



सत्यमेव जयते

**GOVERNMENT OF INDIA**

**OUTCOME BUDGET**

**OF**

**MINISTRY OF STEEL**

**2016-2017**

**GOVERNMENT OF INDIA**

**OUTCOME BUDGET**

**OF**

**MINISTRY OF STEEL**

**2016-2017**

## **CONTENTS**

<b>CHAPTER NO.</b>	<b>SUBJECT</b>	<b>PAGE NO.</b>
	<b>EXECUTIVE SUMMARY</b>	I-II
<b>I.</b>	<b>INTRODUCTION</b>	1-5
	<ol style="list-style-type: none"> <li>1. <i>Functions</i></li> <li>2. <i>Organisation</i></li> <li>3. <i>Public Sector Undertakings</i></li> <li>4. <i>Research &amp; Development in Iron &amp; Steel Sector</i></li> </ol>	<p>1</p> <p>1-2</p> <p>2-5</p> <p>5</p>
<b>II.</b>	<b>OUTCOME BUDGET (2016-17) - MAJOR SCHEMES</b>	6-26
	<ol style="list-style-type: none"> <li>1. <i>Normal Saving/surrender of non utilized fund in projects/schemes run under Government Budgetary Support</i></li> </ol>	26
<b>III.</b>	<b>REFORM MEASURES AND POLICY INITIATIVES</b>	27-37
	<ol style="list-style-type: none"> <li>1. <i>Liberalisation of the Indian Steel Sector</i></li> <li>2. <i>Major Initiatives taken by Ministry of Steel</i></li> <li>3. <i>New National Steel Policy</i></li> </ol>	<p>27-30</p> <p>30-37</p> <p>37</p>
<b>IV.</b>	<b>REVIEW OF PAST PERFORMANCE OF SCHEMES OF 2015-16 &amp; 2014-15</b>	38-81
<b>V.</b>	<b>FINANCIAL REVIEW</b>	82-89
	<ol style="list-style-type: none"> <li>1. <i>Total Requirement of Funds for 2016-17</i></li> <li>2. <i>Actual Expenditure - 2013-14 to 2015-16</i></li> <li>3. <i>Non-Plan Expenditure</i></li> <li>4. <i>Plan Expenditure</i></li> <li>5. <i>Brief on R&amp;D Scheme</i></li> <li>6. <i>Annual Plan Outlay for 2016-17 (BE)</i></li> <li>7. <i>Year-wise analysis of Gross Budgetary Support for 12<sup>th</sup> Plan</i></li> <li>8. <i>Plan Outlay and Actual Expenditure during 2015-16</i></li> <li>9. <i>Status of Outstanding Utilisation Certificates</i></li> </ol>	<p>82</p> <p>82</p> <p>83-84</p> <p>84</p> <p>84-85</p> <p>85-88</p> <p>88</p> <p>89</p> <p>89</p>

## **EXECUTIVE SUMMARY**

The Outcome Budget of the Ministry of Steel highlights the Ministry's specific role and objectives, its programmes, projects, schemes and activities undertaken to realise these objectives and the outcome of various major schemes/programmes implemented by the Ministry and its Public Sector Undertakings (PSUs). The document also highlights the physical and financial targets, achievements for previous years and also the projections in the year 2016-17.

**Chapter - I** gives a brief introductory note on organisational set up and the objectives of the Ministry of Steel, the broad programme classification and agencies engaged in their implementation.

**Chapter - II** gives the break-up of outlays and outcomes/ targets in respect of major schemes and projects implemented by the PSUs under the Ministry. As the schemes/ projects of the PSUs are too many and varied, and mostly related to their day to day operations, only major schemes with estimated/ sanctioned cost of Rs. 50 crore and above have been covered. For 2016-17, 44 such major Plan schemes have been included in the outcome budget statement. Out of 44 Plan schemes, Steel Authority of India Ltd. (15 schemes), Rashtriya Ispat Nigam Ltd. (21), MOIL Limited (03) and National Mineral Development Corporation Limited (NMDC Ltd.) (04) are implementing schemes with entire expenditure funded from their Internal & Extra Budgetary Resources (I&EBR) and 01 scheme by the Ministry of Steel for promotion of research and development in iron and steel sector with Plan budgetary support. The estimated/ sanctioned cost, outlay for 2016-17, processes/ timelines, risk factors, projected physical outputs and projected outcomes in respect of these 44 major schemes have been given in the statement.

**Chapter - III** details the reform measures and policy initiatives of the Ministry of Steel. This chapter also covers the important policy measures, which have been taken by the Government in the post-liberalisation era for the growth and development of the domestic iron and steel industry. An important policy initiative taken in this regard by the Ministry was the announcement of the National Steel Policy (NSP) in 2005. Process of drafting of new National Steel Policy to replace the existing National Steel Policy 2005 has been initiated for development of steel industry with an aim of producing 300 mtpa of steel by 2025. The long-term objective of the NSP is to achieve a modern and efficient domestic steel industry of world standards, catering to diversified steel demand. The focus of the policy is to achieve global competitiveness not only in terms of cost, quality and product-mix but also in terms of global benchmarks

of efficiency and productivity. The major thrust areas where supportive measures/policies may need to be provided to make India globally competitive in the iron and steel sector have also been highlighted in this chapter.

**Chapter - IV** gives a review of the past performance of the Plan Schemes of the Ministry of Steel and the major schemes and projects with estimated/ sanctioned cost of Rs. 50 crore or more of the PSUs in terms of the projected outcomes/ targets indicated in the Outcome Budget of 2015-16 and 2014-15. The actual achievements vis-à-vis the intended outcome in respect of the 40 of major Plan schemes included in Outcome Budget 2015-16 and 39 of the 2014-15 have been highlighted.

**Chapter - V** gives break-up of the financial outlays and financial requirements of Ministry of Steel and the Public Sector Undertakings/ Organizations under its administrative control. As against budgetary provision (Gross) of Rs. 88.13 crore in Budget Estimates (BE) 2015-16 and Rs. 38.48 crore in Revised Estimates (RE) 2015-16, a provision of Rs. 85.62 crore has been provided in BE 2016-17 under Demand No. 86 for the Ministry of Steel. A provision of Rs. 12308.53 crore has been made from I&EBR of PSUs and a Plan Gross Budgetary Support Rs. 15.00 crore has been made in BE 2016-17 totaling Rs. 12323.53 crore. The overall trends in expenditure vis-à-vis BE/RE in 2015-16 and BE of financial year 2016-17 are covered in this chapter.

\*\*\*\*\*

## **CHAPTER - I**

### **INTRODUCTION**

#### **1. FUNCTIONS**

The main functions of the Ministry of Steel are:

- (a) Planning, development and facilitation of setting up of Steel Plants and steel processing facilities like the re-rolling industry and ferro-alloys in Public and Private Sectors.
- (b) Production, distribution, prices, imports and export of iron & steel and Ferro alloys.
- (c) 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).
- (d) Providing a platform for interaction of producers and consumers of steel in the country.
- (e) Identification of infrastructural and related facilities required by steel industry.
- (f) Overseeing the performance of 8 PSUs, their subsidiaries and one Special Purpose Vehicle (Joint Venture Company) called International Coal Ventures Pvt. Ltd. (ICVL).

#### **Ministry of Steel –facilitator for development of Steel Industry**

The Ministry of Steel is expected to play a crucial role in ensuring harmonious and integrated growth of the Steel Sector. Being a core sector, its sustained growth is a prerequisite for attaining the high level of Gross Domestic Product (GDP) growth. The industry has strong forward and backward linkages with other sectors of the economy and, therefore, its own growth pattern is also influenced by other sectors of the economy specially infrastructure development, real estate, auto mobiles/auto components etc. The environment in which the domestic steel sector operates calls for a greater promotional role by the Ministry of Steel specially as a facilitator to remove sectoral bottlenecks/constraints like availability of raw materials, development of infrastructure and also interaction with other concerned Ministries/Departments of the Government for appropriate policy formulation and implementation.

#### **2. ORGANISATION**

The Ministry of Steel is headed by Union Minister of Steel and one Minister of State duly assisted by a Secretary to the Government of India, an Addl. Secretary and Financial Adviser, four Joint Secretaries, one Economic Adviser, a Chief Controller of Accounts, five Directors, two Deputy Secretaries and other officers and supporting staff. For dealing with technical aspects relating to the iron and steel industry, there is a separate Technical Wing.

Prior to deregulation of the sector, Ministry of Steel had an attached office viz. the Office of the Development Commissioner for Iron & Steel (DCI&S), located at Kolkata. Based on the recommendations of the Expenditure Reforms Commission, an

administrative decision was taken to close the four Regional Offices of DCI&S with effect from 23.05.2003.

There is no statutory or autonomous body under the administrative control of Ministry of Steel.

### 3. **PUBLIC SECTOR UNDERTAKINGS**

Ministry of Steel has the following Public Sector Undertakings under its administrative control:

- I. Steel Authority of India Limited, (SAIL), New Delhi
- II. Rashtriya Ispat Nigam Limited, (RINL), Visakhapatnam
- III. NMDC Limited, Hyderabad
- IV. MOIL Ltd., Nagpur
- V. KIOCL Ltd., Bengaluru
- VI. Hindustan Steelworks Construction Limited (HSCL), Kolkata
- VII. MECON, Ranchi
- VIII. MSTC, Kolkata

(I) **Steel Authority of India Limited (SAIL):** (Registered office at Ispat Bhavan, Lodi Road, New Delhi – 110003) has the following Units under its overall control:

- a) Bokaro Steel Plant, Bokaro (Jharkhand)
- b) Bhilai Steel Plant, Bhilai (Chhattisgarh)
- c) Durgapur Steel Plant, Durgapur (West Bengal)
- d) Rourkela Steel Plant, Rourkela (Orissa)
- e) Alloy Steel Plant, Durgapur (West Bengal)
- f) Salem Steel Plant, Salem (Tamilnadu)
- g) IISCO Steel Plant, Burnpur
- h) Visvesvaraya Iron & Steel Plant, Bhadravati (Karnataka)
- i) Central Marketing Organisation, Kolkata (West Bengal)
- j) Research and Development Centre for Iron & Steel, Ranchi (Jharkhand)
- k) Raw Materials Division, Kolkata (West Bengal)
- l) Centre for Engineering & Technology, Ranchi (Jharkhand),
- m) Corporate Office, New Delhi
- n) SAIL Refractory Unit
- o) Chandrapur Ferro Alloy Plant

In addition, SAIL has incorporated a new subsidiary company, namely “SAIL Refractory Co. Ltd.” (SRCL) for absorbing Salem Refractory Unit of M/s. Burn Standard Co. Ltd.

SAIL is in the process of enhancing its hot metal production capacity from the level of 13.82 million tonnes per annum to 23.46 million tonnes under its current phase of expansion and modernization which is expected to be completed by financial year 2016-17. It has further plans to take up its capacity to 50 million tonnes by 2025.

(II) **Rashtriya Ispat Nigam Ltd. (RINL):** (Registered Office at 'A' Block, Visakhapatnam - 530 031), is the first shore based Integrated Steel Plant set up in India. The company is



a port based integrated Steel Plant commissioned in 1992 with capacity of 3 Million Tonnes Liquid Steel per annum. The plant has been built to match international standards with state -of-the-art technology, incorporating extensive energy saving and pollution control measures. The company has completed its first phase of expansion of liquid steel production to 6.3 Million tonnes from 3.0 Million tonnes. The entire cost of the project has been met from the internal resources and borrowings.

As approved by Government, three operational companies under the erstwhile Bird Group of Companies, namely Eastern Investments Ltd. (EIL) (subsidiary of RINL) and Bisra Stone Lime Company Ltd. (BSLC) and Orissa Minerals Development Company (OMDC) (subsidiary of EIL) have become Public Sector Undertakings with effect from 19.03.2010.

- (III) **NMDC Ltd.:** (Registered Office at Hyderabad, Khanij Bhavan Masab Tank, 500028), The company was established on 15<sup>th</sup> November, 1958 as a Public Sector Undertaking and is the single largest producer of iron ore and diamonds in the country and is engaged in exploration, development and exploitation of various other minerals such as Dolomite, Lime stone, Magnesite etc. NMDC's large mechanized Iron ore mines are being operated at Bailadila Iron ore Mines, Kirandul Complex which operates Dep-14 & Dep-11C mines, Bachel Complex which operates Dep-5 & Dep-10&11A mines in Chhattisgarh state and Donimalai Iron ore Mines in Karnataka state. NMDC has got India's only mechanized Diamond mine at Panna, Madhya Pradesh. NMDC is contemplating a major expansion to meet the demand of Iron ore. Deposit-11B mine at Kirandul, Bailadila and Kumaraswamy Mine at Donimalai in Karnataka are the projects in progress.

The total iron ore production of NMDC in FY 2015 was 30.44 MT. NMDC plans to produce 75 MTPA by 2018-19 and 100 MTPA by 2021-22. The company can produce about 78 MTPA from existing mines and it needs to acquire new mines to enhance its production to 100 MTPA.

NMDC has diversified its activities in the field of renewable energy by setting up Wind Mill in Karnataka and is exploring the possibilities in solar energy. The company has planned to expand its business through horizontal integration in the field of Coal, Rock Phosphate, Lime stone, Gold and Diamond.

The Company has 78.56% shareholding in Legacy Iron Limited, an ASX listed entity based in Perth, Australia. Legacy has 60% interest in Mt. Bevan Iron Ore Project from Hawthorn Resources Ltd. in Western Australia.

- (IV) **MOIL Ltd :** The company which was formed in 1962 (Registered office at MOIL Bhavan, 1A, Katol Road, Nagpur – 440013) is the largest domestic producer of high grade manganese ore, a basic raw material for manufacturing of Ferro-Alloys – an essential input for steel making – and dioxide ore for manufacturing dry batteries. With the increase in the domestic demand for high grade manganese and dioxide ores, the Company embarked upon various capital schemes for development and modernization of its mines and increasing of its mines and increasing the production capacity from 1.1 Million Tons to 2.0 Million Tons by 2020-21. To improve business volume and profitability, MOIL diversified its activities into manufacture of value added products during 90's. As part of diversification, the company set up a project for manufacture of



Electrolytic Manganese Dioxide in the year 1991 and a Ferro Manganese Plant of 10000 MT capacity at Balaghat in Madhya Pradesh during the year 1998. Further, the company also has Wind Power Electricity Generation capacity of 20 MW at Nagda hills in Madhya Pradesh.

Considering the necessity for expanding the operation of the company, MOIL has also entered into joint ventures with SAIL and RINL for setting up Ferro Alloys manufacturing unit mainly to cater the Ferro alloys requirement of these companies. Total cost of this project as per initial estimates is around at Rs. 600 crore and MOIL's share of investment is estimated to be around Rs. 150 crore. In view of increase in cost of power, an essential ingredient for manufacturing of ferro alloys, possibilities of sourcing power at cheaper rates are being explored to go ahead with the implementation of the project.

(V) **KIOCL:** (Registered office at 11 Block, Koramangala, Bangalore – 560 034), a fully owned Government Company was established in 1976 as a 100% Export Oriented Unit (EOU) with mining operations at Kudremukh. In 1980, a beneficiation plant at Kudremukh was established with a capacity of 7.50 mtpa iron ore. In 1987, a Pellet Plant at Mangalore was set up with a capacity of 3 mtpa which was subsequently increased to 3.5 mtpa. In 2001 Pig Iron Plant at Mangalore was set up under a JV namely KISCO which has since been merged with KIOCL w.e.f. 01.04.2007. The Blast Furnace operation was stopped w.e.f. 05.08.2009 due to economically unviable conditions. The mining activity at KIOCL Ltd. was stopped as per the Hon'ble Supreme Court verdict w.e.f. 01.01.2006. At present KIOCL is mainly operating the pellet plant at Mangalore by sourcing iron ore from the market.

(VI) **Hindustan Steelworks Construction Limited (HSCL):** (Registered Office at 5/1, Commissariat Road, Hastings - 700022 ), Hindustan Steelworks Construction Limited (HSCL) is one of the major construction agencies in the Public Sector established in 1964 under the administrative control of Ministry of Steel. The mandate for its incorporation was to mobilize indigenous capability for putting up integrated steel plants in the country. The organization rose to the occasion and successfully met the challenge by bringing together competent human resources and mobilizing a fleet of updated construction equipment. HSCL has diversified its activities. As an example, in the construction of rural roads, the Company has a proud privilege of participating in the Bharat Nirman Programme of Govt. of India in the North Eastern State of Tripura under PMGSY, HSCL has been working as a Project Implementation Unit there with the responsibility starting from preparation of DPR to the maintenance of the roads for five years after construction.

(VII) **MECON Limited :** (Registered office at MECON Building, P.O. Hinoo, Ranchi – 834002) is the first consultancy and engineering organisation in the country to be accredited with ISO:9001-2008 and registered with the World Bank, Asian Development Bank, European Bank of Reconstruction and Development, African Development Bank (AFDB) and United Nations Industrial Development Organisation. The company is one of the leading multi disciplinary design, engineering, consultancy and contracting organization in the field of Metal, Power, Oil & Gas and infrastructure sectors. The company's mission is to provide technical consultancy-design and engineering, design and supply of plant, equipment and systems, implementation of new industrial ventures from concept to commissioning.

Presently MECON is involved in almost all the mega steel projects in India both in public and private sectors. The Company is also deeply entrenched in other fields of diversification being Power, Oil & Gas and Infrastructure and is involved in large number of assignments in public and private sectors.

MECON has also spread its wings in International market providing quality design, engineering & consultancy services for about 130 projects in different countries like Indonesia, Qatar, Saudi Arabia, Oman, UAE, Vietnam, USA etc. MECON has an overseas office in Nigeria to effectively cater to the opportunities in African states.

(VIII) **MSTC Limited:** (Registered Office at 225 C, A.J.C. Bose Road, Kolkata – 700 020) is a trading concern previously designated as the canalising agency of the Government for import of carbon steel melting scrap for distribution to mini-steel plants. The company lost its status as a canalising agency with effect from February, 1992, and is now operating in a totally free and competitive environment like any other private trader. The company undertakes trading activities, e-commerce, disposal of ferrous and non-ferrous scrap and surplus stores mostly from Public Sector Undertakings and Govt. Departments, including Ministry of Defence. MSTC is the Holding Company of Ferro Scrap Nigam Ltd. (FSNL) whose 100% paid up equity shares are held by MSTC.

#### 4. **RESEARCH & DEVELOPMENT (R&D) IN IRON & STEEL SECTOR**

R&D in Indian Steel Sector is carried out mainly by major steel plants and R&D laboratories and academic institutions. The steel companies like SAIL, TATA Steel, JSW Steel and ESSAR Steel have accomplished some significant work in the area of raw material beneficiation, agglomeration and product development. However, indigenous development of high performance steel products is yet another challenging area being faced by the steel industries in India. The R&D by the large steel companies in India varies from company to company in the range of 0.05% – 0.5% of the sales turnover, which is far below of the international standard. Ministry of Steel is supplementing R&D efforts/investment of the steel industries by providing financial assistance from (i) Steel Development Fund (ii) Plan Fund (Government Budgetary support).

\*\*\*\*\*

**CHAPTER – II****OUTCOME BUDGET FOR 2016-17 OF MAJOR SCHEMES**

The concept of Outcome Budget was introduced in 2005-06 by the Government with the objective of improving the quality of development programmes by making their conceptualization, design and implementation 'outcome' oriented. It is based on the premise that 'outlays do not necessarily mean outcomes'. The intention of outcome budgeting is to track not only the intermediate physical 'outputs' that are more readily measurable, but also the 'outcomes' which are the end objectives of State intervention. This requires strong project/ programme formulation, appraisal capabilities, as well as effective delivery systems. The development outcomes need to be defined in measurable terms, with benchmarking of unit cost of delivery, making the entire exercise monitorable. This also requires better utilization of physical assets and manpower, and steps to improve project management and programme implementation, including effective monitoring. Outcome Budget is, therefore, an effort to put in place a mechanism to measure the development outcomes of all major programmes.

In the 11<sup>th</sup> Plan (2007-12), a new scheme for "promotion of Research & Development in Iron and Steel sector" was included with a budgetary provision of Rs. 118.00 crore for promotion of research & development in the domestic iron and steel sector. The scheme has been continued in the 12<sup>th</sup> Five Year Plan with a budgetary provision of Rs. 200 crore. Under the scheme, a total of ten (10) R&D projects have been approved. Total cumulative amount of Rs 43.47 crore has been released under the scheme upto December, 2015 during 12<sup>th</sup> Five Year Plan. In BE 2016-17, which is the fifth year of 12<sup>th</sup> Five Year Plan (2012-17) Rs. 15.00 crore has been earmarked for the scheme.

The PSUs under the administrative control of the Ministry formulate and implement various schemes/ programmes related to their respective area of operations. The schemes of the PSUs are components of their respective Annual or long term plans. Since each PSU has several schemes, most of which are related to the normal day to day functioning as well as MOU linked operations of the company, it would be difficult to cover all schemes of the PSUs in the Outcome Budget. A view was, therefore, taken that only projects with sanctioned/estimated cost of more than Rs.50.00 crore will be covered as given in the following table.

**Statement of Outlays and Outcomes/Targets (2016-17)**  
**(Schemes with estimated/sanctioned cost more than Rs.50.00 crore)**

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
<b>A. SCHEMES WITH ESTIMATED/SANCTIONED COST MORE THAN RS. 50.00 CRORE</b>											
<b>1. STEEL AUTHORITY OF INDIA LTD. (SAIL)</b>											
<b>(1) Bhilai Steel Plant (BSP)</b>											
(i)	Cold Repair of COB-9	To meet the shortfall in coke demand as well as stabilizing coke oven gas balance and to reduce emission level	332.65	--	--	27.00	Improved production & achieve latest pollution norms of MOEF	Will ensure sustainable operation of the plant	Aug' 2014	Feb'2016 (Revised from June' 2015)	<p>The delays are primarily due to delays made by MECON (contractor for the Battery proper) on following accounts:</p> <ul style="list-style-type: none"> <li>Initial delay in design-engineering, which adversely affected overall work of battery proper.</li> <li>Inadequate deployment of Manpower not permitting parallel activities at multiple fronts</li> <li>Non availability of critical items at site in time causing intermittent stoppage of work.</li> <li>Abnormal delay in ordering of materials &amp; awarding of sub-contractor.</li> <li>Delay in refractory supply has also adversely affected the progress.</li> </ul>
(ii)	Expansion of BSP	Increase in production of hot metal & crude steel through state-of-the-art technology; Phasing out of low yield and energy intensive units, Reduction of semis by	17266.00	--	--	1388.17	Increase in HM capacity from 4.08 Mtpa to 7.5 Mtpa	Once the facility is commissioned the overall increase of the production capacity will increase by 2.7 MTPA --	Mar'13	Oct'2016 One Converter & three Casters (Revised from Sept.' 2015)	The SMS-III Package got affected as the initial contract for civil work package with M/s Ratna Infra had to be terminated due to slow progress of work and fresh contract awarded to M/s HSCL in Feb'11 at risk & cost of M/s Ratna Infra. Subsequently contract with M/s HSCL also

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
		enhancing finished steel production; Broadening and value addition in product-mix for higher flexibility and profitability; Meeting requirement of Indian Railways									<p>had to be terminated due to poor progress &amp; order for balance civil works has been placed on M/s Simplex at risk &amp; cost of M/s HSCL. The equipment erection package also had to be re-tendered since sufficient erection fronts could not be handed over within contractual completion period. Fresh contract awarded to M/s Essar Projects.</p> <p>The slow progress of work by HEC (installation of cranes for both equipment erection and subsequent material handling during production). HEC has failed to complete supply &amp; erection of even priority cranes even in spite of close follow-up at topmost levels and help by SAIL in the form of direct payment to sub-vendors against HEC's bills, payment of outstanding amounts against LCs opened by HEC, advance payments on revolving credit basis, issue of steel on credit basis, follow-up by SAIL with HEC's sub-vendors and issuance of comfort letters.</p> <p>HSCL has delayed in handing over of equipment erection fronts in Mills areas due to inadequate resource mobilization. Civil &amp; structural works are still not completed. Poor performance of M/s EPI (OHP Part-B and Fuel &amp; Flux</p>

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
											<p>Crushing &amp; Screening Facilities) considerably in the area of design-engineering, manpower &amp; resource deployment &amp; co-ordination supervision adversely affected the work leading to delay in completion of Coke Route for supply of BF Coke to BF-8 from COB-11.</p> <p>Increase in quantity for civil works/ structural fabrication and erection for BOF &amp; CCP, URM &amp; BRM has also led to prolongation of execution period.</p> <p>The progress of work in various utilities packages, such as, External Water System of URM &amp; BRM (M/s McNally Bharat), External Water System of SMS-III (M/s Aireff Detox), Make-up &amp; Drinking Water System (M/s Vishwa Infra.) etc are also affected due to poor financial condition of the agencies and consequential delays in supplies and inadequate resource deployment at site. Delays in these packages are having a cascading effect on the completion of the new facilities</p>
(iii)	Development of permanent Barracks at 21 locations at Rowghat Deposit	Infrastructure for security forces to facilitate 'Dalli- Rajhara – Rowghat Rail Line and	188.93	--	--	20.00	Providing permanent barracks for security forces deployed for the project	To ensure security of the installation	April' 2015	Dependent on timely handing over of Clear site by State	Security Forces deployed in 12 locations. Construction of Barrack is in progress in 11 locations and in 1 location, barrack is established in Railway property.

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
		Rowghat Mining Project'								Government and progress of Rajhara-Rowghat Rail line	Forestry clearances and delay in tree cutting work by State Government had delayed the start of work.  Completion of permanent barracks is dependent on deployment of Security Forces at all the locations and handing over of clear site by State Government.
<b>(2)</b>	<b>Durgapur Steel Plant (DSP)</b>										
(i)	Rebuilding of COB-5	To meet the shortfall in coke demand as well as stabilizing coke oven gas balance and to reduce emission level	313.05	--	--	28.83	Improved production & achieve latest pollution norms	Energy saving as well as efficiency in production	Jun'2015	Feb'2016 (Revised from June' 2015)	<ul style="list-style-type: none"> <li>Battery heating started on 27.08.15.</li> <li>There were delays in dismantling of the quenching car platform of the battery due to design engineering issues.</li> <li>Coke pushing delayed due to Design changes in laying of pipe lines in battery area</li> </ul>
<b>3.</b>	<b>Rourkela Steel Plant</b>										
(i)	Rebuilding of COB-3	To meet the coke requirement for hot metal production of 4.5 Mtpa and to reduce emission levels	237.09	--	--	15.00	Improve production & achieve latest pollution norms of MOEF	Will increase sustainable operation of the plant	Jan' 2015	May' 2016 (Revised from Aug. ' 2015)	<ul style="list-style-type: none"> <li>Battery heating started on 13.08.15 Project was delayed due to Issues related to quality of silica bricks, Slow progress of refractory erection by BEC and Delay in supply of oven machines by BEC</li> <li>Coke pushing delayed due to inadequate supply of CO Gas which is affecting the temperature rise</li> </ul>



(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
(ii)	Installation of heat treatment facilities	To meet the increasing requirement of quenched & tempered plates for Defence and other sectors of strategic importance	160.48	--	--	9.39	Additional production of 12000t	Value addition of the finished product	Sep'14	Jan'16 (Revised from June' 2015)	<p>Poor performance of the contractors:</p> <ul style="list-style-type: none"> <li>CAN Engg. in Design &amp; Engg.</li> <li>Empire Ind. Eqpt. &amp; Reliable High-Tech in equipment supply.</li> </ul> <ul style="list-style-type: none"> <li>Delay in supply of instrumentation / control cable by consortium</li> <li>Problems in shafts of gear boxes during testing, which were to be airlifted from Germany</li> <li>Delay due to non-availability of foreign experts for testing and commissioning</li> </ul>
(iii)	Upgradation of BF-1	To increase hot metal production from 1304 tpd to 2900 tpd	708.91	--	--	125.21	Increase in furnace working volume from 995m <sup>3</sup> to 1490m <sup>3</sup> , increase in no. of tuyeres from 18 to 20 and oxygen enrichment of 4%, increase in BF productivity from 1.360 to 1.946 t/m <sup>3</sup> /day, Reduction in coke rate from 527 to 520 kg/thm		April' 2016	Sep'16 (Revised from April' 2016)	<ul style="list-style-type: none"> <li>As upgradation of BF-1 is being carried-out in the existing operational BF area, work has been affected due to isolation of utilities, Diversion of railway tracks, Re-routing of steam line and water line, etc.</li> </ul>

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
(iv)	Installation of New Hot Strip Mill	To install a new state-of-the-art New Hot Strip Mill of 3.0 Mtpa (input slab) capacity to ensure competitive product quality and to enrich the product range with wider strip, higher coil weight & higher grades of products.	3127.30	--	--	433.00	Installation of a new Hot Strip Mill of 3.0 Mtpa (input slab) capacity		April' 2018	April' 2018	
<b>(4)</b>	<b>Bokaro Steel Plant (BSL)</b>										
(i)	Re-building of COB-7	To meet the coke demand & CO gas shortage and to comply with latest statutory emission norms.	245.67	--	--	37.00	Improve production & achieve latest pollution norms of MOEF	Will ensure sustainable plant operation	May' 2016	May'2016	
(ii)	New Sinter Plant	To meet the Sinter requirement for production of 5.77 Mtpa of Hot Metal after Phase-I Modernisation and Expansion of BSL	1034.01	--	--	45.00	Installation of New Sinter Plant of capacity 3.70 Mtpa		October ' 2017	October ' 2017	--
(iii)	Alternate Gas Network	To facilitate maintenance of existing Gas Lines, which are in operation since 1970s and to have an	255.19	--	--	30.00	Installation of alternate gas network		Mar'2018	Mar'2018	--

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
		alternate gas supply route and keeping in view the safety considerations									
(iv)	Modernisation of SMS-I	To phase out energy efficient ingot casting route by introduction of CC route in SMS-I for supplementing slab produced at SMS-II for full capacity utilization of existing HSM	1154.18	--	--	45.00	Replacement of one Converter of SMS-I and installation of Slab Caster, ladle Furnace with associated facilities with 1.305 Mtpa capacity		Dec' 2017	Dec' 2017	--
(5)	<b>Raw Materials Division</b>										
(i)	Enhancement of production capacity of Meghahatubu-ru Iron Ore Mine	A technical necessity to increase iron ore for meeting requirement after SAIL expansion.	118.85	--	--	11.59	capacity from 4.3 Mtpa to 6.50 Mtpa of finished product	Availability of continuous supply of the raw materials for steel plants	Jun'12	Dec'2016 (revised from Oct'2015)	<ul style="list-style-type: none"> <li>With the completion of work for the upgradation of loading system, installation of new wagon loader &amp; classifiers, the enhancement of capacity of MIOM has been achieved.</li> <li>For the main package, due to poor progress of the contractor RPN action taken and work awarded for balance works excluding Reclaimer in Oct'2015</li> </ul>
(ii)	Expansion of Gua iron ore mines	To meet the enhance iron ore requirement after Modernisation and Expansion of	4749.00	--	--	114.00	Expansion of Gua iron ore mines to 10 Mtpa alongwith beneficiation facilities of 12.5		Sep' 2017	Sep' 2017	--

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
		SAIL to 23.46 Mtpa of Hot metal					Mtpa and Pellet Plant of 4 Mtpa				
<b>(6)</b>	<b>Chandrapur Ferroalloy Plant</b>										
(i)	Installation of 1x45 MVA submerged arc Furnace	The additional production of HCFeMn & HCSiMn	187.33	--	--	9.95	The additional production of 37500 t of HCFeMn & 35000 t of HCSiMn or 60,000t of HCSiMn on standalone basis.		Oct'2013	Jun'2016 (Revised from August'2015)	Start of Civil work was affected due to delay in environmental clearance from MOEF.  Further, civil & structural work was delayed due to poor resource mobilization at site and non-payment to sub-contractors by main contractor, M/s Tecpro who failed to adhere to any of its commitments and stopped work at site. RP action taken and Fresh order placed on M/s HSCL.  Inadequate manpower deployment by M/s. Reliable Hi-Tech for Raw Material package
<b>2.</b>	<b><u>RASHTRIYA ISPAT NIGAM LTD. (RINL)</u></b>										
(i)	Expansion to 6.3 Mtpa Liquid Steel	To increase the plant capacity	12291.00	--	--	200.00	Enhancing production of liquid steel to 6.3 mtpa of liquid steel	Enhancing production of liquid steel to 6.3 mtpa of liquid steel	Completed April' 2015.		Units are commissioned and are under various stages of stabilization.
(ii)	COB-4 (Ph-II)	To operate COB-4 as independent Battery and increase in recovery of by-product.	355.30	--	--	5.00	To operate COB-4 as independent Battery. Increase in recovery of by products	Increase in recovery of by products	Original Schedule Dec' 2014 (Revised to Feb' 2016 from June' 2015)		By Product Plant – the unit was commissioned in Dec' 2014 and balance package i.e. Mixing Bins & Conveyor System is likely by Feb' 2016.

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
(iii)	COB-5	To meet the coke requirements and gas balance for 6.3/7.3 MTPA stage, and to facilitate rebuilding of COBs # 1,2 & 3 successively.	2853.00	-	-	140.00	To produce 0.82 mtpa of Gross Coke.	Will ensure energy efficiency	29 months from award of main package.		Engineering is under progress for already ordered packages viz. Coke Dry Cooling Plant, 14MW Power Plant, Stacker cum Reclaimer, Wagon Tippler & Car Pusher, Main Battery Package and Coal & Coke Handling System. With regard to By Product Plant, representation by a bidder is being examined by IEMs.
(iv)	Power Plant-II	To meet the additional power requirement by utilise the lean by-product gases which otherwise would be flared to atmosphere	677.00	-	-	30.00	To utilise the lean by-product gases which otherwise would be flared to atmosphere. This project is conceived with the sole intention of reducing Green House Gas (GHG) emissions into the atmosphere while meeting the power requirement of RINL to the extent of 120 MW thereby mitigating the effects of climate change.	To generate 120MW electricity by utilising the lean by-product gases while mitigating the effect of climate change	Original Schedule May' 2015	<ul style="list-style-type: none"> <li>Turbo Generator commissioned on 29th July'2015 by synchronizing with grid.</li> <li>Second Boiler was commissioned on 15th September 2015.</li> </ul>	-
(v)	Pulverised Coal Injection	Injection system for reduction in consumption of expensive BF coke with less expensive pulverised coal	133.00	-	-	5.00	Increased production of hot metal. To reduce cost of production of hot metal	Increased production of hot metal. To reduce of cost of production hot metal.	Original Schedule Q 4 of 2014-15.	<ul style="list-style-type: none"> <li>PCI System in BF-1 commissioned in March '15.</li> <li>BF-2: June 2016</li> </ul>	PCI system in BF-2 is planned to be commissioned after the revamp of BF-2.

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
(vi)	Facilities for Iron Ore Storage	To increase iron storage facility.	450.00	-	-	10.00	To increase Iron ore storage facility to 30 days	To increase Iron ore storage facility to 30 days	July '15 (Revised from June' 2015)		The Stacking and Reclaiming streams are in operation with the existing Tippling System.
(vii)	Augmentation of Water Storage System	Construction of additional storage reservoir with capacity of 16 Mqm.to meet the water requirement of expansion.	220.00	-	-	50.00	To increase water storage capacity by 16Mqm	To increase water storage capacity	Jan'2019		WAPCOS has been appointed as consultant for Civil Work. The Civil Works package is under tendering.
(viii)	Strengthening of 220KV system of APTRANSCO	To strengthen AP power grid and internal system at VSP for transmission of power 400 MVA	86.34	-	-	5.00	To strengthen AP power grid for transmission of power of 400 MVA	To strengthen AP power grid for transmission of power.	—		Phase-I work completed. (modalities for establishment of 400/220 KV Substation are under finalization).
(ix)	Augmentation of 220KV power system for receiving 400MVA power	Strengthening the internal systems of VSP like substations etc. to enable to receive 400MVA power to meet the expansion needs.	58.10	-	-	5.00	Strengthening the internal systems of VSP like substations etc. to enable to receive 400MVA power to meet the expansion needs.	Strengthening the internal systems of VSP	—		The system is made ready in all respects and testing & commissioning by APTRANSCO side for their portion of work is under progress:
(x)	BF-1 & 2 Category repairs	To carry out the Category-I capital repairs & enhance the volume to 3800 CuM from the existing 3200 CuM capacity.	1663.00	-	-	175.00	To increase the production by 0.5Mt from 2Mt to 2.5Mt of Hot Metal	To increase the production	BF-1: 30-07.2014 (Commissioned) BF-2: Q1/Q2 of 2016-17		Blast Furnace-1: Commissioned on 30th July 2014.Blast Furnace-2: Category-1 Capital repair of the furnace will commence in last quarter of 2015-16.

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
(xi)	3rd Converter & 4th Caster	To convert additional Hot Metal generated (after category 1 repairs of the existing 2 Blast Furnaces ) into steel by adding a 3rd converter and 4th caster.	974.76	-	-	200.00	To increase the production of steel by 0.97 Mt	To increase the production	3rd Converter: Aug'16 4th Caster: Dec'16		3rd Converter: Works completed. and Equipment erection is in progress. 4th Caster: All major supplies ordered. Civil and Structural works are under progress.
(xii)	Sinter plant productivity enhancement.	To increase the Production of Sinter to support the increase in the volume of BF. This is to meet the present pollution control norms.	343.00	-	-	100.00	To increase the production from 5.5 Mt to 6.8 Mt of Sinter.	To increase the production	Q1 of 2017-18 (Revised from October' 2016)		Civil works are under progress. Critical equipment having long lead viz. pallet car have been ordered. Ural Mash first shipment of supplies completed.
(xiii)	SMS converter Revamp.	To improve the reliability of the 3 converters as the existing estimated life is almost over. This is to meet the present pollution control norms.	404.16	-	-	75.00	Technological necessity to change the converters.	To change the converters	1st Converter - Feb'16. 2nd Converter: Q2 of 2016-17. 3rd Converter: Q1 of 2017-18.		The 1st Converter revamping has commenced from 7th September 2015 and completion is likely by March'16.
(xiv)	Acquisition of Iron Ore Mines & Coal Mines & including investment through JVs	To achieve self-reliance for raw material and cost reduction	500.00	-	-	20.00	RINL/VSP does not have captive source for coking coal/iron ore and outlay included to acquire mines	To achieve self-reliance for raw material and cost reduction	Continuous		Banera Mine: Government of Rajasthan has conducted the Public Hearing on 5th Nov'15 at Banera Dist. Bhilwara. EIA/EMP report is being updated as per the suggestions given in Public Hearing Proceedings. After updation final EIA/EMP report will be submitted to MOEF for Environment clearance.



No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
											Jahajpur Mine: Matter is being pursued with Ministry of Mines, GOI for reserving the block in favour of RINL as per the provisions of MMDR Act, 2015.
(xv)	Installation of Addl. Steam Turbine Driven Blower TB – 5 in TPP & BH	To install TB - 5 as standby to cater the need I case TB – 1,2,3 goes for modernization and also can be used as standby for BF – 4 in future.	280.52	--	--	75.00	To Install TB – 5 to cater the need of cold Blast requirement of BF – 1 & BF – 2 in case existing TB-5 are under modernization/ maintenance	To cater the need of Cold Blast requirement of BF I and BF 2	September' 2016		Steam Turbine by BHEL is getting ready.
(xvi)	AMR schemes	To maintain good health of plant	Continuous	-	-	125.00	To maintain good health of the equipment and to sustain current level of production / productivity in the context of the ageing of the plant	To maintain good health of plant	Continuous		—
(xvii)	R&D schemes	To enhance productivity / achieve cost reduction / Development of new products	Continuous	-	-	50.00	Development on the existing technology, trouble shooting with technological solutions for operational activities through investigative studies, failure	To enhance productivity / achieve cost reduction / Development of new products	Continuous		—

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
							analysis and critical examinations of process parameters to reduce cost / enhance productivity				
(xviii)	Forged Wheel Plant	To set up the facility for manufacture of Forged wheels at Lalganj, Rae Bareli UP.	1177.00	-	-	20.00	To produce 100000 wheels for Railways .	Higher production	30 months from effective date of contract (for main package)		Main package: Price quoted by resultant single tenderer is under negotiation.
(xix)	Axle Plant	To set up the facility for manufacture of Axles and other related products at New Jalpaiguri, West Bengal by forming a 100% subsidiary of RINL for the purpose.	391.00	-	-	5.00	Install suitable capacity of Axle and other related products Manufacturing unit at New Jalpaiguri, West Bengal.	Install suitable capacity of Axle etc.	24 months from Effective date of Contract (for main package) scheduled		After continuous follow up with Railways, discussions were held with Chief Advisor (Cost), MOF on 19.11.2015, about the draft off take agreement. Major issues have been sorted out. Efforts are being made to conclude the definitive agreements in Feb' 2016.
(xx)	Revamping of LMMM walking beam furnance	Revamping of Furnace	186.00	-	-	5.00	To reduce the break-down/stabilisation.	To reduce breakdown	---	July' 2018	MECON has been engaged as the Consultant and Technical specifications viz., Walking Beam Furnaces, Water System and Civil work etc are finalized for tendering.

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
(xxi)	Central Storage Yard	Ease of Handling & Transportation	270.00	-	-	10.00	Increased capacity at a centralised storage location.	Increase capacity		August'2018	Order has been placed for consultancy to M/s MN Dastur&Co on 04.11.2014. Technical specifications are under finalisation for tendering.
<b>3.</b>	<b><u>NMDC Ltd.</u></b>										
(i)	Bailadila Deposit 11B	To increase the production of Iron Ore	607.18	--	--	35.00	Capacity of 7mtpa	Availability of iron ore will increase	March' 2012	March'2015	Construction activities completed and integrated load trials taken on 29 <sup>th</sup> March' 2015
(ii)	Kumaraswamy Iron Ore Project	To increase the production of iron ore	898.55	--	--	10.00	Capacity of 7mtpa	Additional iron ore will become available to the consumer.	May' 2013	August'2015	<ul style="list-style-type: none"> <li>Crushing Plant load trials taken on 25.05.2015</li> <li>Downhill Conveyor load trials conducted on 31.08.2015</li> </ul>
(iii)	Pellet Plant at Donimalai	To diversify into pellet production	572.00	--	--	30.00	Capacity of 1.2mtpa	Availability of pellet will increase	April' 2013	June' 2015	<ul style="list-style-type: none"> <li>Integrated load trials taken on 29<sup>th</sup> June' 2015 with fines circuit of beneficiation plant</li> </ul>
(iv)	3 MTPA Steel Plant at Nagarnar	i) Ensure value addition to Iron ore mined in CG State. ii) Development of Baster region inhabited mostly by	15525.00	--	--	2600.00	Capacity of 3 mtpa	Steel availability will increase to cater the needs of the country.	May' 2015	December' 2016	<ul style="list-style-type: none"> <li>Forest Clearance &amp; Right of Way for laying water pipe lines from</li> </ul>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
		tribals. iii) Partially meet the growing demand for steel products, primarily in the Indian market. iv) Investment of funds available for business growth.									river Sabri to Steel Plant site at Nagarnar for operation water for the steel plant.
<b>4.</b>	<b>MOIL Limited</b>										
(i)	Sinking of second vertical shaft at Munsar mine.	To sustain as well as to increase the production from the larger area of the mine	51.32	0.00	0.00	4.00	The expected production will be 96000 TPA of saleable manganese ore after attaining full capacity	The expected production will be 96000 TPA of saleable manganese ore after attaining full capacity	Four years from the date of commencement of work	The project will be completed 2019-20	Letter of intent issued in Jan-2016. Work is expected to start in Feb' 2016
(ii)	Joint venture for Ferro Manganese / silico Manganese Plant with SAIL	The project will be set up at Bhilai to produce Ferro/Silico Manganese to cater to the demand of Steel Authority of India Limited.	391.00	0.00	0.00	0.25	The project will be producing Ferro Manganese 31000 MT and Silico Manganese 75000 MT	The project will be producing Ferro Manganese 31000 MT and Silico Manganese 75000 MT	June' 2012	24 Months after placing work order for furnace and auxiliaries	The investments have been delayed due to:- (a) Getting higher offers for furnace package initially, leading to decision to refloat the tenders for both the projects. (b) Change in requirement of ferro alloys of SAIL as well as RINL resulting in preparation of fresh TEFRs and
(iii)	Joint Venture for Ferro Manganese/ Silico	The project will be set up at Bobbili to produce Ferro/	217.00	0.00	0.00	0.25	The project will be producing Ferro	The project will be producing Ferro	June' 2012	24 Months after placing work order for furnace and	

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
				Budget Support		I&EBR			Original	Actual/Now scheduled	
				Non-Plan Budget	Plan Budget						
1	2	3	4	5(i)	5(ii)	5(iii)	6	7	8	9	10
	Managanese Plant with RINL	Silico Manganese to cater to the demand of Rashtriya Ispat Nigam Limited					Manganese 20000 MT and Silico Manganese 37500 MT	Manganese 20000 MT and Silico Manganese 37500 MT		auxiliaries	(c) Increase rates of power all over India and shortage of power in Andhra Pradesh necessitating review of the projects. Possibilities of sourcing power (which is main ingredient for production of ferro alloys) at cheaper rates are being explored to go ahead with the implementation of the project.
	<b>Total (A)</b>		<b>71653.87</b>	<b>0.00</b>	<b>0.00</b>	<b>6328.64</b>					

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
			Original	Revised	Budget Support		I&EBR			Original	Actual/Now scheduled	
					Non-Plan Budget	Plan Budget						
1	2	3	4(i)	4(ii)	5(i)	5(ii)	5(iii)	6	7	8	9	10
<b>B.</b>	<b><u>Scheme of Ministry of Steel</u></b>											
<b>1</b>	<b>(On-going projects)</b>											
1(i)	Scheme for promotion of Research & Development in Iron & Steel sector	<p>1. Development of Innovative/ Path-Breaking Technologies utilising Indian Iron Ore Fines &amp; Non-Coking Coal.</p> <p>2. Improvement of quality of steel produced through Induction Furnace route.</p> <p>3. Beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. Pelletisation).</p> <p>4. Development of the technology for Cold Rolled Grain Oriented (CRGO) Steel sheets and other value added innovative steel products.</p> <p>5.To pursue R&amp;D on any other subject of national importance concerning the Iron &amp; Steel sector.</p>	200.00	--	--	15.00	--	<p>1) Improvement in sinter productivity through deep beneficiation and agglomeration technologies for rational utilization of low grade iron ores and fines.</p> <p>2) Development of Alternate complementary Route of Iron/Steel making with reference to Indian raw material viz low grade iron ore and non coking coal.</p> <p>3) Production of low Phosphorus Steel using DRI through Induction furnace route adopting innovative fluxes and/or design (refractory) changes.</p> <p>4) Smelting reduction of iron ore/fines by hydrogen plasma and elimination of CO2 emission.</p> <p>5) Beneficiation of Iron Ore slimes from Barsua and other mines in India.</p> <p>6) Development of pilot scale pelletization</p>	Same as in col. 6	During 11th Plan (2007-12). Continued in 12 th Five Year Plan (2012-17).Will be continued further being a continuous scheme.	<p>1) The Scheme for R&amp;D was introduced in MoS in the 11th Five Year Plan and it took considerable time to get appraisal and approval as per laid down procedure.</p> <p>2) The EFC approved the scheme in Nov 2008 and Ministry of Finance accorded final clearance on Jan 2009 with a rider that the scheme be operated with effect from 2009-10.</p> <p>3) Ministry of Steel took follow up action for selection of R&amp;D projects in consultation with the stake holders, got the projects approved by Panel of Experts and 4 projects were approved in Feb 2010. Four more projects were approved by PAMC in Nov 2010.</p> <p>4) Because of the delays on the approval of the scheme and subsequent approval of the individual R&amp;D projects, the 4 projects could only be started in April 2010, 2</p>	

(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
			Original	Revised	Budget Support		I&EBR			Original	Actual/Now scheduled	
					Non-Plan Budget	Plan Budget						
1	2	3	4(i)	4(ii)	5(i)	5(ii)	5(iii)	6	7	8	9	10
								<p>technology for Indian Goethitic/hematite ore with varying degree of fineness.</p> <p>7) CO2 abatement in Iron and Steel production by process optimisation.</p> <p>8) Production of low ash (10% ash) coal (coking non coking) from high ash Indian coals including desulphurisation of high sulphur North East coal.</p> <p>9) Development of the technology for production of CRGO Steel Sheets and other value added Steel Products.</p> <p>10) Production of low Phosphorus steel through Induction Furnace route using DRI as major ferruginous raw material – An Industrial Assessment.</p> <p>11) Development of Automation System for Optimum Coal Blending at Coal Handling Plant of Coke Oven Batteries.</p>				<p>projects on Jan 2011 and the balance 2 projects in Dec 2011. The projects continued in the 12th Five Year Plan.</p> <p>5) So far 6 projects have been completed and 2 projects are in progress which are likely to be completed in 2016-17. 6) The R&amp;D Scheme has amended with the due approval of SFC and HSM in Nov 2014, to include development of technology for Cold Rolled Grain Oriented (CRGO) Steel Sheets and other value added innovative steel products and also to include R&amp;D on any other subject of national importance concerning the Iron &amp; Steel sector, as objectives of the scheme.</p>



(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved outlay 2016-17			Quantifiable Deliverables/ Physical Outcomes	Projected Outcomes	Processes/ Timelines		Remarks/ Risk Factors
			Original	Revised	Budget Support		I&EBR			Original	Actual/Now scheduled	
					Non-Plan Budget	Plan Budget						
1	2	3	4(i)	4(ii)	5(i)	5(ii)	5(iii)	6	7	8	9	10
								12) Economic production of iron through direct reduction of Mill Scale by low grade coal of Rajasthan. 13) Develop Procedure for Joining Next Generation High Temperature Material to be used for Supercritical/ Ultra Supercritical Power Plant by Friction Stir Welding				
	<b>TOTAL (B)</b>		200.00			15.00						
	<b>C. OTHETR SHCEMES/PROGRAMMES</b>											
	<b>(i) Relating to PSUs</b>											
	(i) Various AMR schemes, ongoing and new schemes costing less than Rs. 50.00 crore (ii) Schemes with sanctioned cost of more than Rs. 50.00 crore at initial stages of finalization	For regular maintenance and upkeep of plant, equipments and machinery, cutting down of production cost, improvement in the quality of products, enhanced productivity, etc.					5979.89	--				These schemes are related to day to day functioning and operations of the PSUs. The schemes, which are yet to get necessary approvals have not been included.
	<b>TOTAL (C)</b>		--	0.00	0.00	15.00	5979.89					
	<b>GRAND TOTAL - A + B + C</b>		<b>71853.87</b>	<b>0.00</b>	<b>0.00</b>	<b>15.00</b>	<b>12308.53</b>					

**Normal Saving/surrender of non utilized fund in projects/schemes run under Government Budgetary Support**

S. No.	R&D Project	Lead Agency	Amount Refunded (in crore)	Year of Refund	Remarks
1.	Improvement in sinter productivity through deep beneficiation and agglomeration technologies for rational utilization of low grade iron ores and fines	CSIR-NML Jamshedpur	0.68	2014-15	Less expenditure against the estimated cost
2	Alternate complementary Route of Iron/Steel making with reference to Indian raw material viz low grade iron ore and now coking coal	CSIR-NML Jamshedpur	1.94	2014-15	Less expenditure against the estimated cost
3	Production of low Phosphorus Steel using DRI through Induction furnace route adopting innovative fluxes and /or design (refractory) change	CSIR-NML Jamshedpur	0.12	2012-13	Less expenditure against the estimated cost
4	Production of low ash (10% ash) coal (coking non coking) from high ash Indian coals including desulphurization of high sulphur North East coal	CSIR-IMMT Bhubaneswar	3.29	2014-15	Two equipment were procured from AMPRI Bhopal free of cost

\*\*\*\*\*

**CHAPTER - III****REFORM MEASURES AND POLICY INITIATIVES****1. LIBERALISATION OF THE INDIAN STEEL SECTOR**

The Indian steel sector was the first core sector to be completely freed from the licensing regime and pricing and distribution controls. This was done primarily because of the inherent strengths and capabilities demonstrated by the Indian iron and steel industry. The economic reforms and the consequent liberalization of the iron and steel sector which started in the early 1990s resulted in substantial growth in the steel industry and green field steel plants were set up in the private sector.

India ranked as the 3<sup>rd</sup> largest producer of crude steel in the world after China and Japan in 2015 (January - December) based on provisional data released by the World Steel Association. India's crude steel capacity expanded from 80.36 million tonnes per annum (MTPA) in 2010-11 to 109.85 MTPA in 2014-15. Indian crude steel production was 88.98 MT in 2014-15 as against 70.67 MT in 2010-11. India was also the third largest consumer of finished steel in the world in 2014, after China and the USA as per data released by the World Steel Association. The country has also been the largest sponge iron producer in the world since 2003. The domestic steel sector contributes to nearly 2% of GDP and provides employment to over 6 lakh people. India has been a net importer of total finished steel every year since 2007-08 except 2013-14. The production for sale of total finished steel (alloy+non-alloy) during 2014-15 was 92.16 MT, up by 5.1% over 2013-14 as per data released by Joint Plant Committee (JPC).

The important policy measures which have been taken over the years for the growth and development of the Indian iron and steel sector are as under:-

- i) Pricing and distribution of steel were deregulated from January, 1992. At the same time, it was ensured that priority continued to be accorded for meeting the requirements of small-scale industries.
- ii) The import regime for iron and steel has undergone major liberalization moving gradually from a controlled import by way of import licensing, foreign exchange release, canalization and high import tariffs to total freeing of iron and steel imports from licensing, canalization and lowering of import duty levels. Export of iron and steel items has also been freely allowed.
- iii) In an attempt to control the surge in imports, the government hiked the import duty on key steel products twice in 2015 – in June and in August - each time by 2.5%. As a result, after the last hike in August 2015, import duty on semi finished products has been raised to 10% while duty on non-alloy flat products and some specified alloy steel products have been raised to 12.5%.

- iv) In September 2015, the government also imposed a provisional safeguard duty of 20% for 200 days on import of certain categories of hot rolled flat steel with a view to protect domestic producers from recent surge in imports from China specially. The safeguard duty would cover import from all countries including those with which India currently has FTAs like Japan and South Korea.
- v) In order to safeguard domestic steelmakers from rising imports, the Indian government has imposed anti-dumping duty on cold-rolled flat products of stainless steel. The duty has been levied in the range of 5-57% on major countries such as China, US, South Africa, Thailand and Taiwan. The highest duty of 57.39% has been imposed on steel from China.
- vi) In a move to curb steel imports, Indian government banned the production and sale of steel products that does not meet Bureau of Indian Standard (BIS) approval. In a Steel and Steel products (Quality Control) order dated 16 Dec'15 issued by Steel Ministry, BIS is made mandatory for all the steel products that are manufactured and traded in India. The government has issued a list of 15 steel products for which BIS certification are mandatory. These 15 products which constitute a large part of steel imports will impact the imports of HRC, CRC, bars, wire rods, billets and HR plates.
- vii) The import duty on raw materials differs and is at 2.5% for each of melting scrap, iron ore and coking coal and 5% for metcoke.
- viii) There is no export duty on any steel item. In recent times, the government has raised duty drawback rates on a host of items, including iron and steel with a view to boosting exports.
- ix) In order to conserve the mineral for long term requirement of the domestic steel industry, the Government has imposed ad valorem export duty of 30% on all forms of iron ore except low grades (10%) and pellets (5%). The Government has also reduced basic customs duty from 7.5% to 2.5% on plant and machinery imported for setting up or substantial expansion of iron ore pellet plants or iron ore beneficiation plants.
- x) Excise duty for steel is currently at 12.5%.
- xi) A roadmap for Research & Development and Technology for Indian Iron and Steel Industries has been released by the Ministry of Steel with the aim to highlight the gaps in R&D and Steel Technology and sensitize the steel industry to draw suitable action plan/strategy to invest on R&D and technology upgradation programme. Vision on indigenous R&D for steel has been laid down with R&D investment target placed at 1% of sales turnover by 2016-17.
- xii) Inter Ministerial Group (IMG) meetings under the Chairmanship of Secretary (Steel) are being held regularly to sort out infrastructure constraints of steel industry and raw material issues. In addition, the Ministry is actively involved with the Project Monitoring Group (PMG) of the Cabinet Secretariat on fast tracking decision in respect of delayed steel projects.

- xiii) A National Steel Consumers' Council to facilitate regular interaction of producers and consumers and redress problems faced by consumers relating to supply/availability/pricing of steel products and other related issues had been set up in the Ministry of Steel, under the Chairmanship of the Hon'ble Steel Minister.
- xiv) Ministry of Steel in association with Steel Industry organizes the "Steel Pavilion" at the India International Trade Fair held at Pragati Maidan, New Delhi, every year where items of iron and steel and mining sector are showcased to highlight the versatility and benefits of steel use.
- xv) As a facilitator, the Government had released the National Steel Policy 2005, which has laid down the broad roadmap for encouraging growth for the Indian steel industry, on both supply and demand sides. On the steel supply/production side, the National Steel Policy 2005 indicates that the strategy would be to facilitate creation of additional capacity, remove procedural and policy bottlenecks in the availability of inputs, make higher investments in R&D, and encourage the creation of infrastructure such as roads, railways, and ports. On the demand side, the National Steel Policy 2005 has stressed the development of the demand side through creation of incremental demand via promotional efforts, creation of awareness and strengthening the delivery chain, particularly in rural areas. Apart from the anticipated growth in the leading steel end use segments, this has to be achieved through conscious promotion of steel usage in the technical curricula in the country, increased use of steel in construction activities and infrastructure building and opening of new block-level stock points in the rural areas.
- xvi) India's Parliament has passed the Mines and Minerals Development and Regulation (MMDR) Amendment Bill 2015, seeking to introduce the system of auction of mines to enhance transparency in mineral allocations and paves the way for introduction of competitive bidding for allocation of mines of iron ore and other non-coal minerals.
- xvii) The Government has issued the "Steel & Steel Products (Quality Control) Order" under the Bureau of Indian Standard Act 1986, to ensure that no manufacturer can manufacture, import, store for sale or distribute steel and steel products which do not conform to the standards and which do not bear the standard mark (BIS or ISI mark).
- xviii) Following the completion of the all-India study by Joint Plant Committee (JPC) as commissioned by the Ministry of Steel to obtain a full picture of the pattern of domestic rural steel consumption, a Monitoring Committee has been constituted by the Ministry of Steel, Government of India under the chairmanship of Joint Secretary to Government of India and comprising of representatives from public sector steel plants, Ministry of Steel, JPC and INSDAG to monitor the implementation of the various recommendations of the rural study report.
- xix) Process of drafting of New National Steel Policy to replace the existing National Steel Policy 2005 has been initiated for long term development of steel industry with the aim of producing 300 MTPA of steel by 2025.

- xx) The government has decided to set up four 6 MTPA steel plants in the states of Chhattisgarh, Jharkhand, Odisha and Karnataka through the SPV route, which together will add 20-24 MTPA of steel producing capacity, once operational.
- xxi) Hon'ble Prime Minister dedicated to the nation, the IISCO Steel Plant (ISP) of SAIL, modernised at an investment of Rs 16,000 crore to expand the plant's crude steel capacity from 0.5 MTPA to 2.5 MTPA in May 2015 and the Rourkela Steel Plant (RSP) of SAIL, modernised at an investment of Rs 12,000 crore to raise its crude steel production capacity from 1.9 MTPA to 4.4 MTPA in April 2015.

## **2. MAJOR INITIATIVES TAKEN BY THE MINISTRY OF STEEL**

To achieve the objectives of the National Steel Policy (NSP) 2005, Ministry of Steel has taken the following major initiatives:-

### **(i) Mega Expansion Plans of SAIL, RINL & NMDC Ltd.**

**SAIL:** Steel Authority of India Ltd has undertaken Modernization & Expansion of its integrated steel plants at Bhilai, Bokaro, Rourkela, Durgapur & Burnpur and special steel plant at Salem. In the current phase, the crude steel capacity is being enhanced from 12.8 Million tonne to 21.4 million tonne per annum. The indicative investment for current Phase is about Rs. 62000.00 crore. Approximately Rs. 10,000 crore has been earmarked for modernization and expansion of SAIL Mines. The Expansion Plan of SAIL, besides capacity enhancement, adequately addresses the need of SAIL Plants towards eliminating technological obsolescence, energy savings, enriching product mix, pollution control, developing mines & collieries to meet higher requirement of key inputs, introduce customer centric processes and have matching infrastructure facilities in the Plant to support higher production volumes.

The Expansion Plan of SAIL, besides capacity enhancement, addresses the need of SAIL Plants towards eliminating technological obsolescence, energy savings, enriching product mix, pollution control, developing mines & collieries to meet higher requirement of key inputs, introduce customer centric processes and have matching infrastructure facilities in the Plant to support higher production volumes.

The expansion project at Salem Steel Plant has been completed in Sep'10. Hon'ble Prime Minister of India has dedicated Modernized & expanded Rourkela Steel Plant and IISCO Steel Plant to the nation on 01.04.2015 and 10.05.2015 respectively. Entire new integrated process routes in these two plants are in operation, stabilization and ramp up.

The major facilities at Durgapur Steel Plant and Bokaro Steel Plant have been completed in Jun'15 and Sep'15 respectively. At Bhilai Steel Plant, some of the facilities such as New Coke Oven Battery No.11, 2<sup>nd</sup> Sinter Machine in Sinter Plant-3, Ore Handling Plant Part-A and Oxygen Plant on BOO basis have been completed. However the facilities such as Blast Furnace, Steel Melting Shop-III, Bar & Rod Mill and Universal Rail Mill are under various stages of execution. SAIL is committed to complete the balance facilities at Bhilai under current phase of Modernization & Expansion progressively by October' 2016.

**RINL:** RINL has completed its expansion plan from 3 Mtpa to 6.3 Mtpa of Liquid Steel with a cost of Rs 11551 crore till December' 2015 out of revised estimated cost of Rs. 12,291

crore. For enhancing the liquid steel capacity by 1 Mtpa to 7.3 Mtpa, up-gradation & modernization of existing Blast Furnaces, Converters shop, sinter plant etc with an investment of Rs. 4000.00 crore (approximately), as on December' 2015 expenditure about Rs. 1496.00 crore has been made in this regards. Category-I Capital Repairs and upgradation of Blast Furnaces-I was completed with blowing in of the Furnace on 30<sup>th</sup> July, 2014.

**NMDC Ltd:** NMDC has plans to increase iron ore production capacity to 75 million tons per annum (MTPA) by 2018-19 and 100 MTPA by 2021-22 from the current production level of around 30 MTPA. To meet the 100 MTPA target, NMDC would require additional Mining Leases in Odisha, Jharkhand, Karnataka, Chhattisgarh and other states (SPV or Other routes). NMDC desires that Leases should be considered under 17A (2A) of MMDR Amendment Act, 2015 and request for the same has already been made by NMDC to explore and develop the Mine either independently or under JV or under SPV. NMDC intends to set up a 10 MTPA Ore processing plants in Baildila sector to convert iron fines into iron ore concentrate (in slurry form), a 15 MTPA Slurry pipeline transportation system from Bailadila to Vizag via Nagarnar and Pellet Plant at Nagarnar (2 MTPA) and Vizag (6 MTPA).

(ii) **Special Purpose Vehicle (SPV)**

A Special Purpose Vehicle (SPV) called International Coal Ventures Private Limited has been set up as a Joint Venture Company on 20.05.2009 with SAIL, CIL, RINL, NMDC and NTPC as the promoter companies with an objective to meet the coal requirement of its promoter companies. ICVL has been granted the powers and the autonomy to function as a Navratna company but without formal Navratna status.

ICVL has set its first global footprints by making a strategic and large acquisition in Moatize coal basin in Mozambique on 7<sup>th</sup> October, 2014 by taking over the operating coal mine and green field coal assets in Mozambique of Rio Tinto, a global mining major. The acquired assets comprise of a producing mine at Benga, pre-development assets at Zambeze and exploration stage assets at Tete East which together have a coal resource of 2.6 billion tonnes.

➤ With the aim producing 300 Million Tonnes of Steel by 2025, a concept of Special Purpose Vehicle (SPV) has been proposed with State Governments of Chhattisgarh, Odisha, Jharkhand and Karnataka. The following MoUs have been signed:

- An MOU for setting up Ultra Mega Steel Project (UMSP) in Chhattisgarh has been signed amongst MOS/GOI, SAIL, NMDC Ltd. and the Government of Chhattisgarh on 09<sup>th</sup> May, 2015.
- MoU between Govt of Chhattisgarh, NMDC, IRCON and SAIL for 140km rail line between Rowghat and Jagdalpur. Estimated project cost: Rs. 2000 crore.
- MoU between Govt of Chhattisgarh and NMDC for Slurry Pipeline and 2MTPA Pellet Plant at Nagarnar in Bastar District with an investment of Rs. 4000 crore.

- MoU between Govt of Chhattisgarh and SAIL for setting up 1MTPA Pellet Plant at Dalli-Rajhara, Balod District with an investment of Rs. 826 crore.
- NMDC has incorporated Karnataka Vijayanagar Steel Ltd. with registered office at Bengaluru to develop the steel plant at Bellary through SPV route.
- In Jharkhand an MOU among Ministry of Steel-GOI, Government of Jharkhand and NMDC was signed on 28<sup>th</sup> June; 2015 to incorporate a wholly owned subsidiary: *Jharkhand Kolhan Steel Limited* to develop the Steel SPV in the state.
- SAIL is participating in setting up of an Ultra Mega Steel Plant of approximately 3+3 million tonnes green-field capacity in Bastar district of Chhattisgarh. "Chhattisgarh Mega Steel Limited" has been incorporated by SAIL as a Special Purpose Vehicle (SPV) for UMSP in Chhattisgarh on 20th January 2015. The SPV will induct NMDC as a Joint Venture partner with equity holding of 26% in the steel SPV. In addition, a Mining SPV will be created which will undertake mineral exploration, mine development and commercial production of iron ore.

(iii) **Mergers/Acquisitions and Strategic alliances/Joint Ventures**

To improve operational efficiency of steel units and to achieve synergy, a number of mergers/acquisitions/strategic alliance/Joint Ventures have either taken place or are in various stages of negotiations. Details of which are as under:-

(A) **Mergers/Acquisitions**

- Ministry of Steel has taken up with Ministry of Commerce, Government of India for exploring possibility of acquiring majority stake in Neelachal Ispat Nigam Limited (NINL) in Jeypore, Odisha by SAIL. Such acquisition process will facilitate realization of full potential of NINL as a profitable integrated steel plant. It will help in enhancing SAIL's growth and market share, beside providing an access to a port based plant and captive iron ore deposits which could be gainfully utilized.

(B) **Strategic alliances/Joint Ventures**

- **Automotive steel joint venture in India:** SAIL and Arcelor Mittal are in discussions for exploring the possibility for setting up an automotive steel manufacturing facility under a Joint Venture ('JV') arrangement in India. The proposed JV will construct a state-of-the-art cold rolling mill and other downstream finishing facilities in India that will offer technologically advanced steel products to India's rapidly growing automotive sector. An MoU in this regard has been signed between the two companies on May 22, 2015.
- A joint venture company namely, SAIL-SCL Kerala Ltd. has been formed between SAIL and Government of Kerala. A new rolling mill for manufacturing 65,000 tonnes



p.a. of TMT bars has been installed. The mill has commenced rolling of billets into Fe 500 D Grade TMT bars from 30<sup>th</sup> Dec 2015.

- A Joint Venture company between SAIL and RITES viz. “M/s SAIL RITES Bengal Wagon Industry Pvt. Ltd.” was formed for fabrication of wagons. Two Assured Off take Agreements’ (AOTAs), one for manufacture of new wagons and another for Rehabilitation of in-service wagons have been signed on 24<sup>th</sup> November’2015 between Railways and the JV Company for supply of 1200 wagons and rehabilitation of 300 wagons per annum to Railways by the JV Company for 10 years.
- NMDC has signed MoU with RINL to develop Slurry Pipe Line system from Nagarnar to Vizag and Pellet Plant at Vizag.
- RINL has made a strategic tie-up with Railways for setting up of a Forged Wheel plant at Rae Bareli, UP for production of wheels of High Speed Trains of Indian Railways and an Axle plant is being set-up for production of 50,000 axles per annum which is an import substitute item for Indian Railways.
- RINL entered into an MOU with APMDC on 29<sup>th</sup> Apr’15, for exploration and development of Iron ore mining reserves over an area of 2,800 hectares in Kukunur area of West Godavari district, through JV route.
- RINL in partnership with POWERGRID (Power Grid Corporation of India) established a Joint Venture company “**RINL POWERGRID TLT Pvt Ltd.**” on 19<sup>th</sup> Aug ’15 to manufacture 1.2 Lakh tonne/annum of Transmission Line Towers at Visakhapatnam. The foundation stone for the JV project was laid on 21<sup>st</sup> Aug ’15.
- RINL has also a strategic tie-up for Rajasthan Mining Project at Bhilwara– (IBM Ajmer has approved the Mining plan along with progressive mine closure plan of Banera Iron ore mines on 04<sup>th</sup> Nov’ 2015).

(iv) **Corporate Social Responsibility**

- Corporate Social Responsibility (CSR) is a concept whereby organizations serve the interests of society by taking responsibility for the impact of their activities on customers, employees, shareholders, communities and the environment in all aspects of their operations. Harnessing of natural resources has a direct impact on the economy, environment and society at large. CSR is thus linked with the practice of Sustainable Development.
- Department of Public Enterprises has issued new “Guidelines on Corporate Social Responsibility and Sustainability for Central Public Sector Enterprises” vide OM No. 15 (13)/2013-DPE (GM) Dated the 21<sup>st</sup> October, 2014.
- Various activities like constructions of schools, colleges, provisions of medical facilities, community centers construction of roads drains, lighting of roads in villages, constructions of toilets in schools etc. are taken up and cleanliness campaign under “Mission Swachh Bharat” is being implemented by PSUs under this CSR activities.
- NMDC has launched Livelihood-linked skill development programs in Bamboo, Bell Metal & Tumba art investing Rs. 181.78 Lakh to provide livelihood generation training to 460 unemployed tribal youth of Bastar District in Chhattisgarh. Another

livelihood skill training program in installation, repairs & maintenance of hand pumps and submersible pumps for 1260 unemployed youth of Bastar has been completed by NMDC.

### **BUDGET AND EXPENDITURE ON CSR BY STEEL PSUs**

(Rs. in lakhs)

PSU	2011-12		2012-13		2013-14		2014-15		2015-16 (upto Dec. 2015)	
	Budgeted	Exp.	Budgeted	Exp.	Budgeted	Exp.	Budgeted	Exp.	Budgeted	Exp.
<b>SAIL</b>	6400.00	6125.00	4200.00	5329.00	4000.00	6206.00	7800.00	3504.00	9896.00	4241.00
<b>RINL</b>	1200.00	1062.22	750.00	1600.00	750.00	2031.00	1423.00	1403.88	1500.00	676.52
<b>NMDC</b>	8013.00	8671.00	14530.00	10110.00	17105.00	13142.00	25018.69	18865.00	29820.00	6865.00
<b>MOIL</b>	628.00	655.91	680.00	1056.00	863.00	1036.00	1419.00	1358.00	1375.00	538.00
<b>KIOCL</b>	230.00	119.00	283.00	79.00	93.00	227.00	110.00	100.11	96.50	15.72
<b>MSTC</b>	150.00	166.00	355.00	193.28	260.00	482.86	120.00	120.00	150.00	94.74
<b>FSNL</b>	9.00	9.06	9.00	9.00	4.00	4.50	25.27	22.10	29.97	0.00
<b>MECON</b>	325.00	220.51	497.49	235.33	460.46	257.63	468.76	144.45	491.51	174.00
<b>HSCL</b>	0.00	7.51	0.00	24.02#	0.00	0.00	0.00	10.21	0.00	0.00
<b>BGC</b>	38.00	26.00	17.00	48.00	64.32	92.27	99.60*	33.50*	73.00	42.57
<b>TOTAL</b>	<b>16993.00</b>	<b>17062.21</b>	<b>21321.49</b>	<b>18683.63</b>	<b>23599.78</b>	<b>23479.26</b>	<b>36484.32</b>	<b>25561.25</b>	<b>43431.98</b>	<b>12647.55</b>

# spent from the carried over fund of last year.

\*Figures of Budgeted and Expenditure of Rs. 97.49 lakhs and Rs. 31.39 lakh of OMDC and Rs. 2.11 lakh and Rs. 2.11 lakh of EIL respectively.

#### (v) **Rural Distribution Network of Steel**

- SAIL has been expanding its' dealer network, with special focus on Rural Dealership Scheme, to widen reach of items of mass consumption. As on 1<sup>st</sup> January, 2016, SAIL's dealership network consists of 2623 dealers, including 903 rural dealers. During April- December' 2014, 380 new dealers have been appointed out of which 207 are Rural dealers. SAIL Rural Dealership Scheme was introduced in 2011-12 with a view to expand its scope of business in rural areas at Block/Taluka level.
- Appointment of SAIL Dealers is a continuous process. Preference is accorded to applicants from SC, ST and OBC categories in appointment under SAIL Dealership Scheme, subject to their fulfilling eligibility criteria/ conditions, as prescribed for them. Dealership under SC/ST & OBC have been exempted from payment of security deposit while the dealers under general category are required to furnish a security deposit @ Rs. 500/-per tonne of agreed monthly off take.
- RINL makes efforts on continuous basis for promotion of steel usage through development and supplying of new products and improving Distribution Network for wider coverage.
- RINL has a Distribution Network consisting of 5 Regional Offices, 24 Branch Offices, 22 Stockyards and 6 Consignment Sales Agents. RINL has appointed 160 Retailers for supplying steel products in urban, semi-urban and rural areas.
- With a view to popularizing usage of steel in rural areas, RINL/VSP introduced the Scheme of registration of District Level Dealers in Small Towns and Rural Dealers at Block and Panchayat Level locations. The process of registration of Rural Dealers is continuous and simple. Preference is given for the minorities and women entrepreneurs in the Rural

Areas for the Rural Dealerships. Till the end of December 2015, RINL has 697 Rural Dealers spread across almost all the States and Union Territories in the country to supply steel products to the semi-urban and rural consumers.

#### **(VI) Ministry of Steel's Initiatives to promote R&D**

R&D in the Indian Steel sector is carried out mainly by the steel plants, R&D laboratories and academic institutions. The steel companies like SAIL, Tata Steel, JSW Steel and Essar Steel have accomplished some significant work in the area of raw material beneficiation, agglomeration and product development. However, there are certain constraints in raw material quality, particularly high Alumina in Indian iron ore and high ash in Indian coal, which adversely affect the techno economic performance of the whole industry. Indigenous development of high performance steel products is yet another challenging area being faced by the steel industry in India. While large varieties of value added steel products are now being produced indigenously, the country is dependent on import for several high performance and value added steel products like electrical steel, automotive grade steel and steels for specialized use in defence, space and nuclear applications. To address these constraints and also to sustain the projected high growth rate, there is an urgent need for concerted R&D and technology intervention in the iron and steel sector. R&D by the large steel companies in India varies from company to company in the range of 0.05-0.5% of the sales turnover, which is way below the international standards.

Ministry of Steel is supplementing R&D efforts/ investment of the steel industry by providing financial assistance from (1) Steel Development Fund and (2) Plan Fund/ Government Budgetary Support. Besides specific R&D projects, Ministry of Steel is also facilitating several capacity building initiatives like Ministry of Steel Chair Professor, Ministry of Steel Scholarships, Centre of Excellences, Steel Research & Technology Mission of India (SRTMI) etc. to promote human resource development and R&D in Indian steel sector. Brief notes on all these programmes follows:

**SDF Funded R&D Scheme:** Under the Scheme with financial assistance from SDF, R&D projects are pursued by reputed Research Laboratories, Academic Institutions & Industries, for basic/ fundamental research as well as applied research, i.e. to find out ways to solve the technological problems being faced by the industry. Under this scheme, so far, 83 R&D projects have been approved with a total cost of Rs. 696.27 crore with SDF contribution of Rs. 389.63 crore. Research results of several R&D projects have already been implemented by plants under SAIL and in Tata Steel, resulting in improvement in productivity, reduction in energy consumption and pollution etc.

**Government Funded R&D Scheme:** The Government started a new scheme with Plan Fund support viz. "Promotion of R&D in Iron and Steel Sector", during the 11th Five Year Plan, to pursue R&D in the following areas:

- Development of innovative/ path breaking technologies for utilization of iron ore fines and non-coking coal.
- Beneficiation of raw materials like iron ore, coal etc. and agglomeration.
- Improvement in quality of steel produced through the induction furnace.
- Development of technology for CRGO Electrical Steel Sheets and other value added innovative steel products

- To pursue R&D on any other subject of national importance concerning the Iron & Steel sector

So far 12 R&D projects have been approved with a total cost of Rs. 149.17 crore with financial assistance of Rs. 102.91 crore from Plan Fund. Major projects covered under the scheme include exclusive R&D initiatives to upgrade Indian low grade iron (including BHQ/BHJ) and Indian coking/non-coking coal and finding ways to produce quality steel with low Phosphorus in Induction Furnace. Another major initiative is to produce CRGO steel in India. So far 6 projects have been completed wherein processes/ technologies have been developed in laboratory/ pilot scale for beneficiation & agglomeration of iron ore & beneficiation of coal for the benefit of the iron & steel sector. Process has also been developed in laboratory scale for production of low Phosphorus steel in laboratory scale Induction Furnace, for which industrial trials are being carried out. Further, feasibility of smelting reduction of iron ore/fines using hydrogen plasma has been explored in laboratory/ pilot scale.

**Development of Cold Rolled Grain Oriented (CRGO) Steel:** Ministry of Steel is pursuing a joint collaborative R&D project to set up a R&D Pilot plant to pursue indigenous development of the technology of CRGO steel sheets. Ministry of Steel, DSIR (CSIR-NML), Tata Steel & RINL are the stakeholders in the R&D project. The estimated cost of the project is around Rs 500 crores which will be shared by the stakeholders. DPR of the project has been prepared and submitted by MECON. Project will commence and approval of the DPR by the stakeholders.

**Centre of Excellences at IITs with financial assistance from SDF:** Ministry of Steel has taken a major initiative to setup Centre of Excellences in leading academic Institutions in the country, to create world class research facilities with the main focus to encourage R&D and also promote human resource in the field of metallurgy required for the industry, academia and research laboratories. The fund is given from the SDF for initial setting up of the centre and its running cost for initial five years. The fund for building & related infrastructure is provided by the institutes. So far, one centre is operational at IIT Kharagpur with a total approved cost of Rs.20.26 crore (SDF Rs 16.20 crore and balance contribution from DST). Another centre is being set up at IIT Bombay with a total cost of Rs 33.06 crore (100% SDF). Creation of a third centre at IITBHU with a total cost of Rs. 30.98 crore (100% SDF) has also been approved. Proposal for the fourth center at IIT Chennai is under consideration of Ministry of Steel.

**Ministry of Steel Chair Professor and Scholarships Scheme:** The Scheme has been implemented by Ministry of Steel for providing financial assistance from SDF to appoint Chair Professors and to provide scholarships to undergraduate students of Metallurgy for 5 years for each Institute teaching Metallurgical Engineering. The aim of the Scheme was to address the problem of shortage of faculties in these institutes and also to attract students towards studying Metallurgical Engineering. Scholarship scheme has presently been implemented in 16 institutes and Chair Professors have been appointed in 12 institutes.

**Steel Research & Technology Mission of India (SRTMI):** Ministry of Steel is facilitating an industry led institutional mechanism to spearhead R&D of national importance. SRTMI is an industry driven initiative and has been setup as a Registered Society. Total Corpus envisaged for SRTMI is Rs. 200 crore out of which 50% i.e. Rs. 100 crore is to be funded

from SDF/ Ministry of Steel. The participating companies shall pay an initial entry fee @ Rs 25/tonne of crude steel produced during 2013-14, or, Rs 5 Cr, whichever is higher.

**(VII) Ministry of Steel's Initiative to promote Production of Quality Steel**

Percentage of standard and certified steel produced by integrated steel plants varies from 80-90%. In secondary steel sector this percentage is very low. Besides, many of the units in the secondary sector particularly the induction furnace units produce and sell steel products which do not conform to the prescribed standards. This is a major issue and Ministry of Steel is seized of the matter. In India, Bureau of Indian Standards (BIS) is the National Standards Body, who are engaged in formulation and implementation of National Standards known as Indian Standards. These Standards are formulated by designated Technical Committees and in most of the Steel Committees, Ministry of Steel is represented. Adoption of Indian Standards or marking products to bear ISI Mark by its very nature is optional.

Ministry of Steel had notified Steel and Steel Products (Quality Control) Orders for 30 steel products which are critical in building the country's infrastructure and human safety, for mandatory BIS certification.

**(viii) Gender Budgeting**

For empowerment of women, a Gender Budget Cell has been set up in the Ministry as per directions of the Ministry of Finance and Ministry of Women & Child Development with the aim to initiate steps for implementation of gender budgeting concept in the Ministry.

**3. NEW NATIONAL STEEL POLICY**

Steel industry is basically driven by changes in domestic and global market trends. This meant that most of the objectives and targets included in the National Steel Policy (NSP) 2005 needed to be reassessed/revaluated in the light of changing market conditions. Therefore, it has been decided to formulate a New National Steel Policy. The new policy, while retaining the core structure of National Steel Policy 2005, will aim for much broader policy formulation covering various aspects of steel sector in the country such as growth of steel demand in India, raw materials, resources and design, environment and facilitation of new steel projects. As precursor to the new policy documents Long Term Perspective of the Iron and Steel Sector has been prepared for finalization.

A High Level Committee on Manufacturing (HLCM) headed by the Prime Minister has set a target of 300 million tones Steel Production by 2025. This is a very ambitious target and with a view to achieve the same, SAIL and RINL are preparing plans for their second phase of modernization / expansion. Further, efforts are being made to facilitate setting up of large scale steel plants in the mineral rich states of Odisha, Jharkhand, Karnataka and Chhattisgarh. This would be done by having partnerships between SAIL, RINL and NMDC and State Government PSUs for setting up Special Purpose Vehicles (SPVs) which would be responsible for developing such projects.

\*\*\*\*\*

## **CHAPTER – IV**

### **REVIEW OF PAST PERFORMANCE OF SCHEMES OF 2015-16 & 2014-15**

In the 11<sup>th</sup> Plan (2007-12), a new scheme named 'Scheme for promotion of Research & Development in Iron and Steel Sector' was included with a budgetary provision of Rs. 118.00 crore. The scheme was formally approved for implementation on 23.01.2009. The scheme has been continued in the 12<sup>th</sup> Five Year Plan (2012-17) with an allocation of Rs. 200 crore. Upto December, 2015, ten (10) R&D project proposals have been approved.

The allocation of Rs. 200 crore for 12<sup>th</sup> FY Plan included Rs. 32.87 crore for the ongoing projects, Rs. 150 crore for the 'Development of Technology for Cold Rolled Grain Oriented (CRGO) steel sheets and other value added innovative steel products' (new component), and Rs. 17.13 crore for new projects to be pursued under the existing objectives of the scheme. In BE 2015-16, Rs. 15.00 crore were allocated, which has been kept as it is in RE 2015-16.

The PSUs under the administrative control of the Ministry formulate and implement various schemes/ programmes related to their respective areas of operation. The Plan schemes of the PSUs are components of their respective Annual Plans or Five Year Plans or of both, depending on the nature of the scheme. Since each PSU has several Plan schemes, most of which are related to the normal day to day functioning and operations of the company, it was felt that inclusion of all schemes of the PSUs in the Outcome Budget of Ministry of Steel would neither be practical nor commensurate with the objectives of outcome budgeting. A view was, therefore, taken that only major Plan and Non-Plan schemes with sanctioned/estimated cost of more than Rs. 50.00 crore are included in the Outcome Budget of Ministry of Steel. Based on this criterion, the actual achievements vis-à-vis the intended outcome in respect of the 39 of major Plan schemes included in Outcome Budget 2014-15 and 40 of the 2015-16 are given in the following tables. Achievements under the plan schemes of the Ministry are also given in the table. It may be noted that since almost all the major schemes are still under various stages of implementation, a more meaningful and realistic assessment of the actual achievements is possible only upon completion of the schemes.

**Actual achievement vis-à-vis projected outcome/targets 2015-16**

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'15-Dec.'15	Cumulative upto Dec.'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>A. SCHEMES WITH ESTIMATED/SANCTIONED COST MORE THAN 50.00 CRORE</b>												
<b>1. STEEL AUTHORITY OF INDIA LTD. (SAIL)</b>												
<b>(a) Bhilai Steel Plant (BSP)</b>												
(i)	Cold Repair of COB-9	To meet the shortfall in coke demand as well as stabilizing coke oven gas balance and to reduce emission level	332.65	100.00	77.00	Improved production & achieve latest pollution norms of MOEF	Aug'14	Feb' 2016 (revised from June' 2015)	56.79	229.56	Battery heating started on 28.08.15 Battery temperature (vertical flue) is being maintained at around 750 OC because of balance work in quenching tower, Coal Tower & Coke Wharf area	<ul style="list-style-type: none"> <li>The delays are primarily due to delays made by MECON (contractor for the Battery proper) on following accounts: <ul style="list-style-type: none"> <li>Initial delay in design-engineering, which adversely affected overall work of battery proper.</li> <li>Inadequate deployment of Manpower not permitting parallel activities at multiple fronts</li> <li>Non availability of critical items at site in time causing intermittent stoppage of work.</li> <li>Abnormal delay in ordering of materials &amp; awarding of</li> </ul> </li> </ul>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												sub-contractor.  • Delay in refractory supply has also adversely affected the progress.
(ii)	Expansion of BSP	Increase in production of hot metal & crude steel through state-of-the-art technology; Phasing out of low yield and energy intensive units, Reduction of semis by enhancing finished steel production; Broadening and value addition in product-mix for higher flexibility and profitability; Meeting requirement of Indian Railways	17266.00	2286.72	1406.00	Increase in HM capacity from 4.08 Mtpa to 7.5 Mtpa	Mar'13	Oct' 2016 (revised from Sep'2015)	1131.82	15431.95	Major Facilities completed  • Ore Handling Plant (OHP)-A • 2nd Sinter Machine in SP-III • Oxygen Plant (BOO basis) • COB-11	The SMS-III Package got affected as the initial contract for civil work package with M/s Ratna Infra had to be terminated due to slow progress of work and fresh contract awarded to M/s HSCL in Feb'11 at risk & cost of M/s Ratna Infra. Subsequently contract with M/s HSCL also had to be terminated due to poor progress & order for balance civil works has been placed on M/s Simplex at risk & cost of M/s HSCL. The equipment erection package also had to be re-tendered since sufficient erection fronts could not be handed over within contractual completion period. Fresh contract



(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												<p>awarded to M/s Essar Projects. The slow progress of work by HEC (installation of cranes for both equipment erection and subsequent material handling during production). HEC has failed to complete supply &amp; erection of even priority cranes even in spite of close follow-up at topmost levels and help by SAIL in the form of direct payment to sub-vendors against HEC's bills, payment of outstanding amounts against LCs opened by HEC, advance payments on revolving credit basis, issue of steel on credit basis, follow-up by SAIL with HEC's sub-vendors and issuance of comfort letters.</p> <p>HSCL has delayed in handing over of equipment erection fronts in Mills areas due to inadequate resource mobilization. Civil &amp;</p>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												<p>structural works are still not completed. Poor performance of M/s EPI (OHP Part-B and Fuel &amp; Flux Crushing &amp; Screening Facilities) considerably in the area of design-engineering, manpower &amp; resource deployment &amp; co-ordination supervision adversely affected the work leading to delay in completion of Coke Route for supply of BF Coke to BF-8 from COB-11.</p> <p>Increase in quantity for civil works/ structural fabrication and erection for BOF &amp; CCP, URM &amp; BRM has also led to prolongation of execution period.</p> <p>The progress of work in various utilities packages, such as, External Water System of URM &amp; BRM (M/s McNally Bharat), External Water System of SMS-III</p>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												(M/s Aireff Detox), Make-up & Drinking Water System (M/s Vishwa Infra.) etc are also affected due to poor financial condition of the agencies and consequential delays in supplies and inadequate resource deployment at site. Delays in these packages are having a cascading effect on the completion of the new facilities
2.	<b>Durgapur Steel Plant</b>											
(i)	Expansion of DSP	Phasing out of energy intensive units, introduction of energy efficient technology, reduction of semis & increase of hot metal capacity	2875.00	564.00	362.88	Increase of hot metal capacity from 2.09 to 2.45 Mtpa	Dec'12	Completed in June' 2015.	231.12	2798.25	<b>Major Facilities completed</b> <ul style="list-style-type: none"> <li>• Barrel type reclaimer of RMHP</li> <li>• Rebuilding of COB-2</li> <li>• New Ladle Furnace</li> <li>• Bloom cum Round Caster</li> <li>• Medium Structural Mill</li> </ul>	All major facilities completed. Hot trials taken for Medium Structural Mill on 08.06.2015.
(ii)	Rebuilding of COB-5	To meet the shortfall in coke demand as well as stabilizing coke oven gas balance	313.05	50.00	90.00	Improved production & achieve latest pollution norms	Jun'15	Feb' 2016 (revised from June' 2015)	108.94	314.87	Battery heating started on 27.08.15	Some common facilities for Battery

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
		and to reduce emission level										4 and 5 have been removed from COB-4 and added in COB-5 due to which the scope has increased.  Coke pushing delayed due to Design changes in laying of pipe lines in battery area
<b>3.</b>	<b>Rourkela Steel Plant</b>											
(i)	Rebuilding of COB-3	To meet the coke requirement for hot metal production of 4.5 Mtpa and to reduce emission levels	237.09	70.00	75.00	Improve production & achieve latest pollution norms of MOEF	Jan'15	May' 2016 (revised from August' 2015)	64.67	220.15	Chimney heating started on 01.07.15 Battery heating started on 13.08.15	<ul style="list-style-type: none"> <li>Issues related to quality of silica bricks</li> <li>Slow progress of refractory erection by BEC</li> <li>Delay in supply of oven machines by BEC</li> <li>Electrical work is slow. Earlier BEC was proposing to execute electrical work themselves but now order has been placed on sub vendor.</li> <li>Slow erection of burner pipes &amp; outdoor pipeline and construction service</li> </ul>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												platform and main feeding conveyor has further delayed the project <ul style="list-style-type: none"> <li>Coke pushing delayed due to inadequate supply of CO Gas which is affecting the temperature rise</li> </ul>
(ii)	Installation of heat treatment facilities	To meet the increasing requirement of quenched & tempered plates for Defence and other sectors of strategic importance	160.48	11.00	47.62	Additional production of 12000t	Sep'14	Jan' 2016 (revised from June'15)	24.62	143.50		Poor performance of the contractors: <ul style="list-style-type: none"> <li>CAN Engg. in Design &amp; Engg.</li> <li>Empire Ind. Eqpt. &amp; Reliable High-Tech in equipment supply.</li> </ul> <p>Late arrival of experts and delay in design clearance by CAN Engg. Integrated trials with automation could not be taken due to short/delay in supply of instrumentation/ control cable by the consortium.</p>
(iii)	Up-gradation of BF-1	With increase in furnace working volume, BF productivity and hot metal	779.41	200.00			April' 2016	Sept.' 2016 (revised from April' 2016)				As upgradation of BF-1 is being carried-out in the

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15-Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
		production will increase. Up-gradation will also reduce coke rate.										existing operational BF area, work has been affected due to isolation of utilities, Diversion of railway tracks, Re-routing of steam line and water line, etc.
<b>4.</b>	<b>Bokaro Steel Plant</b>											
(i)	Expansion of BSL	Enhancing Hot metal production Introduction of energy efficient technology, conversion of higher quantities of Hot Rolled coils to value added Cold Rolled products with the installation of additional Cold Rolling Capacity.	6325.00	499.00	398.82	New Cold Rolling Mill complex of 1.2 Mtpa & enhancing Hot metal production from 4.59 Mtpa to 5.77 Mtpa	Dec'11	Completed	243.20	5340.48	Major Facilities completed <ul style="list-style-type: none"> <li>• New Cold Rolling Mill Complex</li> <li>• Upgradation of Hot Strip Mill</li> <li>• Rebuilding of COB No.1&amp; 2</li> <li>• Upgradation of BF No.2</li> <li>• Cast House Slag Granulation Plant of Cast House no.6 of BF-3 and no.3 of BF-2 completed.</li> </ul>	All major facilities completed. Hot trials taken for Hot Strip Mill after its upgradation on 30.9.15.
(ii)	Re-building of COB-7	To meet the coke demand & CO gas shortage and to comply with latest statutory emission norms.	245.67	98.00	67.00	Improve production & achieve latest pollution norms of MOEF	May'16	May'16	47.58	79.89	--	<ul style="list-style-type: none"> <li>• Design engg. and civil &amp; structural works are in progress.</li> <li>• Supply and erection of</li> </ul>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec.15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												Refractory is in progress. • Fabrication of Oven Machines is in progress.
<b>5.</b>	<b>Raw Material Division</b>											
(i)	Enhancement of production capacity of Meghahatuburu Iron Ore Mine	A technical necessity to increase iron ore for meeting requirement after SAIL expansion.	118.85	10.00	8.38	capacity from 4.3 Mtpa to 6.50 Mtpa of finished product	Jun'12	Dec' 2016 (revised from Oct. 2015)	2.48	78.42	<ul style="list-style-type: none"> <li>Crushing Section</li> <li>Augmentation of power supply</li> <li>Upgradation of Loading Section</li> <li>Erection of Wagon Loader Three nos. Classifiers</li> </ul>	With the completion of work for the upgradation of loading system, installation of new wagon loader & classifiers, the enhancement of capacity of MIOM has been achieved. RPN action taken and work awarded for balance works excluding Reclaimer in Oct'15
(ii)	Enhancement of production capacity of Bolani Iron Ore Mine	A technical necessity to increase iron ore for meeting requirement after SAIL expansion.	254.55	42.00	49.86	capacity from 4.1 Mtpa to 10 Mtpa of finished product	Nov'13	Completed in May' 2015.	19.92	143.20	Plant augmentation completed.	Enhancement of production capacity achieved in Jun'15 after completion of major upgradation work for main plant during the shutdown taken in May'15
<b>6.</b>	<b>Chandrapur Ferroalloy Plant</b>											
(i)	Installation of 1x45 MVA submerged arc Furnace	Additional production of HCFeMn & HCSiMn	187.33	25.00	36.00	Additional production of 37500 t of HCFeMn & 35000 t of HCSiMn or 60,000t of HCSiMn on standalone basis.	Oct'13	June' 2016 (revised from August' 2015)	23.63	173.07		Start of Civil work was affected due to delay in environmental clearance from MOEF. Due to failure of civil & structural works contractor

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec' 15	Cumulative upto Dec' 15		
1	2	3	4	5	6	7	8	9	10	11	12	13
												(M/s Techpro Systems), the work had to be re-tendered and awarded to alternative agency against Risk-Purchase action.  In present contract with M/s HSCL for civil & structural works, there have been delays in design-engineering. Inadequate manpower deployment by M/s. Reliable Hi-Tech for Raw Material package
2.	<b><u>RASHTRIYA ISPAT NIGAM LTD. (RINL)</u></b>											
(i)	Expansion to 6.3 Mtpa Liquid Steel	To increase the plant capacity	12291.00	250.00	250.00	Enhancing production of liquid steel to 6.3Mtpa of Liquid Steel.	36/48 months in phases from 28-10-2005 /June'20 11	Completed in April 2015.	266.21	11551.40	Units are commissioned and are under various stages of stabilisation.	PCI System in BF-1 commissioned in March '2015. BF-2: June 2014
(ii)	Coke Oven Battery No.4 Phase-II	To operate COB-4 as independent Battery and increase in recovery of by-product.	355.30	20.00	20.00	Increase in recovery of by products	By Product Plant: Oct'12 Coal Handling Plant:	Feb'16	5.94	278.75		By Product Plant commissioned and Coal Handling Plant partly commissioned



(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
							Feb'10					and balance package i.e Mixing Bins & Conveyor System is likely by Feb. 2016
(iii)	COB-5	To meet the coke requirements and gas balance for 6.3/7.3 MTPA stage and to facilitate rebuilding of COBs # 1,2 & 3 successively.	2858.00	50.00	50.00	To produce 0.82 mtpa of Gross Coke.	29 months form award of main package	Dec-17	44.06	109.23	Engineering is under progress for already ordered packages viz. Coke Dry Cooling Plant, 14MW Power Plant, Stacker cum Reclaimer, Wagon Tippler & Car Pusher, Main Battery Package and Coal & Coke Handling System. With regard to By Product Plant, representation of one bidder is being examined by IEMs.	
(iv)	Power Plant-II	To meet the additional power requirement by utilise the lean by-product gases which otherwise would be flared to atmosphere.	677.00	40.00	40.00	To utilise the lean by-product gases which otherwise would be flared to atmosphere. This project is	Sept' 2013	Completed in Sep' 2015	30.49	539.90	--	<ul style="list-style-type: none"> <li>• Turbo Generator commissioned July'2015 by synchronizing with grid.</li> <li>• Second Boiler was commissioned</li> </ul>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
						conceived with the sole intention of reducing Green House Gas (GHG) emissions into the atmosphere while meeting the power requirement of RINL to the extent of 120 MW there by mitigating the effects of climate change.						on 15 <sup>th</sup> September 2015.
(v)	Pulverised Coal Injection System for BF-1 & BF-2	Injection system for reduction in consumption of expensive BF coke with less expensive pulverised coal	133.00	6.00	6.00	Increased production of hot metal. To reduce cost of production of hot metal	Sep'09	PCI System in BF-1 commissioned in March '15. BF-2: June 2016	0.82	107.61	• PCI system in BF-1 is in operation. • PCI system in BF-2 is planned to be commissioned after the revamp of BF-2.	---
(vi)	Facilities for Iron Ore Storage	To increase iron storage facility.	450.00	25.00	25.00	Increase Iron ore storage facility to 30 days	May'12	--	22.92	398.09	The Stacking and Reclaiming streams are in operation with the existing Tippling System.	--
(vii)	Augmentation of Water Storage facility	Construction of additional storage reservoir with capacity of 16 Mqm.to meet the	220.00	5.00	5.00	To increase water storage capacity by 16Mqm	--	2017-18	0.00	0.33	WAPCOS has been appointed as consultant for Civil Work.	--

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
		water requirement of expansion.									The Civil Works package is under tendering.	
(viii)	Strengthening of 220KV system of APTRANSCO	To strengthen AP power grid for transmission of power of 400 MVA	86.34	18.00	18.00	It enables to enhance contracted demand of 400 MVA	Sept'12	Phase-I work completed.	0.00	63.33	Phase-I work completed. (modalities for establishment of 400/220 KV Substation are under finalization).	--
(ix)	Augmentation of 220KV power system for receiving 400MVA power	Strengthening the internal systems of VSP like substations etc. to enable to receive 400MVA power to meet the expansion needs.	58.10	3.00	3.00	Strengthening the internal systems of VSP like substation etc to augment to receive 400MVA power at VSP	Aug'11	Commissioning by APTranSCO side is in progress.	1.39	46.86	The system is made ready in all respects and testing & commissioning by APTRANSCO side for their portion of work is under progress.	—
	BF-1&2 Capital Repairs	To carry out the Category-I capital repairs & enhance the volume to 3800 CuM from the existing 3200 CuM capacity.	1663.00	200.00	200.00	To increase the production by 0.5Mt from 2Mt to 2.5Mt of Hot Metal	BF-1: Dec'12 BF-2: July'15	BF-1: 30-07.2014 (Commissioned) BF-2: Q4 of 2015-16 Now revised for Q1/Q2 of 2016-17	282.86	995.64	Blast Furnace-1: Commissioned on 30th July 2014. Blast Furnace-2: Category-1 Capital repair of the furnace will commence in last quarter of 2015-16 and completion in Q1/Q2 of 2016-17.	—

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(xi)	3rd Converter and 4th Caster	To convert additional Hot Metal generated (after category 1 repairs of the existing 2 Blast Furnaces) into steel by adding a 3rd converter and 4th caster.	975.00	200.00	200.00	To increase the production of steel by 0.97 Mt	3rd Converter: July'15 4th Caster: Jul'16	3rd Converter: Aug'16 4th Caster: Dec'16	146.37	215.52	3rd Converter: Works completed. and Equipment erection is in progress. 4th Caster: All major supplies ordered. Civil and Structural works are under progress.	Rescheduled: 3rd Converter- Aug'16 4th Caster- Dec'2016
(xii)	Sinter Plant productivity enhancements	To increase the Production of Sinter to support the increase in the volume of BF. This is to meet the present pollution control norms.	343.00	100.00	100.00	To increase the production from 5.5 Mt to 6.8 Mt of Sinter.	Jan.' 2016	Oct.' 2016 Further revised for Q1 of 2017-18	12.48	36.00	Civil works are under progress. Critical equipment having long lead viz. pallet car have been ordered. Ural Mash first shipment of supplies completed. Unit is scheduled for completion by Q1 of 2017-18.	—
(xiii)	SMS Converter Revamp	To improve the reliability of the 3 converters as the existing estimated life is almost over. This is to meet the present pollution control norms.	404.00	120.00	120.00	Technological necessity to change the converters.	Jul'15	1st Converter by Q4 of 2015-16 ( further revised to 1 <sup>st</sup> converter Feb. 2016 2nd	104.05	248.38	The 1st Converter revamping has commenced from 7th September 2015 and completion is likely by March'2016.	1st Converter - Feb'2016. 2nd Converter: Q2 of 2016-17. 3rd Converter: Q1 of 2017-18.

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
								Converter: Q2 of 2016-17. 3rd Converter: Q1 of 2017-18.)				
(xiv)	Acquisition of Iron Ore Mines & Coal Mines & including investment through JVs	To achieve self-reliance for raw material and cost reduction	500.00	20.00	20.00	RINL/VSP does not have captive source for coking coal/iron ore and outlay included to acquire mines	Continuous	—	40.00	40.28	Banera Mine: Government of Rajasthan has conducted the Public Hearing on 5th Nov'15 at Banera Dist. Bhilwara. EIA/EMP report is being updated as per the suggestions given in Public Hearing Proceedings. After updation final EIA/EMP report will be submitted to MOEF for Environment clearance. Jahajpur Mine : Matter is pursued with Ministry of Mines , GOI for reserveing the block in favour of RINL as per the provisions of MMDR Act, 2015.	—

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(xv)	Installation of Addl. Steam Turbine Driven Blower TB-5 in TPP & BH	To install TB-5 as standby to cater the need in case TB-1,2,3 goes for modernization and also can be used as standby for BF-4 in future.	280.52	90.00	90.00	To Install TB-5 to cater the need of cold Blast requirement of BF1 & BF2 when existing TBs are under modernization / maintenance	Sept'16	Sept'16	17.87	19.87	Steam Turbine by BHEL is getting ready.	—
(xvi)	AMR Schemes	To maintain good health of Plant	Continuous	75.00	75.00	To maintain good health of the equipment and to sustain current level of production / productivity in the context of the ageing of the plant	Continuous	Continuous	34.99	--	--	--
(xvii)	R & D Schemes	To enhance productivity / achieve cost reduction / Development of new products		50.00	50.00	Development on the existing technology, trouble shooting with technological solutions for operational activities through investigative studies, failure analysis and critical examinations of process parameters to reduce cost / enhance productivity	Continuous	Continuous	16.24	—	—	--

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(xviii)	Forged Wheel Plant	To set up the facility for manufacture of Forged wheels at Lalganj, Rae Bareli UP.	1170.00	60.00	60.00	To produce 100000 wheels for Railways .	36 months from effective date of contract	36 months from effective date of contract (for main package)	7.90	24.05	Main package: under process.	—
(xix)	Axle Plant	To set up the facility for manufacture of Axles and other related products at New Jalpaiguri, West Bengal by forming a 100% subsidiary of RINL for the purpose.	391.00	5.00	5.00	Install suitable capacity of Axle and other related products Manufacturing unit at New Jalpaiguri, West Bengal. by forming a 100% subsidiary of RINL for the purpose to meet the Railways assured off take of 20,000 to 25000 numbers.	24 months from Effective date of Contract (for main package )	24 months from Effective date of Contract (for main package)	0.42	2.54	After continuous follow up and persuasion with Railways, discussions were held with Chief Advisor (Cost), MoF on 19.11.2015, for the draft off take agreement. Major issues have been sorted out. Efforts are being made to conclude the definitive agreements in Feb'16.	—
(xx)	Revamping of LMMM Walking beam Furnace	Revamping of Furnace	186.00	5.00	5.00	To reduce the break-down/stabilization.	--	--	0.00	0.00	MECON has been engaged as the Consultant and Technical specifications viz., Walking Beam Furnaces, Water System and Civil work etc are finalized for	

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15- Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
											tendering.	
(xxi)	Central Storage Yard	Ease of Handling & Transportation	270.00	5.00	5.00	Increased capacity at a centralised storage location.	--	--	0.00	0.00	Order has been placed for consultancy to M/s MN Dastur&Co on 04.11.2014. Technical specifications are under finalisation for tendering.	
<b>4.</b>	<b>NMDC Ltd.</b>											
(i)	Bailadila Deposit 11B	To increase production of iron ore	607.18	5.00	5.00	Capacity of 7mtpa	Mar'12	Mar'15	15.07	402.03	Construction activates completed and integrated load trial taken on 29 <sup>th</sup> March' 2015	Completed
(ii)	Kumaraswamy Iron Ore Project	To increase production of iron ore	898.55	65.00	65.00	Capacity of 7 mtpa	May' 2013	August'15	29.37	408.94	<ul style="list-style-type: none"> <li>Crushing Plant load trials taken on 25.05.2015</li> <li>Downhill Conveyor load trials conducted on 31.08.2015</li> </ul>	Completed
(iii)	Pellet Plant at Donimalai	To diversify into pellet production	572.00	40.00	40.00	Capacity of 1.2 mtpa	Apr'13	June' 2015	30.63	482.21	<ul style="list-style-type: none"> <li>Integrated load taken on 29<sup>th</sup> June' 2015 with fines circuit of beneficiati on plant.</li> </ul>	Completed



(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr' 15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(iv)	3 MTPA Steel Plant at Nagarnar	i) Ensure value addition to Iron ore mined in CG State. ii) Development of Baster region inhabited mostly by tribals. iii) Partially meet the growing demand for steel products, primarily in the Indian market. iv) Investment of funds available for business growth.	15525.00	2450.00	2450.00	Capacity of 3 mtpa	May' 2015	December ' 2016	1663.75	8318.82	<ul style="list-style-type: none"> <li>Major Technological Packages (09 Nos.). All Major Technological packages are awarded. Civil work, structural erection and equipment erection work is progressing at site for 08 major packages. Civil work is in progress at site for Lime &amp; Dolomite Plant Auxiliary packages (26 Nos.): Out of the Total 26 packages, 10 Nos. are awarded, tenders issued for 07 nos. of packages (07 Nos. are under different stage of tender evaluation) and remaining 09 packages (including 03 package under retendering process) are</li> </ul>	Forest Clearance & Right of Way for laying water pipe lines from river Sabri to Steel Plant site at Nagarnar for operation water for the steel plant.

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'15-Dec'15	Cumulative upto Dec.'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
											<p>under different stages of tender document finalization.</p> <ul style="list-style-type: none"> <li>Infrastructure Packages (15 Nos.): Out of the Total 15 packages. 01 package has been awarded, tenders issued for 06 (six) nos. of packages including wet-leasing of Locomotives (all 06 packages are different stages of tender evaluation) and remaining 08 packages are under different stages of tender document finalization.</li> </ul> <p>Enabling Packages (11 Nos.) : Out of the Total 11 packages, 09 Nos. of packages are awarded (06 nos. completed &amp; 02nos. Nearing completion and 01 package award recently), tenders issued for 02 No.</p>	

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'15-Dec'15	Cumulative upto Dec.'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
											<p>of package (One is under evaluation and other is to be opened).</p> <ul style="list-style-type: none"> <li>Railway Siding Packages (05 Nos.)</li> </ul> <p>DPR of Railway siding is approved by E. Co. Railway. Diversion plan approved by E.Co. Railway. Out of the Total 05 packages, 01 package is already awarded, tenders enquiry issued for 03 no. of packages (02 under tender evaluation and NIT floated for remaining 01 package recently). One No. package to be executed by NHAI/NH-PWD on deposit basis.</p>	
<b>4.</b>	<b>MOIL LIMITED</b>											
	<b>Ongoing Scheme</b>											
(i)	Joint venture for Ferro Manganese / silico Manganese	The project will be set up at Bhilai to produce Ferro/Silico	391.00	0.25	0.25	The project will be producing Ferro Manganese	June' 2012	24 Months after placing work order for furnace	0.00	2.10	NA	The investments have been delayed due to:-

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'15-Dec'15	Cumulative upto Dec.'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
	Plant with SAIL	Manganese to cater to the demand of Steel Authority of India Limited.				31000 MT and Silico Manganese 75000 MT		and auxiliaries				(a) Getting higher offers for furnace package initially, leading to decision to refloat the tenders for both the projects.
(ii)	Joint Venture for Ferro Manganese/ Silico Managanese Plant with RINL	The project will be set up at Bobbili to produce Ferro/ Silico Manganese to cater to the demand of Rashtriya Ispat Nigam Limited	217.00	0.25	0.25	The project will be producing Ferro Manganese 20000 MT and Silico Manganese 37500 MT	June' 2012	24 Months after placing work order for furnace and auxiliaries	0.00	7.85	NA	(b) Change in requirement of ferro alloys of SAIL as well as RINL resulting in preparation of fresh TEFRs and  (c) Increase rates of power all over India and shortage of power in Andhra Pradesh necessitating review of the projects.  (d) Possibilities of sourcing power which is main ingredient for production of ferro alloys) at cheaper rates are being explored.

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
			Original	Revised	BE	RE		Original	Now Anticipated	For Apr'15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>B.</b>	<b><u>Scheme of Ministry of Steel</u></b>												
1	Scheme for promotion of Research & Development in Iron & Steel sector												
1(i)	(On Going Projects)	<p>1. Development of Innovative/ Path-Breaking Technologies utilising Indian Iron Ore Fines &amp; Non-Coking Coal.</p> <p>2. Improvement of quality of steel produced through Induction Furnace route.</p> <p>3. Beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. Pelletisation)</p>	48.00	32.87*	0.00	0.00	<p>1) Improvement in sinter productivity through deep beneficiation and agglomeration technologies for rational utilization of low grade iron ores and fines.</p> <p>2) Development of Alternate complementary Route of Iron/Steel making with reference to Indian raw material viz low grade iron ore and non coking coal.</p> <p>3) Production of low Phosphorus Steel using DRI through Induction furnace route adopting innovative fluxes and/or design (refractory) changes.</p> <p>4) Smelting reduction of iron ore/fines by hydrogen plasma and elimination of CO2 emission.</p> <p>5) Beneficiation of Iron Ore slimes from Barsua and other mines in India.</p>	During 11th Plan 2007-12.	Scheme Continued in the 12th Plan 2012-17, being a continuous scheme.	0.00	32.87	8 R&D projects were pursued under this Scheme. So far 6 projects have been completed and 2 projects are in progress.	<p>1) The Scheme for R&amp;D was introduced in MoS in the 11th Five Year Plan and it took considerable time to get appraisal and approval as per laid down procedure.</p> <p>2) The EFC approved the scheme in Nov 2008 and Ministry of Finance accorded final clearance on Jan 2009 with a rider that the scheme be operated with effect from 2009-10.</p> <p>3) Ministry of Steel took follow up action for selection of R&amp;D projects in consultation with the stake holders, got the projects approved by Panel of Experts and 4 projects were approved in Feb 2010. Four more projects were approved by PAMC in Nov 2010.</p> <p>4) Because of the delays on the approval of the scheme and subsequent</p>

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
			Original	Revised	BE	RE		Original	Now Anticipated	For Apr'15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
							6) Development of pilot scale pelletization technology for Indian Goethitic/hematite ore with varying degree of fineness. 7) CO2 abatement in Iron and Steel production by process optimisation. 8) Production of low ash (10% ash) coal (coking non coking) from high ash Indian coals including desulphurisation of high sulphur North East coal.						approval of the individual R&D projects, the 4 projects could only be started in April 2010, 2 projects on Jan 2011 and the balance 2 projects in Dec 2011. The projects continued in the 12th Five Year Plan. 5) So far 6 projects have been completed and 2 projects are in progress which are likely to be completed in 2016-17.
1(ii)	(New Component )	Development of the technology for Cold Rolled Grain Oriented (CRGO) Steel sheets and other value added innovative steel products	150.00	15.00	1.00	1.00	Development of Technology for Cold Rolled Grain Oriented (CRGO) Steel Sheets and other value added innovative steel products	During 12th Plan	During 12th Plan. Will Continue in 13th Plan, being a continuous scheme.	0.00	0.25	Order for the DPR was placed on MECON Ltd. on 20th May 2015 with a total cost of Rs. 1,37,53,302 with 25% funding from Ministry of Steel. Balance fund to be released. MECON has completed	The R&D Scheme has amended with the due approval of SFC and HSM in Nov 2014, to include development of technology for Cold Rolled Grain Oriented (CRGO) Steel Sheets and other value added innovative steel products as an objective of the scheme.

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved Outlay 2015-16		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
			Original	Revised	BE	RE		Original	Now Anticipated	For Apr'15-Dec'15	Cumulative upto Dec'15		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
												the DPR which is being examined by the stakeholders for acceptance.	
1(iii)	(New Projects)	<p>1. Development of Innovative/ Path-Breaking Technologies utilising Indian Iron Ore Fines &amp; Non-Coking Coal.</p> <p>2. Improvement of quality of steel produced through Induction Furnace route.</p> <p>3. Beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. Pelletisation).</p> <p>4. To pursue R&amp;D on any other subject of national importance concerning the Iron &amp; Steel sector.</p>	2.00	17.13#	14.00	14.00	<p>1) Production of low Phosphorus steel through Induction Furnace route using DRI as major ferruginous raw material – An Industrial Assessment.</p> <p>2) Development of Automation System for Optimum Coal Blending at Coal Handling Plant of Coke Oven Batteries.</p> <p>3) Economic production of iron through direct reduction of Mill Scale by low grade coal of Rajasthan.</p> <p>4) Develop Procedure for Joining Next Generation High Temperature Material to be used for Supercritical/ Ultra Supercritical Power Plant by Friction Stir Welding</p>	During 12th Plan. Will be contned in 13th Plan being a continuous scheme.	During 12th Plan. Will be contned in 13th Plan being a continuous scheme.	8.55	10.33	2 New R&D Projects have been approved by the PAMC in its meetings held on 17th Feb 2014 & 8th Dec 2014. 2 more R&D projects were approved by PAMC by circulation in September 2015. The projects are in progress.	The R&D Scheme has amended with the due approval of SFC and HSM in Nov 2014, to include R&D on any other subject of national importance concerning the Iron & Steel sector, as an objective of the scheme.

\* As no further expenditure is required for the ongoing projects, it is proposed to reduce the allocation from Rs. 48 crore to Rs. 32.87 crore in 12<sup>th</sup> Five Year Plan.

# It is proposed to increase the allocation for new projects from Rs. 2 crore to Rs. 17.13 crore in the 12<sup>th</sup> Five Year Plan.

\*\*\*\*\*

**Actual achievement vis-à-vis projected outcome/targets 2014-15**

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>A.</b>	<b>SCHEMES WITH ESTIMATED/SANCTIONED COST MORE THAN 50.00 CRORE</b>											
<b>1.</b>	<b><u>STEEL AUTHORITY OF INDIA LTD. (SAIL)</u></b>											
<b>(a)</b>	<b>Bhilai Steel Plant (BSP)</b>											
(i)	Cold Repair of COB-9	To meet the shortfall in coke demand as well as stabilizing coke oven gas balance and to reduce emission level	359.78 (332.65)	100.00	60.00	Improved production & achieve latest pollution norms of MOEF	Aug'14	June' 2015	70.38	172.77	<ul style="list-style-type: none"> <li>Battery heating started on 28.08.15</li> <li>Battery temperature (vertical flue) is being maintained at around 750 OC because of balance work in quenching tower, Coal Tower &amp; Coke Wharf area</li> </ul>	Now rescheduled for Feb' 2016.  This project has been reviewed in 2015-16.
(ii)	Expansion of BSP	Increase in production of hot metal & crude steel through state-of-the-art technology; Phasing out of low yield and energy intensive units, Reduction of semis by enhancing finished steel production; Broadening and value addition in product-mix for	18847.00 (17266.00)	2960.00	1839.72	Increase in HM capacity from 4.08 Mtpa to 7.5 Mtpa	Mar'13	Sept.' 2015 (One Converter & two caster)	1808.27	14300.13	<ul style="list-style-type: none"> <li>Major Facilities completed</li> <li>Ore Handling Plant OHP)-A</li> <li>2nd Sinter Machine in SP-III</li> <li>Oxygen Plant (BOO basis)</li> <li>COB-11</li> </ul>	Now rescheduled for Oct.' 2016 with One Converter & three Casters.  This project has been reviewed in 2015-16



(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
		higher flexibility and profitability; Meeting requirement of Indian Railways										
(iii)	Up-gradation of Stoves for BF-4	To achieve higher HBT to increase injection of auxiliary fuel injection, reduction of coke rate	75.95 (70.65)	10.00	20.00	To achieve 1200°C HBT	Dec'14	Linked to shut down	19.31	19.31		This project has been reviewed in 2015-16
<b>2</b>	<b>Durgapur Steel Plant</b>											
(i)	Expansion of DSP	Phasing out of energy intensive units, introduction of energy efficient technology, reduction of semis & increase of hot metal capacity	3164.00 (2875.00)	588.00	414.70	Increase of hot metal capacity from 2.09 to 2.45 Mtpa	Dec' 2012	March' 2015	413.91	2567.13	Major Facilities completed <ul style="list-style-type: none"> <li>• Barrel type reclaimer of RMHP</li> <li>• Rebuilding of COB-2</li> <li>• New Ladle Furnace</li> <li>• Bloom cum Round Caster</li> <li>• Medium Structural Mill</li> </ul>	Completed in Jun'2015 This project has been reviewed in 2015-16
(ii)	Rebuilding of COB-5	To meet the shortfall in coke demand as well as stabilizing coke oven gas balance and to reduce emission level	339.35 (313.05)	125.00	102.39	Improved production & achieve latest pollution norms	Jun' 2015	June' 2015)	121.95	205.93	• Battery heating started on 27.08.15	Now rescheduled for Feb.' 2016 This project has been reviewed in 2015-16
<b>3.</b>	<b>Rourkela Steel Plant</b>											
(i)	Coal Dust Injection System	Technical necessity for	70.71 (66.02)	2.46	6.25	Replacement of coke with	Oct' 2008	Jan' 2015	1.67	59.58	All jobs including	Completed

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
	in BF- 4	reduction in coke rate and improvement of the furnace productivity.				pulverized coal on 1:1 basis. Coal injection rate in Blast Furnace at 120 Kg/thm.					integrated cold trials completed. Hot trials to be done.	
(ii)	Expansion of RSP	Increase in production of hot metal & crude steel through state-of-the-art technology; Improvement in quality of products; Production of more value-added products; Improvement in energy consumption & environment; and Reduction in cost of production	12922.00 (11812.00)	1789.68	1600.00	Increase in hot metal capacity from 2.00 Mtpa to 4.5 Mtpa	Mar' 2013	Dec' 2014	957.29	11827.46	All new facilities under the integrated process route are in operation	Completed
(iii)	Rebuilding of COB-3	To meet the coke requirement for hot metal production of 4.5 Mtpa and to reduce emission levels	258.53 (237.09)	85.00	96.06	Improve production & achieve latest pollution norms of MOEF	Jan' 2015	Aust.' 2015)	123.55	155.48	Battery heating started on 13.08.2015	Now rescheduled for May' 2016 This project has been reviewed in 2015-16
(iv)	Installation of heat treatment facilities	To meet the increasing requirement of quenched & tempered plates for Defence and other sectors of strategic importance	178.73 (160.48)	80.00	122.57	Additional production of 12000t	Sep' 2014	June' 2015)	100.02	143.50	--	Now rescheduled for Jan' 2016 This project has been reviewed in 2015-16

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>4</b>	<b>Bokaro Steel Plant</b>											
(i)	Expansion of BSL	Enhancing Hot metal production Introduction of energy efficient technology, conversion of higher quantities of Hot Rolled coils to value added Cold Rolled products with the installation of additional Cold Rolling Capacity.	6951.00 (6325.00)	642.00	533.86	New Cold Rolling Mill complex of 1.2 Mtpa & enhancing Hot metal production from 4.59 Mtpa to 5.77 Mtpa	Dec' 2011	May' 2015)	505.94	5097.28	Major Facilities completed in Sep' 2015 Rebuilding of COB No.1 & 2 <ul style="list-style-type: none"> <li>• Upgradation of BF No.2</li> <li>• New Cold Rolling Mill Complex,</li> <li>• Cast House Slag Granulation Plant of Cast House no.6 of BF-3 and no.3 of BF-2 completed,</li> <li>• Upgradation of Roughing Stands of Hot Strip Mill</li> </ul>	For balance Hot Strip Mill up-gradation: <ul style="list-style-type: none"> <li>• All pre shutdown activities have been completed and final completion is dependent upon shutdown of Mill</li> <li>• Since entire crude steel production of BSL is processed through Hot Strip Mill, shutdown is being taken judiciously so that up-gradation job is completed with minimum loss of production.</li> <li>• Shutdown taken on 24.07.15 and 1st coil rolled on 30.09.15.</li> </ul>
(ii)	Re-building of COB-7	To meet the coke demand & CO gas shortage and to comply with latest statutory emission norms.	265.50 (245.67)	0.00	48.00	Improve production & achieve latest pollution norms of MOEF	May'16	May'16	25.40	32.31	--	--

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
5	<b>IISCO Steel Plant</b>											
(i)	Expansion of ISP	To install a new stream of facilities to produce 2.7 Mtpa hot metal, 2.5 Mtpa crude steel & 2.37 Mtpa saleable	17960.59 (16408.00)	1244.00	1178.94	2.91 Mtpa hot metal, 2.5 Mtpa crude steel & 2.37 Mtpa saleable steel.	Dec'10	Dec'14	1233.87	17021.74	All facilities under the integrated process route are in operation	Completed.
6	<b>Raw Materials Division</b>											
(i)	Enhancement of production capacity of Meghahatuburu Iron Ore Mine	A technical necessity to increase iron ore for meeting requirement after SAIL expansion.	125.78 (118.85)	12.86	12.00	capacity from 4.3 Mtpa to 6.50 Mtpa of finished product	Jun' 2012	October' 2015	10.57	75.94	<ul style="list-style-type: none"> <li>Crushing Section</li> <li>Augmentation of power supply</li> <li>Upgradation of Loading Section</li> <li>Erection of Wagon Loader</li> <li>Three nos. Classifiers</li> </ul>	Now rescheduled for Dec' 2016. This project has been reviewed in 2015-16
(ii)	Enhancement of production capacity of Bolani Iron Ore Mine	A technical necessity to increase iron ore for meeting requirement after SAIL expansion.	275.28 (254.55)	52.71	20.00	capacity from 4.1 Mtpa to 10 Mtpa of finished product	Nov' 2013	June' 2015	19.12	123.28	Plant augmentation completed.	Completed in May'15. This project has been reviewed in 2015-16
7	<b>Chandrapur Ferroalloy Plant</b>											
(i)	Installation of 1x45 MVA submerged arc Furnace	The additional production of HCFeMn & HCSiMn	203.85 (187.33)	23.00	45.00	The additional production of 37500 t of HCFeMn & 35000 t of	Oct' 2013	Aug' 2016	29.56	149.44		Now rescheduled for June' 2016. This project has been reviewed in 2015-16

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
						HCSiMn or 60,000t of HCSiMn on standalone basis.						
<b>2.</b>	<b>RASHTRIYA ISPAT NIGAM LTD. (RINL)</b>											
	<b>Ongoing Schemes</b>											
(i)	AMR Schemes	To maintain good health of plant	100.00	60.00	60.00	To maintain good health of the equipment and to sustain current level of production / productivity in the context of the ageing of the plant	Continuous	---	45.75	-		This project has been reviewed in 2015-16
(ii)	R & D Schemes	To enhance productivity / achieve cost reduction / Development of new products	--	15.00	15.00	Development on the existing technology, trouble shooting with technological solutions for operational activities through investigative studies, failure analysis and critical examinations of process parameters to reduce cost / enhance productivity	Continuous	---	33.09	-		This project has been reviewed in 2015-16

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/ Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(iii)	Coke Oven Battery No.4 Phase-II	To operate COB-4 as independent Battery and increase in recovery of by-product.	355.30	38.00	30.00	To operate COB-4 as independent Battery. Increase in recovery of by products	By Product Plant: Oct'12 Coal Handling Plant: Feb'10	Dec' 2014	15.86	272.81	0	This project has been reviewed in 2015-16
(iv)	Expansion to 6.3 Mtpa Liquid Steel	To increase the plant capacity	12291.00	400.00	470.00	Enhancing production of liquid steel to 6.3Mtpa of Liquid Steel.	36/48 months in phases from 28-10-2005 /June'2011	April 2015. (Completed )	492.53	11285.19	Units are commissioned and are under various stages of stabilisation.	—
(v)	Pulverised Coal Injection System for BF-1 & BF-2	Injection system for reduction in consumption of expensive BF coke with less expensive pulverised coal	133.00	15.00	15.00	Increased production of hot metal. To reduce cost of production of hot metal	Sep'09	Q4 of 2014-15	5.75	106.79	PCI system in BF-1 is in operation. • PCI system in BF-2 is planned to be commissioned after the revamp of BF-2.	This project has been reviewed in 2015-16
(vi)	Acquisition of iron ore Mine & coking coal mines	To achieve self-reliance for raw material and cost reduction	500.00	20.00	30.00	RINL/VSP does not have captive source for coking coal/iron ore and outlay included to acquire	Continuous	—	0.00	0.28	Banera Mine: Government of Rajasthan has conducted the Public Hearing on 5th Nov'15 at Banera Dist. Bhilwara. EIA/EMP report is being updated as per the suggestions given in Public	—

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/ Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
						mines					Hearing Proceedings. After updation final EIA/EMP report will be submitted to MOEF for Environment clearance. Jahajpur Mine : Matter is pursued with Ministry of Mines , GOI for reserving the block in favour of RINL as per the provisions of MMDR Act, 2015.	
(vii)	Facilities for Iron Ore Storage	To increase iron storage facility.	450.00	40.00	34.00	Shall increase Iron ore storage facility to 30 days	May' 2012	June' 2015	65.72	375.17	The Stacking and Reclaiming streams are in operation with the existing Tippling System.	—
(viii)	Strengthening of 220KV system of APTRANSCO	To strengthen AP power grid for transmission of power of 400 MVA	86.34	5.00	5.00	It enables to enhance contracted demand of 400 MVA for RINL on expansion	Sept'12	Phase-I work completed.	0.00	63.33	Phase-I work completed. (modalities for establishment of 400/220 KV Substation are under finalization).	—
(ix)	Augmentation of 220KV power system for receiving	Strengthening the internal systems of VSP like substations etc. to	58.10	15.00	15.00	To augment to receive 400MVA power at VSP	Aug' 2011	System Ready. Commissioning by	10.96	45.47	The system is made ready in all respects and testing &	—

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/ Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
	400MVA power	enable to receive 400MVA power to meet the expansion needs.						APTransco side is in progress.			commissioning by APTRANSCO side for their portion of work is under progress.	
(x)	BF-1&2 Category Repairs	To carry out the Category-I capital repairs & enhance the volume to 3800 CuM from the existing 3200 CuM capacity.	1663.00	350.00	200.00	To increase the production by 0.5Mt from 2Mt to 2.5Mt of Hot Metal	BF-1: Dec' 2012 BF-2: July' 2015	BF-1: July' 2014 (Commissioned) BF-2: Q4 of 2015	356.63	712.78	Blast Furnace-1: Commissioned on 30th July 2014. Revised schedule for Blast Furnace-2 is Q1/Q2 of 2016-17: Category-1 Capital repair of the furnace will commence in last quarter of 2015-16 and completion in Q1/Q2 of 2016-17.	
(xi)	Sinter Plant productivity enhancements	To increase the Production of Sinter to support the increase in the volume of BF. This is to meet the present pollution control norms.	343.00	25.00	1.00	To increase the production from 5.5 Mt to 6.8 Mt of Sinter.	Oct' 2016	Oct' 2016	22.51	23.52	Civil works are under progress. Critical equipment having long lead viz. pallet car have been ordered. Ural Mash first shipment of supplies completed. Unit is rescheduled for completion by Q1 of 2017-18.	—
(xii)	SMS Converter Revamp	To improve the reliability of the 3 converters as the existing estimated life is almost over. This is to meet the present pollution control norms.	404.16	25.00	140.00	To increase the production of steel by 0.97 Mt	Jul'15	Q.4 of 2015-16 for Conveter-I	142.28	144.33	The 1st Converter revamping has commenced from 7th September 2015 and completion is likely by Feb'2016.	This project has been reviewed in 2015-16
(xiii)	3rd Converter and 4th Caster	To convert additional Hot Metal generated (after category 1	975.00	150.00	100.00	To increase the production of steel by 0.97	3rd Converter: July'201	3 <sup>rd</sup> Converter Q.4 of 2015-16 4 <sup>th</sup>	69.01	69.15	3rd Converter: Works completed. and Equipment erection is in.	This project has been reviewed



(Rs. In crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/ Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
		repairs of the existing 2 Blast Furnaces ) into steel by adding a 3rd converter and 4th caster.				Mt	5 4th Caster: Jul'2016	Caster July' 2016			progress. 4th Caster: All major supplies ordered. Civil and Structural works are under progress	in 2015-16
(xiv)	Power Plant-II	To meet the additional power requirement by utilise the lean by-product gases which otherwise would be flared to atmosphere.	677.00	100.00	220.00	To utilise the lean by-product gases which otherwise would be flared to atmosphere. This project is conceived with the sole intention of reducing Green House Gas (GHG) emissions into the atmosphere while meeting the power requirement of RINL to the extent of 120 MW thereby mitigating the effects of climate change.	Sept' 2013	May' 2015	213.12	509.41	--	This project has been reviewed in 2015-16
(xv)	Axle Plant	To set up the facility for manufacture of Axles and other related products at New Jalpaiguri,	513.00	5.00	5.00	Install suitable capacity of Axle and other related products	40 Months after agreeme nt with Railways	24 Months from Effective date of Contract (for main	2.00	2.11	After continuous follow up with Railways, discussions were held with Chief Advisor (Cost),	—

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
		West Bengal.				Manufacturing unit at New Jalpaiguri, West Bengal.		package)			MOF on 19.11.2015, about the draft off take agreement. Major issues have been Sorted out. Efforts are being made to conclude the definitive agreements in Feb'16.	
(xvi)	Forged Wheel Plant	To set up the facility for manufacture of Forged wheels at Lalganj, Rae Bareli UP.	1170.00	70.00	70.00	To produce 100000 wheels for Railways .	36 months from effective date of contract	30 months from effective date of contract (for main package)	16.05	16.16	Main package: Price quoted by resultant single tender is under negotiation.	—
(xvii)	Installation of Addl. Steam Turbine Driven Blower TB-5 in TPP & BH	To have an additional unit as standby to cater the need when TB-1,2,3 goes for modernization	280.52	50.00	25.00	To Install TB-5 to cater the need of cold Blast requirement of BF1 & BF2 when existing TBs are under modernization / maintenance	Sept'16	Sept'16	2.00	2.00	Steam Turbine by BHEL is getting ready.	—
(xviii)	SLTM	To Utilise the additional liquid steel of 1 MT that will be produced after revamping/upgradation of existing BFs and Converters/ Casters.	2512.00	10.00	1.00	To produce 4,00,000 TPA of Seamless Tubes in the size range of 5 1/2 " to 18" OD.	--	—	0.00	1.12	Kept in abeyance	—

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(xix)	COB-5	To meet the coke requirements and gas balance for 6.3/7.3 MTPA stage	2853.00	25.00	25.00	To produce 0.82 mtpa of Gross Coke.	29 Months from award of main package	—	61.18	65.17	Engineering is under progress for already ordered packages viz. Coke Dry Cooling Plant, 14MW Power Plant, Stacker cum Reclaimer, Wagon Tippler & Car Pusher, Main Battery Package and Coal & Coke Handling System. With regard to By Product Plant, representation of one bidder is being examined by IEMs.	—
<b>3.</b>	<b><u>NMDC Ltd.</u></b>											
(i)	Bailadila Deposit 11B	To increase production of iron ore	607.18	15.00	15.00	Capacity of 7mtpa	March' 2012	March' 2015	17.18	386.96	Construction activates completed and integrated load trial taken on 29 <sup>th</sup> March' 2015	This project has been reviewed in 2015-16
(ii)	Kumaraswamy Iron Ore Project	To increase production of iron ore	898.55	80.00	80.00	Capacity of 7 mtpa	May' 2013	August' 2015	87.75	379.57	<ul style="list-style-type: none"> <li>Crushing Plant load trials taken on 25.05.2015</li> <li>Downhill Conveyor load trials conducted on 31.08.2015</li> </ul>	This project has been reviewed in 2015-16
(iii)	Pellet Plant at Donimalai	To diversify into pellet production	572.00	60.00	60.00	Capacity of 1.2 mtpa	April' 2013	June' 2015	71.96	451.58	<ul style="list-style-type: none"> <li>Integrated load taken on 29<sup>th</sup> June' 2015 with fines circuit of beneficiation plant.</li> </ul>	This project has been reviewed in 2015-16

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
(iv)	3 MTPA Steel Plant at Nagarnar	<p>i) Ensure value addition to Iron ore mined in CG State.</p> <p>ii) Development of Baster region inhabited mostly by tribals.</p> <p>iii) Partially meet the growing demand for steel products, primarily in the Indian market.</p> <p>iv) Investment of funds available for business growth.</p>	15525.00	2280.00	2280.00	Capacity of 3 mtpa	May' 2015	December' 2016	2424.63	6655.07	<p>Major Technological Packages (09 Nos.): All the 09 major Technological packages are awarded. Civil work, structural erection and equipment erection work is progressing at site for 08 major</p> <ul style="list-style-type: none"> <li>• Packages Civil work is in progress at site for Lime &amp; Dolomite Plant. Auxiliary packages (26 Nos.): Out of the Total 26 packages, 10 Nos. are awarded, tenders issued for 07 nos. of packages (07 Nos. are under different stage of tender evaluation) and remaining 09 packages (including 03 package under</li> </ul>	This project has been reviewed in 2015-16

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected Timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipate d	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
											<p>retendering process) are under different stages of tender document finalization.</p> <p>Infrastructure Packages (15 Nos.): Out of the Total 15 packages. 01 package has been awarded, tenders issued for 06 (six) nos. of packages including wet-leasing of Locomotives (all 06 packages are different stages of tender evaluation) and remaining 08 packages are under different stages of tender document finalization.</p> <ul style="list-style-type: none"> <li>Enablin g Packages (11 Nos.) : Out of the Total 11 packages, 09 Nos. of packages are</li> </ul>	

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost	Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
				BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13
											<p>awarded (06 nos. completed &amp; 02 nos. Nearing completion and 01 package award recently), tenders issued for 02 No. of package (One is under evaluation and other is to be opened).</p> <ul style="list-style-type: none"> <li>Railway Siding Packages (05 Nos.) DPR of Railway siding is approved by E. Co. Railway. Diversion plan approved by E.Co. Railway. Out of the Total 05 packages, 01 package is already awarded, tenders enquiry issued for 03 no. of packages (02 under tender evaluation and NIT floated for remaining 01</li> </ul>	

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors	
			Original	Revised	BE	RE		Original	Now Anticipated	For Apr'14-Dec'15	Cumulative upto Mar'15			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
<b>B.</b>	<b><u>Scheme of Ministry of Steel</u></b>													
1(i)	Scheme for promotion of Research & Development in Iron & Steel sector	(On Going Projects) 1. Development of Innovative/ Path-Breaking Technologies utilising Indian Iron Ore Fines & Non-Coking Coal. 2. Improvement of quality of steel produced through Induction Furnace route. 3. Beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. Pelletisation).	48.00	32.87*	6.00	0.00	1) Improvement in sinter productivity through deep beneficiation and agglomeration technologies for rational utilization of low grade iron ores and fines. 2) Development of Alternate complementary Route of Iron/Steel making with reference to Indian raw material viz low grade iron ore and non coking coal. 3) Production of low Phosphorus Steel using DRI through Induction furnace route adopting innovative fluxes and/or design (refractory) changes. 4) Smelting reduction of iron ore/fines by hydrogen plasma and elimination of CO2 emission. 5) Beneficiation of Iron Ore slimes from Barsua and other mines in India.	During 11th Plan 2007-12.	Scheme Continued in the 12th Plan 2012-17, being a continuous scheme.	0.00	32.87	8	R&D projects were pursued under this Scheme. So far 6 projects have been completed and 2 projects are in progress.	This project has been reviewed in 2015-16

(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
			Original	Revised	BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
							<p>6) Development of pilot scale pelletization technology for Indian Goethitic/hematite ore with varying degree of fineness.</p> <p>7) CO2 abatement in Iron and Steel production by process optimisation.</p> <p>8) Production of low ash (10% ash) coal (coking non coking) from high ash Indian coals including desulphurisation of high sulphur North East coal.</p>						
1(ii)	(New Component)	Development of the technology for Cold Rolled Grain Oriented (CRGO) Steel sheets and other value added innovative steel products	150.00	150.00	12.00	0.50	Development of Technology for Cold Rolled Grain Oriented (CRGO) Steel Sheets and other value added innovative steel products	During 12th Plan	During 12th Plan. Will Continue in 13th Plan, being a continuous scheme.	0.25	0.25	Order for the DPR was placed on MECON Ltd. on 20th May 2015 with a total cost of Rs. 1,37,53,302 with 25% funding from Ministry of Steel. Balance fund to be released. MECON has completed the DPR which is being examined by	This project has been reviewed in 2015-16



(Rs. in crore)

No	Name of PSUs and Scheme/ Programme	Objective/ Outcome	Estimated/ Sanctioned Cost		Approved Outlay 2014-15		Quantifiable Deliverables/ Projected Outcomes	Projected timeline		Actual Expenditure		Achievements w.r.t projected Outcomes in Col.7	Remarks/Risk factors
			Original	Revised	BE	RE		Original	Now Anticipated	For Apr'14-Mar'15	Cumulative upto Mar'15		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
												the stakeholders for acceptance.	
1(iii)	(New Projects)	<p>1. Development of Innovative/ Path-Breaking Technologies utilising Indian Iron Ore Fines &amp; Non-Coking Coal.</p> <p>2. Improvement of quality of steel produced through Induction Furnace route.</p> <p>3. Beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. Pelletisation).</p> <p>4. To pursue R&amp;D on any other subject of national importance concerning the Iron &amp; Steel sector.</p>	2.00	17.13#	2.00	7.50	<p>1) Production of low Phosphorus steel through Induction Furnace route using DRI as major ferruginous raw material – An Industrial Assessment.</p> <p>2) Development of Automation System for Optimum Coal Blending at Coal Handling Plant of Coke Oven Batteries</p>	During 12th Plan. Will be contned in 13th Plan being a continuou s scheme.	During 12th Plan. Will be contned in 13th Plan being a continuou s scheme.	1.78	1.78	2 New R&D Projects have been approved by the PAMC in its meetings held on 17th Feb 2014 & 8th Dec 2014. The projects are in progress.	This project has been reviewed in 2015-16

\* As no further expenditure is required for the ongoing projects, it is proposed to reduce the allocation from Rs. 48 crore to Rs. 32.87 crore in 12<sup>th</sup> Five Year Plan.

# It is proposed to increase the allocation for new projects from Rs. 2 crore to Rs. 17.13 crore in the 12<sup>th</sup> Five Year Plan.

\*\*\*\*\*

**CHAPTER - V****FINANCIAL REVIEW**

For the year 2016-2017, Demand No. 86 will be presented to the Parliament on behalf of the Ministry of Steel during the Budget Session. The Demand includes provisions for Plan/Non-Plan expenditure for the Ministry and Plan expenditure of the Public Sector Undertakings (PSUs) under its administrative control.

**1. TOTAL REQUIREMENT OF FUNDS FOR 2016-17**

The total financial requirements covered in Demand No. 86 for BE 2016-17, are summarized in the following Table:-

*(Rs. in crore)*

Demand No. 86 for 2016-2017	BE 2016-17		
	Plan	Non-Plan	Total
REVENUE SECTION	15.00	70.62	85.62
CAPITAL SECTION	0.00	0.00	0.00
<b>Total (Gross)</b>	<b>15.00</b>	<b>70.62</b>	<b>85.62</b>

**2. ACTUAL EXPENDITURE: 2013-14 TO 2015-16 (UPTO DEC'15)**

The actual Plan and Non-Plan expenditure (Gross) under the Ministry's grant during the preceding three years vis-à-vis the BE and RE for the respective years, are summarized in the table below:

*(Rs. in crore)*

Year	BE			RE			Actual Expenditure		
	Non-Plan	Plan	Total	Non-Plan	Plan	Total	Non-Plan	Plan	Total
2015-16	73.13	15.00	88.13	23.48	15.00	38.48	16.82	8.55	25.37*
2014-15	72.92	20.00	92.92	71.10	7.00	78.10	64.09	2.03	66.12
2013-14	72.97	46.00	118.97	70.46	8.00	78.46	70.02	8.00	78.02

\*Upto Dec'2015

### 3. NON-PLAN EXPENDITURE

3.1 The Non-Plan provision of Ministry of Steel, including Secretariat proper, PAO (Steel), Development Commissioner for Iron & Steel (DCI&S), Kolkata and the PSUs under this Ministry, in 2015-16 (BE & RE) and requirement of fund in 2016-17 (BE) are given in the following table :-

(Rs. in crore)						
No.	Major Head & Item of Expenditure	BE 2015-16	RE 2015-16	% age increase/decrease in RE over BE 2015-16	BE 2016-17	% age increase/decrease over BE 2015-16
I.	<u>MH – 3451</u>					
1.	Secretariat - Economic Services	23.35	22.99	-1.54%	26.06	11.61%
II.	<u>MH – 2852</u>					
2.	Development Commissioner for Iron & Steel, Kolkata	0.23	0.23	0.00%	0.25	8.70%
3.	Awards to Distinguished Metallurgists.	0.26	0.26	0.00%	0.26	0.00%
4.	Interest Subsidy :					
(i)	Subsidy to Hindustan Steelworks Construction Ltd. (HSCL) for payment of interest on loans raised from Banks for implementation of VRS	44.11	0.00	-100.00%	44.05	-0.14%
5.	Waiver of guarantee fee (Non-cash transaction) :					
(i)	HSCL – Waiver of guarantee fee in respect of Govt. guarantee for cash credit (CC) limit, bank guarantee (BG) and VRS loans	5.18	0.00	-100.00%	0.00	-100.00%
	<i>Less – Receipts netted [5(i) to (ii)]#</i>	-5.18	0.00	-100.00%	0.00	-100.00%
	<b>Total : Non- Plan Expenditure(Net of receipts)</b>	<b>67.95</b>	<b>23.48</b>	<b>-65.45%</b>	<b>70.62</b>	<b>3.93%</b>
	<b>Total : Non- Plan Expenditure(Gross)</b>	<b>73.13</b>	<b>23.48</b>	<b>-67.89%</b>	<b>70.62</b>	<b>-3.42%</b>

3.2 As against Non-Plan provision of Rs. 73.13 crore in BE 2015-16, a provision of Rs. 70.62 crore has been kept in BE 2016-17.

#### 4. PLAN EXPENDITURE

4.1 The Gross Budgetary Support for plan outlay in BE 2016-17 is Rs. 15.00 crore for the scheme for `Promotion of R&D in iron & steel sector. Upto Financial Year 2015-16 the plan provision was kept under three sub-heads but from 2016-17 the schemes have been rationalized and the whole amount has been kept under one sub-head.

4.2 The total Plan budgetary support of Rs. 15.00 crore in BE 2015-16 was Kept unchanged in RE 2015-16. A total Plan budgetary support of Rs. 15.00 crore has been provided in BE 2016-17 for the aforesaid R&D scheme. The break-up of Plan provision during 2015-16 given in the following table:

#### Plan Expenditure

<i>(Rs. in crore)</i>			
No	Name of Scheme	2015-16 (BE)	2015-16 (RE)
1.	Scheme of the Ministry: Promotion of R&D in iron & steel sector		
1(i)	On-going R&D projects	0.00	0.00
1(ii)	Development of Technology for Cold Rolled Grain Oriented (CRGO) Steel Sheets and other value added innovative steel products (new component)	1.00	1.00
1(iii)	New project under the existing scheme	14.00	14.00
	<b>Total</b>	<b>15.00</b>	<b>15.00</b>

#### 5. BRIEF ON R&D SCHEME

5.1 Based on the recommendation of the Working Group on Steel Industry for 11<sup>th</sup> Plan (2007-12), a new scheme i.e. 'Scheme for Promotion of R&D in Iron and Steel Sector was included in the 11<sup>th</sup> Five Year Plan with an outlay of Rs. 118.00 crore. The objective of the scheme was to promote and accelerate R&D activities in development of innovative/path breaking technologies utilizing Indian iron ore fines and non-coking coal, improvement of quality of steel produced through induction furnace route and beneficiation of raw materials like iron ore, coal etc. and agglomeration (e.g. pelletization). The scheme was approved on 23.01.2009 for implementation from FY 2009-10 (w.e.f. 01.04.2009).

5.2 The scheme was continued in the 12<sup>th</sup> Five Year Plan with an allocation of Rs. 200.00 crore. In 12<sup>th</sup> Five Year Plan the scheme was amended to include the following additional objectives:-

- (i) To pursue development of CRGO and other value added innovative steel products.
- (ii) To pursue any other projects of National importance for the iron and steel sector.

5.3 Upto Financial Year 2015-16 the plan provision was kept under three sub-heads namely (i) Scheme for promotion of Research & Development in Iron & Steel Sector-ongoing R&D Projects; (ii) Development of Technology for Cold Rolled Grain Oriented (CRGO) steel sheets and other value added innovative steel products (New component); and (iii) Development of innovative Iron/Steel making Process/Technology (New project under existing scheme). From Financial Year 2016-17 the scheme has been rationalized and it has been decided to keep entire provision under one sub-head i.e. Promotion of Research and Development in Iron and Steel Sector.

5.4 The year wise Plan fund allocation and the amount released under the scheme is given below:

*(Rs. in crore)*

Period	B.E	RE	Actual
2011-12	39.00	29.00	9.63
2012-13	46.00	26.49	24.89
2013-14	46.00	8.00	8.00
2014-15	20.00	7.00	2.03
2015-16	15.00	15.00	8.55*

\*Upto Dec'2015

## 6. ANNUAL PLAN OUTLAY FOR 2016-17 (BE)

6.1 Based on the discussion held in the Ministry of Finance and intimated to them within the overall context of the 12<sup>th</sup> Five Year Plan (2012-2017), the following Plan outlay for 2016-17 (BE) for Ministry of Steel are as under:

*(Rs. in crore)*

		Actual 2014-15	BE 2015-16	RE 2015-16	BE 2016-17
(a)	Gross Budgetary Support	2.03	15.00	15.00	15.00
	EAP component of GBS	0.00	0.00	0.00	0.00
(b)	Internal & Extra Budgetary Resources (I&EBR)	11743.71	13070.47	11869.05	12308.53
	<b>Total</b>	<b>11745.74</b>	<b>13085.47</b>	<b>11884.05</b>	<b>12323.53</b>

## 6.2 Plan outlay of Public Sector Undertakings (PSU's):-

(Rs. in crore)

No.	Name of the PSU/ Organization	BE 2015-16			RE 2015-16			BE 2016-17		
		IEBR	B.S.	Outlay	IEBR	B.S.	Outlay	IEBR	B.S.	Outlay
<b>A.</b>	<b><u>Central Sector Scheme</u></b>									
1	SAIL	7500.00	0.00	7500.00	6500.00	0.00	6500.00	6000.00	0.00	6000.00
2	RINL#	1801.00	0.00	1801.00*	1428.98	0.00	1428.98**	1678.00	0.00	1678.00***
3	HSCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	MECON Ltd.	5.00	0.00	5.00	5.00	0.00	5.00	5.00	0.00	5.00
5	MSTC Ltd.	10.00	0.00	10.00	5.00	0.00	5.00	10.00	0.00	10.00
6	FSNL\$	12.00	0.00	12.00	12.00	0.00	12.00	12.00	0.00	12.00
7	NMDC Ltd.	3588.00	0.00	3588.00	3787.00	0.00	3787.00	3964.00	0.00	3964.00
8	KIOCL Ltd.	27.00	0.00	27.00	3.00	0.00	3.00	500.00	0.00	500.00
9	MOIL Ltd.	127.47	0.00	127.47	128.07	0.00	128.07	139.53	0.00	139.53
10	Scheme for promotion of R&D in Iron & Steel sector								15.00	15.00
10(i)	On-going R&D Projects	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10(ii)	Development of Technology for Cold Rolled Grain Oriented (CRGO) Steel Sheets and other value added innovative steel products (new component)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00
10(iii)	Development of innovative iron/steel making process/technology (new project under the existing scheme)	0.00	14.00	14.00	0.00	14.00	14.00	0.00	0.00	0.00
	<b>TOTAL - A</b>	<b>13070.47</b>	<b>15.00</b>	<b>13085.47</b>	<b>11869.50</b>	<b>15.00</b>	<b>11884.50</b>	<b>12308.53</b>	<b>15.00</b>	<b>12323.53</b>
<b>B.</b>	<b><u>Centrally Sponsored Schemes</u></b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL - B</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	<b>GRAND TOTAL – A + B</b>	<b>13070.47</b>	<b>15.00</b>	<b>13085.47</b>	<b>11869.50</b>	<b>15.00</b>	<b>11884.50</b>	<b>12308.53</b>	<b>15.00</b>	<b>12323.53</b>

#OMDC Ltd. and BSLC Ltd. were constituents of erstwhile Bird Group of Companies, which have become subsidiary PSUs of RINL and their figures have been clubbed with RINL. (\* BE 2015-16 RINL- 1402 + OMDC- 399 = 1801) (\*\*RE 2015-16: RINL – 1402.00 + OMDC – 26.98 = 1428.98) and (\*\*\*) BE 2016-17: RINL – 1350.00 + OMDC – 328.00 = 1678.00).

\$ FSNL is a subsidiary of MSTC Ltd

6.3 The total Plan outlay of the Ministry of Steel for BE 2016-17 is Rs. 12323.53 crore which will be financed through approved gross budgetary support of Rs. 15.00 crore and IEBR of Rs. 12308.53 crore.

6.4 Brief description of the PSU-wise outlays provided in BE 2016-2017 for various schemes of the PSUs are given below:-

- (i) Out of the total outlay of **Rs.12308.53 crore** in Annual Plan 2016-17 (BE), an amount of **Rs. 6000.00 crore** has been provided for **Steel Authority of India Limited (SAIL)**, for various ongoing and new schemes/ projects and research work.
- (ii) Outlay of **Rs. 1678.00 crore** has been provided for **Rashtriya Ispat Nigam Ltd.** Major portion is earmarked for expansion of RINL's production capacity. Balance outlay is for AMR schemes. RINL's outlay includes the outlay of subsidiary PSUs viz., OMDC Ltd., which is a constituent of erstwhile Bird Group of Companies.
- (iii) Outlay of **Rs. 3964 crore**, has been provided for **NMDC Ltd.** for 3 MTPA Steel Plant at Nagarnar in Chhattisgarh. Balance outlay is for AMR/Township and R&D activities.
- (iv) Outlay of **Rs. 500.00 crore** has been provided for **KIOCL Ltd.**, for (i) development of Devadari Iron ore deposit in the state of Karnataka & forwarding integration project at Blast Furnace unit etc; (ii) Equity participation with NMDC & RINL for setting up slurry pipeline & Pellet Plant project Development of iron ore deposit joint with APMDC, a State owned PSU under Government of Andhra Pradesh; and (iii) Setting up of 1.5 MTPA Pellet plant at Bokaro Steel Plant, SAIL on Built, Own & Operate (BOO) basis.
- (v) Outlay of **Rs. 139.52 crore** has been provided for **MOIL Ltd.** for sinking/deepening of vertical shaft at Balaghat Chikla, Kandri, Ukwa, Munsar and Gumgaon Mine, investment in joint for Ferro/Silico Manganese manufacturing with SAIL and RINL, development of new areas and acquisition of land, forest and environment clearance including prospecting and exploration and AMR schemes, township , R&D/feasibility studies etc. Entire outlay will be met from IEBR of the Company.
- (vi) Outlay of **Rs. 5.00 crore** has been provided for **MECON Ltd.** for expansion, modification & augmentation of office space/guest house at various locations.
- (vii) Outlay of **Rs. 10.00 crore**, to be met out of I&EBR of the company has been provided for **MSTC Ltd.** for setting up of Shredding Plant.

(viii) Outlay of **Rs. 12.00 crore** has been provided for **Ferro Scrap Nigam Ltd.**, for AMR schemes.

## 7. YEARWISE ANALYSIS OF GROSS BUDGETARY SUPPORT (GBS) OUTLAY IN 12<sup>TH</sup> FIVE YEAR PLAN

7.1 The Scheme-wise break up of GBS of Rs. 200.00 crore approved for 12<sup>th</sup> Plan (2012-17) are given in the table below:-

### Scheme of the Ministry: Promotion of R&D in the Iron & Steel sector

*(Rs. in crore)*

No.	Name of Scheme	12 <sup>th</sup> Plan (2012-17)	2013-14		2014-15		2015-16		2016-17
			BE	RE	BE	RE	BE	RE	BE
	Scheme for promotion of Research and Development in Iron and Steel sector								15.00
1(i)	Ongoing projects	32.87	12.00	8.00	6.00	0.00	6.00	0.00	--
1(ii)	Development of Technology for Cold Rolled Grain Oriented (CRGO) Steel sheets and other value added innovative steel products (new component)	150.00	32.00	0.00	12.00	0.50	1.00	1.00	--
1(iii)	Development of innovative Iron/Steel making Process/Technology (new projects under existing scheme)	17.13	2.00	0.00	2.00	6.50	14.00	14.00	--
	<b>TOTAL</b>	<b>200.00</b>	<b>46.00</b>	<b>8.00</b>	<b>20.00</b>	<b>7.00</b>	<b>15.00</b>	<b>15.00</b>	<b>15.00</b>

7.2 In BE 2015-16, there was an allocation of RS 15.00 crore which was been kept unchanged at RE stage. Total Plan Gross Budgetary support of Rs. 15.00 crore has been allocated in BE 2016-17.



**8. PLAN OUTLAY AND ACTUAL EXPENDITURE DURING 2015-16****Plan outlay and actual expenditure during 2015-16 (upto December, 2015)**

For the financial year 2015-16, the Ministry of Finance has approved an outlay of Rs. 13085.47 crore (Rs. 13070.47 crore as IEBR and Rs. 15.00 crore as GBS). The source-wise details of approved outlay for 2015-16 (BE) and actual expenditure upto December, 2015 are given in the table below:-

(Rs. in crore)										
No.	Name of the PSUs	2015-16 (BE)			2015-16 (RE)			2015-16 Actual expenditure (upto Dec. 2015)		
		I&EBR	B.S.	Total	I&EBR	B.S.	Total	I&EBR	B.S.	Total
<b>A</b>	<b>Central Sector Scheme</b>									
1.	SAIL	7500.00	0.00	7500.00	6500.00	0.00	6500.00	4483.00	0.00	4483.00
2.	RINL <sup>^</sup>	1801.00	0.00	1801.00*	1428.98	0.00	1428.98**	1048.98	0.00	1048.98***
3.	HSCCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	MECON Ltd.	5.00	0.00	5.00	5.00	0.00	5.00	7.19	0.00	7.19
5.	MSTC Ltd.	10.00	0.00	10.00	5.00	0.00	5.00	25.39	0.00	25.39
6.	FSNL	12.00	0.00	12.00	12.00	0.00	12.00	5.04	0.00	5.04
7.	NMDC Ltd.	3588.00	0.00	3588.00	3787.00	0.00	3787.00	2736.00	0.00	2736.00
8.	KIOCL Ltd.	27.00	0.00	27.00	3.00	0.00	3.00	0.23	0.00	0.23
9.	MOIL Ltd.	127.47	0.00	127.47	128.07	0.00	128.07	67.81	0.00	67.81
<b>B</b>	<b>Centrally Sponsored Scheme</b>									
<b>10</b>	Scheme for promotion of R&D in Iron & Steel sector									
10(i)	on-going R&D projects	0.00	0.00	0.00	0.00	0.00	0.00	--	0.00	0.00
10(ii)	Development of Technology for Cold Rolled Grain Oriented (CRGO) Steel sheets and other value added innovative steel products (new component)	--	1.00	1.00	0.00	1.00	1.00	--	0.00	0.00
10(iii)	Development of innovative Iron/Steel making Process/Technology (new projects under existing scheme)	--	14.00	14.00	0.00	14.00	14.00	--	8.55	8.55
	<b>Grand Total (A+B)</b>	<b>13070.47</b>	<b>15.00</b>	<b>13085.47</b>	<b>11869.05</b>	<b>15.00</b>	<b>11884.05</b>	<b>8373.64</b>	<b>8.55</b>	<b>8382.19</b>

<sup>^</sup> OMDC Ltd. and BSLC Ltd. were constituents of erstwhile Bird Group of Companies, which have become subsidiary PSUs of RINL and their figures have been clubbed with RINL. (\* BE 2015-16 RINL- 1402 + OMDC- 399 = 1801) (\*\*RE 2015-16: RINL - 1402.00 + OMDC - 26.98 = 1428.98) and (\*\*\*) Actual expenditure upto December 2015, RINL - 1047.39 + OMDC - 1.59 = 1048.98).

**9. STATUS OF OUTSTANDING UTILISATION CERTIFICATES**

As on 31.12.2015, no utilization certificate is pending.

\*\*\*\*\*