
<td>- - -</td>
<td>2 0 0 2</td>
</tr>
</tbody>
</table>

Manganese Ore (India) Ltd. is a mining company and major activities are carried out in underground mines situated in remote places. It is difficult due to statutory restrictions under Mines Act and Metalliferous Mines Regulations and because of the safety reasons, to deploy disabled persons on the jobs which are of strenuous nature at the mines.
MSTC LTD

Representation of persons with disabilities

On September 9, 2008, the 44th Foundation Day of MSTC, approximately 500 tricycles were distributed to disabled persons at a function presided over by the Hon’ble Steel Minister.

FERRO SCRAP NIGAM LTD (FSNL)

To help physically challenged persons of the society, the company has identified some Government higher secondary schools of nearby villages where FSNL’s units are functioning, and has distributed text books, notebooks and other useful items to the physically challenged students for their studies.

Representation of persons with disabilities

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of vacancies reserved</td>
<td>No. of appointments made</td>
<td>No. of vacancies reserved</td>
</tr>
<tr>
<td></td>
<td>VH HH OH</td>
<td>Total VH HH OH</td>
<td>VH HH OH</td>
</tr>
<tr>
<td>Group A</td>
<td>157</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Group B</td>
<td>100</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Group C</td>
<td>42</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group D</td>
<td>17</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>316</td>
<td>2</td>
<td>32</td>
</tr>
</tbody>
</table>

(i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)
(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH stands for Orthopaedically Handicapped (Persons suffering from locomotor disability or cerebral palsy)
HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

There has been no recruitment in the company during the last 15 years. The details of disabled persons employed in the company are depicted below:

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of employees</th>
<th>No. of disabled</th>
<th>Appointments during 2008-09</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>VH</td>
<td>HH</td>
<td>OH</td>
</tr>
<tr>
<td>A</td>
<td>210</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>193</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>804</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>41</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1248</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

MECON LTD

Representation of persons with disabilities

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of vacancies</td>
<td>No. of appointments made</td>
</tr>
<tr>
<td></td>
<td></td>
<td>reserved</td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>1656</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Group B</td>
<td>52</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group C</td>
<td>133</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Group D</td>
<td>17</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1858</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

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(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH stands for Orthopaedically Handicapped (Persons suffering from locomotor disability or cerebral palsy)
BHARAT REFRACTORIES LTD (BRL)

Representation of persons with disabilities

(As on 31.03.2009)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of vacancies reserved</td>
<td>No. of appointments made</td>
</tr>
<tr>
<td></td>
<td>Total VH HH OH</td>
<td>VH HH OH Total</td>
<td>VH HH OH Total</td>
</tr>
<tr>
<td>Group A</td>
<td>230</td>
<td>- - 61</td>
<td>- - -</td>
</tr>
<tr>
<td>Group B</td>
<td>307</td>
<td>- - 63</td>
<td>- - -</td>
</tr>
<tr>
<td>Group C</td>
<td>783</td>
<td>- 01 67</td>
<td>- - -</td>
</tr>
<tr>
<td>Group D</td>
<td>269</td>
<td>01 -</td>
<td>- - -</td>
</tr>
<tr>
<td>Total</td>
<td>1389</td>
<td>01 01 11</td>
<td>- - -</td>
</tr>
</tbody>
</table>

(i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)
(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH stands for Orthopaedically Handicapped (Persons suffering from locomotor disability or cerebral palsy)

SPONGE IRON INDIA LTD (SIIL)

As against the required 3% of physically handicapped persons as per the Act, the company currently has 1.31%. The shortfall is due to the fact that some physically handicapped persons left opting for VRS and there has been no recruitment in the company since 1995 due to various reasons. The company will be merging with NMDC shortly.

Representation of persons with disabilities

(As on 31.03.2009)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of vacancies reserved</td>
<td>No. of appointments made</td>
</tr>
<tr>
<td></td>
<td>Total VH HH OH</td>
<td>VH HH OH Total</td>
<td>VH HH OH Total</td>
</tr>
<tr>
<td>Group A</td>
<td>230</td>
<td>- - 61</td>
<td>- - -</td>
</tr>
<tr>
<td>Group B</td>
<td>307</td>
<td>- - 63</td>
<td>- - -</td>
</tr>
<tr>
<td>Group C</td>
<td>783</td>
<td>- 01 67</td>
<td>- - -</td>
</tr>
<tr>
<td>Group D</td>
<td>269</td>
<td>01 -</td>
<td>- - -</td>
</tr>
<tr>
<td>Total</td>
<td>1389</td>
<td>01 01 11</td>
<td>- - -</td>
</tr>
</tbody>
</table>

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(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH stands for Orthopaedically Handicapped (Persons suffering from locomotor disability or cerebral palsy)
KIOCL LTD

KIOCL strives hard to provide appropriate safety and health measures in all the locations and especially where Persons with Disabilities (PWD) are employed and ensures that a particular disability does not come in the way of performance of the jobs allotted to them. The work environment is always maintained in such a manner that productivity/performance of staff with disabilities is in no way impaired by their condition. The details of physically handicapped employees in different groups in position as on March 31, 2009:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of employees</th>
<th>Direct recruitment</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of vacancies</td>
<td>No. of appointments</td>
<td>No. of vacancies</td>
</tr>
<tr>
<td></td>
<td>reserved</td>
<td>made</td>
<td>reserved</td>
</tr>
<tr>
<td>Total VH HH OH</td>
<td>VH HH OH</td>
<td>Total VH HH OH</td>
<td>VH HH OH</td>
</tr>
<tr>
<td>Group A</td>
<td>450 1 - 4</td>
<td>5 4 4 5</td>
<td>- - - -</td>
</tr>
<tr>
<td>Group B</td>
<td>29 - - -</td>
<td>- - - -</td>
<td>- - - -</td>
</tr>
<tr>
<td>Group C</td>
<td>1020 1 2 8</td>
<td>No Recruitment</td>
<td>- - - -</td>
</tr>
<tr>
<td>Group D</td>
<td>121 - 3 1</td>
<td>No Recruitment</td>
<td>- - - -</td>
</tr>
<tr>
<td>Total</td>
<td>1620 2 5 13</td>
<td>5 4 4 5</td>
<td>- - - -</td>
</tr>
</tbody>
</table>

(i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)
(ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
(iii) OH stands for Orthopaedically Handicapped (Persons suffering from locomotor disability or cerebral palsy)
PROGRESSIVE USE OF HINDI

The Ministry of Steel made greater use of Hindi in official work during the year 2008-09 keeping in view the Annual Programme prepared and issued by the Department of Official Languages [Ministry of Home Affairs] for implementation of the Official Language policy of the Union. The work relating to the Progressive use of Hindi in the Ministry is under the administrative control of a Joint Secretary. The Hindi Section under the direct charge of Joint Director (Official Language) looks after the work relating to Implementation of Official Language Policy and Hindi Translation work.

Official Language Implementation Committee

There is an Official Language Implementation Committee under the Chairmanship of a Joint Secretary in the Ministry. This Committee reviews the progress made in the use of Hindi in the Ministry and its Public Sector Undertakings. Meetings of the committee are held regularly. Four such meetings have been held up to March 2009 during the current year.

Hindi Salahakar Samiti

Hindi Salahakar Samiti of this Ministry was reconstituted on 30th November 2004 under the chairmanship of the Hon’ble Minister for Steel. During the year, the Samiti met on April 5, 2008 and February 10, 2009.

Implementation of Section 3 (3) of the Official Language Act, 1963

In pursuance of the Official Language Policy of the Government of India, almost all documents covered under Section 3[3] of the Official Language Act, 1963 are prepared both in Hindi and English. In order to ensure issue of letters in Hindi to Central Government Offices located in Region ‘A’, ‘B’ and ‘C’, check points have been identified in the Ministry.
Rajbhasha shield/trophies

In order to encourage the use of Hindi in the PSUs under the Ministry, Ispat Rajbhasha Shield (First Prize), Ispat Rajbhasha Trophy (Second Prize) and Ispat Rajbhasha Trophy (Third Prize), a Rajbhasha Shield for the PSUs located in Region “C” have been instituted. These are given every year to the Undertakings on the basis of their annual performance in progressive use of Hindi. Besides, a medal is also awarded to the officer/employee whose work in Hindi is rated to be the best in the Ministry.

Incentive scheme for original work in Hindi

The cash incentive scheme for original work in Hindi introduced by the Department of Official Language is being implemented in the Ministry.

Cash prize scheme for dictation in Hindi

An incentive scheme for officers for giving dictation in Hindi is in operation in this Ministry.

Award for writing original books in Hindi

A scheme for awarding cash prizes for writing technical books in Hindi on various disciplines related to the Steel industry and its allied subjects is also in operation in the Ministry. An amount of Rs. 20,000, Rs. 16,000 and Rs. 10,000 each, is awarded for the first, second and third prize respectively.

Hindi Divas/Hindi Fortnight

In order to encourage use of Hindi in official work amongst officers/employees of the Ministry, appeals were issues by the Hon’ble Minister of Steel and Hon’ble Minister of State for Steel on 15th September 2008. Hindi Fortnight was organised in the Ministry from September 1-15, 2008. During this period various Hindi competitions were organised.

Training in Hindi/Hindi typewriting/ Hindi stenography

A programme has been drawn up for imparting training in Hindi/Hindi Typing/Hindi Stenography to those employees for whom in-service training is obligatory. All officers and staff [except group “D” employees] possess working knowledge of Hindi.

STEEL AUTHORITY OF INDIA LTD (SAIL)

SAIL has continued its thrust on implementation of the Official Language Policy of the Government of India. The company has won several prizes at the corporate/plant/unit levels, including the first prize for its Hindi house journal “Ispat Bhasha Bharti” for five consecutive years from the Town Official Language Implementation Committee, Delhi, and another first prize from the Ministry of Steel in the area of promoting usage and implementation of Hindi in official work. The Hon’ble President of India Pratibha Devi Singh Patil conferred the first prize to SAIL’s in-house Rajbhasha journal “Ispat Bhasha Bharti”. The award was received by Chairman Shri S.K. Roongta on the occasion of the Hindi Day on September 14, 2008. The publication has the unique honour of securing the first prize among all PSUs under the All-India House Journal Award Scheme of the Ministry of Home Affairs, Government of India, for the second consecutive year.
The meeting of Hindi Salahkar Samithi of Ministry of Steel was organised under the Chairmanship of then Hon’ble Minister for Steel, Shri Ram Vilas Paswan, on February 10, 2009 in which VSP was given ‘Rajbhasha Trophy’ for excellent performance in usage of Hindi for the year 2007-08.

In addition to the fulfilment of various obligations under official language policy of the Government of India, RINL (VSP) has taken up several activities to propagate Hindi in and around the company, and its township under Corporate Social Responsibility (CSR) policy of the organisation. To mention a few, housewives of Ukkunagaram were given training in Hindi to appear for the exams to be conducted by DBHP Sabha, Hyderabad. This way the efforts were made to create an environment in the township for people to use Hindi. Similarly the students of new ITI were trained to communicate in Hindi, so that when they complete the education and get jobs anywhere in the country, they will be able to communicate comfortably. Hindi books were distributed to 24 schools in and around Ukkunagaram to make the students of these schools more conversant with Hindi.

A national level Hindi Seminar was organised in September 2008 on the topic ‘Importance of Ideal Human Relations’. On this occasion, a special issue ‘Sambandh’ was published with the articles written by the delegates of the seminar which received applause from eminent scholars in the field all around the world.

A reference book ‘Hindi Sandarbhika’ was published, so that the employees can take advantage and can use it as a ready reckoner for official work in Hindi. During the year, over 600 employees were imparted training in Hindi workshops and intensive training programs. In addition to this, 88 employees were trained on computers in Hindi.

During the period, four quarterly issues of Hindi in-house magazine ‘Sugandh’ were published. Visiting directors and senior officials inspected Hindi implementation at the marketing branches and liaison offices.
NMDC LTD

The company has continued its efforts for the progressive use of the official language in all its production units and the head office during the year 2008-09. Successful efforts were made to use the official language Hindi in administrative as well as technical fields.

Rajbhasha technical/professional seminars in Hindi were organised during the year in the head office as well as in production units. A Rajbhasha souvenir and technical seminar books were also published. Apart from these publications, Hindi house journals viz. NMDC Patrika, published bi-lingually along with Baila Samachar, Bacheli Samachar, Hira Samachar; monthly Hindi bulletins and Doni Samachar, a tri-lingual monthly bulletin are published. In addition to these, the company also publishes Khanij Bharati, a literary Hindi magazine.

Training in Hindi and Hindi stenography was imparted to employees. Hindi workshops were also conducted for the officers and employees having working knowledge of Hindi. Various programmes such as Hindi divas, Rajbhasha Pakhwadas, Rajbhasha Maah and district level competitions in Hindi were organised during the year to increase awareness among the employees and their family members and also among the employees of other offices situated in and around the head office and various production units. Incentive scheme at the central and regional levels were implemented and suitable prizes were awarded to the eligible employees.

NMDC was awarded the first prize of the Government of India’s Indira Gandhi Rajbhasha Shield for excellent implementation of the official language policy and progressive use of Hindi amongst the PSUs of region ‘C’ for the year 2006-07. Shri Rana Som CMD, NMDC Ltd, received the shield from Her Excellency, the President of India, Smt Pratibha Devisingh Patil, at a function held at Vigyan Bhawan, New Delhi, on Hindi Divas, September 14, 2008.

NMDC Ltd was awarded the Steel Ministry’s Rajbhasha Shield for excellent implementation of the official language policy and progressive use of Hindi amongst the PSUs of region ‘C’ for the year 2007-08.

NMDC Ltd was also awarded the Rajbhasha Shield – 1st prize for the year 2007–08 of town official language implementation committee (undertakings), Hyderabad and Secunderabad, for excellent implementation of the official language policy amongst the PSUs situated in the twin cities.

MANGANESE ORE (INDIA) LTD (MOIL)

During the year, the Company continued its efforts in propagating and implementation of the provisions of Official Language Act 1963 and rules and orders thereon. The Company is also publishing In-house Journal “SANKALP” in Hindi in order to encourage the employees to participate in various competitions like essay competition, noting, drafting, poetry and articles for propagating Hindi. Around 97% of the work is being done at Mines in Hindi, and the employees are being trained to make use of the same. In Head quarter and Mine level, the Hindi Karyanwayan Samiti meetings are being conducted regularly. The Company has provided Hindi Language Software in computer and imparting training to its employees so that MOIL’s employees can use the same in their workings. MOIL has been awarded with “Ispat Rajbhasha” Prize by the Ministry of Steel from last two years for excellent works in Hindi.

MSTC LTD

MSTC Ltd. celebrated Rajbhasha Trimas. During Trimas, Hindi workshops and extempore competitions were organised in MSTC’s head office, regional offices and branch offices. Hindi workshops were organised in all offices of the corporation. The Ministry of Steel inspected MSTC’s Mumbai and Vizag offices. All the issues related to the inspections were made available. The Ministry of Steel and the Hindi Salahkar Samiti have continuously provided guidelines for implementation of the official language.
FERRO SCRAP NIGAM LTD (FSNL)

In order to encourage and motivate the employees to carry out their day-to-day jobs in Hindi, “Hindi Diwas” and “Hindi Pakhwada” are organised in the company and various Hindi competitions, like Hindi essay writing, Hindi gyan pratiyogita/Hindi debate etc., are conducted, and the winners are suitably awarded.

The guidelines/directives of the Government/Ministry with regard to implementation of the official language policy are strictly adhered to and implemented in the company.

On passing the Hindi exams of Prabodh, Praveen and Pragya, by the employees, the company gives lump sum cash awards under the “Hindi Protsahan Yojna” to such employees. Further, on passing the Hindi stenography/Hindi typewriting exams also, cash awards are provided to the concerned individuals under the scheme.

Apart from the above, in order to create interest among the employees to carry out their day-to-day jobs in Hindi, the company gives annual cash awards to those employees who win the Hindi noting/drafting and Hindi typing competitions, as per the scheme, which are conducted during Hindi Pakhwada.

In view of the exemplary work done in implementation of Hindi, the company has been achieving prestigious awards from the Ministry, including the Indira Gandhi Rajbhasha shield, Ispat Rajbhasha shield, Rajbhasha trophy etc.

Employees were also nominated for participating in various Hindi competitions by the member concerns of Nagar Rajbhasha Karyanvayan Samithi, Bhilai-Durg, viz., SAIL/MECON/BSNL/CISF etc., and the nominated employees bagged various prizes in such competitions.

HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

The company has made various encouraging efforts in implementing the official language policy and programmes of Department of Official Language, Government of India. Besides holding meeting of the official language implementation committees at Corporate and unit levels at regular intervals, the company has made massive drive to motive its officials at all levels for use of Hindi in official noting and drafts. The Government’s guidelines on the use of Rajbhasa are compiled with. Hindi Day and Hindi Fortnight were observed.

MECON LTD

As per constitutional provisions, various activities to motivate the employees of the company for use of Rajbhasha Hindi in official work were organised during the year. Official Language Policy of the Government of India is being implemented in the head office and other site offices of MECON with full vigour. In addition to the coaching classes and training programmes, Hindi workshops were also organised to remove hesitation of employees to work in Hindi. Hindi software in PCs has been provided in every section to facilitate Hindi typing.

Rajbhasha Pakhwara was observed in head office as well as in all the site offices from September 15-29, 2008. On the occasion all employees took pledge to increase the use of Hindi as official language in their day-to-day work. During the Rajbhasha Pakhwara different competitions were organised. In addition, a special Hindi workshop on the subject ‘Rajbhasha Se Vishwa Bhasha Hindi Ki Yatra’ was organised. Besides, a symposium was also organised on the subject ‘Rajbhasha Hindi Ke Karyanwayan Ki Sthiti - Dasha and Disha’.

BHARAT REFRACTORIES LTD (BRL)

The company continued to lay emphasis on optimum use of Hindi in its official language working in accordance with the Official Language Act and Official Language Policy. Besides, during the year, programmes were regularly held for all-round development of Hindi.
SPONGE IRON INDIA LTD (SIIL)

During 2008-09, Section 3 (3) of Official Language Act 1963 was fully complied with and under this provision, 210 documents were released in bilingual form. All rubber stamps and name plates were prepared in bilingual/trilingual form as per requirement. Different schemes introduced for the progressive use of Hindi, such as “Learn Hindi Words”, “Quarter of Hindi” correspondence, and, noting and drafting competitions in Hindi were conducted. Songs competitions in Hindi were conducted and prizes were distributed to the winners. A Hindi workshop was organised on August 4, 2008 for giving training to the employees in Hindi and the Hindi Day was celebrated on September 15, 2008. Official Language Implementation Committee meetings were convened from time to time.

KIOCL LTD

The company follows the directives issued from time to time by the Department of Official Languages, the Ministry of Home Affairs, and the Ministry of Steel, Government of India, for progressive use of Hindi, the official language.

Hindi training is given to the employees. Cash awards and increments are given as per government directives. Hindi workshops, orientation programmes are conducted regularly to create awareness, impart knowledge and encourage employees to do their official work in Hindi. Cash awards are given to those employees who do official work in Hindi.

All the stationery, name plates and name boards of the company are in bilingual form. The annual report, MoU, house magazine, employees' pension scheme, etc., are printed in Hindi also. Hindi software is provided in computers in all departments.

Official Language Implementation Committee meetings take place regularly and the progress during the previous quarter is reviewed in such meetings. A Hindi fortnight was celebrated at all the locations of the company. Hindi programmes and several Hindi competitions were held and prizes distributed to the winners.

During the year, four Hindi workshops are conducted to impart practical training to employees for doing their official work in Hindi.

The Hindi Salahakar Samiti meeting of the Ministry of Steel was held on April 5, 2008. Shri MB Padiyar, Director (P&P), received the Rajbhasha Shield from the Hon’ble Minister for Steel on the occasion. A citation was given to the Sr. Manager (OL) by the Hon’ble Minister of Steel.

A discussion programme of Drafting & Evidence Sub-Committee of the Committee of Parliament on Official Language was held in Bengaluru on September 9, 2008. KIOCL was made the co-ordinator for making all the necessary arrangements for the committee and the meeting. Conveners of the three sub-committees were present and had a long discussion on official language implementation with the company’s CMD and other PSUs heads. The committee was satisfied with the progress of KIOCL’s official language implementation and conveyed their appreciation to the CMD.

The company is convener of the Bengaluru Town Official Language Implementation Committee (Undertakings) and conducts regular meetings and Joint Hindi Fortnight programmes for all central PSUs in Bengaluru. The last meeting was conducted on December 1, 2008 and presided over by the CMD, KIOCL.

KIOCL organised a Joint Hindi Fortnight for Town Official Language Implementation Committee (Undertakings) members and 13 Hindi competitions were conducted. Most of the PSU offices in Bengaluru have participated in these competitions.
EMPOWERMENT OF WOMEN

Introduction

The Hon’ble Supreme Court of India in its judgment in August 1997, in the case of Visakha and others versus State of Rajasthan and others, recognised international conventions and norms of gender equality of women, in relation to work and held that sexual harassment at workplace, is against their dignity and is violative of Article 14, 15(1) and 21 of the Constitution of India. As per the guidelines laid down by the Hon’ble Supreme Court, all employers whether in the public or private sector should take appropriate steps to prevent sexual harassment. As a part of the mechanism, a Complaints committee with representatives from outside the organisation were appointed and headed by a woman, with not less than half of its members being women is to be constituted in each organisation.

In compliance of the guidelines of the Hon’ble Supreme Court, Ministry of Steel has constituted a five-member committee, headed by a Joint Secretary level woman officer and having three women as members, to look into complaints made by women employees and to address them. The committee did not receive any complaint in 2008-09 which is a broad indicator of general satisfaction of women work force in the Ministry.

All the public sector undertakings under the Ministry of Steel have also been directed to implement the Hon’ble Supreme Court’s guidelines. The related details are briefly enumerated below:

Empowerment of women

Gender Budget Cell has been set up in the Ministry as per directions of the Ministry of Finance & Ministry of Women & Child Development with the aim to initiate steps for implementation of the concept in this Ministry.
STEEL AUTHORITY OF INDIA LTD (SAIL)

Equal opportunity employer

SAIL is an equal opportunity employer that has employed both women and men of calibre. Since its inception, several women have not only held positions of responsibility in its management, but have also headed various departments. The company had the distinction of having Dr. Isher Judge Ahluwalia on its board in 2001, before the Narayana Murthy Committee on Corporate Governance came up with the proposal.

SAIL employs about 6,666 women employees in both technical and non-technical areas which is around 5% of total employees. Though historically and traditionally, SAIL as a public sector undertaking has been a labour-intensive manufacturing industry with more employees being men in both technical and non-technical areas, over the years, more and more women employees brave the hazardous nature of the operations in a steel company and work in tandem with their male colleagues on the shop-floors in tough working conditions. The Shiromani Award has been conferred on Dr. Meena Limaye at Bokaro Steel Plant. Moreover, the first medical department of Bhilai Steel Plant was started in December 1956 with Dr. (Miss) Dasgupta, in charge.

Mahila Samaj/Samitis: 49 glorious years of pioneering work

Recognising that gender equality and empowerment of women leads to faster progress of society, a Mahila Samaj was formed in 1957 in Bhilai when the industrial complex was just coming up.

The Sewing Training Centre of DSP’s Mahila Samaj.
Since then, this revolutionary institution, which started with just 50 members on August 4, 1957 has inspired other SAIL plants to develop their ladies’ society/groups which have become pioneers in community welfare and have been given the status of an ancillary industry by SAIL. These various plant level organisations today have 4,000 members and 15 affiliations with national-level organisations. They undertake various activities, especially those involving women from the weaker sections or belonging to SC/ST communities. The members, through internal revenue collections, have been conducting/operating various functions, including manufacturing of hand gloves, masala, soaps, bags, etc., and contributing to women’s colleges, rehabilitation of the differently-abled and many other similar activities. The achievements of SAIL in affording accessibility to employment to women coupled with those of the Mahila Samaj for impoverished women are significant.

**Contribution of women**

<table>
<thead>
<tr>
<th>Products made for SAIL employees</th>
<th>Hand Gloves, Spices, Soaps, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community welfare</td>
<td>Sewing/Embroidery, Centres, Creches, Kindergarten Schools, Schools for Special Persons, Adult Education, Children’s Library, Health and Hygiene Education, Psychological Support to ill-treated tribal women, Medical Centres and Dispensaries, running of Petrol-Pump at Bhilai</td>
</tr>
<tr>
<td>Workshops</td>
<td>Workshops conducted by women on Banking, Insurance, Rights of Women, Information Technology, Civic Facilities</td>
</tr>
<tr>
<td>Assistance during natural calamities</td>
<td>Kargil War Relief, National Defence Fund, Cholera Control, Orissa Flood/Cyclone Relief, Welfare for poor women, Orissa Chief Minister’s Blood/Drought Relief Fund, Gujarat Earthquake, etc.</td>
</tr>
</tbody>
</table>

**RASHTRIYA ISPAT NIGAM LTD (RINL)**

The HRD department has organised the following events to empower women employees:
- Three training programmes on ‘Gender Sensitivity’ for women employees.
- Three-day training programme on ‘Effective Communication Skills’ for women employees.
- Two-day training programme on ‘Personal Effectiveness for growth’ for women employees.
- Safety training programmes were organised for contract women workers by the safety department.
- Interactive sessions were conducted for women employees of non-works and works departments.
- RINL, chapter of WIPS (Women in Public Sector), is running a crèche to enable women employees to keep their children without affecting core activities.
- An additional crèche was inaugurated in Ukkunagaram (RINL township) by Dr. Dalip Singh, Joint Secretary on Children’s Day, November 14, 2008.
- Some of the women employees were associated as members of the selection committee in recruitment and promotion.

**NMDC LTD**

NMDC Limited employs 263 women employees which constitute about 4.65% of its total manpower of 5,652 (as on March 31, 2009). The company provides equal opportunities to both sexes at all levels, be it in selection, recruitment, placement or promotion. The number of women in senior positions is growing and two independent directors in NMDC board are women.

Facilities like separate washrooms, rest rooms/ lunchrooms etc have been provided in the head office and various projects. NMDC has also been sponsoring women employees for training on awareness on healthcare, family planning etc. All statutory obligations of the company are reflected in its policies for women employees.
In compliance with the directives of the Hon’ble Supreme Court regarding guidelines relating to sexual harassment of women employees at the work place, a complaints committee has been constituted in all the projects and the head office. The committee, headed by a woman employee, meets periodically to review the status of the complaints received. No case of harassment has been reported so far. The directives have been widely circulated and the conduct rules have been amended in 1998 to incorporate suitable clauses for prohibition of sexual harassment of women at the work place.

NMDC Limited has made sincere efforts to increase the awareness among women in general in the remote areas where it has its mines. Various awareness programmes have been conducted on health care, family planning antenatal services, informative programmes on AIDS control and other social issues with the active involvement of the mahila samitis functioning in the projects.

**MANGANESE ORE (INDIA) LTD (MOIL)**

MOIL employs 890 women employees which constitute 13.04% of its total workforce of 6823 as on 31/03/2009.

In compliance of the directives of the Hon’ble Supreme Court, guidelines relating to Sexual Harassment of Women workers at work place were issued by Govt. of India, Ministry of Human Resources Development. Accordingly, a Complaints Committee comprising of three officials including a lady Doctor was constituted in the year 1999. No case of any harassment has since been reported at any of the Mines of the Company or its Corporate Office. The directives have been widely circulated to bring awareness amongst the women workers.

Mahila Mandals are working effectively at all the Mines of the Company. Various cultural, social, educative and Community activities, such as adult education, blood donation camps, eye camps, family planning etc. are being organised regularly, mostly for the benefit of the women residing in the remote mine areas. Every year, March 8 is celebrated as International Women Day and various programmes are organised to mark the day. Company grants Maternity Leave and Special Casual leave for Family Planning. Company has set-up creches at its mines and gives time off for nursing mothers. As part of its CSR activities, Self Help Groups have been created at the mines which comprise women hailing from the remote villages. They are trained to make candles, washing powder, washing soaps, bamboo baskets, tailoring and various other vocational activities in order to make them self-reliant.

**MSTC LTD**

MSTC Ltd. is a corporate life member of the Forum of Women in Public Sector (WIPS) and in the year 2008-09, a number of women employees have participated in the programmes organised by the WIPS.

**FERRO SCRAP NIGAM LTD (FSNL)**

The work culture of FSNL is quite conducive for the women employees. Due importance is given to the women employees in all activities, including recognition of their abilities in various competitions/areas. One woman representative is invariably involved in various committees formed by the company, such as Committee for Prevention of Sexual Harassment etc.

**HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)**

The break up of woman employees in the company as on March 31, 2009 is as below:

Executive: 3
Non-executive: 7
Worker: 37
Total: 47
These woman employees are scattered in different units. Most of the women employees are posted at Bokaro and Bhilai. No organised body of women employees exists in the company. It is ensured by the company’s management that the interest of the woman employees are protected. It is seen that they are not subjected to any sort of sexual harassment in the workplace.

**MECON LTD**

MECON Ltd. is an equal opportunity employer and there is no discrimination made on the basis of gender. There are total 151 women employees. A fair number of women employees work in executive category and many of them are working in senior management grades. There is a designated committee headed by a senior lady executive to look after complaints of harassment of women employees and other problems at workplace. Women employees are also nominated in various committees and social welfare units run by the company. MECON also encourages small family norm in respect of its employees and also provides incentive scheme for promoting small family norms. The community development centre run by MECON emphasises on empowerment of women by running several courses on primary education and vocational training. This programme benefits around 200 women from the weaker sections in the locality every year.

**BHARAT REFRACTORIES LTD (BRL)**

In conformity with the National Policy for Empowerment of Women, the conduct, discipline and appeal rules have been amended by incorporating a special clause 5(35) relating to sexual harassment of women to ensure a protected and congenial atmosphere at work for women employees. Various complaint committees have been constituted at different levels to examine the complaints. As far as BRL is concerned, no complaint has been received from any female employee.
**SPONGE IRON INDIA LTD (SIIL)**

As per the guidelines received from the Hon’ble Supreme Court of India and also the Ministry of Steel, the company has constituted a Complaints Committee of Women for redressal of complaints made by women employees. As on March 31, 2009, the company has 20 women employees.

**KIOCL LTD**

All necessary measures/statutory provisions for safeguarding the interests of women employees in matters like payment of wages, hours of work, health, safety and welfare aspects, maternity benefits etc. are being followed by the company.

Based on directives by the Hon’ble Supreme Court, conduct rules of the company has been amended by incorporating a suitable clause for prohibiting sexual harassment of women at work place. A Complaints Committee was constituted in September 1998 to deal with complaints made by victims of sexual harassment. The complaints panel comprises a woman executive at the level of a deputy manager as chairperson, three nominated women representatives, and a lady advocate from the High Court of Karnataka as a third-party member. A women’s forum - Women in Public Sector - is operating in KIOCL and most of the women employees are members of this forum. KIOCL is a life member for the WIPS. Coordinators are being nominated on rotation basis from KIOCL to liaison with the WIPS and women employees (members) are being sent to attend meets of WIPS by the company.

**BIRD GROUP OF COMPANIES (BGC)**

Bird Group of Companies employs 321 women employees, which constitute 15% of its total workforce of 2,142 as on March 31, 2009.
NEW INITIATIVES/
INNOVATIVE SCHEMES

Major initiatives of the Ministry of Steel

Meetings of the Inter Ministerial Group (IMG)

The Hon’ble Prime Minister had approved the constitution of an Inter Ministerial Group (IMG) on July 19, 2007 to monitor and coordinate various issues concerning major steel investments in the country. The IMG is chaired by Secretary (Steel) with Secretaries of Department of Industrial Promotion & Policy, Mines, Environment & Forest, Road Transport & Highways, Shipping, Member (Traffic) – Railway Board and Chief Secretaries of concerned State Governments as its members. The IMG reviews and coordinates measures for early completion of the major steel capacities and addresses various problems concerning:

- Infrastructure constraints related to ports, rail, road network
- Availability of iron ore and coal
- Speedy environmental clearance for project site as well as for iron ore and coal mining activities
- Availability of land, water resources and issues concerning rehabilitation
- Any other item concerned with the major steel investments in the country

The IMG, under the Chairmanship of Secretary (Steel), has been conducting regular review and coordination meetings with the steel investors, concerned Central Ministries/Departments and the State Governments. During 2008-09, two meetings were held with investors in July and September 2008, two meetings were held with State Governments (January 2008 at Ranchi and May 2008 at Bhubaneswar) and two coordinating meetings were also held with Central Ministries and State Governments (October 30 and December 17, 2008).

Awareness campaign to increase domestic steel consumption and promotion of steel usage

Per capita steel consumption increased from 31 kg in 2003 to 49 kg in 2008. There is a huge potential for growth of steel consumption in the country. While steel use will improve with rising income levels, urbanisation and infrastructure development, conscious efforts are needed to stimulate domestic demand, particularly in rural areas and for creation of incremental consumption pattern. National Steel Policy focuses on conscious promotion of steel usage with particular emphasis on rural areas. The world average of per capita consumption stands at 150 kg and that of developed countries stands at 400 kg; and to raise the present per capita consumption in the country the Ministry of Steel took an initiative to launch a National Steel Promotion Campaign in March 2007. All the major public and private sector steel producers are participating in the campaign. The aim of the campaign is to create mass awareness about the economic and viable common uses of steel. The steel campaign will also further expand so as to educate the architects, designers, engineers and builders in going for more steel intensive structures in flyovers, bridges, airports, railway station platforms as well as other engineering applications. A Steel Promotion Coordination Committee (SPCC) has been constituted to decide on the measures required for promotion of steel consumption in the country on a sustained basis. During 2008, the Ministry of Steel, initiated a study on “Assessment of Steel Demand in Rural India”. The key objective of this study is to arrive at an estimation of both short term and long term demand for steel of major categories and also overall, in the rural India. Associated with this key objective are related areas like review of prospects for growth of steel consumption in the rural market and measures that need to be adopted to raise such levels in the future.

Quality Control Order on selected steel products

Steel Quality Control Orders to ensure making available 17 critical steel products of certified quality to consumers were issued during 2008. The order has since been revised subsequently whereby 3 products have been excluded and implementation of the order on 8 products have been deferred.
Initiatives under Clean Development Mechanism (CDM)

CDM is one of the flexible arrangements under Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) to support the implementation of sustainable and environment friendly technologies. The Central Government, through the Ministry of Environment & Forest, has constituted the National CDM Authority of which the Ministry of Steel is a member that accords — Host Country Approval (HCA) to eligible projects. So far around 127 proposals from the iron & steel plants in India have been accorded HCA in India. These projects will result in Green House Gas abatement worth 99 million tonnes of CO₂ equivalent, resulting in generation of 99 million tonnes of Certified Emission Reduction (CER) till the year 2012 which can be traded in the International Market for earning substantial foreign earnings which at present is in the range of 15 to 25 Euros per CER unit. The state-wise CERs expected to be generated till the year 2012 are as detailed below:

<table>
<thead>
<tr>
<th>No. of Projects</th>
<th>State</th>
<th>CERs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>1,40,268</td>
</tr>
<tr>
<td>36</td>
<td>Chattishgarh</td>
<td>1,64,31,636</td>
</tr>
<tr>
<td>1</td>
<td>Goa</td>
<td>2,28,381</td>
</tr>
<tr>
<td>4</td>
<td>Gujarat</td>
<td>11,13,710</td>
</tr>
<tr>
<td>17</td>
<td>Jharkhand</td>
<td>1,77,82,518</td>
</tr>
<tr>
<td>10</td>
<td>Karnataka</td>
<td>3,13,18,223</td>
</tr>
<tr>
<td>6</td>
<td>Maharashtra</td>
<td>40,50,359</td>
</tr>
<tr>
<td>30</td>
<td>Orissa</td>
<td>1,47,03,575</td>
</tr>
<tr>
<td>4</td>
<td>Tamil Nadu</td>
<td>22,06,846</td>
</tr>
<tr>
<td>15</td>
<td>West Bengal</td>
<td>83,16,510</td>
</tr>
<tr>
<td>3</td>
<td>Multi State*</td>
<td>26,10,273</td>
</tr>
</tbody>
</table>

Total = 127

9,89,02,299

*These three projects will be implemented in more than one plant, located in different states.

Out of the above, 13 projects from SAIL will generate 9.2 million CERs and 9 projects from TATA steel will generate 12.4 million CERs till the year 2012.

Joint Consultative Mechanism with Railways

A Joint Consultative Mechanism has been constituted by the Ministry of Steel with representatives of the Ministry of Railways, the Ministry of Steel and the Steel Industry (both public and private sector) to address their increased infrastructure needs in line with the National Steel Policy as well as the rationalisation of freight class for transportation of steel items and raw materials such as iron ore and limestone.

Consumer Council Meeting

A Forum of Steel Consumer Council to facilitate regular interaction of producers and consumers and redress the problems faced by the consumers relating to supply/availability of steel products and other related issues had been set up in the Ministry. The Meetings of Consumer Council were held in 2008-09, under the Chairmanship of the Hon’ble Steel Minister. The various issues affecting the consumers of Steel namely opening of new stockyards and monitoring of their working, monitoring of the trend of domestic steel prices, review of prevailing excise and import duties and availability of steel material, figured prominently in the meeting.
**Special Purpose Vehicle**

International Coal Ventures Limited (ICVL), a Special Purpose Vehicle, with equity participation to an extent of Rs. 3,500 crore by SAIL, RINL, Coal India Ltd, NMDC and National Thermal Power Corporation Ltd for acquisition of metallurgical and thermal coal assets abroad has been incorporated. ICVL will function like a Navratna company with powers to clear proposals involving investment of up to Rs. 1,500 crore. ICVL is assisted by a panel of investment bankers on acquisition of coal assets abroad through equity purchase, JVs in existing mines or Greenfield projects in Australia, Canada, Indonesia, Mozambique, Russia and USA.

**Encouraging Research & Development in the Iron & Steel Sector**

Besides supplementing R&D initiatives & investments under the existing Empowered Committee Mechanism, the Ministry of Steel has evolved a new scheme to encourage R&D in the Iron & Steel sector during the 11th Five-year Plan.

A new scheme named ‘Scheme for promotion of R&D in the Iron & Steel Sector’ has been launched with budgetary provision of Rs. 118 crore. The scheme will be implemented in the 2009-10.

A Steel Technology Centre has been set up at IIT, Kharagpur to promote and encourage study and research in metallurgical engineering, particularly in the iron and steel sector. This project has been approved at a cost of Rs. 22.26 crore for 5 years after which it will be run by IIT Kharagpur like other centers of excellence at the institute.

**Mega expansion plans of SAIL, RINL & NMDC Ltd**

The steel PSUs are in the midst of ambitious expansion plans. The major thrust of the modernisation and expansion plans is to adopt the best modern technology, which in addition to being cost effective should also be energy efficient and environment friendly.

**SAIL**

The expansion plans would increase the capacity of SAIL from 14.61 million tonnes (in 2006-07) per annum hot metal production to 26.18 million tonnes by 2010-11. The details are as below:

<table>
<thead>
<tr>
<th>Plant</th>
<th>Hot Metal (Mtpa)</th>
<th>Saleable Steel (Mtpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual 2006-07</td>
<td>After Expansion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bhilai (BSP), Chhattisgarh</td>
<td>4.82</td>
<td>7.50</td>
</tr>
<tr>
<td>Durgapur (DSP), West Bengal</td>
<td>2.06</td>
<td>3.50</td>
</tr>
<tr>
<td>Rourkela (RSP), Orissa</td>
<td>2.12</td>
<td>4.50</td>
</tr>
<tr>
<td>Bokaro (BSL), Bihar</td>
<td>4.59</td>
<td>7.44</td>
</tr>
<tr>
<td>IISCO (ISP), Burnpur, West Bengal</td>
<td>0.78</td>
<td>2.91</td>
</tr>
<tr>
<td>VISL, Karnataka</td>
<td>0.24</td>
<td>0.33</td>
</tr>
<tr>
<td>Alloy Steel Plant,</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Durgapur, West Bengal</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Salem Steel Plant (SSP), Tamil Nadu</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>14.61</td>
<td>26.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plant</th>
<th>Saleable Steel (Mtpa)</th>
<th>After Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual 2006-07</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bhilai (BSP), Chhattisgarh</td>
<td>4.22</td>
<td>6.53</td>
</tr>
<tr>
<td>Durgapur (DSP), West Bengal</td>
<td>1.70</td>
<td>2.83</td>
</tr>
<tr>
<td>Rourkela (RSP), Orissa</td>
<td>1.94</td>
<td>3.88</td>
</tr>
<tr>
<td>Bokaro (BSL), Bihar</td>
<td>3.86</td>
<td>6.53</td>
</tr>
<tr>
<td>IISCO (ISP), Burnpur, West Bengal</td>
<td>0.40</td>
<td>2.37</td>
</tr>
<tr>
<td>VISL, Karnataka</td>
<td>0.13</td>
<td>0.22</td>
</tr>
<tr>
<td>Alloy Steel Plant,</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Durgapur, West Bengal</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Salem Steel Plant (SSP), Tamil Nadu</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>12.58</td>
<td>23.13</td>
</tr>
</tbody>
</table>
RINL

In the case of RINL, the expansion plan would increase its capacity from the present level of 3 million tonnes of liquid steel production per annum to 6.3 million tonnes by 2010-11 at an estimated cost of around Rs. 12,228 crore. The cumulative expenditure incurred till March 2009 was Rs. 4,043 crore. In the first phase of capacity expansion project, new facilities like rotary cooler and multi slit burner in sinter plant, pulverised coal dust injection in blast furnace, combined blowing and electro magnetic stirrer in Steel Melting Shop, free size rolling facilities in mills area are envisaged.

NMDC LTD

- NMDC plans to expand its iron ore production capacity from its present level of 30 million tonnes to 50 million tonnes per annum by 2014-15 through capacity expansion of existing mines and by opening new mines.
- NMDC has signed an MoU with the Government of Chattisgarh for setting up a greenfield integrated steel plant of 3 million tonne per annum capacity in Nagarnar, Chattisgarh with an estimated cost of around Rs. 16,000 crore. There has been considerable progress on the subject. The final Environment Impact Assessment/Environment Management Plant (EIA/EMP) report for environmental clearance has been submitted to Central Pollution Control Board (CPCB), the State Government of Chattisgarh, and the Ministry of Environment and Forest (MOEF) after a public hearing. The Techno-Economic Feasibility Report (TEFR) has been finalised. Allocation of additional land, water and power is being finalised and an ‘Expression of Interest’ (EOI) to short-list parties for nine major technological units has been issued.
- NMDC is also planning to set up 2 pellet plants of 1.2 million tonnes per annum (mtpa) and 2.0 MTPA capacity at Donimalai, Karnataka and Bailadila, Chattisgarh respectively, with an estimated cost of Rs. 1396 crore.
- NMDC is planning to set up a BHJ Benefication Plant of 3 lakh tonne capacity per annum at Donimalai, Karnataka.
- NMDC has opened a Global Exploration Centre at Raipur, Chattisgarh to offer its services free of cost to the State Governments which may accept help of NMDC for exploration activities.

Merger/acquisitions/revival and restructuring of PSUs/Companies

- Maharashtra Elektrosmelt Ltd (MEL): The merger of MEL with SAIL is at an advance stage. MEL is located at Chandrapur in the State of Maharashtra. The valuation of MEL shares has been done while valuation of SAIL’s equity shares is in progress. It has been decided that MEL shareholders would be allotted SAIL’s shares in suitable swap ratio to be decided by the valuers. The merger process requires various issues to be resolved with the Maharashtra government, like obtaining ‘No Objection’ for transfer of MEL land in favour of SAIL etc. which is in progress.
- Bharat Refractories Ltd (BRL): The proposal for the merger of BRL with SAIL is underway and is expected to be completed soon. The merger includes a financial restructuring of BRL involving waiver of loans and interests thereon amounting to Rs. 216.37 crore and setoff of various earlier losses amounting to Rs. 226.04 crore. BRL’s units are located at Bokaro, Ranchi and Bhandaridah in Jharkhand, and also at Bhilai in the Chhattisgarh. A draft business plan for BRL has been prepared to bring synergy with SAIL after merger. Also, post-merger issues have been identified and are under discussion within SAIL and BRL.
- National Iron and Steel Company (NISCO): The Government of West Bengal has given an in-principle approval for the acquisition of NISCO, a company of West Bengal Government by SAIL on clean-slate basis and all its assets would be acquired by SAIL at ‘NIL’ cost along with its existing employees. NISCO is located at Belur near Howrah in the State of West Bengal. Further discussions are going on with the State Government after obtaining the SAIL board approval in October 2007 to take over NISCO including about 106 acres of encumbrance free land, to develop it further, by setting up a rolling mill of 45,380 tones per annum of capacity for Fe 500 grade TMT bars, at an estimated investment of Rs. 48.28 crore. Necessary action like digital
survey of the NISCO’s land has been completed. The railways have given their clearance for a manual level crossing to be constructed as part of the link road. The Government of West Bengal has indicated that with this development, the total estimate for the link road project would be about Rs.16 crore. Further discussions are on with the Government of West Bengal on the issue. The Government of West Bengal has been requested to provide the final clearance, for transfer of 100% shares of NISCO along with its manpower to SAIL. After receiving the clearance, the acquisition process of NISCO will be initiated by SAIL.

Malvika Steel Ltd (MSL): The company, a division of Usha (India) Limited, had started work on setting up an integrated steel plant at Jagdishpur in the district of Sultanpur in Uttar Pradesh. Iron making complex comprising two 350 m³ blast furnaces, two pig casting machines (one of 1200 tonnes/day capacity and the other of 1280 tonnes/day capacity), raw material handling and storage facilities and associated auxiliary facilities were set up in 1995-96 for production of foundry grade pig iron for sale in the market. The Company was closed for over a decade. This plant, which is the only integrated Steel Plant in the State of Uttar Pradesh, has enormous significance, not only for the local economy and employment, but also for the entire nation. SAIL has taken over the steel plant of MSL and is planning to revive the unit and bring it back to production.

Steel Complex Ltd (SCL): The Steel Complex Ltd (SCL) with a 50,000 tonne per annum capacity for producing continuous cast billets had approached SAIL for necessary help for its revival. Steel Authority of India Ltd (SAIL) signed an MoU with the Government of Kerala (GoK) for revival of SCL through formation of a JV with SAIL holding up to 50% of equity and the balance held by GoK and others. The JV agreement was signed between SAIL and SCL on December 10, 2008 for setting up a rolling mill of 65,000 tonnes per annum. It is expected that the Government of Kerala (after clean slating the balance sheet of SCL, obtaining clearance from Board for Industrial & Financial Reconstruction (BIFR) and after complying with the points stipulated under the Condition Precedent clause in the JV agreement) is likely to issue the final clearance for transfer of up to 50% shares of SCL in favour of SAIL by September 2009.

Neelachal Ispat Nigam Ltd (NINL): Acquisition and merger of NINL in Orissa by one of the major steel PSUs is under active consideration.

Sponge Iron India Ltd (SIIL): The Government has approved merger of SIIL with NMDC. The merger process is likely to be completed shortly. At present, the main problem of SIIL is the assured supply of quality iron ore. By becoming a part of NMDC, SIIL would be in position to have assured quality iron ore supply from Bailadilal mines of NMDC. The sponge iron plant of SIIL is located at Paloncha, Andhra Pradesh, while its head office is at Hyderabad.

Hindustan Steelworks Construction Ltd (HSCL): The restructuring/revival proposal of HSCL is under active consideration of the Government. The cost of revival is estimated at Rs. 1404 crore. The numbers of employees of HSCL are 1620, who are employed in HSCL’s 17 units spread across the country.
BIRD GROUP OF COMPANIES (BGC)

Restructuring/reorganisation of Bird Group of Companies

In December 2006, a committee under the chairmanship of Dr. J.K. Bagchi, former Secretary (Steel), Government of India, was constituted to examine the various aspects of BGC and for making recommendations on its restructuring. The report of Bagchi Committee was considered by the company, which appointed IFCI Ltd. to suggest restructuring of BGC in order to improve their operational and financial performances. IFCI Ltd. have recommended for restructuring of the group companies under BGC banner in a manner as to make them into subsidiary companies under Rashtriya Ispat Nigam Ltd. (RINL), a PSU under the Steel Ministry. The recommendations of IFCI Ltd. have been agreed ‘in principle’ in the Ministry and process has been started for obtaining requisite approvals for their implementation.

Joint ventures (JVs) and MoUs entered into by the PSUs

SAIL

SAIL has drawn up growth plan to enhance its current level of hot metal production from about 15 million tonnes per annum (mtpa) to 26 mtpa by 2010–11 and to around 60 mtpa by 2020. In this regard, to meet the enhanced power requirements of SAIL by 2020, an MoU has been signed with Larsen and Toubro on September 30, 2008, for a strategic alliance to acquire and develop thermal coal blocks and set up 1680 MW capacity power plants using super critical technology. As per the Navratna guidelines, SAIL will hold about 26% equity share in the proposed Joint Venture.

The proposed JV will acquire thermal coal blocks and develop them. Based on the allocation of thermal coal blocks and their location, the actual site for setting of thermal power plant would be decided. The preparation of draft JV agreement is in progress.
SAIL and Tata Steel have formed a Joint Venture company for coal mining in September, 2008. The headquarter of the JV company is at Kolkata (West Bengal). The Company has started functioning. They are exploring the possibilities for acquisition of Coking Coal Block.

SAIL has signed a Memorandum of Understanding (MoU) with MOIL and a JV company namely “SAIL MOIL Ferro Alloys Pvt. Ltd” has been incorporated on July 31, 2008. Further processes are going on to commence the project within the scheduled framework. It has been decided to set up a ferro alloy plant comprising of 1x16.5 Mega Volt Ampere (MVA) capacity furnace for production of high carbon Ferro Manganese and 2x27.0 MVA capacity furnace for production of Silico Manganese at Village Nandini, Bhilai (Chattisgarh) with initial investment of Rs. 10 crore under this JV company.

**RINL**

A JV agreement to set up ferro alloy plant in Bobbili near Visakahapatnam has been signed jointly as a renewed effort with MOIL. Considering the enhanced demand of Ferro Alloys, MOIL has purchased 100 acres land in Growth Centre, Bobbili, Andhra Pradesh for setting up of a Ferro Alloys plant and also to utilize the same as a stockyard of importing Manganese Ore by creating blending facilities incorporating crushing, screening, sintering process/project. In the current market scenario, company has decided to go ahead with the ideal and standard furnace size of 9 MVA with a provision of future expansion.

**NMDC LTD**

- NMDC had entered into Joint Venture with Chattisgarh Mineral Development Corporation (CMDC) for development and exploitation of Bailadila Deposit-13 in Chattisgarh on July 1, 2006. NMDC will have 51% share in the JV company. The joint venture between NMDC & CMDC has been incorporated as NMDC-CMDC Limited under the Companies Act 1956 on June 19, 2008 with an initial share ratio percentage of 51:49 respectively.
- NMDC had signed an MoU with CMDC on September 3, 2008 to develop Bailadila Deposit-4 in Joint Venture to fulfill the requirement of proposed 3 MTPA integrated steel plant at Nagarnar.
- NMDC and West Bengal Mineral Development & Trading Corporation (WBMDTC) have signed two MoUs on November 18, 2008, as below:
  - Development of Deocha-Pachami Coal Block (DP) in Birbhum district of West Bengal having a geological reserve of about 2 billion tonnes of thermal coal by a Joint Venture Company in which both NMDC and WBMDTC will have 50% share each.
  - Supply of iron ore and bauxite by NMDC to WBMDTC from proposed new acquisitions of iron ore and bauxite mine in the State of Jharkhand.
- NMDC has also signed MoUs with Spice Metals and Minerals on May 29, 2008 for Strategic partnership for planning, acquisition, development and management of metal & mineral projects outside India.
- NMDC has also signed MoU with Rio Tinto India Private Limited on August 18, 2008 for cooperation in investigating mutually advantageous potential investment opportunities primarily for iron ore and other commodities both within India and globally.

**OTHER MAJOR INITIATIVES**

**SAIL**

**Setting up of steel processing units (SPUs)**

SAIL has planned to set up Steel Processing Units (SPUs) at various locations in Bihar (Bettiah, Mahnar, Gaya); Uttar Pradesh (Lakhimpur-Kheri); Madhya Pradesh (Gwalior, Ujjain, Hosangabad); Himachal Pradesh (Kangra); Assam (Guwahati) and Jammu & Kashmir (Srinagar) to meet customers’
demand for supplying sized and finished steel near the point of consumption, particularly in states
where there are no steel plants and where steel consumption is low compared to the national average.

**MOIL**

**20 Megawatt (MW) wind energy farm**

In order to meet part of energy requirement of Balaghat mine and the ferro manganese plant and to
promote the use of non-conventional energy sources, MOIL has commissioned 20 MW wind energy
farm in Madhya Pradesh. Out of 20MW, 4.8 MW wind energy generators were commissioned
during the year 2007-08 and 15.2 MW in 2008-09 and connected to Grid. While the power generated
from the 4.8 MW project is used towards captive energy needs, the power generated through the
15.2 MW project is being sold to Madhya Pradesh Power Trading Corporation. So far, the wind farm
has produced more than 46.81 million units of power till March, 2009.

**MSTC LTD**

The construction of the departmental stockyard at Haldia was completed during the year 2008-09.

**FSNL LTD**

**Improvement of Quality**

Improvement has been made in the quality of scrap recovered through magnetic separator by
increasing Fe content of Open Hearth (OH) grade, Blast Furnace (BF) fines grade and sinter fines
grade scrap. The increase in Fe content in these two grades was achieved as shown below:

<table>
<thead>
<tr>
<th>Fe Content</th>
<th>At present</th>
<th>After Modernisation</th>
<th>Recycled to</th>
</tr>
</thead>
<tbody>
<tr>
<td>BF Fines Grade</td>
<td>60 to 65%</td>
<td>80 to 90%</td>
<td>Blast Furnace/SMS</td>
</tr>
<tr>
<td>Sinter Fine Grade</td>
<td>40 to 45%</td>
<td>60 to 90%</td>
<td>Sinter Plant</td>
</tr>
</tbody>
</table>

**Reduction in metallic loss**

The metallic loss before modernisation, which was about 1.25%, is now restricted to 1%. With the
implementation of the above scheme, the steel plants will be benefited due to improvement in
quality of scrap, which will fetch additional revenue to the steel plants.

**HSCL LTD**

The following initiatives have been taken by the company to improve the efficiency of the company:

- Career growth of the employees.
- More responsibilities on individuals for growing as leaders.
- Exposure to computerised accounting and Management Information System (MIS).
- ISO accreditation.
- Training of employees in six standard modules has been taken up for workmen and non-executives
  at Bokaro and Bhilai. 100 employees of the company have been trained in the required categories
during the year 2008-09.
SIIL

The merger process of SIIL with NMDC is at an advanced stage and the expansion of plant capacity from 60,000 tonnes per annum to 2,60,000 tonnes per annum will be executed after merger with NMDC for which preparatory work has already been taken up.

KIOCL LTD

In pursuance with the directive of the Hon’ble Supreme Court, mining activities at Kudremukh were stopped on December 31, 2005. Consequent to closure of mining activities at Kudremukh, the company has been exploring various alternatives for mining at other locations within Karnataka and also in other states.

New projects

- The company is in the process of setting up of a 1,00,000 tonnes per annum Ductile Iron Spun Plant to add value at its pig iron complex at Mangalore.
- The company is also setting up a coal injection system and an additional pig-casting machine to the blast furnace unit as part of productivity improvement.
- The company is in the process of identifying a suitable joint venture partner for equity participation in the proposed integrated steel plant in Karnataka.
CHAPTER-XVIII

RECOGNITION AND AWARDS

The PSUs under the Ministry of Steel have consistently bagged several prestigious awards for their excellent performance in various categories. Some of the major awards received by the PSUs during the year are highlighted below:

STEEL AUTHORITY OF INDIA LTD (SAIL)

Awards received during the year 2008-09

SAIL won six Prime Minister’s Shram Awards for the year 2006. Bhilai Steel (BSP) Plant won one PM’s Shram Bhushan, one PM’s Shram Vir and one PM’s Shram Shri Award. Durgapur Steel Plant (DSP) won two PM’s Shram Vir Award, RSP won one PM’s Shram Shri Award. The break-up of awards is as under:

<table>
<thead>
<tr>
<th>PM Shram Awards</th>
<th>Total No. of awards (No. of workers)</th>
<th>Plant</th>
<th>No. of awards per plant (workers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shram Bhushan</td>
<td>1 (5)</td>
<td>BSP</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Shram Vir</td>
<td>4 (19)</td>
<td>BSP</td>
<td>1 (5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DSP</td>
<td>2 (13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RSP</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Shram Shree</td>
<td>1 (1)</td>
<td>BSP</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Total</td>
<td>6 (25)</td>
<td></td>
<td>6 (25)</td>
</tr>
</tbody>
</table>

SAIL employees who were awarded the Vishwakarma Rashtriya Puraskar.
SAIL has won 15 Vishwakarma Rashtriya Puraskar (VRP) Award for the performance year 2006, involving total 68 employees of five plants. The break-up of awards is as under:

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of VRPs won</th>
<th>No. of employees</th>
<th>Plant-No. of awards (No. of employees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>10</td>
<td>BSP-1 (5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BSL-1 (5)</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>29</td>
<td>BSP-2 (10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DSP-2 (13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RSP-1 (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BSL-1 (5)</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>29</td>
<td>BSP-1 (5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DSP-1 (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RSP-3 (16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>BSL-1 (5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SSP-1 (2)</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

- SAIL has won the “ICWAI National Award for Excellence in Cost Management-2007” of the Institute of Cost and Works Accountants of India (ICWAI) in the category /Public sector manufacturing organisation with turnover more than Rs. 1000 crore.
- SAIL has received a commendation certificate from SCOPE under the award category “SCOPE Meritorious Award for Good Corporate Governance” for the year 2006-07.
- Chairman SAIL has received the “Best Turnaround Award” for SAIL from the Hon’ble Chief Minister of Delhi in the first ‘Dalal Street Investment Journal PSU Awards 2009’ ceremony held on March 27, 2009 at New Delhi.
- ‘Ispat Bhasha Bharti’, in house Hindi magazine of SAIL, has won the First Prize from the Home Ministry under the All-India Grih Patrika Puraskar Scheme.

SAIL has won the “Global HR Excellence Award 2008-09” under the award category “Outstanding Contribution to the cause of Education”.

SAIL has won the “ICWAI National Award for Excellence in Cost Management -2008” of the Institute of Cost and Works Accountants of India (ICWAI).

SAIL, EMD has won “Golden Peacock Finalist Certificate” for the year 2008 from the Institute of Directors (IOD) in recognition for eco-renovation.

Bhilai Steel Plant (BSP)

SAIL BSP has received the CII-ITC Sustainability Award 2008 in the independent unit category, whereas SAIL has received the “Certificate for Strong commitment” in Large Business category.

BSP has won the “Golden Peacock National Training Award” for the year 2008 from the World Council for Corporate Governance through the Institution of Directors (IOD), New Delhi.

BSP has been awarded the “Golden Peacock Award- 2008” in recognition of its initiatives and efforts in the corporate social responsibility front.

BSP has won the “Golden Peacock Climate Change Award” for the year 2008 from the World Environmental Foundation, New Delhi, in recognition of its excellent efforts for the preservation of environment.

BSP has won the “Green tech Platinum Award” for the year 2008 from the Green Tech Foundation, New Delhi, in recognition of excellent efforts in the environment front.

Durgapur Steel Plant (DSP)

DSP has won the “Greentech Environment Excellence Award-Gold” on September 5-7, 2008 from the Greentech Foundation at Goa in recognition of its excellent efforts for environmental preservation.

DSP has won the “Ispat Suraksha Puraskar Award” on August 12, 2008 from the Joint Committee...
on Safety, Health and Environment in the Steel Industry at Ranchi in recognition of the fact that there was no fatal accident during 2007.

DSP has received the “Business Excellence Award” on December 19, 2008 from the Indian Economic Development and Research Association (IEDRA) in recognition of its strong commitment for Business Excellence during the year 2008.

Rourkela Steel Plant (RSP)

- RSP has received the coveted Best Organisation Gold Award under the “Rajiv Gandhi Memorial National Awards-2008” for Excellence in Indian Industries. The award was presented to RSP at a glittering function organised at the Institution of Engineers (India) Ltd., Khairatabad, Hyderabad on July 13, 2008.
- RSP has received “Business Excellence Award” from the Confederation of Indian Industry (CII) and Export Import (Exim) Bank of India on November 8, 2008 in recognition of its strong commitment for Business Excellence during the year 2007-08.

Bokaro Steel Plant (BSL)

- BSL has won the prestigious “Rajiv Gandhi National Quality Award for the year 2007”. BSL also became the first recipient of the cash reward of Rs. 5 lakh, which was introduced as part of the Rajiv Gandhi National Award in the evaluation year 2007.
- BSL has won the “Enterprise Excellence Award” for the year 2007 from the Indian Institute of Industrial Engineering in recognition of its outstanding operational and financial achievements.

IISCO Steel Plant (ISP)

IISCO Steel Plant has received “Green Tech Excellence Award (Silver)” in July 2008 from the Green Tech Consultancy Services awarding body in recognition for maintaining specified norms for environmental protection for the year 2007-08.

Raw Materials Division (RMD)

Two iron ore mines (Kirimuru & Kalta) and one limestone mine (Kuteshwar) of RMD have received five National Safety Awards for their commendable performance in maintaining the safety standard in the mines. Hon’ble president of India, Smt. Pratibha Devisingh Patil, gave away the awards in a function held at Vigyan Bhavan, New Delhi on May 5, 2008.

Salem Steel Plant (SSP)

SSP has won a commendation certificate in August 2008 from the Institute of Directors, (IOD) New Delhi, in recognition for Occupational Health and Safety Performance during the year 2007-08.

SSP has been awarded the “CSR Award” by the Tamil Nadu government for the year 2008-09 for its valuable contribution towards socio-economic upliftment of neglected sections of society through CSR initiatives.

Research and Development Centre for Iron & Steel (RDCIS)

RDCIS has received “Golden Peacock National Quality Award- 2008” from the Institute of Directors for the year 2008.
RASHTRIYA ISPAT NIGAM LTD (RINL)

- Two Quality Circle (QC) teams (Vikas of RMHP and Harmony of WRM departments) of VSP won Excellent (Gold) awards at ICQCC-2008 held at Dhaka, Bangladesh, during October 2008.
- Performance Excellence Award – 2007 was conferred by IIIE, during 11th CEOs conference held at Goa in May 2008.
- VSP bagged QCFI-NMDC trophy for ‘Best QC implementing organisation’ under public sector category at NCQC2008 convention held at Vadodara.
- VSP bagged First prize for “Organisational efforts in promoting QCs at RINL” at APPC-08 National Convention held at Bhubaneswar.
- Received award for presentation on “Organisational efforts in implementing Quality circles at VSP” during QCFI-CCQC: 08 convention.
- VSP has won Vishwakarma Rashtriya Puraskar (VRP)–2007 for the suggestions from Madharam Dolomite Mines, SMS and BF Depts. VSP has won these awards consecutively for the fourth time.

Shri PK Bishnoi, CMD, RINL, receiving a Gold Medal from Hon’ble Prime Minister Dr. Manmohan Singh.

- VSP was given ‘Rajbhasha Trophy’ for excellent performance of Hindi for the year 2007-08 by Hindi Salahkar Samithi of Ministry of Steel. The trophy was presented by then Hon’ble Minister for Steel, Shri Ram Vilas Paswan on February 10, 2009.
- VSP received National Award (Silver Medal) on e-governance for implementing reverse e-auction for awarding Transportation Contracts.

NMDC LTD

- NMDC received IIIE Enterprise Excellence Award for the year 2006-07 on May 16, 2008.
- NMDC received the prestigious Indira Gandhi Rajbhasha Shield for the year 2006-07 from the Hon’ble President of India on September 14, 2008.
- NMDC attained the top rank for the second consecutive year based on the financial parameters published in the Public Enterprise Survey 2007-08 on financial rankings of CPSEs.
MANGANESE ORE (INDIA) LTD (MOIL)

MOIL was awarded the First Prize in the Mining Sector for Chikla mine for 2008, as part of the National Energy Conservation Award. At the State Level Energy Conservation Award, MOIL bagged first prize for EMD Plant and Chikla Mine. In all India Mines Rescue Competition (Coal and Metal) 2008-09, it won Winner’s Trophy Award.

FERRO SCRAP NIGAM LTD (FSNL)

In the meeting of Hindi Salahkar Samithi, held at Kumarkom (Kerala) on April 5, 2008, FSNL was awarded “Ispat Rajbhasha Shield” (first prize) for the year 2005-06 and “Ispat Rajbhasha Trophy” (second prize) for the year 2006-07, by the Hon’ble Steel Minister.

HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

Shri Parthasarathy K., CMD, was decorated with the prestigious Indira Gandhi Memorial National Award 2008 for excellence in Indian industry ‘Best Chief Executive Gold Award’ under the aegis of Public Sector Today, a national magazine.

KIOCL LTD

The Ministry of Steel conferred the ‘Ispat Rajbhasha Shield’ to the company on April 5, 2008 in recognition of the remarkable progress in the field of Progressive Use of Official Language Hindi and its implementation for the year 2005-06.

On February 5, 2009, the Visweswaraya Industrial Trade Centre, Government of Karnataka, conferred the State Export Excellence Award under mineral and mineral-based products — Non SSI — Gold for the year 2005-06.
PROMOTION OF STEEL USAGE

The per capita consumption of steel in India is much lower than that of the developed nations. Therefore, there is a huge potential for growth of steel consumption in the country. While steel use will improve with rising income levels, urbanisation and infrastructure development, conscious efforts are needed to stimulate domestic demand, particularly in rural areas and for creation of incremental consumption pattern.

Awareness campaign to increase domestic steel consumption

One of the major objectives of the National Steel Policy is to augment the demand and consumption of steel in the country by conscious promotion of steel usage. The need for a sustained campaign for creating awareness at different levels of steel users has been strongly felt as the present per capita consumption in the country is only around 49 kg against the world average of 150 kg and that of 400 kg in developed countries. Consequently, a National Steel Promotion Campaign was launched in March 2007 by the Hon’ble Minister for Chemicals & Fertilisers and Steel, with participation of major steel producers such as the Steel Authority of India Ltd. (SAIL), Rashtriya Ispat Nigam Ltd. (RINL), JSW Ltd., Jindal Steel & Power Ltd. (JSPL), Essar Ltd. and Ispat Industries Ltd. to create mass awareness regarding various innovative and common uses of steel. The Steel Promotion Campaign also places particular emphasis on rural sector steel use. Under this scheme, steel bullock carts have been designed and are being distributed in the rural areas in various parts of the country.
The design for steel bullock carts has been made by the Institute for Steel Development & Growth (INSDAG) and the scheme is sponsored by SAIL, RINL and other private sector steel units. So far, more than 600 steel bullock carts have been fabricated for distribution.

In order to encourage usage of steel in bridges, crash barriers, flyovers and building construction, INSDAG has been advised to involve architects/engineers to promote steel intensive structural design as being cost effective and efficient. INSDAG is also taking steps for modification of CPWD code and the technical education curricula in the country. The steel campaign will also further expand so as to educate the architects, designers engineers and builders to go for more steel-intensive structures in flyovers, bridges, airports, railway station platforms as well as other engineering applications.

Steel distribution network

It had been felt that prices of steel should be kept at a reasonable level to safeguard the interests of the common man in accordance with the UPA’s Common Minimum Programme. Therefore, the main steel producers in a meeting held in the Ministry on September 8, 2006 resolved to make available items of common steel consumption in the rural areas through their dealer network at the same price as applicable in metros and a decision was taken to have at least one dealer in each district in order to make available steel items to the common man. Consequently, a significant part of the cost of transportation as well as distributors/wholesalers’ margin would be borne by the producers.

This is providing relief of about Rs. 600-1,000 per tonne to the individual customer in the rural areas. In order to ensure the availability of commonly used items of steel in the rural areas
across the country, SAIL and RINL are expanding their distribution networks at a fast pace with the objective of having dealers in all the districts of the country.

Preference for SC, ST and OBC are given while allotting District level dealerships and relaxed entry conditions have been formulated for SC/ST and OBC categories for their wider participation.

Steps taken by SAIL to promote usage of steel (period 2008-09)

The distribution network of SAIL was expanded by establishing warehouses at seven new locations during April 2008-March 2009. SAIL has now established warehouses at all the state capitals and union territories. With this, SAIL’s marketing network has expanded to 37 branch sales offices, 24 customer contact offices and 65 warehouses. SAIL has the widest network of branches and warehouses in the country among steel producers, which helps it in meeting the requirements of a wide range of customers in time.

- SAIL has also expanded its dealer network extensively. As on March 31, 2009 SAIL has 2,406 dealers spread over 625 districts (including new districts). A total of 43% dealers belong to SC/ST and OBC categories. Items of mass consumption like rebars and galvanised sheets, required by common man are being sold through district dealers.
- Incentive schemes have been introduced by the company to encourage dealers to perform consistently and promote SAIL steel. SAIL held its first dealer award ceremony “Gaurav Samman” during April 2008 at Bangalore to reward well-performing dealers based on their performance during 2007-08.
- SAIL is regularly holding architects and masons’ meets along with its dealers for promotion of SAIL steel.
- SAIL released two directories during the 22nd National Steel Consumer Council meet held on October 4, 2008 at Delhi consisting of details of SAIL Dealers’ Network and SAIL Warehouse Network and distributed them among council members to increase awareness about SAIL outlets.
- Technical presentations are made from time to time to project customers for launching new products
like corrosion resistant/earthquake resistant TMT Bars for construction and rock bolt bars for tunneling.

- SAIL has undertaken various promotional activities to promote sales through dealers. Some of them are given below:
  - Wall paintings done at various locations including interior areas.
  - Broadcast of jingles on FM radio.
  - Product brochures/technical literature given to the dealers for distributing among customers.

RASHTRIYA ISPAT NIGAM LTD (RINL)

Continuous efforts are made at RINL, VSP for developing new products to meet specific applications for promoting steel usage. The requirements of customers of new products/grades/sizes of steel products are studied, and if found feasible, are developed and supplied to the customers.

In order to promote consumption of steel in rural areas, VSP has started District Level Dealership Scheme (DLDs) from 2004-05. The main objectives of DLDs are to establish a wide distribution network so as to ensure availability of VSP’s products and increasing customer base. Till now, VSP has appointed district level dealers (DLDs) in almost all the districts in the southern states i.e. Andhra Pradesh, Tamil Nadu, Karnataka and Kerala and the adjoining states of Orissa, Chattisgarh and Maharashtra.

RINL has a total of 134 DLDs as of March 31, 2009. DLDs have steadily increased procurement of steel products over the years. The quantities of steel lifted by DLDs in the last three years and the current year are as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty sold to DLDs</td>
<td>7331</td>
<td>10434</td>
<td>34922</td>
<td>42000</td>
</tr>
</tbody>
</table>

RINL supplies steel products to the Small Scale Industries Corporations/National Small Industries Corporation (SSICs/NSIC) as per the annual allocation made by the Ministry of Steel. Corporations are extended a JPC rebate of Rs. 500 per tonne towards handling charges for the material supplied to them. In addition, from 2008-09, defraying costs are reimbursed at a rate of Rs. 400 per tonne for material supplied to Small and Medium Enterprises (SMEs) through SSICs/NSIC by VSP to meet the transportation costs of the products to the customers’ premises.
Corporate Social Responsibility (CSR) has been identified as an important parameter in the MoUs drawn up by the major PSUs with the Ministry of Steel since 2007-08. CSR activities focusing on environmental care, education, health care, cultural efflorescence and peripheral development, family welfare, social initiatives and other measures are underway at the PSUs.

- All profitable steel PSUs have earmarked at least 2% of their distributable surplus for CSR activities since 2007-08. Mining PSU-NMDC earmarked 5% of its distributable surplus for CSR activities.
- Total budget of Rs. 290.17 crore had been allocated for carrying out CSR activities by the Steel Ministry PSUs during 2008-09. The expenditure on CSR during the period 2008-09 stood at around Rs. 229 crore. The details are at Annexure-XVI
- More than 400 Medical/Health Camps were organised by SAIL and other PSUs under CSR activities, benefiting more than 5 lakh people.
- SAIL, NMDC, RINL, MOIL, KIOCL, MECON, MSTC, FSNL and OMDC also contributed more than Rs. 30 crore towards Bihar flood relief activities in September-October 2008.

Model Steel Villages

All the main producers have been urged by the Ministry to adopt villages around their plants and as part of their CSR, help develop these villages as model steel villages, with the objective of attaining a holistic development model which would include the promotion and sustenance of medical and health services, education, sports, livelihood promotion through agriculture, self help groups, roads and connectivity, sanitation and community centres.

Use of steel is emphasised in items such as storage bins, bullock carts, buildings such as school buildings, panchayat halls, health centre buildings, water tanks, waiting sheds etc.

149 villages are being developed as ‘Model Villages’ under CSR activities by SAIL, NMDC, Rashtriya Ispat Nigam Limited (RINL) and Manganese Ore (India) Limited (MOIL). SAIL has adopted 79 villages across seven states — Chattisgarh, (21) West Bengal (18 villages), Orissa (16 villages), Bihar (5 villages), Jharkhand (17 villages), Karnataka, (1 village) and Tamil Nadu (1 village). Out of these 79 villages, 13 villages were completed during 2007-08. In respect of NMDC the coverage comprises of 58 villages surrounding Bailadila projects in Chattisgarh and eight villages in the Dongimali Sector of Karnataka. Pre-Project survey of 58 villages surrounding Bailadila Projects has been completed. NMDC initiated Integrated Development of two villages initially due to sensitive nature of the Bailadila area and later expanded to eight villages during the year, at a cost of Rs. 2.5 crore. The project will subsequently cover all 58 villages at an approximate cost of Rs. 20 crore per year. MOIL has adopted three villages in Maharashtra and two in Madhya Pradesh as Model Villages. RINL has adopted seven villages in its periphery as Model Villages.

The PSUs had been advised to strengthen their existing mechanism for implementation and review of the CSR activities and to empower suitable officials in their respective organisations with appropriate administrative and financial delegation of powers so as to streamline and ensure the implementation of CSR activities as per their respective earmarked budgets. Beginning with the peripheral areas around their respective plants, the PSUs will gradually target the CSR activities to cover the areas populated by the SCs, STs and weaker sections of the society. In addition, the PSUs will also provide assistance to National, State and reputed local organisations involved in the field of arts, culture, health care, tourism, sports and other allied areas.

STEEL AUTHORITY OF INDIA LTD (SAIL)

SAIL, since its inception, has been a good neighbour, serving its communities by providing facilities for health, education, roads, water, electricity, etc. The economic, environmental and social dimensions are well-entrenched in the company’s vision which has spurred SAIL’s journey so far. It is with the underlying philosophy and a credo “To make a meaningful difference in people’s lives” that SAIL has been structuring and implementing its various initiatives that contribute to its
communities. The vision of SAIL clearly encompasses a triple bottom line approach, addresses the aspirations and needs of its various stakeholders. These efforts have seen the obscure villages of yesterday, where SAIL plants are located, turn into large industrial centres today.

SAIL has established 32 primary health centres, nine reproductive and child health centres, 35 hospitals and seven super-speciality hospitals to provide specialised healthcare to almost 28 million people. It has opened about 140 schools in the steel townships to provide modern education to about 76,000 children. Besides adopting and providing free education and facilities to tribal children, SAIL has provided assistance to over 1,119 schools, with more than 1,11,958 students of around 435 villages surrounding its units. In this endeavour, SAIL has achieved a girl:boy ratio of 1:1 for all levels of education and a survival rate, i.e. rate of retaining enrolled students of 90% in SAIL schools.

SAIL has been providing access to around 54 lakh people across 435 villages since inception by constructing and repairing of roads. It has provided access to water infrastructure to people living in far-flung areas by installing 2,664 water sources, thereby providing drinking water access to around 34.50 lakh people.

SAIL believes in making a meaningful difference to the lives of people. For the financial year 2008-09, the budget for CSR was earmarked as 2% of distributable surplus (after dividend and dividend tax) of previous financial year (2007-08) which is around Rs. 114 crore.

The efforts of SAIL in the development of society have been well appreciated and have been ratified during the year. SAIL bagged the CII-ITC Sustainability Award-2008, and was adjudged a finalist of the "Stivie Award–2009", Bhilai Steel Plant (BSP)-SAIL has been awarded “Golden Peacock Award- 2008" for CSR and Salem Steel Plant (SSP)-SAIL has been awarded the "CSR Award" by the Tamil Nadu government for the year 2008-09 for its valuable contribution towards socio-economic upliftment of neglected sections of society through CSR initiatives.

SAIL had adopted 79 villages as Model Steel Villages (MSVs) across seven states. The developmental activities being undertaken in these villages include medical and health services, education, roads and connectivity, sanitation, community centres, livelihood generation, sports facilities, etc. In 2008-09, 28 MSVs have been completed. With this, at the end of this fiscal, the total number of MSVs completed by SAIL has reached 41, including 13 MSVs in 2007-08.

The company is also working towards preserving culture and heritage. Some of the key activities include assistance to maintenance of monuments in Lodhi Garden, New Delhi, Rs. 25 lakh contributed by Bokaro Steel Plant to ASI towards development of infrastructural facilities and amenities etc. at archeological sites of Lauria Nanandangarh and Chankigarh in West Champaran district of Bihar. In order to preserve the tribal culture of Chattisgarh, Lok Kala Mahotsav was held on five days at Rajhara mines, Nandini mines and at Bhilai.
In the Lok Kala Mahotsav, the folk music and dance of Chattisgarh attracted around 20,000 people. The statue of poet Kazi Nazrul at Churulia village (the birth place of the poet), district Burdwan, West Bengal, was inaugurated.

Besides, the company extended support to a number of activities for the benefit of physically-challenged persons and destitutes. A special project Baljyoti was started at Lathikata block, district Sundargarh, Orissa, by the Rourkela Steel Plant, to treat child blindness, juvenile cataract, squint etc.

The objective of the company is to focus on the following thematic themes/causes as part of corporate social initiatives and women’s upliftment:

- Income generating schemes (through self-help groups)
- Education
- Health issues

In line with the above themes, SAIL is working in tandem with the Government of Chattisgarh for establishing a technical university at Bhilai (Chattisgarh). The foundation stone has been laid for setting up an ITI at Samastipur, Bihar. SAIL has also established another ITI at Gua Iron Ore Mines in association with the Government of Jharkhand. Besides these, a special school has been started exclusively for the poor, underprivileged children at SAIL’s five integrated steel plant locations viz Bhilai, Durgapur, Rourkela, Bokaro and Burnpur. The facilities provided in these schools include free education, mid-day meals, uniform including shoes, text books, stationary items, school bag, water bottles and transportation in some cases.

A number of benefits are being provided to the SC/ST children, such as scholarships to deserving SC/ST undergraduate engineering students, adoption of 114 tribal children at Bhilai, four girl students for a nursing course and another 14 at Bokaro to provide free education, boarding and lodging facilities, etc. In BSP, no tuition fee is charged from SC/ST students by the company schools, irrespective of their parents’ economic status. A special Learn to Read (L2R) programme has been started by the Rourkela Steel Plant in association with the Orissa government for improving the standard of education in primary classes.

In the field of health care, free medical health centres for the poor has been set up at Bhilai, Bokaro, Rourkela, Burnpur (Gutgutpara), providing free medical consultation, medicines, etc. Over 2,200 health camps have been organised in 2008-09 by all the plants and units, benefiting around 10 lakh people, providing free health check-up, pathological lab. treatment, medicines, immunisation, surgical cases referred to plant hospitals (free stay, to and fro transport and food with one attendant each).
post operative check up etc. Seven mobile medicare units have also been provided to different NGOs like Deepalaya, Sri Ramakrishna Mission etc. during 2008-09. During the year, extensive flood relief operations were undertaken in Uttar Pradesh, Bihar and Orissa.

**RASHTRIYA ISPAT NIGAM LTD (RINL)**

The company has taken up various initiatives during 2008-09 in the field of health care, various community development activities and providing education and employability to the rural people.

### Community development

In order to promote steel usage in rural areas, a Model steel village was handed over in September 2008 consisting of: nine rural houses, panchayat hall, school building, two toilet blocks, and an open stage. Construction of function hall for SC/ST in rehabilitation colony is in progress. Road works were taken up in rehabilitation colony and peripheral villages. Support was given for construction of SC/ST hostels in Ongole and Guntur districts benefiting nearly 1000 students per year. Work has started for construction of 21st century Gurukulam at Andhra University, Visakhapatnam. To provide drinking water to tribal villages, gravity water scheme “Jaladhara” was first completed in Araku agency area and second project was taken up benefiting six villages.

### Community assistance

To prevent Malaria menace, mosquito nets were provided to tribal agency ashram schools benefiting the students. Financial assistance and medical services was provided twice through teams of doctors for floods affected areas in the state of Bihar.

### Medical and healthcare

General medical camps, de-addiction camps, eye screening camps for cataract screening, child immunisation camps, disability rehabilitation camps, de-addiction camps were organised as a part of the medical and healthcare initiatives by RINL.
of medical care in the nearby areas. AIDS awareness programmes were conducted and literature on prevention of AIDS and key chains with “Stop AIDS” message were distributed to truck drivers. Support was given to Sankar Foundation (renowned Eye Hospital) in completing the third floor, for conducting 1000 cataract operations per year for five years starting from 2008-09, for the benefit of the poor.

**Education and employability**

Children’s playing equipment were erected at schools in rehabilitation colony and peripheral villages. Benches were provided which were fabricated through local ITI (Vocational training for ITI students) in schools, in the nearby villages. Vocational training programs like LMV driving, embroidery etc., are conducted regularly.

**Welfare**

Adult literacy programmes – “Ukku Akshara Jyoti” were conducted at rehabilitation colonies. Training programme for teachers was organised in Andhra University benefiting 150 teachers. Sewing machines were distributed to unemployed poor women as a part of self-employment orientation in the nearby peripheral villages. With a view to promote music and culture, a singing talent show was organised through TTD Samskruti Organisation.

**NMDC LTD**

A policy on corporate social responsibility of NMDC has been approved by the Board of Directors. The policy focuses on four major areas viz., literacy/education, safe drinking water/healthcare and sanitation, skill development for sustainable income generation and livelihood and agriculture and infrastructure development.

**Major CSR initiatives of NMDC during 2008-09**

**Integrated development of villages:** Pre-project survey taken up in 28 villages and completed in 24 villages. Integrated development initiated in two villages in Bailadila. Survey of another 30 villages in Bailadila is going on.

**Hospital on wheels:** ‘Hospital on Wheels’ facility was launched on January 1, 2009 to provide medicare at the door step of tribal villagers in eight villages in Bailadila. Medical vans equipped with ultra modern medical equipment visit the villages every day. Two qualified doctors have been recruited for each van exclusively for ‘Hospital on Wheels’.

**Scholarship scheme:** A scholarship scheme to motivate SC/ST students to pursue studies beyond Class VIII upto a degree in engineering/ medicine has been introduced in five districts of Bastar and eight villages surrounding the Donimalai project.

**Education:** A ‘Trust’ has been formed to focus on the improvement of the literacy rate around projects and other backward areas by establishing schools if necessary. Establishment of residential schools at Geedam, Kuwakonda, Dantewara in Chhattisgarh and Sitapur in UP are under active consideration.

**Mid–day meal programme:** Mid–day meal programme, introduced in 2007-08 for 2,150 children has been extended to cover an additional 8,000 children in and around Donimalai project during 2008-09.

**Medical College at Jagdalpur:** Contributed Rs. 2,000 lakh as the third and fourth instalments for the medical college at Jagdalpur.

**Skill development:** Skill development workshops on Jute/Bamboo/Bell Metal/Terracotta to develop the inherent skills of the Bastar villagers have been conducted. The results are very encouraging and revenue is being generated for trained unemployed youth.

**Distribution of tricycles:** A total of 116 tricycles have been distributed to physically challenged people in Sandur taluk of Karnataka.
Schemes under partnership with state governments: Solar electrification in Dantewara and Kuwakonda blocks and solar lighting in the houses and in the roads in Bijapur, Dantewara, Jagdalpur and Narayanpur districts of C.G. have been undertaken at a cost Rs 1611.29 lakh. A residential school at Geedam has been established at a cost of Rs. 1291.19 lakh. Creation of various infrastructure like roads, rest houses, purchase of road making equipment, beautification of various vantage points, plantation of trees etc at a cost of Rs. 958.60 lakh have been undertaken. Construction of houses for slum-dwellers in Bellary district, Karnataka, has been undertaken at a cost of Rs. 1,500 lakh.

Infrastructure Development: Various infrastructure development works like roads, culverts, community halls etc have been initiated at a cost of Rs. 812.20 lakh and Rs.1,500 lakh in the surrounding areas of Bailadila and Donimalai projects respectively. Developmental works worth Rs. 696.34 lakh have been initiated in Kadampal village.

CSR works in other than peripheral areas

- Construction of flood relief shelter at Kusheshwar Asthan, Bihar.
- Establishment of a residential school in Sitapur district, Uttar Pradesh.
- Initiated ‘Hospital on Wheels’ facility in Sitapur and Lakhimpur Kheri district of Uttar Pradesh.
- Contributed Rs. 1,000 lakh to flood relief in Bihar.
- Contributed Rs. 2 lakh to flood relief in West Bengal.
- Distributed 80 tri-cycles to physically challenged people in Rewa, Madhya Pradesh.
- Construction of 10 low cost houses in Orissa.

Promotion of sports

- Promotion of archery in Chattisgarh
- Sponsorship of Asian level junior hockey tournament
- Promotion of handball in Chattisgarh
- Sponsorship of world ranking table tennis tournaments in India through Table Tennis Federation of India (TTFI).
- Provided aid to Olympians.
- Support to the Bastar Football Association and a cricket tournament at Jagdalpur.
- Construction of a multipurpose sports hall at Pune.

Miscellaneous CSR Activities

- Support to BastarVikalang Samiti through provision of a mini bus.
- Financial support to various organisations.
- AIDS awareness programme for truckers at Donimalai.
- Word Disability Day Celebrations – Support to deaf students and schools in the twin cities of Hyderabad and Secunderabad.

MANGANESE ORE (INDIA) LTD (MOIL)

MOIL has been discharging its obligation under CSR. The following major activities have been undertaken by the Company:

- Laying of 112 km long pipeline for drinking water supply to the village near Balaghat Mine. About 5.0 lakh litres per day of drinking water is supplied to the villagers
- MODEL Manganese Gram – Adoption of Villages. So far, five villages have been adopted by the Company in Madhya Pradesh and Maharashtra. The company has carried out total development in these villages such as construction of roads, toilets, schools, water supply schemes, community centers, etc. In addition, the Company also provides medical care, educational facilities by construction of schools etc.
- Provided eye care to the rural poor. So far 1000 cataract surgeries have been sponsored by the Company including lens implantation.
Provided fully air-conditioned mobile hospitals to various parts of the country fully equipped with cardiac-cum-trauma care facilities.

Empowering Women through formation of Self Help Groups (SHGs)

Provided motor boats in the Bhandara and Chandrapur districts of Maharashtra for flood relief.

Contributed Rs. 2.00 crore for flood relief in the State of Bihar

Besides the above, the Company has been taking care of physically challenged persons by providing tri-cycles, hearing aids, calipers, etc. The Company is also carrying out a variety of CSR programmes including slum development, etc.

MSTC LTD

During the year 2008-09, MSTC sanctioned Rs. 33 lakh to 33 organisations, at the rate of Rs. 1 lakh each. These are NGOs in free healthcare, primary schools for the poor, homes for orphan children/street children, rehabilitation centres for distressed women and children etc. MSTC has adopted three orphan children to groom them as tennis players.

During the year 2008-09, MSTC contributed Rs. 40 lakh for flood relief in Bihar and Rs. 5 lakh for Mindnapore flood in West Bengal.

MSTC contributed Rs. 90 lakh for a school building for mentally retarded children. The school building will be named as “MSTC-Samlilani Bhavan”. On September 9, 2008, the 44th Foundation Day of MSTC, approximately 500 tricycles were distributed to disabled persons.

MSTC is also making contribution for the construction of a students’ hostel for the backward and under-privileged children, construction of a ramp in a mentally retarded residential school at Bangalore and a vocational and rehabilitation centre for leprosy patients at Vadodara.

FERRO SCRAP NIGAM LTD (FSNL)

FSNL has identified Government higher secondary schools situated in the village nearby FSNL’s units at Rourkela, Burnpur, Bhilai, Bokaro, Visakhapatnam, Durgapur, Dolvi (Maharashtra), Duburi (Orissa) and Raigarh (Chattisgarh). Every year, the list of meritorious students belonging to SC/ST/OBC communities and physically challenged students, are obtained from the principals of
the concerned higher secondary schools, and based on this list provided by the school management, school uniforms are distributed to such students. Apart from incurring the expenditure towards distribution of school uniforms, FSNL has also developed a playground in the higher secondary school in Dundera village near Bhilai, with provision of a handball goal post, as a measure of developing children in sports activities, and also supplied the sports materials for the benefits of the children. FSNL planted 200 saplings (of fragrant flowers and shading breed) in the school premises at Dundera Higher Secondary school near Bhilai, in order to create awareness among the children towards environmental protection and its importance in human life. A multi-purpose hall with verandah and other infrastructure has been constructed by FSNL in the school at Dundera village near Bhilai for the benefit of the school management and the children as a whole.

HINDUSTAN STEELWORKS CONSTRUCTION LIMITED (HSCL)

Though a loss making PSU, the company spent Rs 6.35 lakh towards CSR activities during the year.

MECON LTD

The major developmental activities being carried out by MECON are as follows:

- Under the “Community education scheme”, free education is being provided to the underprivileged poor children at 12 primary education centres, which are running in the slum areas/backward areas/rural areas in and around Ranchi and nearby villages.
- Under the “Resource generation scheme”, eight stitching training centres are running in slum areas/backward areas in and around Ranchi. These centres are for the poor womenfolk.
- Under the “Community health programme”, the followings areas are being covered:
  - General health/medicine camps (in and around Ranchi and nearby villages).
  - Flood relief health camp in Bihar.
  - Eye operation (Cataract).
  - Family planning operation.
- HIV/AIDS awareness programme.
- Distribution of bleaching powder and gammacin powder in slum areas/villages.
- Mass innoculation of children under Pulse Polio programme.

Providing assistance to Cheshire Home (a home for disabled persons), Bariatu, Ranchi in the following areas:

- Expansion of girls ward to accommodate physically challenged girls.
- Purchase of crutches, calipers, artificial limbs, tri-cycles, wheel chairs etc.
- Training in chalk making.
- Opening up of a stitching training centre for the womenfolk.

Providing training and support to youths of the tribal villages in Rupru, Ranchi, Rai and Khunti district, in the following:

- Lac cultivation.
- Preparation of vermin-compost (earthworm manure).
- Honey bee keeping.
- Horticulture/agro based farming.

MECON had sent its medical team comprising of doctors and paramedical staffs to flood affected area in Bihar to provide medical assistance to the flood affected victims.

**BHARAT REFRACTORIES LTD (BRL)**

In spite of the liquidity crisis, the company has been able to educate wards of people settled in and around the factory area through establishment of schools. Tree plantation has also been taken up to prevent pollution.

**SPONGE IRON INDIA LTD (SIIL)**

During the year, the company spent Rs 15.25 lakh as part of corporate social responsibility.

**KIOCL LTD**

KIOCL Limited has contributed towards CSR activities with primary focus being in the areas of education and health care. In the current financial year, some of the activities undertaken by the company are outlined in brief:

- Running schools and other expenses on education
- Forest, ecology and other related matters
- Distribution of medicine and extension of medical facilities to the tribal population and other people of nearby areas.
- Financial assistance towards construction of new rooms at Govt Higher Primary School, Horanadu
- Supply of steel fabrication towards construction of bridge for the convenience of local residents of Nellibeedu, Kudremukh
- Supply of steel and trusses towards construction of temple and shelter at Kudremukh
- Supply of pipes to the forest department, Kudremukh, for correcting the gravity water supply system at the Bhagavati Nature Camp, Kudremukh
- Financial assistance to schools at Mangalore and neighbouring areas for conducting sports and other related activities
- A free medical camp was organised by the company at Kudremukh and Mangalore, to spread awareness among the public about heart ailments.
In the financial year 2008-09, the company earmarked a sum of Rs. 216 lakh towards CSR. During the year, the company spent a sum of Rs. 211.97 lakh towards CSR activities, including contribution of Rs. 50 lakh towards the Bihar Flood Relief Fund.

**BIRD GROUP OF COMPANIES (BGC)**

The companies under Bird Group undertook various steps to fulfill Corporate Social Responsibility (CSR). Some of them are as below:

- The Orissa Minerals Development Co. Ltd. (OMDC) runs a 20-bed hospital at Thakurani with ambulances. Residents of adjoining villages are given free treatment at the hospital.
- The Bisra Stone Lime Co. Ltd (BSLC) runs a 40-bed hospital at Birmotrapur with ambulances. Villagers from adjoining areas are given treatment at this hospital for a nominal fee.
- OMDC arranged to renovate a number of ponds in the villages nearby for the provision of water.
- Both OMDC and BSLC extended aid to peripheral schools and colleges by building them classrooms, arranging study materials, providing furniture and school buses etc. The companies also actively participated in other community awareness programmes.
- OMDC contributed Rs. 25 lakh in the month of October 2008 towards relief and support for flood calamity in Bihar.
- OMDC contributed Rs.10 crore to the government-managed agencies in Keonjhar district, Orissa towards development of road, health and education, and construction of school.
- OMDC executed projects pertaining to drinking water supply, electrification and improvement of education facility in the tribal village around Barbil in Keonjhar, Orissa amounting to Rs. 4.50 crore.
CHAPTER-XXI

TECHNICAL INSTITUTES UNDER THE MINISTRY OF STEEL

The Ministry of Steel strives to constantly upgrade the technical skills of the workforce through courses and programmes. The following institutes set up for the purpose deserve a mention for their worthwhile role and contribution:

BIJU PATNAIK NATIONAL STEEL INSTITUTE (BPNSI)

Based on the concept plan developed by a task force set up by the Ministry of Steel, a decision was taken to set up a National Steel Institute (NSI) at Puri, as a Training-cum-Service-cum-Research & Development centre. The foundation stone for the Biju Patnaik National Steel Institute (BPNSI) at Puri was laid on January 1, 2001. The institute is registered under the Societies Registration Act, 1980 and started functioning from January 1, 2002. The JPC chairman is also the Chairman of the BPNSI. The BPNSI was established to help the domestic secondary steel industry to keep up with the rapid transformation which the global and Indian steel industries have been undergoing. The Cabinet had on February 20, 2004 approved the setting up of the BPNSI at Puri as a full-fledged institute with capital funding from JPC. Presently, the Institute is being run from two separate buildings in Puri, having laboratory, library, and seminar room facilities. A workshop for welding technology has also been set up at Puri to impart hands-on practice to the trainees.

Some of the major initiatives taken by the BPNSI are enumerated below:
- Since October 2006, the institute has been conducting a course on “Advanced Certificate in Iron and Steel Manufacturing and Plant Management” which prepares students to take managerial positions in the industry.
- For the benefit of the working executives, the said course is being offered from January 2007 onwards as part of its Training and Further Education (TAFE) Programme.
- Visa Steel, Jai Balaji Group and Gonterman Peipers Ltd. have evinced interest to take students of the Institute as industrial trainees.
- The institute is looking for an alternate land for its permanent building somewhere in Puri or in adjacent area. Government of Orissa has been requested to provide the necessary land.

NATIONAL INSTITUTE OF SECONDARY STEEL TECHNOLOGY (NISST)

The need for Human Resource Development and Technology Upgradation in the Secondary Steel Sector comprising mainly the steel melting units with Electric Arc Furnace (EAF) or Induction Furnaces (IF), and the Re-rolling units, has been felt since long. A similar opinion was expressed by the Advisory Committee on Steel Rolling Industries, set up by the Ministry of Steel, Government of India, in 1984. It was primarily based on these needs and also the demand from the industry, that the National Institute of Secondary Steel Technology was set up as a registered society on August 18, 1987 under the chairmanship of the then Development Commissioner for Iron and Steel and presently Joint Secretary, Ministry of Steel, with the following aims and objectives:
- To provide trained technical manpower to the secondary steel sector through short-term and long-term courses and to update their knowledge base.
- To bring awareness about state-of-the-art technologies by holding seminars, workshops and symposia.
- To provide various industrial services and testing facilities.
- To extend consultancy services to industries in terms of solving technological problems, improving energy efficiency and reducing pollution levels.
- To conduct Research, Development and Design work in frontier areas for providing updated technology to this sector.
- To organise documentation and information retrieval services for the industry.
- To provide a platform for interaction between industry and educational as well as research institutions.
The following areas of the secondary steel sector are under the purview of the Institute:
- Electric Arc and Induction Furnace
- Secondary refining
- Rolling Mills (Hot & Cold)
- Direct Reduced Iron units

**Major activities of NISST**

The NISST is an ISO 9001-2000 Certified organisation for its laboratories. The Institute achieved milestones and took the following initiatives as outlined below:
- The Job-Oriented Certificate Course (JOCC) in Steelmaking and Rolling Technology run by NISST entered its 16th year of operation. This has already provided more than 400 skill/semi-skilled, supervisory level technical personnel to the secondary steel sector, thereby opening a new channel of employment.
- A new Centre for JOCC has been opened at Pune.
- Metallurgical and mechanical testing were conducted for Garrison Engineers, Punjab State Electricity Board (PSEB), Northern Railway, Power Grid Corporation and Housing Boards.
- NISST has been working jointly with IIT, Kanpur for undertaking a Developmental Project on computer simulation and e-demonstration on reheating furnace operation.
- NISST is continuously providing technical support to the secondary steel sector to improve quality, yield, value-addition and cost reduction to meet the challenges.
- Human Resource Development activities are being continuously undertaken to improve knowledge and skill of the employees of the secondary steel sector through modular courses.
- The institute organised seminars, in-house trainings, safety awareness programmes and workshops for the steel industry. It organised national level seminars at Palakkad (Kerala) and Chennai. The Chennai seminar has been planned as an annual event.
- The NISST has been empanelled by the Bureau of Energy Efficiency for conducting energy audits through its qualified and registered energy auditors. Energy audits of industries and buildings, including those of the Punjab State Electricity Board, banks etc., are being carried out with suggestive measures for energy conservation in the service to the nation.
- The process for National Accreditation Board for Testing and Calibration Laboratories (NABL) has been initiated. Once obtained, industry shall be immensely benefited. In the next phase, the Bureau of Indian Standards (BIS) certification shall be obtained.
- In-house training programmes have been undertaken in the steel industry all over the country. Many units have already placed their request.

**INSTITUTE FOR STEEL DEVELOPMENT & GROWTH (INSDAG)**

The initiatives for setting up the INSDAG emanated from the steel producers and the Institute was registered as a society on August 26, 1996. The mission of the Institute is to work in unison with all stakeholders in the steel industry so as to evolve ways and means for efficient usage of steel and provide optimum value to customers. The Institute primarily works towards the development of technology in steel usage and market for the steel fraternity. The institute is managed by its Executive Council.

**Education/ Training of Professionals and Teaching Faculty on Steel Design**

For enhancing the knowledge and skills of faculty and professionals in the country on structural steel design methods and technologies, several Refresher Courses and Short Term Training Programmes were conducted.

INSDAG is continuously engaged in various seminars, conferences, training and knowledge dissemination programmes all across the country. Architects, design engineers and planners have been educated in the innovative uses of steel in modern structures and constructions. INSDAG is regularly engaged in publication of various designs and updation of current designs in structural engineering. INSDAG has contributed significantly for design and manufacture of Steel Bullock Carts, which has helped the rural and agricultural sector. Efforts to promote various innovative uses of steel are being continuously taken up by INSDAG.
CHAPTER-XXII

IMPLEMENTATION OF THE RIGHT TO INFORMATION ACT, 2005

With a view to promoting openness, transparency and accountability in the administration and good governance of the country, the Government of India enacted the Right to Information (RTI) Act, 2005 on June 15, 2005. The objective of the Act is to promote openness, transparency and accountability in the administration and to provide good governance in the country. The Act also aims to protect the citizens’ Right to Information (RTI) to enable every citizen to secure access to information from public authorities. Correspondingly, dissemination of such information has become an obligation for all public authorities.

Implementation of the RTI Act in the Ministry of Steel

One Director level officer has been nominated as nodal officer for implementation of the RTI Act and its monitoring. The officers of the rank of Deputy Secretary/Director, or officers of equivalent level, and the concerned Joint Secretary have been nominated as Public Information Officer (PIO) and Appellate Authority, respectively. In addition, two Assistant Public Information Officers (APIOs) have also been nominated. The Ministry also monitors the progress/implementation of the RTI Act in its PSUs/Companies and other organisations which are under its administrative control. The manual of 17 items, details of Appellate Authority/Public Information Officer, Assistant Public Information Officers and the names of all the Public Authorities with their categories have been hosted on the Ministry’s Website www.steel.gov.in. All the public authorities under the administrative control of the Ministry of Steel have also hosted the manual of 17 items on their respective websites and have nominated their respective Public Information Officers/Assistant Public Information Officers and Appellate Authority. During the year 2008-09 (up to March 31, 2009), the Ministry of Steel alone had received 155 RTI applications for information, which were duly disposed of within the prescribed deadline of one month.

STEEL AUTHORITY OF INDIA LTD (SAIL)

A total of 1,811 applications were received in SAIL as a whole during the financial year 2008-09, out of which 190 were from its Corporate Office. Out of these 190 receipts, 91 cases were related to SAIL Plants/Units which have been transferred to the respective Plants/Units under Section 6(3) of RTI Act. The remaining 99 cases were disposed of. All the applications were replied within the stipulated time period.

An Awareness Programme / Workshop on ‘Obligation of Public Authorities under RTI’ was organized on May 31, 2008 at Corporate office for the benefit of all PIOs of the SAIL Plants/Units and Senior Officers of Corporate Office. In addition, an awareness programme for General Public on Right to Information Act 2005 was organised at Kaushambi, Ghaziabad on 13th December 2008 for the benefit of local residents and NGOs.

RASHTRIYA ISPAT NIGAM LTD (RINL)

- A total of 132 requests were received under the Right to Information Act, by RINL from April 1, 2008 to March 31, 2009. Out of the same, 125 requests were disposed of by furnishing information to the seekers, two requests were rejected as per the provision of the Act and five requests were pending as on March 31, 2009.
- Number of cases where appellant has appealed to Central Information Commission (CIC): 05 (All cases were disposed of by CIC)
Other activities

- A training cum interaction session on “Three years journey of RTI Act – A critical analysis” by Prof. M. M. Ansari, Information Commissioner, Central Information Commission, was organised for the officers (around 50) dealing with the RTI matters in the organisation on November 29, 2008.
- A discussion session with appellate authorities (i.e. all Directors and the CVO) where the CMD was also present was organised on November 29, 2008. Drawing on the latest decisions of CIC, Prof. Ansari cleared the doubts raised by the participants. He also appreciated the efforts made by RINL in the area.
- A training cum workshop on “Right to Information Act-2005” by Dr. Sairam Bhat, Assistant Professor, National Law School of India University, Bengaluru, was organised for the officers (around 60) dealing with RTI matters in the organisation on February 10, 2009.
- With a view to facilitate channelising of information to the CPIO, 3 Nodal Officers and 3 Contact officers have been added to the existing 10 Nodal Officers and 26 Contact Officers.
- Information available in the 17 manuals of the RTI portal in company website is being regularly updated in accordance with the requirement of Section 4(1) of Right to Information Act-2005.
- Frequently Asked Questions and Answers (FAQs) on implementation of RTI Act have been compiled and kept on the company intranet for wider circulation among the employees and for clarification of doubts in implementing the Act.
- RTI request and Appeal Management Information System (RTI-MIS) is being implemented in accordance with the direction of Central Information Commission.

NMDC LTD

NMDC has published on its website, www.nmdc.co.in, information under Section 4 (1) of the RTI Act 2005. The NMDC website, which has specifically provided for information under the RTI Act as also other information, statutory or otherwise, and list of PIOs/AA, is being updated regularly for the information of the public. Annual reports of the company, which gives lots of information on its working, are widely circulated and given to any interested person. Further, information is disseminated through press conferences, press handouts etc.

NMDC maintains all its records in a transparent manner. NMDC is also registering the receipt of request for information to its final disposal, including decision of the appellate authority in the RTI-MIS system as introduced by the Central Information Commission, New
Delhi. Information is given to the maximum extent in the form in which it is asked for and in local language as well, when needed. NMDC has organised in-house training programmes for all PIOs and their assisting staff, besides sending them to programmes organised by outside agencies. A lecture was also delivered on the subject on June 9, 2008 by Shri C.D. Arha, Central Information Commissioner, of the Andhra Pradesh chapter.

The number of RTI queries received and disposed of during the period April 1, 2008 to March 31, 2009 are as follows:

<table>
<thead>
<tr>
<th>No. of queries received</th>
<th>No. of queries replied to</th>
<th>Queries referred to CIC</th>
<th>Queries disposed of by CIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>55</td>
<td>NIL</td>
<td>NIL</td>
</tr>
</tbody>
</table>

**MANGANESE ORE (INDIA) LTD (MOIL)**

MOIL has taken the major initiatives for implementation of RTI Act, 2005 in letter and spirit. MOIL have appointed PIOs at the Corporate Office and PIOs/APIOs have also been appointed in all its Mining Units. Director (Production & Planning) has been appointed/designated as Appellate Authority under the Act. The names of all the PIOs/APIOs and the Appellate Authority has also been hosted on MOIL’s website [www.moil.nic.in](http://www.moil.nic.in). The obligation of the preparation of the 17 manual prescribed in clause (b) subsection (1) Section (4) has been complied with and these have also been hosted on MOIL’s portal within the stipulated time frame given under the Act.

On the basis of the directives issued by Central Information Commission and the Ministry of Steel from time to time, MOIL has been updating the requisite information every three months.

A number of awareness workshops were also conducted in order to make employees aware about the intention and spirit of the Act.

<table>
<thead>
<tr>
<th>Applications received during 2008-2009</th>
<th>Applications disposed of as on 31.03.2009</th>
<th>Applications pending as on 31.03.2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>23</td>
<td>NIL</td>
</tr>
</tbody>
</table>

No. of cases where appellant has filed appeal: 1

**MSTC LTD**

The company is complying with the provisions of the RTI Act, 2005. Information as sought under the Act is provided to applicants. The company has appointed a CPIO and PIO at the head office and PIO and APIO at various locations for effectively complying with provisions of the RTI Act. During the period April 2008 to March 31, 2009, the total number of RTI applications received was 17. All these 17 applications were disposed of during the period.

**FERRO SCRAP NIGAM LTD (FSNL)**

FSNL has implemented Right to Information Act, 2005 by nominating CPIO/APIO, finalisation of manuals of 17 items (manuals) and hosting of manuals on the company website ([www.fsnl.nic.in](http://www.fsnl.nic.in)). Quarterly reports are submitted to the Ministry of Steel and CIC regularly. All requests for information are dealt with as per the prescribed guidelines of the RTI Act, 2005.

The total number of RTI applications received during the period April 1, 2006 to March 31, 2009 was 10. All these 10 applications were disposed of during the period.
HINDUSTAN STEELWORKS CONSTRUCTION LTD (HSCL)

Right to Information Act 2005 has been implemented in HSCL. The company has nominated one CPIO and seven APIOs. CMD, HSCL is the first appellate authority under the act for the company.

From April 1, 2008 to March 31, 2009 the summary statement of application received and disposal action taken is as under:
- Total No. of RTI application received: 96
- Total No. of RTI application disposed of by CPIO/APIO: 96
- Total No. of First appeals received: 20
- Total No. of First appeals disposed of by Appellate Authority: 20

MECON LTD

In line with the directives of the Government of India, MECON has also implemented the Right to Information (RTI) Act 2005. All the relevant manuals pertaining to RTI Act 2005 have been hosted on MECON’s website www.mecon.co.in with effect from September 19, 2005. A Public Information Officer (PIO) has been nominated by MECON at its headquarters and Assistant Public Information Officers (APIOs) have been nominated at various regional and site offices. The queries coming to MECON from the public are being attended to by these nominated officials and replied by the PIO within the stipulated time period.

BHARAT REFRACTORIES LTD (BRL)

The information sought under the RTI Act, 2005 are being promptly replied with relevant details. A senior official has been entrusted to co-ordinate the process.

KIOCL LTD

The company complies with all the provisions of the Right to Information Act, 2005, both in letter and spirit. Information as sought under the Act is provided well within the prescribed time. The company has appointed Public Information Officers/Assistant Public Information Officers at various locations for effectively complying with various provisions of the Act. Necessary details as required under the Act are also posted in company’s website.
- Total number of RTI applications received: 25
- Total number of RTI applications disposed of: 24
- Total number of first appeals received: 2
- Total number of first appeal disposed of: 1

BIRD GROUP OF COMPANIES (BGC)

In line with the directives of the Government of India, Bird Group of Companies (BGC) has implemented the Right to Information (RTI) Act, 2005. All the relevant manuals pertaining to RTI Act 2005 have been hosted on BGC’s website www.birdgroup.gov.in

A Public Information Officer has been nominated by the Bird Group at its head office and several other Assistant Public Information Officers at the mines office and head office. These officers regularly attend to queries raised by members of the public. During the year 2008-09, BGC received a total of 21 requests for information which were all disposed of and there are no RTI cases pending as on March 31, 2009.
CHAPTER-XXIII

DEVELOPMENT OF NORTH-EASTERN REGION

The Ministry of Steel has been exempted from the requirement of making 10% of the budgetary allocation in the Demands for Grants for this purpose.

STEEL AUTHORITY OF INDIA LTD (SAIL)

Installation of Steel Processing Unit at Guwahati

With a view to meeting the increased customer demand for tailor made steel products, it was felt that there is a need to set up a Steel Processing Unit (SPU) near the consumption points, particularly in a state where no steel plant is located and where steel consumption is low compared to the national average. As per the National Steel Policy, per capita steel consumption in rural areas is to improve from 2 to 4 kg by 2019-20. The Working Group on the Steel Industry for the 11th Five-Year Plan emphasised that “an important potential area for steel usage resulting from economic growth and rising income levels in the household sector is in the rural areas. However, unlike urban areas, in rural areas, concerted efforts would be required to convert this rural potential into actual consumption of steel”. Keeping this in view, SAIL is considering setting up SPUs at various locations, including in the north-east region. Guwahati has been identified as a suitable location for setting up of the SPU based on the demand and availability of steel, especially for the construction/housing sector, subject to certain exemptions/ concessions from the State/Central Government.

The facilities proposed to be installed at Guwahati are TMT bar mill, galvanising, cut-to-length
and corrugation line, de-coiling, straightening and cutting of TMT coils. The land for the project has been identified at Tilingaon near IIT, Guwahati, and the State Government has approved land acquisition in December 2007. The proposal for setting up the SPU has been approved by the SAIL Board in April 2008. SAIL has made payment of Rs. 7.97 crore for 33 acres of land.

RASHTRIYA ISPAT NIGAM LTD (RINL)

RINL has appointed a Consignment Sales Agent (CSA) at Guwahati during the year 2008-09. Iron and steel products are supplied from the stockyard of CSA to North Eastern states. One District Level Dealer (DLD) has also been appointed at Siliguri to cater to the iron and steel requirements of the North Eastern region.

RINL is also supplying steel products directly to the Hydro Electric and other projects in the North Eastern region through VSP’s stockyard located at Kolkata and through the traders based in Kolkata.

During the financial year 2008-09, Branch Sales Office (BSO), Kolkata had supplied 2,795 tonnes of pig iron to Assam and Meghalaya through CSA at Guwahati. VSP had also supplied 4452 tonnes of steel products to North Eastern region.

HINDUSTAN STEELWORKS CONSTRUCTION LIMITED (HSCL)

HSCL has been engaged in execution of Projects in the north eastern states of Sikkim and Tripura since January 2005. The company, at present, is executing projects worth about Rs. 835 crore in these two states, which will help in infrastructure and tourism development of the north eastern states.
SIKKIM

The following projects are under execution in Sikkim:

- **Construction of Pilgrimage Centre at Solopok, Sikkim**
  
The work has been taken up under Rural Management and Development Department, Government of Sikkim, for a value of Rs. 93.08 crore. The project involves installation of statues and a number of shrines at the hilly terrain of the picturesque State. This is expected to add to the tourist attraction of the State.

- **Construction of Cultural Centre at Yangang, in South Sikkim**
  
  Construction of a cultural centre at Yangang at a cost of Rs. 46.75 crore is expected to be completed by the end of 2009. The project has been taken up under Rural Management and Development Department, Government of Sikkim.

TRIPURA

The following projects are being executed by HSCL in Tripura:

- **Construction of Rural Roads under Pradhan Mantri Gram Sadak Yojana (PMGSY)**
  
The work has been taken up by HSCL under Public Works Department of the Government of Tripura for establishing new connectivity and upgradation of existing roads in rural areas with population densities ranging from 250 to more than 1000. The work involves activities from soil testing, survey and construction / upgradation including maintenance of the constructed roads for five years after handing over. HSCL is at present working in two Districts – Dhalai and North District. The summary of the projects under PMGSY is as below:

  - Number of road links to be constructed: 153
  - Number of roads completed: 28
  - Number of roads where work is in progress: 114
  - Total Length: 600.094 km
  - Work completed: 69.359 km
  - Total value of work: Rs. 488.140 crore

- **Construction of district hospitals and health care centres in Tripura**
  
  HSCL has taken up construction of three 150 bedded District Hospitals, one each in North, South and Dhalai District and construction of a 100 bedded hospital at Teliamura under the Department of Health, Government of Tripura. Staff quarters at the three district hospitals are also being constructed by HSCL. The total value of work taken up is Rs. 120.57 crore.

- **Construction of market complexes and residential quarters**
  
  Over and above the rural roads under PMGSY and district hospitals and healthcare centres, HSCL has taken up the development of an industrial area under Tripura Industrial Development Corporation Ltd, construction of three market complexes and one residential complex at Agartala under Agartala Municipal Council. The total value of work is Rs. 85.42 crore.
Scott & Saxby Ltd (SSL), a unit of Bird Group of Companies, is engaged in the business of sinking deep tube wells and other allied activities and has been engaged in the north-eastern part of India for revenue generation for the last several years. The activities are spread across the states of Assam and Tripura. The company’s activities in Assam are related to water supply for tea irrigation. The activities in Tripura are related to the public health engineering department, involving sinking deep tube wells to help supply potable water to distant and remote villages.

Performance in Tripura and Assam for the last five years is as follows:

<table>
<thead>
<tr>
<th>Financial year</th>
<th>Tripura</th>
<th>Assam</th>
<th>Total (Rs. in lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of tube wells sunk</td>
<td>No. of repairing jobs*</td>
<td>No. of repairing jobs*</td>
</tr>
<tr>
<td>2004-05</td>
<td>32</td>
<td>08</td>
<td>10</td>
</tr>
<tr>
<td>2005-06</td>
<td>26</td>
<td>08</td>
<td>06</td>
</tr>
<tr>
<td>2006-07</td>
<td>24</td>
<td>06</td>
<td>06</td>
</tr>
<tr>
<td>2007-08</td>
<td>15</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>2008-09</td>
<td>06</td>
<td>-</td>
<td>11</td>
</tr>
</tbody>
</table>

* On existing tube wells
ANNEXURE - I

LIST OF SUBJECTS ALLOCATED TO THE MINISTRY OF STEEL AS PER GOVERNMENT OF INDIA (ALLOCATION OF BUSINESS) RULES, 1961

1. Planning, development and facilitation of setting up of iron and steel production facilities including Electric Arc Furnace (EAF) units, Induction Furnace (IF) units, processing facilities like re-rollers, flat products (hot/cold rolling units), coating units, wire drawing units and steel scrap processing including ship breaking.

2. Development of iron ore mines in the public sector and other ore mines (manganese ore, chrome ore, limestone, sillimanite, kyanite, and other minerals used in the iron and steel industry but excluding mining lease or matters related thereto).

3. Production, distribution, prices, imports and exports of iron and steel and ferro-alloys.

4. Matters relating to the following undertakings including their subsidiaries, namely:
   (i) Steel Authority of India Limited (SAIL);
   (ii) Rashtriya Ispat Nigam Limited (RINL);
   (iii) NMDC Limited;
   (iv) Manganese Ore (India) Limited (MOIL);
   (v) MSTC Limited;
   (vi) Ferro Scrap Nigam Limited;
   (vii) Hindustan Steelworks Construction Limited (HSCL);
   (viii) MECON Limited;
   (ix) Bharat Refractories Limited (BRL);
   (x) Sponge Iron India Limited (SIIL);
   (xi) KIOCL LTD; and
   (xii) Bird Group of Companies.
## ANNEXURE - II

**MINISTERS IN-CHARGE AND OFFICERS IN THE MINISTRY OF STEEL DURING 2008-09**

*(PLEASE SEE CHAPTER III)*

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tbody>
<tr>
<td>Minister for Chemicals &amp; Fertilizers and Steel</td>
<td>Shri Ram Vilas Paswan</td>
</tr>
<tr>
<td>Minister of State for Steel</td>
<td>Dr. Akhilesh Das (up to 06.04.2008)</td>
</tr>
<tr>
<td></td>
<td>Shri Jitin Prasada</td>
</tr>
<tr>
<td>Secretary</td>
<td>Shri R.S. Pandey (up to 31.07.2008)</td>
</tr>
<tr>
<td></td>
<td>Shri Pramod Kumar Rastogi</td>
</tr>
<tr>
<td>Additional Secretary &amp; Financial Adviser</td>
<td>Shri B.S. Meena</td>
</tr>
<tr>
<td>Joint Secretaries</td>
<td>Shri Elias George</td>
</tr>
<tr>
<td></td>
<td>Shri Ajoy Kumar (up to 07.04.2008)</td>
</tr>
<tr>
<td></td>
<td>Dr. Dalip Singh</td>
</tr>
<tr>
<td></td>
<td>Dr. Uday Pratap Singh</td>
</tr>
<tr>
<td>Economic Adviser</td>
<td>Ms. Chandrakshala Malviya</td>
</tr>
<tr>
<td>Chief Controller of Accounts</td>
<td>Ms. Vibha Pandey</td>
</tr>
<tr>
<td>Industrial Adviser</td>
<td>Shri A.C.R. Das</td>
</tr>
<tr>
<td>Directors</td>
<td>Shri J.P. Shukla</td>
</tr>
<tr>
<td></td>
<td>Shri Nihar Ranjan Dash</td>
</tr>
<tr>
<td></td>
<td>Shri Mukhmeet Singh Bhatia</td>
</tr>
<tr>
<td></td>
<td>Shri Sanjay Mangal</td>
</tr>
<tr>
<td></td>
<td>Shri L. Siddhartha Singh</td>
</tr>
<tr>
<td></td>
<td>Shri Navin Soi (up to 07.01.2009)</td>
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<tr>
<td>Director level Officers</td>
<td>Shri Jane Alam, PS to Hon’ble Minister for Chemicals &amp; Fertilizers and Steel</td>
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<tr>
<td></td>
<td>Shri D. Kashiva, Additional Industrial Adviser</td>
</tr>
<tr>
<td></td>
<td>Shri Sudhir Garg, PS to Hon’ble Minister of State for Steel (up to 21.07.2008)</td>
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<tr>
<td>Deputy Secretaries</td>
<td>Shri M.K. Roy</td>
</tr>
<tr>
<td></td>
<td>Ms. Indrani Kaushal</td>
</tr>
<tr>
<td></td>
<td>Ms. B. Nalini</td>
</tr>
<tr>
<td></td>
<td>Ms. Jaya Dubey</td>
</tr>
<tr>
<td>Deputy Secretary level Officers</td>
<td>Shri Rupinder Singh, PS to Hon’ble Minister of State for Steel</td>
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<tr>
<td></td>
<td>Shri R.P. Rathi, OSD to Hon’ble Minister for Chemicals &amp; Fertilizers and Steel</td>
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<tr>
<td></td>
<td>Shri B.D. Ghosh, Joint Industrial Adviser</td>
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<tr>
<td></td>
<td>Shri O.P. Sethi, Joint Director (Official Language) (up to 28.07.2008)</td>
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<td></td>
<td>Shri Ved Prakash Singh, Joint Director (Official Language)</td>
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<td></td>
<td>Shri B.S. Kaushik, Senior PPS to Additional Secretary &amp; Financial Adviser</td>
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## ANNEXURE - III
### PRODUCTION OF MAIN AND SECONDARY PRODUCERS
#### (SUMMARY)

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<td><strong>I. CRUDE STEEL:</strong></td>
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<td>Main Producers</td>
<td>19738</td>
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<td>ASP + VISL</td>
<td>277</td>
<td>292</td>
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<td>315</td>
<td>264</td>
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<td></td>
<td><strong>Other Producers:</strong></td>
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<td>EAF Units (incl. Corex &amp; MBF/EOF)</td>
<td>10229</td>
<td>11273</td>
<td>13250</td>
<td>14820</td>
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<td>Induction Furnaces</td>
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<td>13493</td>
<td>15390</td>
<td>16933</td>
<td>18000</td>
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<td></td>
<td><strong>TOTAL (Crude Steel):</strong></td>
<td>43437</td>
<td>46460</td>
<td>50817</td>
<td>53857</td>
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<td>% share of Other Producers</td>
<td>53.9%</td>
<td>53.3%</td>
<td>56.4%</td>
<td>59.0%</td>
<td>57.3%</td>
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<td><strong>II. PIG IRON:</strong></td>
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<td>Main Producers</td>
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<td>1007</td>
<td>860</td>
<td>936</td>
<td>589</td>
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<td>Other Producers</td>
<td>2603</td>
<td>3688</td>
<td>4133</td>
<td>4378</td>
<td>4700</td>
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<td></td>
<td><strong>TOTAL (Pig Iron):</strong></td>
<td>3228</td>
<td>4695</td>
<td>4993</td>
<td>5314</td>
<td>5289</td>
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<td>% share of Other Producers</td>
<td>80.6%</td>
<td>78.6%</td>
<td>82.8%</td>
<td>82.4%</td>
<td>88.9%</td>
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<td><strong>III. SPONGE IRON:</strong></td>
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<td></td>
<td>Gas Based</td>
<td>4640</td>
<td>4545</td>
<td>5265</td>
<td>5845</td>
<td>5280</td>
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<td></td>
<td>Coal Based</td>
<td>7897</td>
<td>10280</td>
<td>13080</td>
<td>14531</td>
<td>15320</td>
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<td></td>
<td><strong>TOTAL (Sponge Iron):</strong></td>
<td>12537</td>
<td>14825</td>
<td>18345</td>
<td>20376</td>
<td>20800</td>
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<td>% share by Process (Coal Based)</td>
<td>63.0%</td>
<td>69.3%</td>
<td>71.3%</td>
<td>71.3%</td>
<td>74.6%</td>
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<td><strong>IV. FINISHED STEEL FOR SALE (Alloy/Non-Alloy)</strong></td>
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<td>Main Producers</td>
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<td>16413</td>
<td>17614</td>
<td>18020</td>
<td>17216</td>
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<td>Other Producers</td>
<td>31041</td>
<td>34809</td>
<td>40047</td>
<td>43332</td>
<td>45000</td>
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<td>Less IPT/Own Consumption</td>
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<td>4656</td>
<td>5132</td>
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<td><strong>TOTAL (finished steel):</strong></td>
<td>43513</td>
<td>46566</td>
<td>52529</td>
<td>56075</td>
<td>56416</td>
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<tr>
<td></td>
<td>% share of Other Producers</td>
<td>71.3%</td>
<td>74.8%</td>
<td>76.2%</td>
<td>77.3%</td>
<td>79.8%</td>
</tr>
</tbody>
</table>

*Provisional

**Legend:**
- **EAF**: Electric Arc Furnace
- **LD**: Linz-Donawiz
- **MBF**: Mini Blast Furnace
- **EOF**: Energy Optimising Furnace
- **IPT**: Inter-Plant Transfer
## ANNEXURE - IV

### PRODUCTION OF CRUDE/LIQUID STEEL

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<tr>
<td>B S P</td>
<td>3925</td>
<td>4582</td>
<td>117</td>
<td>3925</td>
<td>4799</td>
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<tr>
<td>D S P</td>
<td>1802</td>
<td>1806</td>
<td>100</td>
<td>1802</td>
<td>1869</td>
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<tr>
<td>R S P</td>
<td>1900</td>
<td>1603</td>
<td>84</td>
<td>1900</td>
<td>1661</td>
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<tr>
<td>B S L</td>
<td>4360</td>
<td>3835</td>
<td>88</td>
<td>4360</td>
<td>4228</td>
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<tr>
<td>I S P</td>
<td>520</td>
<td>357</td>
<td>69</td>
<td>520</td>
<td>434</td>
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<tr>
<td>A S P</td>
<td>234</td>
<td>150</td>
<td>64</td>
<td>234</td>
<td>140</td>
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<td>V I S L</td>
<td>118</td>
<td>127</td>
<td>100</td>
<td>118</td>
<td>132</td>
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<tr>
<td><strong>TOTAL</strong> (SAIL)</td>
<td>12859</td>
<td>12460</td>
<td>97</td>
<td>12859</td>
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<td>R I N L</td>
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<td>3452</td>
<td>119</td>
<td>2910</td>
<td>3494</td>
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<tr>
<td><strong>TOTAL</strong> (Private Sector)</td>
<td>15769</td>
<td>15912</td>
<td>101</td>
<td>15769</td>
<td>16964</td>
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### PRIVATE SECTOR

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<tbody>
<tr>
<td>Tata Steel Ltd</td>
<td>4000</td>
<td>4103</td>
<td>103</td>
<td>5000</td>
<td>4730</td>
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<tr>
<td>Majors</td>
<td>6560</td>
<td>6237</td>
<td>95</td>
<td>7160</td>
<td>6988</td>
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<tr>
<td>Other E A F Units/ MBF-EOF</td>
<td>4586</td>
<td>3982</td>
<td>87</td>
<td>4542</td>
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<td><strong>INDUCTION FURNACE UNITS</strong></td>
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<td>13193</td>
<td>77</td>
<td>18700</td>
<td>13493</td>
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<td><strong>TOTAL</strong> (Private Sector)</td>
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<td>27525</td>
<td>85</td>
<td>33402</td>
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<td><strong>GRAND TOTAL</strong></td>
<td>47995</td>
<td>43437</td>
<td>91</td>
<td>51171</td>
<td>46460</td>
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Majors = Essar, Ispat & JSWL.
## ANNEXURE - V

**PRODUCTION OF CRUDE/LIQUID STEEL**

**2004-05 TO 2008-09**

**(BY ROUTE)**

<table>
<thead>
<tr>
<th>CATEGORY OXYGEN ROUTE</th>
<th>2004-05 ('000 tonnes)</th>
<th>2005-06 ('000 tonnes)</th>
<th>2006-07 ('000 tonnes)</th>
<th>2007-08 ('000 tonnes)</th>
<th>2008-09 ('000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B S P</td>
<td>4582</td>
<td>5054</td>
<td>4799</td>
<td>5055</td>
<td>5184</td>
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<tr>
<td>D S P</td>
<td>1806</td>
<td>1801</td>
<td>1889</td>
<td>1914</td>
<td>1886</td>
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<td>R S P</td>
<td>1603</td>
<td>1661</td>
<td>1990</td>
<td>2093</td>
<td>2083</td>
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<tr>
<td>B S L</td>
<td>3835</td>
<td>4228</td>
<td>4067</td>
<td>4127</td>
<td>3576</td>
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<td>I S P</td>
<td>357</td>
<td>434</td>
<td>472</td>
<td>458</td>
<td>418</td>
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<tr>
<td>V I S L</td>
<td>127</td>
<td>152</td>
<td>159</td>
<td>158</td>
<td>96</td>
</tr>
<tr>
<td>R I N L</td>
<td>3452</td>
<td>3494</td>
<td>3497</td>
<td>3129</td>
<td>2963</td>
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<tr>
<td>TATA Steel Ltd.</td>
<td>4103</td>
<td>4730</td>
<td>5174</td>
<td>5013</td>
<td>5646</td>
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<tr>
<td>JSW Steel Ltd.</td>
<td>1875</td>
<td>2268</td>
<td>2643</td>
<td>3147</td>
<td>3167</td>
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<td>Other Oxygen Route</td>
<td>510</td>
<td>576</td>
<td>724</td>
<td>872</td>
<td>870</td>
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<tr>
<td><strong>TOTAL OXYGEN ROUTE:</strong></td>
<td><strong>22250</strong></td>
<td><strong>24398</strong></td>
<td><strong>25394</strong></td>
<td><strong>25966</strong></td>
<td><strong>25889</strong></td>
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**ELECTRIC ARC FURNACE**

| A S P                  | 150                    | 140                    | 150                    | 157                    | 168                    |
| Essar Steel Ltd.       | 2360                   | 2510                   | 3006                   | 3564                   | 3258                   |
| Ispat Industries Ltd.  | 2002                   | 2190                   | 2761                   | 2827                   | 2200                   |
| Jindal Steel & Power Ltd. | 379                | 564                    | 803                    | 1219                   | 1573                   |
| Lloyds Steel Ltd.      | 454                    | 515                    | 537                    | 463                    | 460                    |
| Jindal Stainless Ltd.  | 535                    | 542                    | 585                    | 585                    | 470                    |
| Other Electric Arc Furnace | 2114              | 2108                   | 2191                   | 2143                   | 2502                   |
| **TOTAL ELECTRIC ARC FURNACE:** | **7994** | **8569** | **10033** | **10958** | **10631** |

**Induction Furnace**

| 13193 | 13493 | 15390 | 16933 | 18000 |

**TOTAL ELECTRIC ROUTE:**

| 21187 | 22062 | 25423 | 27891 | 28631 |

**GRAND TOTAL:**

| 43437 | 46460 | 50817 | 53857 | 54520 |

*Provisional
## ANNEXURE - VI
### PRODUCTION OF HOT METAL

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<td><strong>A. PUBLIC SECTOR</strong></td>
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<td>BHILAI STEEL PLANT</td>
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<td>5178</td>
<td>4817</td>
<td>5268</td>
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<td>DURGAPUR STEEL PLANT</td>
<td>2017</td>
<td>1953</td>
<td>2064</td>
<td>2186</td>
<td>2111</td>
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<td>2124</td>
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<td>4588</td>
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<td>IISCO STEEL PLANT</td>
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<td>782</td>
<td>775</td>
<td>640</td>
<td>598</td>
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<td>VISVESVARAYA I &amp; S PLANT</td>
<td>168</td>
<td>205</td>
<td>238</td>
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<td>RASHTRIYA ISPAT NIGAM</td>
<td>3920</td>
<td>4153</td>
<td>4046</td>
<td>3913</td>
<td>3546</td>
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<td><strong>SUB TOTAL (A)</strong></td>
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<td>MINI BLAST FURNACE</td>
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<td>10463</td>
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<td><strong>SUB TOTAL (B)</strong></td>
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<td><strong>TOTAL (A+B)</strong></td>
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<td><strong>% SHARE OF PRIVATE SECTOR</strong></td>
<td>39.5%</td>
<td>41.0%</td>
<td>46.2%</td>
<td>48.0%</td>
<td>51.0%</td>
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*Provisional
## ANNEXURE - VII
### PRODUCTION OF PIG IRON

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<td>ROURKELA STEEL PLANT</td>
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<td>495</td>
<td>322</td>
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<td>625</td>
<td>1007</td>
<td>860</td>
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<td>589</td>
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| B. PRIVATE SECTOR                     |         |         |         |         |          |
| BLAST FURNACE/ COREX UNIT             | 2603    | 3688    | 4133    | 4378    | 4700     |
| **SUB TOTAL (B)**                     | 2603    | 3688    | 4133    | 4378    | 4700     |
| **TOTAL (A+B)**                       | 3228    | 4695    | 4993    | 5314    | 5289     |

| % SHARE OF PRIVATE SECTOR             | 80.6%   | 78.6%   | 82.8%   | 82.4%   | 88.9%    |

*Provisional
### ANNEXURE - VIII

**PRODUCTION FOR SALE OF FINISHED STEEL**

**(NON-ALLOY & ALLOY STEEL)**

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<td>2059</td>
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<td>Less Own Consumption (Major &amp; Others)</td>
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<td>52529</td>
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<td><strong>% SHARE OF PRIVATE SECTOR</strong></td>
<td>71.7%</td>
<td>73.0%</td>
<td>74.9%</td>
<td>75.9%</td>
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*Provisional*
# ANNEXURE - IX

## CATEGORYWISE PRODUCTION FOR SALE OF FINISHED STEEL (NON-ALLOY)

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<td>2321</td>
<td>653</td>
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<td>559</td>
<td>9215</td>
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<td>1110</td>
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<td>300</td>
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<td>2</td>
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<td>TOTAL (Flat Products)</td>
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<td>14480</td>
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<td>3. Pipes (Large dia)</td>
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IPT/OC: Inter Plant Transfer/own consumption; TMBP: Tin Mill Black Plates; MP: Main Producers.
## ANNEXURE -X

### IMPORT OF IRON & STEEL THROUGH MAJOR INDIAN PORTS

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*Provisional

** HR - Hot Rolled; CR - Cold Rolled; GP - Galvanised Plate; GC - Galvanised Coated; TMBP - Tin Mill Black Plates**
## ANNEXURE -XI
### CATEGORY-WISE EXPORTS

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<td>323.0</td>
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*Provisional
ANNEXURE -XII

AUDIT REPORT No. CA 10 OF 2008 (REGULARITY AUDIT)

STEEL AUTHORITY OF INDIA LTD

CMO IT enabled systems in Central Marketing Organisation

Central Marketing Organisation (CMO), the sales and distribution network of Steel Authority of India Ltd. (SAIL), encompasses a wide network of 34 branch offices and stockyards located in major cities and towns throughout India. The Company, with the aim to provide CMO with ‘integrated, uniform, relevant, and up-to-date information system which gives power to make decisions at the right time’, created CMO IT Enabled System (CMOITES) in 2004. However, the Company failed to undertake a SDLC approach to map its business activities. As a result of incomplete mapping of business rules the entire activity of the Company has not been properly captured within the system, with the result that even after the implementation of CMOITES, various activities continued to be carried out manually. Further due to inadequate input and validation controls, reliability of the data could not be fully assured.

AUDIT REPORT No. CA 11 OF 2008 (REGULARITY AUDIT)

BOKARO POWER SUPPLY COMPANY PVT LTD

The Company’s decision to import 0.46 lakh metric tonne of coal on the ground of acute shortage without reviewing the actual availability and consumption pattern resulted in avoidable extra expenditure of Rs. 12.31 crore.

NMDC LTD

Failure to consider the published financial results for the purpose of computation of payment of advance tax resulted in an avoidable payment of interest of Rs. 1.22 crore under Income Tax Act.

SAIL

The Company made irregular payment of cash reward amounting to Rs. 21.29 crore to its employees in contravention of the guidelines issued by DPE.

Company purchased 33KV XLPE cables, without incorporating performance bank guarantee clause, from a party against whom negative reports were available, resulting in premature failure of the cables causing a loss of Rs. 5.37 crore.

Reassessment of excise duty by the Company on the export surplus in contravention of the Central Excise Rules resulted in payment of penalty of Rs. 1.23 crore.

Visvesvaraya Iron and Steel Plant placed orders in February and March, 2005 on National Mineral Development Corporation Ltd for supply of 35,000 WMT of iron ore but it could not lift the entire ordered quantity within the delivery schedule and incurred an additional expenditure of Rs. 1.18 crore.
Department of Public Enterprises


During test check in Audit, several cases relating to non-recovery, short recovery, undue payment, excess payment, excess allowance of discount etc., by Central PSUs were pointed out. In 30 such cases pertaining to 16 PSUs, where Audit pointed out an amount of Rs. 27.16 crore for recovery, the management of PSUs recovered an amount of Rs. 20.71 crore during the year 2006-07.
ANNEXURE -XIII

POSITION OF IMPLEMENTATION OF THE 
JUDGEMENTS/ORDERS OF THE CENTRAL 
ADMINISTRATIVE TRIBUNAL

There are no judgements/orders of the Central Administrative Tribunal pending for implementation in respect of the Ministry of Steel and the public sector undertakings and companies under its administrative control.
### ANNEXURE - XIV

**COMPARATIVE PBT (PROFIT BEFORE TAX)**

**PSUs/BIRD GROUP OF COMPANIES**

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**Total** | 5297.60 | 14321.79 | 11222.36 | 15566.36 | 20595.63 | 19407.11 |

*Provisional

**COMPARATIVE PAT (PROFIT AFTER TAX)**

**PSUs/BIRD GROUP OF COMPANIES**

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**Total** | 4819.60 | 14321.79 | 11222.36 | 15566.36 | 20595.63 | 19407.11 |

*Provisional

*Orissa Mineral Development Company Limited (OMDC), Bisra Stone Lime Company Limited (BSLC), Karanpura Development Company Limited (KDCL), Scott & Saxby Limited (SSL) are constituents of the Bird Group of Companies under the administrative control of the Ministry of Steel
### ANNEXURE - XV

**CONTRIBUTION MADE TO THE CENTRAL GOVERNMENT AND GOVERNMENT INSURANCE COMPANIES BY THE PSUs AND BIRD GROUP OF COMPANIES**

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*Provisional

### CONTRIBUTION MADE TO THE STATE GOVERNMENTS BY THE PSUs AND BIRD GROUP OF COMPANIES

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*Provisional
## ANNEXURE - XVI

### BUDGET AND EXPENDITURE ON CSR

(Rs. in lakh)

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Exp. = Expenditure
...the Shivalik is the first Indian warship to be built with Indian steel. The Steel Authority of India Limited has finally mastered the art of mass-producing specially toughened, warship-grade steel; no longer will India shop abroad for thousands of tons of steel for each warship it builds.

Business Standard (Weekend), March 21, 2009