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Report of the Comptroller and Auditor General of India

Union Government (Railways)

No. 14 of 2017

Report of the
Comptroller and Auditor General
of India

for the year ended March 2016

Laid in Lok Sabha/Rajya Sabha on _____

Union Government (Railways)

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PREFACE

The Report for the year ended March 2016 has been prepared for submission to the President under Article 151 of the Constitution of India.

The Report contains significant result of the compliance audit of the Ministry of Railways of the Union Government.

The instances mentioned in this Report are those, which came to notice in the course of test audit for the period 2015-16 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; instances relating to the period subsequent to 2015-16 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

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Abbreviations

Abbreviation	Full form
ACASH	Association of Corporations and Apex Societies of Handlooms
AGC	Assistant Guard's Cabin
AIEHC	All India Engine Hour Cost
ATM	Automated Teller Machine
ATN	Action Taken Note
BEE	Bureau of Energy Efficiency
BOOT	Build Own Operate Transfer
C&W	Carriage and Wagons
CCM	Chief Commercial Manager
CCTV	Closed-circuit Television
CDE	Chief Designing Engineer
CEDE	Chief Electrical and Distribution Engineer
CEE	Chief Electrical Engineer
CEGE	Chief Electrical General Engineer
CLW	Chittaranjan Locomotive Works
CME	Chief Mechanical Engineer
COFMOW	Centre for Modernisation of Workshops
COM	Chief Operations Manager
CONCOR	Container Corporation of India Limited
COS	Controller of Stores
CPO	Chief Personnel Officer
CR	Central Railway
CRB	Chairman Railway Board
CRIS	Centre for Railway Information Systems
CRS	Commissioner of Railway Safety
CRT	Container Train Terminal
CRWS	Coach Rehabilitation Workshop
CTO	Container Train Operators
CVC	Central Vigilance Commission
CWE	Chief Workshop Engineer
D&G	Direction and General
DLW	Diesel Locomotive Works
DoT	Department of Telecommunication
DPR	Detailed Project Report
DRM	Divisional Railway Manager
EAC	Estimated Annual Consumption

Abbreviation	Full form
ECOR	East Coast Railway
ECR	East Central Railway
EMU	Electric Multiple Unit
EOL	Engine On Load
EPF	Employees Provident Fund
ER	Eastern Railway
ESI	Employees State Insurance
FA&CAO	Financial Advisor and Chief Accounts Officer
FOB	Foot Overbridge
FOIS	Freight Operations Information System
FSLA	Freight Service and Ledger Account
GC	Gauge Conversion
GM	General Manager
GPS	Global Positioning System
GSD	General Store Depot
GSM-R	Global System for Mobile Communication-Railway
GTKM	Gross Tonnage per Kilometre
HSD	High Speed Diesel
ICD	International Container Depot
ICF	Integral Coach Factory
IOH	Intermediate Overhaul
IR	Indian Railways
IRCA	Indian Railway Conference Association
IRCON	Indian Railway Construction Organisation
IRCTC	Indian Railway Catering and Tourism Corporation
IRPSM	Indian Railways Projects Sanctions & Management
IRR	Internal Rate of Return
IRSOD	Indian Railway Schedule of Dimensions
ISS	Integrated Security System
KVIC	Khadi and Village Industries Commission
LC	Level Crossing
MIS	Management Information System
MLR	Midlife Rehabilitation
MoR	Ministry of Railways
MoU	Memorandum of Understanding
MPLAD	Members of Parliament Local Area Development
MR	Metro Railway
NCR	North Central Railway

Abbreviation	Full form
NEFR	Northeast Frontier Railway
NER	North Eastern Railway
NPS	New Pension Scheme
NR	Northern Railway
NREGA	National Rural Employment Guarantee Act
NTXR	Neutral Train Examiner
NWR	North Western Railway
OFC	Optic Fibre Cable
OHE	Over Head Electrical Equipment
PCE	Principal Chief Engineer
PMS	Parcel Management System
POH	Periodical Overhaul
PSU	Public Sector Undertaking
RC	Rate Circular
RDSO	Research, Design and Standards Organisation
RE	Railway Electrification
RITES	Rail India Technical and Economic Services Limited
RKM	Route Kilometers
RMT	Rail Milk Tanker
ROB	Road Overbridge
ROH	Routine Overhaul
ROR	Rate of Return
RR	Railway Receipts
RUB	Road Underbridge
RVNL	Rail Vikas Nigam Limited
SCADA	Supervisory Control and Data Acquisition
SCR	South Central Railway
SLRs	Brake Vans
SP	Sectioning and Paralleling Post
SPTO	Special Parcel Train Operator
SR	Southern Railway
Sr. DCM	Senior Divisional Commercial Manager
Sr. DPO	Senior Divisional Personnel Officer
Sr. DOM	Senior Divisional Operations Manager
SSP	Sub Sectioning and Paralleling Post
SWA	Sender's Weight Accepted
SWR	South Western Railway
TA	Traffic Accounts

Abbreviation	Full form
TC	Tender Committee
TEU	Twenty Feet Equivalent Unit
TKM	Track Kilometre
TOT	Transfer of Technology
TS	Train Superintendent
TSS	Traction Sub-station
TSS	Traction Sub Station
TTE	Travelling Ticket Examiner
TVU	Travelled Vehicle Unit
VP	*Parcel Van*
WCR	West Central Railway
WPC	Wireless Planning and Coordination
WR	Western Railway

Overview

The Audit Report consists of audit findings relating to compliance issues in respect of the Ministry of Railways and its various field units including Railway Public Sector Undertakings and Autonomous Bodies. The Audit Report includes four reviews on selected themes and 31 Paragraphs. A brief overview of the important audit findings and conclusions is given below:

Parcel Business in Indian Railways

Indian Railways recognised the need to augment its parcel business and re-position it as a separate line of business rather than an extension of its passenger transportation services. However, they did not undertake adequate steps to put in place the infrastructure and other institutional arrangements for improvement in parcel services. Consequently, Parcel Services continued to be non-core activity without any specific emphasis on augmentation and improvement in capacity of infrastructure or quality of service. Computerization of parcel services was started in 2005-06, but was yet to be completed on a large number of locations. Adequate measures for security monitoring and screening of the parcels were not available as seen at the selected parcel depots.

Adequate weighment arrangements were not made/ensured by the railways for weighment of leased parcel traffic. On the other hand, rules were framed for termination of contracts after fourth default of overloading. These were, however, not a deterrent as weighment was not being done as a regular measure to check overloading despite laid down norms.

Response for booking of leased parcel traffic through Brake Vans as well as Parcel vans was inadequate. While offers received were far less than space offered on lease, railways did not allot Parcel Vans in 65 *per cent* of cases. As such, leasing space remained grossly unutilized. Leased traffic services suffered from lack of customer friendliness and from maladies like delays in internal processes and deficiencies in decision making. For leasing of parcel space, delay of up to 240 days in finalization of tenders by Zonal Railways was noticed. Customers had to cancel indents for Parcel Vans (VPs) due to non-supply by Railway Administration and in many cases parcel vans were declared sick after being loaded. There were also delays in granting operational clearance due to which railways could not finalise lease agreements.

For non-leased traffic, Zonal Railways carried parcels beyond their intended destinations in a significant number of cases. In the two months test checked, railways carried 13565 over carried parcels back to their original destinations. Over carriage of parcels also took away space in Assistant Guard's Cabin (AGC)/Brake Vans (SLRs) which could be utilised for transportation of parcel traffic. This resulted in hardships to the customers and created operational problems to the Railway Administration. This also reflected on the quality of services being provided to the customers. **(Para 2.1)**

Container Train Operations in Indian Railways

Container Operations by the private operators was promoted with the primary objective to increase the rail share of traffic and to augment Indian Railway's earnings by offloading sundry and piecemeal traffic to the private operators. Railways had decided not to carry sundry and piecemeal traffic in order to improve its operational efficiency through rake load movement. The container traffic registered an annual increase of about 4.57 *per cent* during 2010-11 to 2015-16. IR loaded 46.18 million tonnes of container traffic during 2015-16 and chances of achieving the target of 210 million tonnes by 2020 as envisaged, were remote. Charges like shunting charges, charges for detention of rakes beyond free time, stabling charges and land license fee, which were recoverable from Container Train Operators (CTOs) were not realized in full. The mechanism of recovering the staff cost for commercial staff deployed in various Container Rail Terminals (CRTs)/Inland Container Depots (ICDs) was not effective. Mechanism for monitoring movement of container trains did not exist in Central Railway, North Eastern Railway, South Western Railway and Southern Railway. **(Para 2.2)**

Injudicious decision of preservation of two sections in Northeast Frontier Railway as heritage without assessing their tourism potential led to wasteful expenditure of ₹ 27.33 crore on their preservation/dismantling. **(Para 2.3)**

As per Railway Board's circular of February 2009, shunting charges should be levied for utilization of Railway engine for shunting activity in siding premises. However, East Central Railway (ECR) Administration did not prefer bills for utilization of Railway engine for shunting activity in Bina Coal Siding of Dhanbad division for the period January 2010 to March 2016, resulting in loss of revenue of ₹ 24.28 crore. **(Para 2.4)**

Rules for refund of charges on failure to provide air-conditioning facility in Air Conditioned (AC) coaches exist in railways, wherein, the railways are liable to refund the difference between the fare of AC and non-AC classes of tickets. However, rules for refund of superfast surcharge to passengers in cases where Superfast services have not been provided to the passengers, have not been framed by the Railway Board. Audit observed that in North Central Railway (NCR) and South Central Railway (SCR), railways levied and collected superfast charges of ₹ 11.17 crore during the period 2013-14 to 2015-16 from the passengers on days, where 21 Superfast trains did not attain the average speed of 55 kmph (on broad gauge) for a 'Superfast' train. **(Para 2.5)**

In Asansol Division of ER, during May 2008 to May 2016, detention charges to the extent of ₹ 10.70 crore for load correction of overloaded wagons against five coal companies had not been realised. Eastern Railway (ER) Administration had not raised demand for detention charges at the time of generation of Railway Receipts and had raised the same subsequently. However, when the demands for detention charge were eventually made, the coal companies did not agree for payment. **(Para 2.6)**

The Integrated Security System (ISS) in Metro Railway, Kolkata could not be implemented fully five years after the scheduled date of completion. The reasons were delay in supply of location plans to the contractor, delay in allowing access to

the Optical Fiber Cable (OFC) backbone to the contractor, unclear terms and conditions of the contract etc. Security measures as envisaged under ISS, thus, remained incomplete. **(Para 2.7)**

NR Administration failed to recover the license fee for additional/excess space provided/occupied by banks for ATMs as per the laid down rules. Audit noticed a total short recovery of ₹ 9.40 crore from banks at 97 railway stations over Northern Railway (NR). **(Para 2.8)**

There is an urgent need for policy decision by the Railway Board to prescribe permissible free time lesser than that allowed for manual loading for loading in covered wagons, where a combination of manual and mechanised loading is being used. At present such sidings are allowed free time applicable for manual loading. This has resulted in potential loss of revenue of ₹ 18.91 crore during the period from 2013-14 to 2015-16 (up to February 2016) on account of loss of earning capacity of these wagons in five private cement sidings of South East Central Railway (SECR). **(Para 2.11)**

Diesel Locomotive Works (DLW) at Varanasi manufactures diesel locomotives for Indian Railways. DLW entered into a contract with M/s Electro Motive Diesel (EMD) of United States of America (USA), in October 1995 for Transfer of Technology (TOT) for manufacturing of High Horse Power (HHP) diesel locomotives which extended over the period of 1996-2006 at the total cost of US$ 1.75 crore.

Despite a lapse of 10 years of TOT, DLW failed to develop indigenous sources and continued import of one-third of its requirement (average import of last five years 35.16 *per cent*), on payment of foreign exchange of about ₹ 1250 crore per annum. Audit noticed that most of the imports (almost 91.73 *per cent* - ₹ 4329 crore) were made from the single supplier M/s EMD (USA) from whom the technology was transferred. DLW did not take effective steps for development of new vendors to ensure competitive rates and continued to remain largely dependent on single source suppliers. Non-development of new vendors also led to continued dependence upon the foreign supplier leading to expenditure in foreign currency. **(Para 3.1)**

In August 2014, Railway Board instructed not to import crankcases (a component of diesel locomotive), but to improve in-house production and indigenous sources for the same. It was also instructed to revise the production plan of locomotives, if required. However, DLW continued import of crankcases from M/s EMD at higher cost and incurred extra expenditure of ₹ 59.28 crore in importing 81 crankcases between September 2014 to November 2015. **(Para 3.2)**

Energy conservation measures in Indian Railways

Indian Railway (IR) has switched over from conventional electric locos to more energy efficient HHP three phase locos having regenerative basic feature completely from 2016-17 onwards. However, Electric Multiple Units/Main Line Electric Multiple Unit with the regenerative braking features were inducted in Central Railway and Western Railway only and were yet to be inducted in Northern, Eastern, South Eastern

Southern and South Central Railways. Audit noticed instances wherein the instruction of non-shutting down of locos (in cases of expected detention of more than 30 minutes) were not followed resulting in excess consumption of energy/fuel. Besides, excessive detentions were also observed at the interchange points test checked in audit leading to excess consumption during idling of locos. All Zonal Railways were not using the mechanism of Trip Ration for monitoring and controlling consumption of fuel. Energy Audits were conducted sporadically and recommendations were partially implemented. Post audit activity wise energy consumed was also not assessed. Energy conservation measures are needed to be adopted in more vigorous ways so as to achieve savings in energy consumption.

(Para 3.3)

Management of linen in Indian Railways

The coaching stock of IR consist of 390 AC First Class coaches (7500 berths), 2375 AC (2-tier) coaches (112350 berths) and 5302 AC 3-Tier Sleeper coaches (345091 berths). A robust system for procurement, washing and distribution of linen is therefore necessary to provide clean, hygienic, well ironed and good quality linen to all passengers travelling in AC Classes. Audit observed that as on 31 March 2016 in respect of some of the linen items in selected General Stores Depots (GSDs), the stock in hand was less than one month's requirement, in respect of others it was more than 12 month's requirement. Provision of inspection of a prescribed percentage of new supply was not being used effectively, to ensure, quality of the linen received. The storage space at GSD was not adequate and items were not stored in proper environment. The storage space in the Coaching Depots was also not adequate and proper storing arrangements were not made at many places. No norms had been prescribed for optimal stock of bedroll to be carried in trains. Blankets and pillows were not dry cleaned and/or sanitised for long periods before supply to the passengers.

Due to inadequate response from private parties, railways installed departmental mechanised laundries. However, these did not have sufficient handling capacity and railways continued to meet bulk of its requirement through outsourcing. The pace of setting up of departmental mechanised laundries was also slow. No quality check of washing through departmental mechanised laundries was done nor any norms prescribed for the same. Necessary clearances for operating 26 out of 30 mechanised laundries were not obtained from respective State Pollution Control Boards. Effluent Treatment Plants (ETPs) were not installed in case of 15 out of 30 mechanised laundries. In respect of the remaining, ETPs were installed in the laundries, but these were not functional and one ETP was recycling only part of the waste water.

There were deficiencies in the washing contracts which diluted the enforcement of quality assurance measures. Electronic instruments for quality measurement were not being used in most of the Zonal Railways. This was also not enforced through the terms and conditions of the contracts. Inspections of quality were not being done adequately. Large amounts were being recovered from washing contractors for unsatisfactory performance. Railway as principal employer was lacking in its

responsibilities for ensuring compliance of the labour laws by the linen distribution contractors. **(Para 4.1)**

Working of Coach Rehabilitation Workshop, Bhopal

The Coach Rehabilitation Workshop (CRWS), Bhopal undertakes the activity of Mid-life Rehabilitation (MLR) of passenger coaches. Rehabilitation work is carried out on the coach, which lies in the age group of 12 to 15 years. In this activity, repair on corrosion and degenerated interior and furnishing is carried out to bring it to the level of "as good as new".

The target for MLR of the coaches fixed for Railway Board could not be achieved during the review period and the same were reduced by seven to nine *per cent* by CRWS itself on the ground of inadequate manpower availability.

During 2012-13 to 2015-16, total 137 coaches received in CRWS were returned back due to reasons such as the coaches were new/underage, overage, MLR already done, beyond repair, non-availability of adequate space etc. As such, these coaches did not fall in the criteria for MLR activities. Overall these coaches were detained for 1066 days leading to loss of earning capacity of ₹ 2.21 crore of coaches.

The MLR of coaches are processed through seven main shops of the workshop. There were delays in outturn in various major shops as against the prescribed norms on account of insufficient space and frequent failure of machines. This resulted in non-achievement of targets and detention of coaches causing loss of earning capacity.

Audit also observed that out of total 2286 coaches rehabilitated during the review period, 855 coaches were found defective in the Final shop and had to be re-repaired. The total time consumed on re-repair was 2423 days and on an average 2.23 days were spent per coach. Besides, 87 coaches rehabilitated during the review period failed online, out of which 49 coaches failed within 100 days. **(Para 4.2)**

Integral Coach Factory (ICF) Administration recommended Bharat Heavy Electricals Limited (BHEL) for supply of electrics for manufacturing of metro rakes without ascertaining the eligibility criterion. Further, the procurement of material (worth ₹ 18.90 crore) was made before approval of tender by Railway Board. This led to loss of revenue to the Railway as material worth ₹ 6.17 crore had become obsolete due to change in policy for manufacturing of metro rakes. **(Para 4.4)**

Railway Board introduced a policy of recruitment of land losers as a compensation for acquisition of their land even though land could have been acquired using enabling provisions through notification of 'Special Projects' for expeditious land acquisition without making commitment of recruitment. When South Eastern Railway (SER) sought clarification on this issue, the Railway Board failed to take a clear stand on the policy. This created a situation of confusion and led to agitation by land losers. The work of the projects Bagnan-Amta and Deshpran-Nandigram New Railway Line projects in Kharagpur Division of SER had to be stopped and expenditure of ₹ 93.89 crore was rendered unfruitful. **(Para 5.1)**

NR and ECR Administrations delayed the payment of spectrum charges to Department of Telecommunications (DoT) which led to payment of late

fee/surcharge of ₹ 19.47 crore. In NFR, ER and NCR spectrum charges surcharges/late fee were outstanding to the tune of ₹ 89.77 crore (including surcharge/late fee of ₹ 26.75 crore). Unless the spectrum charges are paid on time, late fee/surcharge would be imposed by DoT, which would have to be paid by the Zonal Railways, as there is no provision of waiver of late fee on spectrum charges. **(Para 5.2)**

SR Administration created infrastructure on land which actually did not belong to them and continued to occupy the same for a long time in violation of the codal provisions. They also did not use the opportunity to settle the matter timely by paying compensation to the land owners as assessed by the State Government. This resulted in an avoidable expenditure liability of ₹ 50.68 crore towards compensation to the land owner. **(Para 5.3)**

Delays on part of ECR Administration to provide necessary facilities/material/ site to the contractor led to delay in building of the new bridge between Kiul and Luckeesarai stations. On the other hand, works taken up for strengthening of the existing bridge were also not completed on time due to lapses on part of the ECR administration. This resulted in continuation of Permanent Speed Restriction and running of trains on Kiul bridge for the past 12 years, which is a safety hazard. **(Para 5.6)**

NR Administration awarded contract for replacement of foot over bridges at Charbagh Railway station in Lucknow without ensuring clear site and drawings. This resulted in unfruitful expenditure of ₹ 5.75 crore on fabrication of steel material for the foot over bridges that would remain blocked till further decision for taking up the work. The existing foot over bridges are very old and not replaced/changed since installation. Till the time they are replaced, their use poses a threat to the safety of the passengers. **(Para 5.10)**

The output of Reinforced Cement Concrete (RCC) depot at Ponmalai of SR is reducing over the years. The expenditure per unit of output has increased by almost 150 *per cent* in the last six years. RCC depot incurred additional expenditure of ₹ 5.68 crore on manufacturing items at a much higher cost as compared to market rates during this period. As operating the depot is proving to be an uneconomical proposition, there is a need for exploring alternative ways and means for gainfully utilizing the staff as well as usable assets of the depot. **(Para 5.11)**

Non/improper implementation of New Pension Scheme at Nanded Division of SCR, Secunderabad resulted in non-recovery of subscription of ₹ 77.07 lakh and equal amount of matching contribution. **(Para 6.1)**

Selection of firm for 'Maintenance of Accounts' on nomination basis in respect of Rail Vikas Nigam Limited (RVNL) and its subsidiary without following the guidelines of Central Vigilance Commission (CVC) led to irregular expenditure of ₹ 5.07 crore during October 2005 to October 2016. **(Para 6.2)**

Chapter 1
Introduction

1.1 Audit Report outline

This Audit Report comprises results of scrutiny of transactions relating to expenditure, receipts, assets and liabilities of the audited entities under the control of Ministry of Railways (Railway Board including Zonal Railways, Railway Public Sector Undertakings (PSUs) and Autonomous Bodies under the Ministry of Railways all over India). This includes an examination of the adequacy, legality, transparency, etc. of the relevant rules to maintain and operate effective control mechanism over public expenditure and safeguard against misuse, waste and loss.

The Audit Report for the year ending March 2016 contains six Chapters. Chapter 1 is introductory in nature and covers issues of cross-cutting nature. The other five Chapters contain audit findings related to important areas of functioning and operations of IR viz., Traffic, Traction, Rolling Stock, Engineering, Staff Matters and Railway PSUs.

This Report presents audit findings of significant materiality which are intended to aid the executive in instituting corrective actions to bring about improved performance and better financial management. The detailed findings on the following four issues, covering all Zonal Railways, are presented in this Report:

(i) Parcel Business in Indian Railways

(ii) Container Trains Operation in Indian Railways

(iii) Energy conservation measures in Indian Railways

(iv) Management of linen in Indian Railways

In addition, detailed audit findings contained in 31 individual paragraphs covering respective Zonal Railways are presented in Chapters 2 to 6 of this Report.

1.2 Chapter outline

Paras 1.3 and 1.4 of this Chapter outline the broad profile of the Ministry of Railways (MoR) and its subordinate field offices. Para 1.5 to 1.7 cover basis of selection of units for audit, reporting procedure for inclusion of audit observations in the Audit Report and response received from the Railway authorities to the Provisional Paragraphs. Paras 1.8 to 1.11 cover, a summary of year-wise pendency of audit observations and impact of audit in terms of recoveries effected and remedial actions taken.

1.3 Audited Entity

Indian Railways (IR) is a multi-gauge, multi-traction system with a total route length of 66,687 kms (as on 31 March 2016) and is one of the world's largest rail network under one management. Some important statistics regarding route/track length in IR is given below:

Table 1.1				
	Broad Gauge (1,676 mm)	Meter Gauge (1,000 mm)	Narrow Gauge (762/610 mm)	Total
Route Kilometers	60,510	3,880	2,297	**66,687**
Running Track Kilometers	85,617	4,170	2,297	**92,084**
Total Track kms	1,12,496	4,639	2,495	**1,19,630**
Electrified Route kms				**23,555**
Electrified Running Track kms				**43,357**

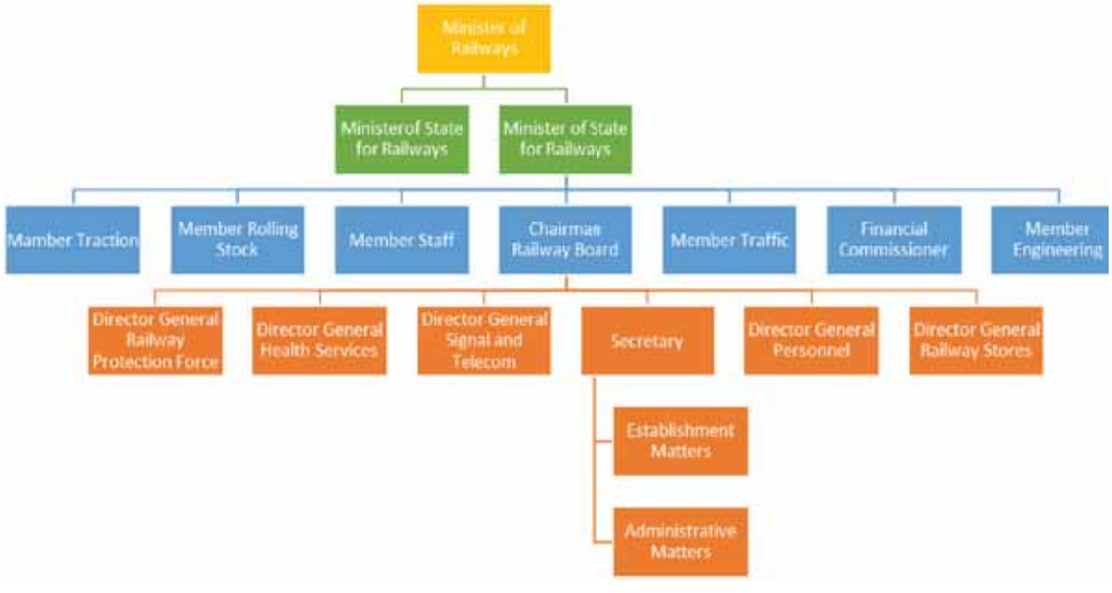
IR runs 13,313 passenger trains and 9,212 Goods trains every day. During 2015-16, it carried 22.21 million passengers and 3.03 million tonnes freight each day. As on 31 March 2016, IR have 1.33 million work force and maintained the following infrastructural assets and rolling stock:

Table 1.2	
Rolling stock	***Numbers***
Locomotives	11,122
Coaching Vehicles	70,241
Freight Wagons	2,51,256
Stations	7,216

Source – Indian Railways Year Book 2015-16 and Indian Railways' Website

Organizational Structure[1]

The Ministry of Railways, a Ministry of the Government of India, is responsible for the country's rail transport. It is headed by a Union Minister of Railways (a Cabinet Minister) and has two Minister of State for Railways.



[1] As on 21 December 2016

Railway Board (RB) which is the apex body of the IR, reports to the Minister for Railways. Railway Board is headed by Chairman Railway Board (CRB) and has five Members (Traction, Rolling Stock, Traffic, Staff, and Engineering) and a Financial Commissioner (Railways). The Board is responsible for laying down policies on all matters of operation and maintenance of train services, acquisition, construction and maintenance of assets and monitoring implementation of policies and instructions across Zonal Railways. Railway Board is also responsible for regulating pricing of both passenger fares and freight tariffs. The Functional Directorates under each Member assist and aid in decision-making and monitoring of railway operations.

At the field level, there are 17 Zonal Railways. In addition, there is one research and standards organization viz. Research, Design and Standards Organization (RDSO) Lucknow; a Central Organization for Modernization of Workshops (COFMOW) for procurement of specialized machinery; two Locomotive manufacturing units {Diesel Locomotive Works (DLW) and Chittaranjan Locomotive Works (CLW)} at Varanasi and Chittaranjan respectively; three Coach factories at Kapurthala, Raebareilly and Perambur; two Wheel and Axle Plants at Yelahanka and Bela; and Diesel Modernization Works at Patiala.

The details of Zonal Railways with their Headquarters and total route kilometers (RKMs) as on 31 March 2016 are given below:

Table 1.3

Zonal Railways	Headquarters	RKMs
Central	Mumbai	4,063
Eastern	Kolkata	2,711
East Central	Hajipur	3,925
East Coast	Bhubaneshwar	2,722
Northern	New Delhi	7,301
North Central	Allahabad	3,364
North Eastern	Gorakhpur	3,869
Northeast Frontier	Maligaon (Guwahati)	4,072
North Western	Jaipur	5,550
Southern	Chennai	5,074
South Central	Secunderabad	6,028
South Eastern	Kolkata	2,716
South East Central	Bilaspur	2,505
South Western	Hubli	3,322
Western	Mumbai	6,440
West Central	Jabalpur	2,997
Metro Railway	Kolkata	28
	Total	**66,687**

Each Zonal Railway is headed by a General Manager who is assisted by Principal Heads of Departments, of Operating, Commercial, Engineering, Electrical, Mechanical, Stores, Accounts, Signal & Telecommunication, Personnel, Safety, Medical etc. departments.

Besides the above, there are 36 PSUs of IR as on 31 March 2016 under control of Ministry of Railways. These PSUs were set up by the Ministry with varied and specific objectives of raising finance for its rolling stock, manufacture of wagons, executing infrastructure projects, managing containerization of rail traffic, catering and tourism, station development, utilise railway telecommunication network etc.

1.4 Integrated Finance Advice and Control

A fully integrated financial advice and control system exists both at Railway Board headed by the Financial Commissioner (Railways) and the Financial Advisers and Chief Accounts Officers (FA&CAOs) at the Zonal level. The Financial Heads are responsible for rendering advice and scrutinizing all proposals involving expenditure from the pubic exchequer.

1.5 Audit Planning

Broadly, the selection of the units for audit of the Railways is planned on the basis of a risk assessment with regard to the level of budgets planned, resources allocated and deployed, extent of compliance with internal controls, scope of delegation of powers, sensitivity and criticality of function/activity, external environment factors, etc. Previous audit findings, Public Accounts Committee (PAC)'s recommendations, media reports, where relevant, were also considered. Based on such risk assessment, test audit of 4,378 entities/units of the Railways was conducted during 2015-16.

The Audit Plan focused on selected issues of significant nature in terms of policy and its implementation *inter-alia* covering freight traffic, earnings, infrastructure development, passenger amenities, asset management, material management and safety works. Each study brings out important audit findings and conclusions followed by audit recommendations, which could help improve systems and strengthen internal control mechanism in railways.

1.6 Reporting

Audits of selected topics were conducted across the Zonal Railways reviewing relevant records and documents of the field units as well as that of Railway Board. Appropriate samples from the population were selected so as to adequately cover the issues under study. The audit findings were issued to the respective Zonal Managements for their response. Similarly, Audit Notes/Inspection Reports (IRs)/Special Letters arising out of regular audit of vouchers and tenders were issued to the Associated Finance and Head of the unit for obtaining their replies. Audit findings were either settled or further action for compliance was advised depending upon action taken. Important audit observations, not having been complied with, were followed up through Draft Paragraphs addressed to the General Managers of Zonal Railways with copies endorsed to the FA&CAOs and Heads of the Departments for reply within the prescribed period. Selected issues raised in these Draft Paragraphs were taken up as Provisional Paragraphs with the Ministry of Railways (Railway Board) for furnishing their reply within a period of six weeks (as prescribed by the PAC) before their inclusion in the Audit Report.

1.7 Response of the Ministry/Department to Provisional Paragraphs

A total of 165 Draft Paragraphs including reviews were issued to the General Managers of the concerned Zonal Railways up to January 2017. After considering the replies of Railway Administrations wherever received, 37 Provisional Paragraphs (including four Reviews covering all Zonal Railways) proposed for inclusion in the Audit Reports were forwarded to the Chairman Railway Board, Members concerned and the Financial Commissioner, Railway Board between 14 June 2016 to 6 January 2017. Of these 37, 35 Paragraphs have been included in this Audit Report. As on 28 February 2017, Railway Board's replies have been received in respect of eight Provisional Paragraphs and the same have been considered and duly incorporated in the relevant Paragraphs.

1.8 Audit observations issued, settled and outstanding

During the year 2015-16, based on the results of test audit, a total of 4,182 Audit observations involving financial irregularities of ₹ 11,568 crore were issued through Special letters, Part-I Audit Notes and Inspection Reports. Besides these, there was a carry forward of 8,584 audit observations pertaining to the previous years. A total of 4,323 Audit observations were settled during the year as Railway Administrations recovered/agreed to recover the amounts involved or had initiated corrective/remedial action. The balance 8,443 audit observations outstanding as on 31 March 2016 involved financial irregularities amounting to ₹ 28,083 crore.

1.9 Recoveries at the instance of Audit

Audit has pointed out the cases of undercharges in realization of freight and other earnings, over payments to staff and other agencies, non-recovery of dues of the Railways etc. amounting to ₹ 1,029.53 crore in the various Zonal Railways during the year 2015-16. An amount of ₹ 123.28 crore was accepted for recovery (₹ 80.27 crore recovered and ₹ 43.00 crore agreed to be recovered). Three Zonal Railways accounted for recoveries exceeding ₹ 10 crore each viz. South East Central Railway (₹ 28.41 crore), East Central Railway (₹ 14.36 crore) and South Central Railway (₹ 11.13 crore). Out of the total amount of ₹ 123.28 crore recovery accepted, an amount of ₹ 57.67 crore pertained to transactions that were already checked by Accounts Department of concerned Railways and ₹ 65.41 crore were other than those checked by Accounts Department. As a result of further review carried out by Accounts Department, another ₹ 0.18 crore were recovered/agreed to be recovered by the railways.

1.10 Remedial Actions

Railway Board initiated remedial action in response to audit observations issued in previous years by appropriate changes in freight tariffs and issue of instructions during 2015-16 for better and improved compliance. Some of the important cases are illustrated below:

Table 1.4		
Para No./ Report No.	**Audit observation**	**Action Taken by the Ministry**
Audit Para No.2.6 of Report No. 32 of 2011-12	Despite carrying of streams of traffic by longer route on a regular basis on Western Railway, no action was taken by the Railway Administration to rationalize the route.	Railway Administration has decided (May 2015) in principle to rationalize the route.
Audit Para No.3.3 of Report No. 32 of 2011-12	Railways' efforts in coordinating with State Government for successful completion of Road Over Bridge (ROB)/Road Under Bridge (RUB)s were inadequate. Railways needed to adopt and ensure a pro-completion approach by prioritization on planning and monitoring of Level Crossing (LC)/ROB/RUBs works and work towards a common agreed plan with the State Governments, so that closure of level crossings is achieved within an agreed time-frame.	Railway Board instructed the Zonal Railways in June 2015 to adopt remedial measures viz. insistence of advance action by the State Governments to acquire land where difficulties are anticipated, approval of site jointly in consultation with Railways, diversion of route to be worked out jointly, execute ROB/RUBs as single entity basis, sanction of ROB/RUBs work under NREGA and MPLAD funds etc.
Chapter 2- Distribution and Utilization of Safety Items in Indian Railways (Report No. 29 of 2015)	Railway Board's instructions for standardization of safety items and unification of PL numbers for uniform monitoring across the Zonal Railways were not adhered to.	In July 2015, Railway Board issued the list of safety items with unified PL number on pan-India basis under safety category. A revised/updated list of safety items was also issued in January 2016 to bring about uniformity among Zonal Railways in categorization of safety items being procured by the Railways. This would facilitate better co-ordination among the Zonal Railways with regard to procurement, distribution and utilization of safety items.
Audit Para No.3.4.16 of Report No.9 of 2002	Maintenance charges for the portion in excess of 7.5 meters were not raised in respect of 12 ROBs which were to be borne by the State Government at the rate of 2.5 *per cent* of the cost of the bridge.	Railway Board requested the Chief Secretary, Government of Maharashtra, Mumbai on 17 November 2015 for making necessary payment to Western Railway administration immediately.
Audit Para No.3.6 of Report No.25 of 2013	NFR Administration failed to inspect its land periodically, which resulted in unauthorized occupation of land valuing ₹ 12.75 crore (as of February 2012) by the District Administration, Bongaigoan.	Ministry of Railways issued instructions in June 2015 to all the Zonal Railways to protect railway land from encroachment.

1.11 Paragraphs on which Action Taken Note received/pending

To ensure accountability of the Executive on all issues dealt with in the Report of the Comptroller and Auditor General of India, the PAC had decided (1982) that the concerned Ministries/Departments of the Government of India should furnish corrective/remedial Action Taken Note (ATNs) on all Paragraphs contained therein and had further desired in their Ninth Report (Eleventh Lok Sabha) presented to the Parliament on 22 April 1997 that henceforth corrective/remedial ATNs, duly vetted by Audit, on all Paragraphs included in the Reports be furnished within four months after the Report is laid on the Table of the Parliament.

The position of ATNs furnished by the Railway Board (as on 28 February 2017) on the Paragraphs included in the Reports of the Comptroller and Auditor General of India-Union Government (Railways) up to the year ended 31 March 2015 is given below:

Table 1.5

Year	Total Paragraphs included in the Reports	No. of Paragraphs on which ATNs Finalized	No. of Paragraphs on which ATNs are pending				
			ATNs not received	*ATNs on which comments sent to Railway Board*	*ATNs finally vetted*	*ATNs under verification by Audit*	*Total*
2003-04	114	113	0	01	0	0	**01**
2005-06	138	134	0	02	02	0	**04**
2009-10	59	57	0	02	0	0	**02**
2010-11	34	28	0	02	02	02	**06**
2011-12	29	18	0	08	0	03	**11**
2012-13	30	12	0	11	02	05	**18**
2013-14	47	12	03	16	04	12	**35**
2014-15	44	05	14	12	02	11	**39**
Total	**495**	**379**	**17**	**54**	**12**	**33**	**116**

ATNs in respect of 17 Paragraphs relating to the Reports for the year 2013-14 and 2014-15 were not received within the prescribed period of four months. 54 ATNs received for vetting by Audit were returned with observations for further action. 12 ATNs, vetted by Audit, are yet to be finalized by Ministry of Railways. In 33 cases, the action stated to have been taken by the railways is under verification by Audit.

Chapter 2
Traffic

The Traffic Department comprises four streams viz., Commercial, Traffic, Coaching and Catering & Tourism. The activities related to these streams are performed by the respective directorates headed by Additional Members/ Executive Director. At the Railway Board level, the Traffic Department is headed by Member Traffic.

The activities such as marketing, traffic development, improvements in quality of railway services provided to customers, regulation of passenger/ coaching/ freight tariffs, monitoring of collection, accountal and remittance of revenues from passenger/ freight traffic are managed by Commercial Directorate. The activities such as long-term and short-term planning of transportation services, management of day to day running of trains including their time table, ensuring availability of rolling stock to meet the expected demand and conditions for safe running of trains is managed by Traffic Directorate. The management of passenger and parcel services is done by Coaching Directorate and activities related to catering and tourism is managed by Catering & Tourism Directorate.

At the zonal level, the Traffic Department consists of two departments, viz., Operating and Commercial. These are headed by Chief Operations Manager (COM) and Chief Commercial Manager (CCM) respectively, who are under charge of General Manager of the concerned Zonal Railway. At the divisional level, the Operating and Commercial Departments are headed by Senior Divisional Operations Manager (Sr.DOM) and Senior Divisional Commercial Manager (Sr.DCM) respectively, who report to Divisional Railway Manager (DRM) of the concerned Division.

The total expenditure of the Traffic Department during the year 2015-16 was ₹ 10,451.73 crore. Total gross traffic receipt during the year was ₹ 1,64,333.51 crore[2]. During the year, apart from regular audit of vouchers and tenders etc., 1398 offices of the department including 942 stations were inspected by audit.

This chapter includes two reviews on specific themes covering all Zonal Railways. In the first review 'Parcel Business in Indian Railways', Audit assessed the management of parcel services and examined the adequacy of infrastructure and other institutional arrangements in place for bringing about improvement in parcel services. In the other review on 'Container Trains Operation in Indian Railways', Audit focused on the effectiveness of monitoring system and recovery of dues by container operators.

In addition, ten Audit Paragraphs highlighting irregularities such as, injudicious decision of preservation of railway line sections as heritage; non-preferring of bills of shunting charges; non-levy of detention charges; non-recovery of license fee; non-revision of interest and maintenance charges; improper utilisation of Higher Capacity Wagons etc., are also included.

[2] Source: Year Book 2015-16

2.1 Parcel Business in Indian Railways

2.1.1 Introduction

As per the Railways Act 1989, 'Parcel' is defined as goods entrusted to the Railway Administration for carriage by passenger or parcel train. Articles such as personal effects, general merchandise, perishables, scooters and motorcycles packed as per conditions prescribed by Railways are accepted as parcels for booking and carriage by Railways. Indian Railways carry different types of Parcel traffic in Passenger trains or in Special Bogies designed for the purpose such as Assistant Guard's Cabin (AGC), Brake Vans (SLRs), Parcel Vans (VPs/VPUs/VPHs), Special Parcel Trains – leased or non-leased, BCN[3] rakes for perishables traffic and Special Purpose Vehicles like Rail Milk Tanker, Refrigerated Vans etc. The traffic in AGC, SLRs and VPs is carried by Mail/Express and passenger trains. Parcel traffic is either leased or non-leased. Leased traffic in AGC, SLR and VPs is governed by the 'Comprehensive Parcel Leasing Policy' and leased traffic in parcel trains is governed by the policy on 'Parcel Cargo Express Trains'. Non-leased parcel traffic is booked by Railways from Parcel Offices at Parcel depots of concerned stations on a day to day basis.

Organizational set up

The Departments and officials dealing with Parcel business in Indian Railways at various levels are as follows:

Table 2.1 – Organizational Structure

Level	Directorate/ Departments	Officials	Responsibilities
Railway Board	Traffic Coaching Commercial	Member Traffic	Policy making and issue of circulars and instructions for field offices
Zonal Railway	Operating Commercial	General Manager • Chief Operations Manager (COM) • Chief Commercial Manager (CCM)	Issue of Zonal level policies and implementation of policy and instructions of Railway Board.
Division	Operating Commercial	Divisional Railway Manager • Senior Divisional Operations Manager (Sr. DOM) • Senior Divisional Commercial Manager (Sr. DCM)	Implementation of policy and instructions of Railway Board and Zonal Railway Headquarters.
Parcel depots/ Stations	Commercial	Parcel Supervisor	Booking of parcels following due procedures.

Audit scope and objectives

The study covered a three year period from 2013-14 to 2015-16 and was undertaken with an objective to assess the following:

[3] BCN – Bogie Covered Wagon

1. Whether railways took adequate steps to put in place the infrastructure and other institutional arrangements including computerization, weighment facilities, security etc. for augmentation and improvement in parcel services?
2. Whether the parcel business was managed with focus on providing quality service to customers?

Audit methodology and sample

The areas studied included steps taken by Indian Railways for augmenting infrastructure and bring about improvement in parcel business as per goals identified in the Vision 2020 Document of the Ministry of Railways. The progress in implementation of computerization of parcel services through Parcel Management System (PMS) was also studied over all Zonal Railways. The process of booking and managing leased and non-lease parcel traffic was also studied to assess the efficiency and effectiveness of parcel services in selected parcel depots, Divisions and Zonal Headquarters of various Zonal Railways.

Records were examined at the Railway Board, Zonal/Divisional Headquarters and field offices relating to plan/policies framed by the IR and their implementation. Detailed examination of records was also done at selected Parcel depots in respect of traffic booked in AGC/Brake Vans, Parcel vans and Special Parcel Trains.

Entry Conferences were held at Zonal Railway level to discuss the audit scope, methodology and objectives. Exit Conferences were held at Zonal Railway level to discuss audit findings and recommendations. Audit findings and recommendations were also discussed in Exit Conference held at Railway Board on 16 February 2017. The response of the Railway Administration has been considered and duly incorporated in the review.

The sample for the study were selected on the basis of the following criteria:

Table 2.2- Criteria for sample selection and sample selected for review

Details	**Criteria for selection of sample**	**Sample selected**
Parcel Depots	***On the basis of Yearly Balance Sheet earnings for 2014-15*** ₹ 10 crore and above - 2 parcel depots with maximum earnings ₹ 5 crore to ₹ 10 crore - 50 *per cent* s.t. maximum 2 ₹ 2 crore to ₹ 5 crore - 25 *per cent* s.t. maximum 2 ₹ 50 lakh to ₹ 2 crore - 15 *per cent* s.t. maximum 2 Below ₹ 50 lakh - 10 *per cent* s.t. maximum 2	156
Divisions	***Two Divisions per Zonal Railways***	33
Outward parcel way bills (PWB)	***For selected parcel depots -*** 10 April, 20 July, 1 October and 30 January each year (s.t. maximum of 100 PWBs per day)	
Tenders	***Tenders floated during the review period for Parcel Special Trains/ VPs/VPUs/VPHXs/AGCs/SLRs*** - 100 *per cent* of selected Divisions	34
Lease contracts	***Lease contracts awarded for operations of*** Parcel Special Trains / Parcel Cargo Trains - 100 *per cent* of	6

Table 2.2- Criteria for sample selection and sample selected for review		
Details	**Criteria for selection of sample**	**Sample selected**
	selected Divisions VPs/VPUs/VPHXs - For each year one train each with maximum trips starting from two different locations SLRs/AGCs - For each year one train each with maximum trips starting from three different locations Number of indents placed for parcel trains/parcel vans subsequently cancelled due to non-supply by Railways - 100 *per cent* Mango/Orange/Banana Traffic - 100 *per cent*	21 126 40 parcel depots 7 stations
Over carried parcels	Two terminating stations on each Zonal Railways with highest number of trains originating/terminating Detailed check of over carried parcels for the month of June and November 2015	32 stations
Parcel Complaints	Any 5 complaint cases lodged through from various means	70[4]

Details of Zonal Railway wise sample selected are given in **Annexure 2.1**.

Audit Criteria

Various aspects of parcel services in Indian Railways were reviewed with respect to the audit criteria which included the provisions prescribed in:

i. Indian Railway Commercial Manual,
ii. Indian Railway Coaching Tariff,
iii. Indian Railway Code for the Accounts Department,
iv. Indian Railway Vision 2020 Document,
v. Budget proposals of last six years (2010-11 onwards),
vi. Comprehensive Parcel Leasing Policy 2006 and 2014,
vii. Railway Board orders on Computerisation of Parcel Management System (PMS), and
viii. Guidelines/instructions issued by Railway Board/Zonal Railways relating to parcel traffic.

Audit findings

2.1.2 Growth of parcel business during 2013-14 to 2015-16

Presently, parcel business is considered as one of the non-core business in Indian Railways. Railway has assessed that Parcel business has a potentially huge market in India, as in parcel segment, there is heavy unmet demand. The data of parcel tonnage carried and parcel earnings of Zonal Railways during the past three years were as follows:

[4] excluding ECR/ ECoR

Table 2.3 - Zonal Railway wise position of Tonnage (in Tonnes) and Earnings (₹ in crore) from parcel business						
Zonal Railway	**2013-14**		**2014-15**		**2015-16**	
	Tonnage	*Earning*	*Tonnage*	*Earning*	*Tonnage*	*Earning*
CR	612525	250.68	632717	296.24	542434	282.98
ER	401755	111.44	352967	120.19	332207	125.14
ECR	168135	28.85	147425	29.39	114828	23.77
ECoR	165480	39.08	143160	41.71	126470	40.01
NR	1820320	432.34	1835270	435.88	1972080	468.37
NCR	174358	32.67	178074	37.83	129328	39.58
NER	113161	19.62	95447	20.42	80222	19.43
NFR	232796	61.85	242894	77.33	288641	99.92
NWR	178970	58.08	171750	60.74	152560	67.66
SR	425223	152.42	408645	169.42	363443	163.77
SCR	390000	95.19	386000	104.93	374000	104.16
SER	326790	106.49	309190	122.50	289240	126.86
SECR	116880	23.36	115870	26.07	105940	27.29
SWR	201050	88.63	173350	88.46	189970	102.01
WR	663898	213.00	635036	235.71	573413	217.19
WCR	147050	25.68	131630	28.27	122780	29.48
Total	**6138391**	**1739.38**	**5959425**	**1895.09**	**5757556**	**1937.62**

Review of tonnage carried and earnings in various Zonal Railways showed that

- There was decreasing trend in the tonnage of parcel business carried by IR during 2013-14 to 2015-16. The parcel tonnage carried during 2015-16 was 6.2 *per cent* less than that carried during 2013-14.
- However, there was growth in terms of earnings during the period 2013-14 to 2015-16, mainly due to increase in freight tariff.
- Only in NR and NFR, the tonnage as well as earnings improved during the past three years.
- In ECR and NER, while there was a decline in tonnage carried by 32 and 29 *per cent,* the earnings also came down by 18 and 1 *per cent* respectively.
- In the remaining Zonal Railways, the tonnage carried decreased by 6 to 24 *per cent*, but the earnings increased by 2 to 21 *per cent*.

As can be seen, during 2013-14 to 2015-16 though the parcel earnings increased by 11.40 per cent, the tonnage carried in parcels declined by 6.2 per cent during the same period except in NR and NFR. This indicated that overall increase in earnings was due to increase in the tariff and not on account of increase in volume of parcel business.

The scheme for leasing SLRs for parcel traffic was introduced by Ministry of Railways in November 1991 with a view to maximize utilization of unutilized/ underutilized parcel space in Brake Vans (SLRs) of various Mail/Express trains. Railway Board introduced Comprehensive Leasing Policy[5] stipulating detailed

[5] Freight Marketing Circular 12 of 2006

guidelines for managing leased parcel. The Policy was later modified[6] to make it more attractive, customer-friendly and simplifying rules. For every four SLRs/AGCs in a train, Zonal Railways were allowed to lease up to three SLRs/AGCs and at least keep one SLR/AGC for non-leased traffic. The total capacity available for leased traffic was almost three times the capacity kept for non-leased traffic as one part of the SLR is required to be kept for loading of passenger luggage perishables, newsprint etc. In February 2007, Railway Board issued detailed policy for leasing of Parcel Cargo Express trains/Parcel Special Trains to private operators. In June 2010, Railway Board revised the standard composition of rake of parcel special trains consisting of 20 Parcel Vans[7] and one Brake Van[8].

Review of earnings from leased and non-leased parcel over various Zonal Railways during the past three years was as follows:

Table 2.4 - Share of earnings from leased and non-leased parcel traffic in various Zonal Railways *(₹ in crore)*

Zonal Railways	Leased parcel traffic			Non-leased parcel traffic		
	2013-14	*2014-15*	*2015-16*	*2013-14*	*2014-15*	*2015-16*
CR	132.61	92.05	118.13	118.07	204.19	164.88
ER	48.52	50.51	56.81	62.92	69.68	68.33
ECR	13.09	12.25	3.79	15.76	17.14	19.98
ECoR	5.03	4.23	3.26	34.05	37.49	36.74
NR	249.45	229.48	272.89	182.89	206.40	195.48
NCR	5.35	9.78	10.70	32.02	38.90	39.49
NER	9.27	9.01	7.95	11.61	12.36	13.92
NFR	0.55	1.20	3.43	23.14	23.18	96.48
NWR	38.39	40.98	45.44	22.27	22.73	25.12
SR	58.10	66.58	55.46	94.32	102.84	108.31
SCR	33.15	35.08	35.27	62.03	69.85	68.89
SER	49.02	46.78	56.02	57.47	75.72	70.85
SECR	5.86	6.96	6.99	17.50	19.11	20.30
SWR	49.24	45.26	54.42	39.39	43.20	47.59
WR	76.78	68.72	61.17	136.22	166.99	156.02
WCR	8.12	6.89	8.03	17.56	21.38	21.45
Total	**782.53**	**725.76**	**799.76**	**927.22**	**1131.16**	**1153.83**

It can be seen that the share of earnings from leased parcel which was 46 per cent of the total parcel earnings of Indian Railways in 2013-14, declined to 41 per cent in 2015-16. Considering that there has been a decline in parcel traffic carried by IR in tonnage terms, there is need to provide impetus to parcel business including leased parcel business.

[6] Freight Marketing Circular 6 of 2014
[7] VPHs/VPs/VPUs/VPHUXs
[8] SLR

2.1.3 Infrastructure development as envisaged in Vision 2020 document

Indian Railways' 'Vision 2020' document tabled in Parliament (December 2009) by Ministry of Railways (Railway Board) projected that the revenue from parcel business would grow at a fast pace from ₹ 1644 crore in 2011-12 to ₹ 8000 crore in 2019-20, provided the following measures for improvement of parcel business were taken:

a. Parcel services to be managed as a separate business and run from dedicated terminals with separate parcel trains rather than from station platforms.
b. On major routes, parcel services to be run as efficiently and professionally as air cargo services. For this, dedicated parcel terminals were to be set up and time-tabled super-fast parcel services were to be run.
c. Partnerships to be formed with the private sector to provide end-to-end logistics, induction of adequate number of parcel vans (200 per annum as against 100 at that time) which would include refrigerated parcel vans to carry fruits, vegetables and perishables and special-purpose rolling stock to carry automobiles.

Audit reviewed the steps taken by Railway Board and various Zonal Railways as envisaged in the Vision 2020 Document and observed that

- Parcel Business was not separated from passenger services,
- No private partnership were formed with private sector to provide end to end logistics and no new parcel vans were inducted in partnership with private sector.
- Refrigerated parcel vans to carry fruits and perishables were not introduced by any of the Zonal Railways. In SR, refrigerated Parcel Van was introduced in November 2002. However, after the inaugural service, no such service was in operation. In SWR, a refrigerated parcel van was available and was being utilised for loading of chocolates from Vasco-da-Gama station.
- Railway Board issued in November 2014 policy on Special Parcel Train Operator (SPTO) scheme to encourage investment through Public Private Partnership mode for procurement of rolling stock (i.e. General service new designed Parcel Vans- Freight Stock or Special purpose Parcel Vans like Refrigerated Vans, Milk tankers etc. for a specific commodity) to be run as Special Parcel Train for time sensitive cargo to meet the future demand. It was observed that there were no such schemes in operation on any of the Zonal Railways even after two years of introducing the policy on SPTO.
- No special purpose rolling stock was introduced to carry automobiles in any of the Zonal Railways.
- No dedicated parcel terminals were set up in any of the Zonal Railways.

Ministry of Railways recognised that in parcel business, the main challenges were enhancement of carrying capacity (rolling stock and dedicated terminal

infrastructure) and re-positioning the parcel business as a separate service rather than a piggy-back service of passenger service. However, in order to achieve the targeted growth of parcel business, Railway Board and Zonal Railways did not take action to facilitate growth of parcel business in Indian Railways.

2.1.4 Computerisation of parcel services - Parcel Management System (PMS)

Computerisation of parcel business in metropolitan cities in Indian Railways was conceived as early as in 1999. In October 2002, Railway Board asked Centre for Railway Information system (CRIS) to prepare estimate for development of application software for management of parcel services in IR viz. Parcel Management System (PMS). It included ten modules viz. weighment/booking of parcel, outward shed operations, loading of parcels, movement of parcels, unloading of parcels, inward shed operations, tracking of parcels, online information of parcels on internet, booking of parcels on internet with street collection/delivery mechanism and MIS and accounting module. For this purpose, electronic weighbridges were to be installed for weighing of parcels. After weighment, the data was to be received by the system where the Parcel Way Bills were to be prepared. The system was to be devised to calculate all the parcel freight charges i.e. individual parcels, four tonne SLR space, complete front or rear SLR, full VP, round trip VP, booking of parcel train, long term leasing of SLR/VP/Parcel trains and internet based parcel services. A single window operation through universal counters was envisaged to eventually make booking of parcels for customers more user friendly and prompt and also reduce customer complaints. It was also expected to reduce the possibility of over carriage and misplacement of parcels in transit thereby reducing cases of claims. Railway Board at that time expected that parcel market in the country was of the order of ₹ 50,000 crore and Railways share in this entire business was miniscule.

In the Pilot Project seven stations viz. New Delhi, Delhi, Kanpur, Allahabad, Gaya, Howrah and Sealdah were identified for computerization of parcel services in 2005-06 at a total cost of ₹ two crore.

In May 2008, Railway Board sanctioned roll out of PMS which included commissioning of 220 stations in two phases. Phase I was to cover 77 stations which included 390 terminals and counters on four corridors viz. New Delhi-Mumbai Central, New Delhi-Chennai, Howrah-Mumbai Central and Howrah-Chennai, 16 Zonal Headquarters, 18 Traffic Accounts (TA) offices and all Divisional (68) Headquarters i.e. total 178 locations. Balance 143 stations were to be taken up in Phase II, which included 561 terminals and counters. Railway Board in August 2009 set out the target for completion of all India roll out of PMS as April 2010 and first phase was set to be completed by February 2010. Zonal Railways were instructed to prepare selected locations for installation of equipment. Zonal Railways were therefore required to complete civil and

electrical work at PMS nodes, procure furniture, ensure connectivity to all locations etc.

Up to March 2016, the capital expenditure incurred on Phase I was ₹ 15.23 crore and no capital expenditure was incurred on Phase II.

2.1.4.1 Implementation of Phase I and II of PMS

Review of progress of implementation of PMS (Phase I and Phase II) over all Zonal Railways was done. In Phase I, PMS was to be implemented at 77 stations of 11 Zonal Railways and was targeted for completion by February 2010. As on 31 March 2016, it was observed that

- The physical progress of the work of PMS Phase I was 100 *per cent*. However, PMS was implemented completely only on 29[9] stations on seven Zonal Railways. In addition, PMS was also implemented on three[10] stations in ECR, though not planned in Phase I.
- PMS was partially implemented on remaining 48[11] stations.
- In five[12] Zonal Railways, on 33[13] stations the delay in completion ranged between 32 and 72 months.
- Reasons for delay included paucity of funds (ECoR) and non-availability of clear site (NWR).

In Phase II, PMS was to be implemented at 143 locations of 13 Zonal Railways. These were targeted for completion in April 2010. As on 31 March 2016, it was observed that

- PMS was not yet implemented on any of the 143 stations in 13[14] Zonal Railways.
- The delay in implementation ranged between three and 77 months up to March 2016.
- Reasons for delay included non-availability of clear site (NWR, NFR), non-finalization of plans and drawings (NFR), non-availability of line blocks (NFR), delay in submission of rate contract/purchase order by CRIS (ECR, WR) and non-availability of connectivity (SWR).

Annexure 2.2 a and 2.2 b

[9] CR (Mumbai CST), ER (Howrah), ECR (Patna, Danapur, Mugalsarai), ECoR (Bhubaneswar, Khurdaroad, Puri, Cuttack, Behrampur, Palasa, Jhajpur Keonjhar Road, Bhadrak (BHC), Vishakhapattanam, Viziaynagaram), NR(Nizamuddin, Delhi, New Delhi), SER (Tatanagar, Chakradharpur, Rourkela, Jharsaguda, Kharagpur, Balasore, Panskura, Mechada), WCR(Kota, Sawai madhopur, Bharatpur, Bhopal, Bina, Itarsi)

[10] Patna, Mugalsarai and Danapur

[11] CR(Dadar, Kalyan, Nasik Road, Manmad, Bhusawal, Akola, Nagpur, Ballarshah), NCR(Mathura, Agra, Gwalior, Jhansi), SR(Chennai Central), SCR (Kazipeth, Vijayawada, Tenali, Gudur, Secunderabad, Hyderabad, Renigunta, Guntur, Warangal, Kachiguda, Samalkot, Rajahmundry, Tirupati, Kakinada Port, Gudivada, Elluru, Nanded, Aurangabad), SECR(Gondia, Rajnandagaon, Itwari, Raipur, Durg, Bilaspur, Raigarh), WR(Surat, Nagda, Ratlam, Vadodra, Valsad, Vapi, Borivali, Dadar, Bandra Ternimus, Mumbai Central)

[12] CR, ECR, ECoR, SR and WR

[13] CR(Mumbai CST, Dadar, Kalyan, Nasik Road, Manmad, Bhusawal, Akola, Nagpur, Ballarshah), ECR (Patna, Danapur, Mugalsarai), ECoR (Bhubaneswar, Khurdaroad, Puri, Cuttack, Behrampur, Palasa, Jhajpur Keonjhar Road, Bhadrak (BHC), Vishakhapattanam, Viziaynagaram), SR(Chennai central), WR(Surat, Nagda, Ratlam, Vadodra, Valsad, Vapi, Borivali, Dadar, Bandra Ternimus, Mumbai Central)

[14] CR, ER, ECR, NR, NCR, NER, NFR, NWR, SR, SCR, SWR, WR and WCR

2.1.4.2 Deficiencies in implementation of PMS

Audit reviewed records of all the 223[15] PMS stations which were planned for implementation in Phase I and Phase II to study the implementation. Of the 223 stations selected in audit, PMS was fully implemented on 32 stations only. In 48 stations PMS was partially implemented and in 143 stations, PMS was yet to be implemented. It was observed that

- In CR, deficiencies such as non-generation of money receipt, non-utilisation of Freight Service & Ledger Account (FSLA) Module, non-inclusion of octroi charges in PMS, non-provision of Bar Code Printers, poor connectivity of Global Positioning System (GPS), maintenance of manual records and non-integration of weighing machine with PMS were noticed at Mumbai CST Parcel depot.
- In SR, wharfage/demurrage charges were not computed in PMS. Carrying capacity of VPs/VPUs was not displayed in PMS. The system had no monitoring mechanism for watching over-carried parcels/parcels unloaded short of destination. The daily reports did not indicate the train number and the scale in which it was booked and hence, the correctness of freight could not be verified.
- In NR, over carried parcels statement did not indicate scale and weight. Forwarding Note was not linked with PMS and were being filled manually. Balance sheet and loading summary were also prepared manually.
- In WR, deficiencies such as non-generation of money receipt and non-display of train number in daily report were noticed at Mumbai Central Parcel Depot.
- In ECR, PMS was not fully functional at Rajender Nagar Patna and only outward Parcel Way bills were being generated.
- In NER, NWR and SWR also, PMS was not fully functional.

Further, as PMS was not implemented fully, some of the functions which could have been done through the application were being done manually and there were deficiencies in their implementation. These are discussed below:

- As per provisions of comprehensive leasing policy[16], if the lease holders who are required to deposit lump sum lease freight one day in advance from the nominated day of loading fails to do so, a five *per cent* surcharge on lumpsum leased freight would be levied. Test check of 27 tenders brought out that there were 711 cases over nine[17] Zonal Railways at 16 selected parcel depots, where surcharges amounting to ₹ 8.16 lakh were not levied and collected.
- In cases where the existing lease holder, who was running lease contract up to the earlier destination, was prepared to take the lease for the extended run of train, railway may consider the same and increase the lump sum lease

[15] Additional 3 stations of ECR as intimated by PDA/ECR in review report.
[16] Para 12.1 and 12.2 of the FM Circular 6 of 2014, effective from 15.4.2014
[17] CR-₹ 4231, ECR-₹ 6421, NR-₹ 468944, NCR-₹ 3295, NER- ₹ 52778, NFR-₹ 16827, NWR-₹ 212537, SR-10742, SECR-₹ 54193

freight on pro-rata basis for the extra distance. In five cases in three Zonal Railways (NR, NWR and WR), the lease charges were revised late leading to loss of revenue of ₹ 8.30 lakh.

- As per Railway Board's extant instructions, all originating Zonal Railways are required to re-assess and re-classify the services of the different trains as per the methodology referred from time to time. On the basis of the percentage utilization of brake vans (SLRs) for a period of 12 months i.e. from 1st April to 31st March, Zonal Railways are required to do a review and issue the notification by 20th May to facilitate implementation of revised rates with effect from 1st June every year. Test check showed delay in implementation of re-classification of 11 trains on three Zonal Railways (CR, WCR and SCR) leading to loss of revenue of ₹ 2.34 lakh.
- As per laid down rules[18], demurrage charges are to be levied for detention to rolling stock after the expiry of the free time allowed for loading/ unloading. In case of detention of individual Wagon/ Van/ SLR resulting in detention of the entire Rake, demurrage was to be charged on the entire Rake. Test check showed that demurrage charges of ₹ 1.92 lakh in eight[19] Zonal Railways and wharfage charges of ₹ 2.00 lakh in ten[20] Zonal Railways were short levied/not collected.
- A test check of 72174 outward parcel way bills of 16 Zonal Railways for 12 days[21] during the review period was done at selected parcel depots in all Zonal Railways to assess the correctness of the charging of general parcels on the basis of class, rate, distance, weight etc. It was observed that the parcel freight collected in 488 cases was not as per the provisions prescribed by Railway Board from time to time in respect of class, rate etc. resulting in short collection of ₹ 1.22 lakh over 13 Zonal[22] Railways.

Thus, there were substantial delays in completion of Phase I (32 to 72 months) and Phase II (3 to 77 months) up to March 2016. Where implemented, many shortcomings/deficiencies were noticed as many processes were not implemented fully. This led to dependence on manual procedures which was susceptible to inaccuracies and errors.

2.1.5 Safety and security at Parcel Offices

Railway Board introduced in September 2008 installation of Integrated Security System (ISS) comprising CCTV System, Access Control, Personal and Baggage Screening System, and Explosive detection. Amongst the various locations of a railway station covered under ISS, parcel business areas were also covered[23].

[18] Para 103(15) of IRCM Vol. I (1992 edition)
[19] CR- 200, ER- ₹ 17850, NR- ₹1800, NCR- ₹ 5300, NFR- ₹41024, SR- ₹9750, SWR- ₹ 102521, WCR- ₹ 14157
[20] ER- ₹ 37980, ECR-₹ 913, NR- ₹ 16092, NCR-₹ 23566, NFR- ₹ 6272, NWR-₹ 9457, SR- ₹ 528, SCR- ₹ 3841, SECR-₹ 776, WCR- ₹ 267
[21] 10 April, 20 July, 1 October and 30 January each year (s.t. maximum of 100 PWBs per day)
[22] CR-₹3313, ER-₹705, ECoR- ₹11021,NR- ₹3309,NCR- ₹19085,NER-₹ 2134, NFR- ₹68544, NWR- ₹3181, SR- ₹450, SCR-₹4071, SECR- ₹1846, SWR-₹3915, WCR-₹1032
[23] Para 7.12 of Ministry of Railways Nineteenth Report (2013) on Passenger Amenities and Passenger Safety in Indian Railways

Review of safety and security features in place on 156 selected Parcel Depots over all Zonal Railways showed that

- In CR, ER ECR, ECoR, NR, NCR, NWR, SCR and SECR, CCTV cameras, scanners and explosive detection mechanism were not deployed exclusively in the parcel office area.
- In NCR NER, NFR and WCR, no mechanism existed for screening of contents of the parcels booked at parcel depots.
- In SR and WR, various tools of security monitoring system such as Personnel and Baggage (including Parcels) Screening Systems (Door Frame Metal Detectors, X-ray parcel scanners), Internet protocol based CCTV Surveillance system etc. were not in operation for parcel traffic.
- In SCR, no mechanism existed to check the parcels loaded in the leased VPs /SLRs to ensure the safety and security of the trains, though agreement restricted carrying of inflammables, dangerous and other restricted goods.
- In SWR, there was no mechanism for screening of parcel contents. This lacuna provided an opportunity for booking of prohibited articles in leased parcels.
- In SR, there has been regular booking of fresh and soiled currency notes by parcel vans (VPU/VPH) at various parcel depots by various banks. The position was reviewed at major Parcel Depots (Chennai Central, Chennai Egmore, Thiruvananthapuram Central, Madurai, Salem and Coimbatore) and it was observed that the provisions[24] for booking of currency notes were not followed by the Parcel Depots. Meanwhile, an incident of tampering of VPH carrying soiled currency notes was noticed on 09 August 2016 at Chennai Egmore Parcel Depot. The records available with SR Administration were examined and it was observed that the consignment was declared as soiled currency. However, the value of the currency notes was not declared. No claim was preferred by the consignee as the booking was under owner's risk. Such incidents reflects on the weaknesses of the security in the parcel operations.
- In SR, a leasing contract to operate one VPH in Train No.16031/16032 Andaman Express MAS-JAT and back (tri-weekly) on round trip basis for a period of three years from 08 January 2014 to 07 January 2017 was awarded to M/s Jugnu Jayant, New Delhi at the lump-sum lease freight of ₹ 4.34 lakh per trip for a total value of ₹ 20.33 crore. As per clause 11.13 to 11.15 of the agreement, inflammable materials were not allowed to be loaded in the leased parcel vans. On 21 April 2014, smoke was observed in the VPH No. SR 99838 attached to Train No. 16032 UP Andaman Express from Jammu Tawi to Chennai. It was noticed that Li-ion battery, which was prone to short circuit and explosion, was loaded in the VPH. The train was stopped and the said VPH was detached. Most of the contents in the VPH were burnt. As per the findings of the Accident Review Committee, (i) mobile Li – Ion battery, which was prone to explosion/short circuit was

[24] Para 1101 to 1130 of Indian Railway Commercial Manual – Volume I

transported in the said VPH, and (ii) items such as bidi butts left behind in the VPH by the loaders at NDLS was the reason for short circuit causing fire. The Committee fixed (October 2014) the responsibility on leaseholder, M/s Jugnu Jayant/New Delhi for loading hazardous/ explosive/ inflammable articles against the contractual conditions. During the meeting of CSOs and DRMs held on 23 April 2014 at NDLS, RB ordered to recover the cost of damage of ₹ 1.32 crore from the lease-holder. The lease-holder stopped loading VPH from 23 October 2014 claiming self ill-health as the reason. Even after a lapse of more than two years from the receipt of the report, SR administration neither has taken penal action nor recovered the cost of damages of ₹ 1.32 crore from the lease-holder so far. Further, no action has been taken to terminate the contract and to enter into fresh contract. Thus, non-enforcing of contract conditions and failure to ensure safety had resulted in loss of potential revenue of ₹ 13.17 crore (₹ 4.34 lakh per round trip x 303 round trips) during the period from 23 October 2014 to 30 October 2016 besides loss of ₹ 1.32 crore due to fire damage.

Thus, existing measures for security monitoring and screening of the parcels were not adequate and needed to be strengthened.

2.1.6 Leased parcel business

IR carry parcel traffic in Brake Vans[25]/Parcel Vans[26]. SLRs have the capacity of 4 or 5 tonnes, whereas Parcel Vans have a capacity of 23 tonne (VPH) and 18 tonne (VPU). IR introduced the scheme for leasing of SLRs for parcel traffic in November 1991 with the objective to utilize the parcel space in Brake Vans (SLRs) of various Mail/Express train. Comprehensive Parcel Leasing Policy was issued in 2006[27] for leasing of parcel space in AGCs, SLRs and Parcel Vans. In 2014, the policy was modified[28] to make it more attractive, customer-friendly and with rules simplified.

Similarly, Railway Board issued in February 2007 detailed policy for leasing of Parcel Cargo Express trains/Parcel Special Trains to private operators. In June 2010 the standard rake composition of Parcel Special Trains was revised as 20 parcel vans[29] and one brake van.

In November 2014, Railway Board issued policy on Special Parcel Train Operator (SPTO) scheme to encourage investment through Public Private Partnership mode for procurement of rolling stock (i.e. General service new designed Parcel Vans- Freight Stock or Special purpose Parcel Vans like Refrigerated Vans, Milk tankers etc. for a specific commodity) to be run as Special Parcel Train for time sensitive cargo to meet the future demand.

[25] SLRs
[26] VPUs/VPs/VPHs
[27] Freight Marketing Circular no. 12 of 2006
[28] Freight Marketing Circular 6 of 2014
[29] VPHs/VPs/VPUs/VPHUXs etc.

2.1.6.1 Carrying capacity for leased parcel traffic

White paper on IR (February 2015) stated that in parcel segment there was heavy unmet demand for which expansion of railway network was necessary. The position of holding of Parcel Vans in Indian Railways during the period of review was as follows:

Table 2.5

As on	Holding of parcel vans (in numbers)
31 March 2014	1899
31 March 2015	1945
31 March 2016	1984

It was seen that there was a net increase of only 85 Parcel Vans of various kinds in Indian Railways during 2013-14 to 2015-16 and the carrying capacity added in terms of tonnage was only 1530 tonnes (on the basis of 18 tonnes per VPU). The overall carrying capacity for 1984 Parcel Vans was 35712 tonnes as on 31 March 2016. As regards, availability of carrying capacity in terms of Brake Vans over the past three years, it was seen that 387 SLRs were allotted/added after 2013-14, which added a capacity of 1548 tonne (@ 4 tonner per SLR) for luggage and parcel traffic during this period. The number of Parcel Vans of various types inducted in ten Zonal Railways were 600[30].

The availability of carrying capacity in terms of Parcel Vans over the past three years for Indian Railways as a whole and Zonal Railway-wise breakup as well as indents pending was as follows:

Table 2.6 – Zonal Railway-wise position of parcel vans

Zonal Railway	As on 31 March 2014		As on 31 March 2015		As on 31 March 2016	
	Holding	***Indents Pending***	***Holding***	***Indents Pending***	***Holding***	***Indents Pending***
CR	343	0	360	0	363	0
ER	126	0	145	0	155	0
ECR	31	0	31	0	31	0
ECoR	14	107	14	125	14	111
NR	388	6879	360	5568	329	6556
NCR	12	292	12	379	11	234
NER	74	73	74	79	118	82
NFR	13	0	13	0	13	0
NWR	28	25	28	47	28	87
SR	249	472	252	426	270	0
SCR	168	0	185	0	184	0
SER	119	0	119	0	119	0
SECR	11	49	11	27	11	128
SWR	138	417	141	284	150	118
WR	170	NMA	185	NMA	173	NMA
WCR	15	0	15	0	15	0
Total	**1899**	**8314**	**1945**	**6935**	**1984**	**7316**

[30] CR – 94, ECoR – 9, NR – 201, NER – 68, NFR – 8, SR – 60, SCR – 26, SECR – 5, SWR – 69, WR - 60

It was observed that

- 8314, 6935 and 7316 indents for Parcel Vans were pending from various parties as on 31 March 2014, 31 March 2015 and 31 March 2016 respectively. The number of indents pending in NR was significantly high.
- Only three Zonal Railways (ECoR-391, NWR-159 and SWR-36) requested Railway Board for allotment of more Parcel vans since 2010-11.

Thus, the demand of Parcel Vans from the parties exceeded the available capacity of various Zonal Railways.

Regarding audit observations on inadequate capacity being added in terms of AGC/SLR/VPUs, Railway Board during Exit Conference, stated (February 2017) that capacity is not a constraint, as adequate capacity is available with the Railways. Railway Board further stated that the area of concern is utilization of available existing capacity. As regards outstanding indents Railway Board stated that it takes two to three days to make available VPUs at selected stations and indents outstanding would be seasonal phenomenon. They further stated that specific response to the cases mentioned by audit would be given in due course after reply from Zonal Railways is received.

2.1.6.2 Provisions and rates for leased Parcel Traffic carried through Parcel Vans

The Comprehensive Parcel Leasing Policy laid down rules and provisions for booking of leased parcel traffic through Parcel trains, parcel vans and SLRs. The policy allows for leasing out of Parcel vans on long term contracts, on round trip basis and by inviting bids through open tenders. The reserve price for leasing of Parcel Vans on round trip basis has been fixed at 1.5 times of the single journey freight at Scale R and P for trains notified under R and P/S category respectively. Further, for carrying parcel traffic on leased basis, the parties have to submit application in prescribed form for registration as lease holder by paying registration fee of minimum ₹ 25000 to ₹ one lakh (for Categories C to A). A copy of audited balance sheet is also to be submitted along with Service Tax registration number etc. The Divisional/Zonal office then verifies the relevant documents within a period of one month from the date of application. If the documents are found incorrect, the applicant would not be eligible for being registered as lease holder. The registration is required separately to be done for all divisions, where the applicant wishes to book parcel and is valid for five years. The registration of the applicants can be cancelled as a punitive measure due to repeated overloading, repeated failure to start loading, attempt to deliberately defraud railways or repeated violation of existing stipulations and the entire registration fee of the applicant is forfeited, registration cancelled from all locations and he is debarred from fresh registration for a period of five years. However, once registered a party can participate in all the tenders floated for leasing of available capacity in the division/Zonal Railways for the category for which he is registered.

In addition to non-refundable registration fee, earnest money of ₹ 1 lakh for SLR and ₹ 4 lakh for VP and security deposit (SD)/performance guarantee (PG) of ₹ 1 lakh for SLR and ₹ 4 lakh for VP are required to be deposited by the bidder as per the Comprehensive Parcel Leasing Policy. Similarly, for Parcel Cargo Express Train (PCET), earnest money of ₹ 10 lakh and SD/PG of amount equivalent to three round trip/single trip for up to five trips per month and for above five trips per month, amount equivalent to five round/single trip is required to be deposited by the bidder, as per the policy.

Further, laid down rules in respect of payment of compensation claims stipulate that, 'unless the consignor declares the value of the consignments and pays the percentage charge on excess value as per rules, the maximum amount of excess liability of the railways shall not exceed the amount calculated at the rate of ₹ 50 per kg'.

The above rules for booking of parcel traffic were not found to be customer friendly as discussed below:

- Leasing of parcel space is admissible to only those who are registered with IR Divisions for this purpose. The rationale of this requirement is not understandable. Those who are not registered can also be allowed to bid subject to payment of Earnest Money Deposit. If non-registered bidder win the bid, their compliance to terms and conditions of lease can be enforced through relevant agreement and security deposit. Registration as a pre-condition only adds to the complexity of process and discourages potential bidders. During Exit Conference, Railway Board stated (February 2017) that registration is done to discourage non-serious bidders, who not only outbid others, but also do not carry traffic as per the contract. Audit stated that customer unfriendly rules make the probable customer move to road sector and unless the rules are made customer friendly, it would be difficult to compete with road sector as not only they provide end to end services, they also provided services at competitive rates. A comparison of parcel rates for carrying 100 kgs for 100 kms by rail and road was done for a few pairs of origin and destination stations. It was seen that the rates for road were higher than rail, in some cases as given below and road was a cheaper mode of transport:

Table 2.7- Comparison of Railway Parcel Rate (Scale P) with Road Transport for distance of 100 km for 100 kg

ZR	From	To	Shortest distance (kms)	Truck freight rate (₹)	Parcel Rate for 100 kgs for 100 kms			
					Train Rate @ 'P' Scale in ₹	*Truck Rate in ₹*	*Month & Year*	*Authority*
CR	Pune	New Delhi	1596	5000 per tonne	55.86	31.33	Jul-16	Road rates obtained from Lease Holder at Pune.
ER	Kolkata	Chennai	1648	2813 per tonne	55.86	17.07	Dec-16	Truck rates between Indian cities displayed at www.infobanc.com/logtruck.htm

Table 2.7- Comparison of Railway Parcel Rate (Scale P) with Road Transport for distance of 100 km for 100 kg

ZR	From	To	Shortest distance (kms)	Truck freight rate (₹)	Parcel Rate for 100 kgs for 100 kms			
					Train Rate @ 'P' Scale in ₹	*Truck Rate in ₹*	*Month & Year*	*Authority*
WR	Ahmedabad	Howrah	2087	5000 per tonne	55.86	23.96	Dec-16	Rates intimated by Railway administration

- The Railway procedure requiring registration to enable interested parties to participate in the bids for leasing of parcel space are restrictive and not in the spirit of the objective of railway administration of receiving competitively higher priced bids for this leasing activity. Rules require separate registration for each division, which makes the process cumbersome for interested parties involving procedural and financial commitment without any assurance of a leased contract.
- The leasing of parcel space in SLRs/AGCs on a day-to-day basis is also permissible to only registered lease holders.
- If the registration of the applicant is cancelled as a punitive measure, all his leasing contracts from the divisions are also cancelled.
- The rule regarding allowing leased parcel traffic in VPUs on round trip basis at 1.5 times of the single journey freight is also a deterrent as a customer may not have necessary parcel traffic to carry both ways. During Exit Conference, Railway Board stated (February 2017) that if they allow one way leasing their SLR/VPUs will run empty in the return journey. They want genuine operators, therefore, they allowed leasing of SLR VPUs in both ways. Audit however, felt that the provision was not customer friendly.
- As regards, rules regarding compensation claims, railways have a limited liability towards loss or damage to booked goods. The rate prescribed was fixed in 1999, and has not been revised since. During the years 2015-16, IR paid an amount of ₹ 25 lakh to customers in 2891 claims cases (which works out to ₹ 865 per claim case). The value of the goods transported between 1999 and 2016 have risen manifold due to inflation. Consequently, unless the consignor pays additional charges, the risk of loss or damage is completely on him instead of railways. Thus, there is a need to revise these rates periodically, in order to adequately compensate the customer in case of loss/damage.

Thus, IR need to consider further simplification of procedure/rules governing booking of leased parcel traffic and make them customer friendly.

During Exit Conference, Railway Board stated (February 2017) that they have delegated powers to GMs, Zonal Railways wherein to attract parcel traffic, they can reduce rates and change conditions for booking of parcel traffic with the concurrence of associated finance.

2.1.6.3 Inadequate response for leasing parcel space

(a) Brake Van (AGCs/SLRs) lease contracts

The response to the tenders floated for lease of AGCs/SLRs was poor from cargo movers in all the Zonal Railways as seen from the below:

Table 2.8 - Offers received against AGCs/SLRs offered for leasing

Zonal Railway	No. of AGC/SLR offered for leasing	No. of offers received for AGC/SLR from parties	Percentage of offers received	Number of allotments made for SLR/AGC
CR	1355	412	30.41	172
ER	864	378	43.75	159
ECR	325	19	5.85	19
ECoR	1302	94	7.23	48
NR	1380	1708	123.77	541
NCR	314	57	18.15	39
NER	910	94	10.33	37
NFR	241	49	20.33	20
NWR	934	178	19.06	144
SR	803	281	34.99	119
SCR	3825	342	8.94	114
SER	604	94	21.83	94
SECR	342	59	17.25	36
SWR	585	90	15.38	81
WCR	239	50	20.92	47
WR	3170	348	1097	255
Total	**17193**	**4253**	**24.74**	**1925**

As can be seen,

- The patronage for leased parcel space in Brake Vans was less than 50 *per cent* in most of the Zonal Railways except in NR where it was 124 *per cent*. The reasons for poor patronage were high reserve price, delay in finalisation of tenders and large number of procedural requirements for leased parcel traffic etc.
- Further, as against the offers received, the number of allotments made was only 45 *per cent*.
- In six[31] Zonal Railways, less than 50 *per cent* of the total trains running were offered for SLR lease during the period of review.

Annexure 2.3

(b) Parcel Vans/Parcel Trains lease contracts

Similarly, the response to the tenders floated for lease of Parcel Vans/Parcel Trains was also poor from cargo movers in many Zonal Railways as seen from the below:

[31] ECR (18 *per cent* for 2014-15), NR (26 *per cent* to 43 *per cent* during 2014-15 and 2015-16), NCR (42 *per cent* to 47 *per cent* during 2014-15 and 2015-16), NFR (1 *per cent* to 30 *per cent*), SR (26*per cent* for 2014-15) and WCR (32 *per cent* for 2014-15)

Table 2.9 - Offers received against Parcel Vans/Parcel trains offered for leasing

Zonal Railway	No. of Parcel Vans/Parcel trains offered for leasing	No. of offers received for Parcel Vans/Parcel trains from parties	Percentage of offers received	Number of allotments made for Parcel Vans/Parcel trains
CR	28	10	39.29	4
ER	21	83	395.24	13
ECR	0	0	-	0
ECoR	8	19	261.25	2
NR	0	0	-	0
NCR	4	1	25.00	1
NER	1	2	200.00	1
NFR	2	2	100.00	2
NWR	28	15	53.57	5
SR	39	47	120.51	20
SCR	104	31	29.81	06
SER	27	8	29.62	7
SECR	3	5	166.67	2
SWR	4	4	100	4
WCR	54	8	14.81	8
WR	42	21	50	18
Total	**365**	**266**	**72.88**	**93**

As can be seen,

- As against the offers received, the number of allotments made was only 35 *per cent*.
- No offer was received in respect of 227 (CR-18, NCR-3, NWR-1, SR-13, SCR-73, SER-19, SECR-21, WCR-46 and WR-21) VPs/Parcel Trains offered for leasing by seven zones.
- While offers received were far less than space offered on lease, railways did not allot Parcel Vans in 65 *per cent* of cases. As such, leasing space in Parcel Vans remained unutilized.

Thus, response for booking of leased parcel traffic through AGCs/SLRs/Parcel Vans/Parcel trains was inadequate. Despite the fact that CCMs of Zonal Railways were given additional powers in 2014 to modify some of the conditions of prospective lease contracts, which were in the spirit of maximization of revenue, there was no significant improvement in the response for lease traffic in SLRs.

Review of various lease contracts of Parcel Trains/Parcel vans/SLRs revealed deficiencies in tender finalization and operational arrangements. Some of these cases are discussed below:

- In CR, tender for leasing of space in Parcel Express Train between Kalyan and New Guwahati on single trip basis for three years[32] was floated on 24 June 2014. Offer from M/s Esquire Express & Courier Services, Howrah for ₹ 36.56

[32] Composition of Parcel train - 20 VPs + 1 Brake van

lakh per trip for 576 trips with total earnings of ₹ 210.58 crore and from M/s Gati Kintetsu Express Pvt. Ltd. for ₹ 35.24 lakh per trip for 576 trips with earnings of ₹ 202.98 crore were received. CR Administration accepted the highest offer. Letter of acceptance was issued on 12 November 2014. However, M/s Esquire did not commence loading, ultimately leading to termination of the contract on 26 December 2014. It was observed that while finalising the tender, tender committee did not take into account the CCM/ER's letter of July 2014 intimating all ZRs, cancellation of registration of M/s Esquire Express & Courier Services, Howrah due to default in four contracts of licensing. By taking into consideration the past performance of the highest bidder, CR Administration could have awarded the contract to the next highest bidder i.e. M/s Gati Kintetsu Express Pvt. Ltd. for a total contract offer value of ₹ 202.98 crore and earned a revenue of ₹ 88.10 crore for the period from 11 December 2014 to 31 March 2016.

- In ECoR, a tender was floated in August 2015 for leasing of parcel vans of two trains (18507/08, 12807/08) on round trip basis. In response, three offers were received for train No. 18507/18508 (tri-weekly) for leasing of parcel van from Visakhapatnam to Amritsar. Out of the three tenderers, the highest bidder was not a registered lease holder at the time of offering his bid. The other two tenderers were registered lease holders in Category A. Tender Committee while examining tender notification observed that the Tender Notice issued was contrary to the instructions contained in Comprehensive Parcel Leasing Policy of 2014, as it invited all the interested parties to participate in the tender process without specifically mentioning that only registered lease holders could participate in the tender. Hence, the Tender was discharged on 5 January 2016. Owing to the flawed tender notification, the Parcel Van of Train No. 18507/08 could not be awarded to the eligible second highest bidder, who quoted a price of ₹ 3.07 lakh per trip, and railways lost an opportunity to earn ₹ 1.56 crore[33].

- In ECoR, a tender was floated in October 2014 for leasing of SLRs in 45 trains. In response, two offers were received for SLR in two trains (18507 ex Vishakhapatnam - Amritsar and 18573 ex Vishakhapatnam- Bhagat Ki Kothi). The tender for leasing of SLRs was awarded in March 2015 to the lone bidder for each train, at quoted price of ₹ 36,890 per trip (two trips in a week) for train No.18507 and ₹ 19,500 per trip (once in a week) for train No. 18573 for a period of three years. The party was to commence the lease by 17 April 2015. The party requested Sr.DCM/Waltair to permit extension of 15 days due to demise of his grandfather. Sr.DCM/Waltair granted the extension of 15 days with instructions that the party may execute the agreement and commence the lease on or before 02 May 2015. The tenderer approached Sr.DCM/Waltair for execution of agreement on 05 May 2015 stating that he could not come to execute the agreement on 02, 03 and 04 May 2015 being holidays. Condonation of delay beyond 15 days was referred to the higher

[33] For 51 round trips between 04.12.2015 to 31.03.2016

competent authority, CCM/FS/ECoR. After a lapse of about eight months, CCM/FS/ECoR instructed Sr. DCM/Waltair in January 2016 to include these two trains in fresh tender by forfeiting the EMD as the party failed to execute the agreement. As such, despite poor response to the tender (only five offers were received for leasing of 45 trains), fresh tender was called for. As a result of delay in taking decision, the lease could not materialize and railways lost an opportunity to earn ₹ 43.84 lakh[34].

- SR awarded a Parcel Cargo Express Train contract to Central Railside Warehouse Company Ltd. (CRWC) from Chalakudi to Moga at a rate of ₹ 41.12 lakh per round trip for a period of three years[35]. Lessee was to operate 156 trips on every Wednesday from Chalakudi and every Thursday from Moga. After operating 18 round trips up to 11 February 2015, CRWC withdrew (September 2015) the contract citing the reasons like delayed placement of rakes, long transit time etc. As per time tabled path, the transit time from Chalakudi to Moga was 95 hours and 45 minutes. It was observed that in all the 18 trips, there were delays in transit to the destination ranging from 37 to 157 hours. Thus, failure of Railway Administration in ensuring availability of satisfactory operational arrangements for running of Parcel Cargo Express Train resulted in loss of potential earnings of ₹ 55.52 crore[36].
- As per rules (FM Circular 03 of 2008), 50 *per cent* concession is granted in the freight to orange, mango and banana traffic when booked and transported in rakes consisting of BCN/BCNA/BCX wagons and freight is charged at parcel rates under Scale P minus 50 *per cent*. The freight is realized for the actual number of wagons supplied subject to minimum freight at concessional rates for 38 wagons. In CR, 17 rakes of BCN wagons and three rakes of VPUs were booked from Savda, Nimbhora and Raver during 2013-14. Similarly, 93 rakes of VPU were booked from Savda and Raver during 2014-15. However, in 2015-16 no banana traffic was loaded from these three stations. Banana traffic in parcels which was ₹ 8.17 crore in 2012-13, ₹ 3.48 crore in 2013-14 and ₹ 12.58 crore in 2014-15 from these stations came down to zero in 2015-16. Reasons as gathered from CR administration were failure of crops, delay in delivery at destination station, market conditions, demand for concession in VPU rakes as admissible for loading of Banana in BCN/BCNA/BCX wagons rakes i.e. 50 *per cent* concession in Scale 'P'. Farmers/ traders also had complaints in respect of enroute weighbridge at Jhansi where re-weighment was done.
- In NCR, a lease contract was awarded for round trip of Parcel Vans of train number 13007/08 (Kanpur Central - Howrah-Kanpur Central). Contractor commenced loading from 16 March 2013. However, due to non-permission for loading of raw material from platform at Howrah, declaration of VP as sick after loading of VP and lack of cooperation from ER Administration,

[34] ₹ 9,16,500 in respect of train No. 18573 for 47 trips and ₹ 34,67,660 in respect of train number 18507 for 94 trips during the period from 05.05.2015 to 31.03.2016.
[35] from 15.10.2014 to 14.10.2017
[36] 156 trips (-) 19+2 trips = 135 trips x ₹41.13 lakh

contractor moved to the High Court, Kolkata on 19 April 2013. The contractor vide letters dated 27 May 2013, 14 June 2013, 11 July 2013, 2 September 2013 and 14 October 2013 requested Railway Administration for supply of VP for commencement of loading of round trip VP. However, NC Railway Administration neither terminated the contract nor provided VPs for loading till 14 Ocotber 2013. The loading resumed from 15 Ocotber 2013 after a lapse of 171 days. Thus, indecisive action of Railway administration towards operation of leased VPs resulted in loss of revenue of ₹ 2.37 crore.

- In NWR, a tender was invited in September 2014 for leasing of PCET from Khori to Royapuram comprising 20 VPs and one Brake Van, on round trip basis, for three years, with minimum of two trips in a month. The reserve price was fixed as ₹ 34.85 lakh per round trip. The tender was opened on 01 October 2014 and only one offer was received. In its offer, party quoted the rates equivalent to the reserve price, with a condition that the party should be allowed and provided rakes for three trips in a week. Letter of acceptance was issued to the party on 03 January 2015. Minimum two trips per month were to be conducted for three years. Railway Administration, however, failed to provide time-table for the train and the party requested the Senior DCM/NWR, Jaipur on 09 October 2015 to refund the earnest money of ₹ 10 lakh. The contract was cancelled and the earnest money was refunded to the party in March 2016. Thus, Railway Administration failed to tap the revenue of ₹ 34.85 lakh per round trip for three years for its inaction in supply of rakes and fixing time table for the same. This resulted in loss of opportunity to earn ₹ 10.45 crore during January 2015 to March 2016.

- SER Administration enhanced the Parcel Rate in respect of three trains viz., 58017 (Kharagpur-Asansol), 58025 (Kharagpur-Hatia) and 58603 (Kharagpur-Dhanbad) from Scale S to R. Due to increase in rate, the traffic shifted from railway to road. There was a sharp fall of 36.58 *per cent* in weight carried and 24.65 *per cent* in earning during June 2015 to October 2015 in comparison to June 2014 to October 2014. The earning for the period reduced by ₹ 0.63 crore. Scrutiny of Audit revealed that upgradation of parcel rate was done erroneously. Finally, SER Administration upgraded the scale from R to S in March 2016.

Therefore, while on one hand railways could not provide adequate space for booking of non-leased indented parcel traffic as against demand, it lost opportunity for earning parcel revenue from leased traffic, since the services were not customer friendly and there were delays/deficiencies in their decision making. The rules were not customer friendly could also be seen from the fact that the term and conditions were very strict and rigid.

2.1.6.4 Delays in finalization of lease contracts

As per laid down provisions[37], Division/Zonal Railways should take timely action

[37] Para 8.2 of the Comprehensive Parcel Leasing Policy

to call for fresh tenders for parcel leasing contract at least two/three[38] months before the expiry of the existing parcels leasing contract. During the review of 131 tenders processed over various Zonal Railways in 33 selected divisions, it was observed that that the Divisions could not finalize lease contracts within the prescribed period of two/three months and there were delays from one day to 240 days[39] in finalization of lease contracts in respect of 795 trains.

Delay in finalization of tenders not only resulted in loss of parcel earnings of ₹ 80.55 crore over 16 Zonal[40] Railways, it also gave an indication to the parties, that Railways were not keen on timely finalization of contracts and providing services to them, thereby resulting in loss of potential goodwill.

Annexure 2.4

During the Exit Conference, Railway Board stated (February 2017) stated that they have started e-tendering for leasing out space in SLR on pilot basis in Delhi which will improve the time taken for finalization of contracts.

2.1.6.5 Delays due to non-receipt of clearance from destination Zonal Railways

As per rules[41], in all cases of leasing of parcel space of the parcel vans, before inviting tenders the Zonal Railway (owning/destination Zonal Railway) who intends to lease out parcel vans, must obtain prior consent and operational clearance (NOC) from the Zonal Railway of the other end. The operational clearance/NOC should be issued by the concerned Zonal Railway within a period of 15 days.

Lease contracts for running of 100 VPs/VPUs/VPHs were awarded during the period of review by inviting tenders on round trip basis with operational clearance from destination Zonal Railways. It was observed that due to delays in obtaining/receiving clearances from destination Zonal Railways, the lease contract could not be awarded on time in 32 trains in five Zonal Railways and Railways lost the opportunity for booking leased parcel for 2 to 753 days resulting in loss of potential earnings.

- Due to non-receipt of operation clearance from ER, NFR, SER and ECR for running of VPs, CR could not award lease contract for running of VPs on round trip basis during January to September 2013 and had lost potential earnings of ₹ 4.85 crore in five cases.

- In July 2013, SER sought operational clearance from CR for running of VP in weekly Train No. 22893/22894 Howrah-Sainagar Shirdi. STM (Cog) in July

[38] FM Circular of 2006 and 2014 respectively

[39] CR-4 to 48, ER-5 to 167, ECR-2 to 148, ECoR-5 to 55, NR-1 to 240, NCR-3 to 37, NER-2 to 58, NFR-8 to 124, NWR-1 to 73, SR-7 to 102, SCR-1 to 74, SER-3 to 222, SECR-8 to 88, SWR-28 to 35, WR-1 to 90, WCR-1 to 82

[40] CR-₹ 0.33 cr, ER-₹ 10.03 cr, ECR-₹ 0.39 cr, ECoR- ₹ 0.48 cr, NR-₹ 15.11 cr, NCR-₹ 0.25 cr, NER-₹ 0.71 cr, NFR-₹ 0.91cr, NWR-₹ 2.15 cr, SR-₹ 19.77 cr, SCR- ₹ 3.41 cr, SER- ₹ 15.20 cr, SECR- ₹ 1.23 cr, SWR-₹ 0.34 cr, WR- ₹ 8.62 cr, WCR-₹ 1.60 cr

[41] Para 50.1 of FM Circular 6 of 2014

2013 intimated CCM (FS) that attachment of VPH in this train was not feasible due to lack of infrastructure for handling of parcels. DCM/Solapur, however, stated that the facility is available at Sainagar Shirdi for loading/unloading of VPs. CR Administration in July 2016 stated that the NOC was not issued so far. Thus, SER lost opportunity to book leased parcel traffic and lost potential earnings of ₹ 2.72 crore. CR also did not take action to bring about improvement in the infrastructure facility at Sainagar Shirdi station for facilitating traffic in future.

- On ER, loss of parcel earnings due to delay in operational clearance from ECR, NR, NCR, NFR, NWR, WR was assessed as ₹ 16.74 crore.
- In NER, loss of parcel earnings due to delay in operational clearance from SER was ₹ 0.95 crore.
- In WR, loss of parcel earnings due to delay in operational clearance from NR was ₹ 0.69 crore.

Annexure 2.5

Operational clearance was an internal matter of Railway Administration and delay in grant of the same in above cases showed poor customer services and resultant loss of potential earnings. Besides loss of parcel earnings, casual approach towards internal processes may lead to loss of potential goodwill.

2.1.6.6 Cancellation of indents of Parcel Vans by parties due to non-supply by the railways

Records of Zonal Railways at 36[42] selected parcel depots for one month each during the three years of review period where maximum number of cancellation of indents were on account of non-supply of VPs by Railway Administration were reviewed. It was observed that

- During 2013-14 to 2015-16, 1451 indents for Parcel Vans (1421 for single VPU and 30 for Parcel special train) were cancelled due to non-supply by Railway Administration in 13[43] Zonal Railways.
- In ER, at Sealdah and Howrah Parcel depots, 402 indents for VPs were cancelled by the ER Administration during April 2014, as there was imposition of restriction by NFR for movement of VPs for the destination stations.
- In case of short supply of VPU /VPH, detailed reasons for non/short supply duly certified by the Gazetted Officer were to be recorded on Parcel Way Bills[44]. It was seen that none of the Zonal Railways recorded reasons for non-supply/short supply of Parcel Vans to parties.

[42] CR-5 (3 for VP- Lokmanya Tilak Terminus, Wadi bunder, Pune (different location for different year) and 2 for PST-Kalyan, New Delhi and one for PST-Tughlakabad) , NCR-2(Agra Fort, Kapur Central), NER-2 (Gonda, Kashipur), NFR-2 (VP-Katihar, New Jalpaiguri), NWR-2(Jaipur, Jodhpur), SR-3-Thiruvananthapuram Central, Chennai Egmore, Coimbatore (different location for different year), SCR-2(Secunderabad, Vijaywada), SER-2 (Shalimar, Ranchi), SECR-2(Bilaspur, Itwari), SWR-3(Two for Vasco, Bangluru and one for PST-Vasco), WR-2 (Palanpur, Vapi), WCR-2(Jabalpur, Shamgarh).

[43] CR-170 (144 VP + 26 PST), ER-402, ECoR-4, NR-703(702+1), NCR-19, NER-6, NFR-2, SR-51, SCR-36 ,SER-43, SWR-7(6+1), WR-7 (5+2), WCR-1

[44] Para 2.3 of FM Circular 17 of 2010

- In CR, at Taloje Panchnand, 19 Parcel Special Train indents were cancelled by the parties during 2013-14 to 2015-16 due to non-supply of VPs by the Railway Administration within 10 days. Railways lost potential parcel earnings of ₹ 4.41 crore, and lost the traffic to other modes of transport.
- In CR, during 12/05/16 to 24/07/2016 it was observed that one VPH (23 tonne capacity) was running empty from Lokmanya Tilak Terminus to Shalimar along with train No. 18029. This resulted in loss of potential earnings of ₹ 49.29 lakh[45].
- Test check of 40 Parcel Depots/stations for three months during the period of review revealed that the loss of potential parcel earnings due to cancellation of indents by the indenting parties on Railways' account in 12[46] Zonal Railways was ₹ 14.56 crore.

Annexure 2.6

Cancellation of indents for VPs due to non-supply by Railway Administration, not only results in loss of potential earnings to Railways, but also diversion of the traffic to other modes of transport.

As per laid down rules[47], before commencing to load goods into wagons, care should be taken to see that wagons are suitable for the traffic to be loaded. For indents placed for the supply of Parcel Vans by the parties at Parcel depots, it is the responsibility of the Railway Administration to supply fit Parcel Vans duly checked by Carriage & Wagon staff for loading by the indenter. Test check of records of Zonal Railways for the period of review revealed that 24 parcel vans (CR-10, ER-13 and NR-1) were declared sick after loading and remained idle for a period ranging between one to 15 days. In these cases, the cargo was transferred and loaded to another Parcel van after one to four days, thereby delaying the time to reach the destination.

Declaring wagons/parcel vans sick after being loaded has an impact on the services provided to the parties and can impact the continuation of services in future. Railways also lost an opportunity to earn ₹22.25 lakh (CR- ₹18.27 lakh and NR- ₹3.98 lakh) in these cases.

2.1.7 Weighment arrangements, overloading and punitive charges - Parcels Vans, AGC/SLRs

Weighment of parcel/freight carried by the railways, is a necessary control measure to ensure that no overloading over and above the permissible weight takes place and railway tracks remain safe for operations. Weighment is also necessary to ensure that revenue due to the railways is received and there is no leakage of revenue.

[45] ₹1,69,894 per trip x 29 empty trips
[46] CR-₹ 7.97 crore, ECoR-₹0.07 crore, NR-₹ 3.83 crore, NCR-₹0.23 crore, NER-.₹0.11 crore, NFR-₹0.02 crore, SR-₹0.69 crore, SCR-₹0.55 crore, SER-₹0.45 crore, SWR-₹0.25 crore,WR-₹0.38 crore, WCR-₹0.01 crore
[47] Para 1506 (3) of Indian Railway Commercial Manual Vol. II

2.1.7.1 Weighment of leased parcel traffic at originating stations

The originating stations are required to weigh at least 20 *per cent* of the total leased parcel traffic on a daily basis in such a manner that the entire leased traffic, originating from a station, is weighed in rotation. Records of such weighment should be maintained in Weighment Registers in the Parcel depots. Review of records pertaining to weighment of leased parcel traffic in 156 selected depots showed that

- Weighment Registers were not maintained at 36[48] out of 156 selected parcel depots of ten Zonal Railways.
- Weighment of 20 *per cent* of outward leased parcel traffic as prescribed by Railway Board was not being done by any of the Zonal Railway except ECR at the parcel depots test checked.
- During the review period, leased parcel traffic was never weighed at 39[49] originating stations over 12[50] Zonal Railways. In CR, no VPs were weighed at Pune.
- The reasons for non weighment of parcel traffic were shortage of staff and non-availability of separate weighing machine (ECoR, NR, WR), lack of sufficient time for weighment (ECoR and SER) and non-working of in-motion weighbridge at Tughlakabad (NR) and inadequate infrastructure and no order of competent authority for weighment of loaded SLR (SER).

Annexure 2.7

2.1.7.2 Weighment of outward leased parcel traffic *enroute*/ at destination

(a) Weighment of Parcels Vans

Parcel vans attached to certain Mail/Express/Passenger trains of different capacities are leased to private parties for arranging parcel traffic. Loading and unloading thereof is done by their own staff. Railway Board in July 2009 advised Zonal Railways that all weighbridges installed/commissioned under Indian Railways can be utilized for weighment of parcel vans duly modifying software in the system. It was further instructed that JPO may be issued by CME, CCM and COM by August 2009 so as to implement the procedure early. Railway Board, reiterated[51] the instructions to the Zonal Railways and advised them to issue Joint Procedure Order (JPO) and confirm the same to Railway Board.

Records of *enroute* weighment of Parcel Vans and weighment advices received at zonal/ divisional headquarters were reviewed and it was observed that:

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[48] CR-4 (Chatrapati Shivaji Terminus, Lokmanya Tilak terminus, Wadibunder, PA),ECoR-3 (Vishakhapatnam, Bhubaneshwar, Puri), NCR-3 (Jhansi, Mathura, Gwalior), NER- 5 (Lucknow, Gorakhpur, Kathgodam, Chhapara, Allahabad City), NFR-3 (Katihar, New Jalpaiguri, Guwahati), NWR-3 (Ajmer, Jaipur, Udaipur), SR- 6(Chennai Egmore, Thiruvananthapuram Central, Madurai, Ppmdocjerry, Mettupalayam, Kanniyakumari), SER-4 (Abada/Sankrail, Kharagpur, Santracachi, Hatia), SWR-2 (KSR Bangaluri, Hubli), WCR-3 (Katni, Rewa, Kota)

[49] CR-1(Lokmanya Tilak Terminus), ECoR-3(Vishakhaptnam, Bhubaneswar, Puri), NR-1(Firozpur), NCR-3 (Jhanshi,Gwalior, Mathura Junction), NER- 5 (Luknow NE, Gorakhpur, Kathgodam, Chhapra, Allahabad City), NFR-3 (Katihar, New Jalpaiguri, Guwahati), NWR-5 (Sri Ganganagar, Udaipur, Ajmer, Jaipur, Bhiwani), SR- 9 (Chennai Central, Irinjalakuda, Aluwaye, Alleppey, Kanniyakumari, Mettupalayam, Pondicherry, Thiruvananthapuram Central), SCR-2 (Renigunta, Tirupati), SER-4 (Abada/Sankrail, Khargpur, Santragachi, Hatia), SECR-1 (Bilaspur), SWR-2 (Yashwantpur, KSR Bengluru)

[50] CR, ECoR, NR, NCR, NER, NFR, NWR, SR, SCR, SER, SECR, SWR

[51] In reply to Para 2.1 of Report No 26 of 2014

- JPOs as directed by Railway Board in July 2009 for utilisation of all weighbridges installed/commissioned in Indian Railways for weighment of parcel vans duly executing some software modification in the system were not found on record in any of the Zonal Railways.
- During the period of review, out of 45850 Parcel Vans booked from selected parcel depots, only 9128 were weighed *enroute*. 36722 Parcel Vans (80 *per cent*) were not weighed *enroute*. *Enroute* weighment advices were also not received in these cases.
- Out of 5135 Parcel Vans booked from CR and SR during the period of review, overloading was detected on every occasion of test weighment done (CR-3, SR-14) *enroute*.
- If all leased Parcel Vans booked during the period of review were checked for overloading, on a proportionate basis, railways would have earned by way of additional revenue and penalties ₹ 91.98 crore at selected locations in three zones[52].

Such large scale non-weighment of Parcel vans not only results in leakage of revenue in terms of penalty and charges for tonnage carried over and above the allowed capacity, it enhances the risk of overloading and damage to rolling stock and tracks affecting safe operations of passenger trains.

Annexure 2.8

(b) Weighment of AGC/SLRs

Records of *enroute* weighment of AGC/SLRs and weighment advices received at zonal/divisional headquarters of Zonal railways were reviewed and it was observed that:

- During the period of review, out of 562907 AGC/SLRs booked from selected parcel depots, only 40752 were weighed *enroute* and 522155 AGC/SLRs i.e. 93 *per cent* AGC/SLRs were not weighed *enroute*.
- In respect of AGC/SLRs booked from selected locations of four Zonal Railways[53], overloading was detected in most of the cases weighed *enroute*.
- In five Zonal Railways (ER, NER, SER, NFR and WCR), no AGCs/SLRs were weighed *enroute.*
- If all leased AGCs/SLRs booked during the period of review were checked for overloading, on a proportionate basis, railway would have earned by way of additional revenue and penalties of ₹ 475.62 crore at selected locations in four zones[54].
- The details of defaulters in respect of whom the overloading has been

[52] CR- 2.85 cr, NR-0.07 cr and SR- 89.07 cr
[53] CR - 73 out of 74 weighed, ECoR-6 out of 6, SR - 67 out of 67 and WR - 4 out of 4
[54] CR- ₹ 329.59 crore, ECoR- ₹ 0.88 crore, SR- ₹ 139.19 crore and WR- ₹ 5.96 crore

noticed/detected are also required to be sent to the Parcel Depots so that they can watch and stop after 4th default. However, such particulars were not being received by Parcel Depots from any *enroute* or destination station.

Annexure 2.9

(c) Joint inspection of two Inward trains

Joint inspection of two inward trains (SLRs or AGC) at terminating stations of Zonal Railways was conducted by audit along with Chief Commercial Inspectors/Travelling Inspectors of Accounts during August 2016 to October 2016.

- During the re-weighment of the SLR/ AGC (inward) of 32 trains over all Zonal Railways, overloading was detected in five trains in five[55] Zonal Railways and an amount of ₹ 1.80 lakh[56] was recovered as a penalty for overloading in excess of permissible carrying capacity.
- Penalty of ₹ 5000/- each was recovered in SECR and NWR Railway for excess packages found against the declaration in manifesto.
- It was also observed that in few cases number of packages found during the joint inspection were less than the packages declared in manifesto. Reasons for the same were not on record.
- In WR, during joint inspection in presence of representative of the contractor of parcel loaded in Assistant Guard Cabin of train No. 12926 at Bandra Terminus on 14 September 2016, overloading was detected on re-weighment.

Annexure 2.10

2.1.7.3 Punitive charges due to overloading of leased parcels

Para 27.4 of Comprehensive Parcel Leasing Policy of 2014 stipulates that if weight of parcels exceeds the permissible carrying capacity of any coaching vehicle viz. VPs/SLRs/AGCs, punitive charges shall be recovered from the consignor/leaseholder. The punitive charges would include normal lumpsum leased freight for weight in excess of permissible carrying capacity of vehicle plus punitive charges equivalent to six times the freight at Scale – R for entire excess weight from origin to destination irrespective of the point where such over loading was detected, and a penalty of ₹ 10,000/- per vehicle. In addition to above penalty, Railway will terminate the contract after 4th default by forfeiting 'Security/Performance deposit'. Division where such excess weight was detected would communicate to the lease allotting division/railway, which in turn will take necessary action like termination of lease, cancellation of registration etc.

During test check of records relating to recovery of punitive charges for overloading of leased parcels at 156 selected parcel depots, it was observed that:

[55] NR, NFR, NWR, SECR and WR
[56] NR- ₹ 33450, NFR- ₹ 23560, SECR- ₹ 38572 WR- ₹ 84000

- In NCR, in Agra Division overloading was detected in SLR – I and II of train No. 13168. However, penalty of ₹10,000/- for overloading for only one vehicle was recovered whereas penalty of ₹10,000/- for other vehicle and normal lump sum leased freight for weight in excess of permissible CC of vehicle plus punitive charges equivalent to six times the freight at Scale – R for entire excess weight amounting to ₹ 3.06 lakh were not recovered. The joint inspection of two leased SLRs of two trains i.e. No. 14152 (FSLRII) and 12034 (FSLR) on 29.08.2016 at Kanpur Central revealed that number of packets declared in manifest were more than the actual number of packets loaded. Descriptions of parcels were not included in manifest and columns of description were filled as Bundels.
- In NER, at selected depots no records regarding penalty imposed for overloading were maintained.
- In NFR, in four cases of overloading, punitive charges of ₹ 1.22 lakh were charged less. Similarly, contracts were not terminated on detection of overloading for 4 times in Train No. 13147-AGC, 15 times in Train No. 13147-FSLR and 4 times in Train No 15721-AGC.
- In SECR, outward leased SLR/AGC/VPUs were not weighed regularly.
- On CR, a lease contract for loading of four tonne R-SLR by train No. 12101 was awarded for ₹ 30,093/- per trip for a period of three years from 05 February 2013 to 04 February 2016. Overloading of 3125 kgs was detected (1st default) at Nagpur on 04 December 2013. In contravention of the clause 27.4 (iii) of Parcel Leasing Policy 2006, Railway Administration terminated the contract on 10 January 2014 after 1st default. Party went in Arbitration and the sole Arbitrator passed the award on 10 December 2014 and party started loading again from 06 January 2015. During the period of termination of contract from 10 January 2014 to 06 January 2015, SLR (4 tonnne) moved empty resulting in loss of earnings of ₹ 62.59 lakh (₹ 30,093 x 52 x 4 trips per week).
- In ER, in case of leased VP of train No. 13049/50, instance of fourth overloading was noticed during the contractual period. In all the four instances, punitive charges for excess weight were recovered. However, the contract was not terminated till 31 March 2016.

Thus, adequate weighment arrangements were not made/ensured by the railways for weighment of leased parcel traffic. On the other hand, rules were framed for termination of contracts after fourth default of overloading. These were however not a deterrent as weighment was not being done as a regular measure to check overloading despite laid down norms. Railways need to ensure provision of weighment facilities for parcel traffic for weighment of parcel traffic, rather than waiting for the fourth default to terminate the contract.

Railway Board during the Exit Conference stated (February 2017) that instructions were given to weigh 20 *per cent* of the outward leased parcel traffic by all Zonal Railways. Audit pointed out that the same were not being followed in most of the Zonal Railways. They further stated that practically, it was not possible to weigh all leased parcel traffic due to constraints such as staff and space. Audit, however, stated that Railway should provide adequate weighment facilities and ensure weighment instead of not weighing the leased traffic and then terminating the contract after fourth default of overloading.

2.1.8 Other issues

2.1.8.1 Over carried parcels

As per rules[57], Guard/ Assistant Guard of the train is required to check the entries in the parcel summary with the packages and that the way bills have been received. On reaching the destination, the Guard should hand over all summaries duly signed together with a covering memo to the Station Master. Rules[58] further stipulate that 'when parcels are over-carried on the home line, the Station Master of the station to which the parcels have been so over-carried will book them back to the correct destination under a free parcel way-bill, which will be accounted for in the books of outward and inward stations and in returns submitted to the Traffic Accounts Office in the same manner as other waybills. However, parcels over-carried from other railways should be rebooked to destination 'To pay' at the ordinary tariff rates, the outstanding being cleared through a certified overcharge sheet. Provisions[59] also exist for supervision of loading of parcels in the order of delivery in various *enroute* stations and also for correct unloading of parcels at the destination stations. Indiscriminate loading without observing the geographical order leads to difficulties for intermediate stations to locate and unload parcels booked to those stations within the limited stoppage time of the train.

Test check of records of over carried parcels for two months (June 2015 and November 2015) maintained at 32[60] selected stations revealed that

- Over-carried Parcel Registers were not being maintained properly on any of the Zonal Railways showing details of scale, weight, charges, consignee etc. Only number of packages, originating station and destination station were mentioned.
- In the two months test checked, railways had to carry, 13565 over carried parcels back to their original destinations, which involved financial implication of ₹ 0.96 crore in sixteen[61] Zonal Railways.

[57] Para 940 and 942 of Indian Railway Commercial Manual (IRCM), Volume I
[58] Para 972 of IRCM Volume I
[59] Para 935 to 939 of Indian Railway Commercial Manual (IRCM) Volume I
[60] Two parcel depots selected per Zonal Railway
[61] CR-₹ 11.68 lakh, ER-₹ 13.04 lakh, ECR- ₹2.55 lakh, ECoR-₹14.81 lakh, NR-₹6.59 lakh, NCR-₹0.63 lakh, NER- ₹ 5.15 lakh, NFR-₹5.42 lakh, NWR- ₹ 5.00 lakh, SR- ₹4.06 lakh, SCR- ₹1.93 lakh, SER- ₹ 1.96 lakh, SECR- ₹10.05 lakh, SWR- ₹ 2.94 lakh, WR- ₹ 9.19 lakh ₹ WCR-₹ 1.28 lakh

- No parcel way bills were prepared in any of the Zonal Railways for return journey of over carried parcels to actual destination stations on home lines. Packages were simply loaded in concerned trains after making entries in the Registers at Parcel depots.
- In respect of parcels over carried over foreign Railways, no rebooking was being done in any of the Zonal Railway. Packages were re-sent to their destinations after loading in concerned trains without preparation of Parcel Way Bills.
- Over-carried parcels were not re-weighed at any of the selected parcel depots.
- Over-carrying of parcels at parcel office was attributed to indiscriminate and haphazard loading at different stations, insufficient stoppage at concerned destination stations, placement of longest distance parcel at the doors of SLRs/AGCs/VPs i.e. failure to load parcels in the order of delivery, shortage of parcel staff at parcel offices, platforms being on the opposite side to sealed/padlocked doors of SLRs/AGCs/VP etc.
- Further, during test check of over carried parcels at few selected locations, peculiar cases of over carried parcels were noticed as follows.

a. In CR, one packet originally booked from Pune to Howrah vide PW Bill No. 440689 was over carried to Mumbai CST on 09/06/2015 by Train No. 16340.

b. In CR, one packet originally booked from Firozpur to Chennai vide PW Bill No. 458282 was over carried to Mumbai CST on 10/06/2015 by Train No. 12138.

c. In CR, one carton originally booked from Raipur to New Delhi vide PW Bill No. 551935 was over carried to Mumbai CST on 04/11/2015 by Train No. 11058.

d. In CR, one Motor Cycle originally booked from Firozpur to Tata vide PW Bill 342160 was over carried to Mumbai CST on 11/11/2015 by Train No. 12138.

e. In SR, a motor cycle booked from Habibganj to Agra Cantonment was wrongly loaded in Train No.12644 (NZM-TVC) and over-carried up to Thiruvananthapuram Central involving an additional distance of 5652 kms.

f. In SR, in another case, parcels booked from Kanpur Central to Nagpur in T. No. 12511 (Gorakhpur- Thiruvananthapuram Central) were not unloaded at Nagpur and over carried up to Thiruvananthapuram involving additional distance of 4000 kms.

g. In WR, two packets booked from Bandra Terminus to Kota vide PW Bill No. 2000619209 were over carried to Bandra Terminus on 2 June 2015

by Train No. 22934.

h. In WR, eleven packets booked from Bandra Terminus to Gorakhpur vide PW Bill No. 2000636241 were over carried to Bandra Terminus on 10 June 2015.

i. In WR, one packet booked from Hyderabad Deccan to Mathura Jn. vide PW Bill No. 20000486969 was over carried to Nizamuddin/ Bandra Terminus on 07 June 2015.

The journey of ten cases each, of over carried parcels in every Zonal Railway was traced from their origin to the final destination and 160 cases of over carried parcels were checked in 16 Zonal Railways. It was observed that these 160 parcels were over carried for the distance ranging between 53 and 3832 kms before they reached their destination up to one month after the due date of delivery.

Annexure 2.11

Instances of over carriage of parcels beyond their intended destinations were noticed in a significant number of cases. This results in hardship to the customers and creates operational problems to the Railway Administration. Such over-carried consignments not only results in additional handling of parcels, loss of freight, but also reflects on the quality of services being provided by Railways to the customers. It also results in occupation of precious space in AGC/SLR which could be utilised for transportation of genuine traffic.

2.1.8.2 Analysis of complaints regarding parcel business

1028 complaints[62] in respect of parcel business were lodged by users during April 2016 to August 2016 through various means over all Zonal Railways. Analysis of 70 out of these complaints over all Zonal Railways[63] revealed that

- 58 cases have been closed and 12 are under enquiry (October 2016).
- Parcels were delivered after a delay of 1 to 94 days (One case - 46 days in NR, one case-12 days in NCR, 5 cases-24 to 61 days in NFR, five cases - 27 to 94 days in WR).
- In SWR, departmental action was being taken by fixing responsibility/ accountability on Staff/ Officers concerned.
- No time limit for attending to and disposal of complaints had been fixed.
- In NR, complainants were not given proper attention as seen from the repeated complaints. Reasons for complaints were such as late arrival of parcels not properly informed to customers, motorcycle not sent to destination even after three days of booking, parcel of the one party dispatched by two different trains, missing parcel, etc.

[62] Facebook and twitter - 787, sms-125, web-112, app-4
[63] excluding ECR and ECoR

- In ECR, no complaint redressal mechanism was available at Muzaffarpur Parcel Depot.

Annexure 2.12

Railways need to improve the quality of services being provided to their customers, so that complaints are minimized.

2.1.9 Conclusion

Indian Railways recognised the need to augment its parcel business and re-position it as a separate line of business rather than an extension of its passenger transportation services. However, they did not undertake adequate steps to put in place the infrastructure and other institutional arrangements for improvement in parcel services. Consequently, Parcel Services continued to be non-core activity without any specific emphasis on augmentation and improvement in capacity of infrastructure or quality of service. Computerization of parcel services was started in 2005-06, but was yet to be completed on a large number of locations. Adequate measures for security monitoring and screening of the parcels were not available as seen at the selected parcel depots.

Adequate weighment arrangements were not made/ensured by the railways for weighment of leased parcel traffic. On the other hand, rules were framed for termination of contracts after fourth default of overloading. These were, however, not a deterrent as weighment was not being done as a regular measure to check overloading despite laid down norms.

Response for booking of leased parcel traffic through SLRs as well as Parcel vans was inadequate. While offers received were far less than space offered on lease, railways did not allot Parcel Vans in 65 per cent of cases. As such, leasing space remained grossly unutilized. Leased traffic services suffered from lack of customer friendliness and from maladies like delays/deficiencies in their decision making relating the internal processes of the IR. For leasing of parcel space, delay of up to 240 days in finalization of tenders by Zonal Railways was noticed. Customers had to cancel indents for VPs due to non-supply by Railway Administration and in many cases parcel vans were declared sick after being loaded. There were also delays in granting operational clearance due to which railways could not finalise lease agreements.

For non-leased traffic, Zonal Railways carried parcels beyond their intended destinations in a significant number of cases. In the two months test checked, railways carried 13565 over carried parcels back to their original destinations. Over carriage of parcels also took away space in AGC/SLR which could be utilised for transportation of parcel traffic. This resulted in hardships to the customers and created operational problems to the Railway Administration. This also reflected on the quality of services being provided to the customers.

2.1.10 Recommendations

It is recommended that

1. *Parcel Management System may be implemented over all identified and required locations in a time bound manner, so as to derive its full benefits.*
2. *Infrastructure requirements for augmentation and improvement in parcel services may be identified and developed so as to re-position the parcel business as a separate service.*
3. *In order to bring about improvement in leased parcel traffic, the quality of services provided to the leaseholders may be improved in terms of timely finalisation of contracts, minimizing operational delays, providing flexibility to the customers and offer rates which are competitive in comparison to road. Adequate weighment arrangements may also be ensured for weighment of leased parcel traffic.*
4. *Railways may explore using services of professional firms for providing solutions for end-to-end services to customers to compete with road.*
5. *Quality of services provided to customers carrying non-leased traffic may be improved by reducing over carriage of parcels.*
6. *Existing measures for security monitoring and screening of the parcels may be strengthened.*
7. *Railways systems and procedures need to be re-tuned. Present spirit of IR treating itself benefactor and customers as beneficiaries should give way to IR treating itself as service provider and customer as the reason for their existence.*

2.2 Container Train Operations in Indian Railways

2.2.1 Introduction

Indian Railways (IR), is one of the largest transportation and logistics networks of the world. As of March 2016, IR ran 23,024 trains (passenger and goods) daily throughout its network of 66,687 route kilometres connecting areas across the length and breadth of the country. During 2015-16, IR carried nearly 3.03 million tonnes of freight traffic and 22.21 million passengers everyday.

By mid 1990s, IR revolutionized their loading performance by introducing speedier bulk movement. During the same time, IR established Container Corporation of India Ltd. (CONCOR) to cater to small and piecemeal traffic through containerized service. Both these initiatives led to higher growth and better services in cargo and piecemeal traffic.

CONCOR remains under IR's control, but has since outsourced lot of its activities to private sector during its expansion. The main objective of setting up of CONCOR was to carry piecemeal traffic, which the Indian Railways had lost to road traffic due to shift in its policy to carry only bulk traffic in rake loads.

A policy to allow operators other than CONCOR, to carry container traffic was announced in 1994. However, the policy did not clearly bring out the role of CONCOR vis-à-vis new operators and the guidelines were found to be restrictive in implementation. Minister for Railways (MR), in his budget speech on 26th February, 2005 announced that the Ministry of Railways (MoR) and the Government of India would permit private operators to run container trains. At the time of this announcement, all container train operations on IR network were being carried out solely by CONCOR.

New Container Train Operation Policy

CONCOR was enjoying monopoly with captive traffic and strategic long term advantage, but Ministry of Railways decided to open up container business to other private players and announced (February, 2006) it's Container Trains Operation Policy, wherein it allowed private operators to obtain licences for operating container trains on IR network.

Minister for Railways while announcing the opening of the sector to new players stated in the Parliament that with the globalization of the Indian economy and spurt in imports and exports, the container traffic is expected to grow exponentially and growth was assessed around 15 *per cent*.

The policy was conceived with a view to attract a greater share of container traffic for railways. India's containerized cargo was mostly export-import and the rail share was only 30 *per cent*. CONCOR, a subsidiary of IR, was the monopoly operator of container trains at the time of announcing the new Container Trains Operation Policy.

As per the new policy, the entire network of IR was classified and grouped into following categories:

- **Category I**- Jawahar Lal Nehru Port (J N Port) /Mumbai Port-National capital region area rail Corridor and/or permission to operate on an all India basis. This includes the existing and future terminals falling in Delhi Area linked to J N Port or Mumbai Port. This constitutes the biggest flow of traffic.
- **Category II**- Rail corridors serving JN Port and its hinterland other than Delhi area.
- **Category III**- Rail corridors serving other ports which have less traffic as compared to JN Port. The ports included in this area are Pipavav, Mundra, Chennai/Ennore, Vizag, Kochi and their hinterlands.
- **Category IV-** Rail Corridors serving ports of Kandla, New Mangalore, Tuticurin, Haldia/Kolkata, Paradip, Mormugao and their hinterlands.

After introduction of policy, 17 container operators including CONCOR were given license to enter the container train operations. Necessary agreements were executed by the authorised representative of the parties and the General Manager/Northern Railway on behalf of the President of India. Agreements between Railway Administrations and 17 Container train operators were

executed (15 Agreements executed during January 2007 to May 2007 and two Agreements executed on 9 May 2008 and on 12 December 2012).

Against the total freight traffic of 1101.51 Million Tonnes handled by Indian Railways as of 31 March 2016, container traffic was 46.18 Million Tonne, which constituted 4.19 *per cent* of the total IR's traffic. The new Container Train Operators (CTOs) have procured 128 rakes and developed 14 terminals. CONCOR owns 249 rakes and 63 terminals.

Main features of the Container Trains Operation Policy

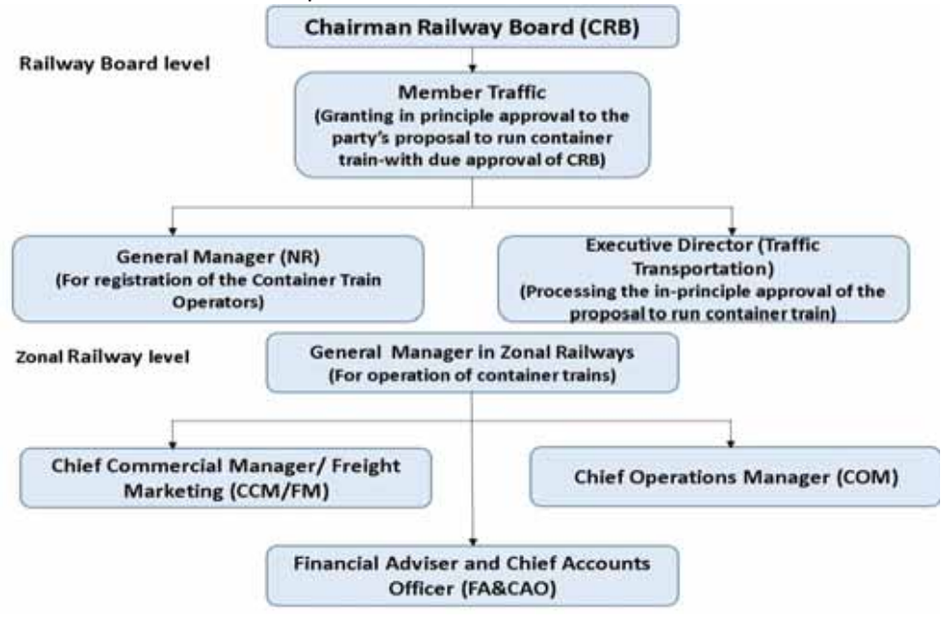
The scheme was open to any individual or a joint venture or a company registered under the Companies Act, 1956. The policy stipulated that it shall be in effect from the date notified in the official gazette in India. The policy was published in the Gazette of India in September 2006. Main features of the policy are as under:

- A non-refundable registration fee of ₹ 50 crore for all India operations (for operations in Category I) and ₹ 10 crore for every other category was to be paid by every operator.
- The permission was for a period of 20 years from the date of operation of container train by the operator and permission could be extended by 10 years subject to satisfactory performance on payment of fees as applicable at that time.
- Operators were to pay the railways haulage charges applicable uniformly to all operators, as notified by railway from time to time.
- Operators were to procure their own rolling stocks (flat wagons) and containers in accordance with the approved design of Research, Design and Standards Organisation (RDSO).
- Maintenance of rolling stock was to be done by the Indian Railways for which prescribed charges were to be recovered from operators.
- Operators were to be permitted to transfer permission to another operator subject to the latter fulfilling the selection criteria and obtaining prior approval of the Railway Board. This permission was to be granted only for one year after container traffic has commenced from Inland Container Depots (ICDs).

As per Indian Railways Vision 2020 Document, an annual growth of 20 *per cent* in container tonnage was envisaged and the container traffic was expected to touch 210 million tonnes by 2020.

Organisational set up

The following organisational structure shows the roles and responsibilities of officials related to container operations in IR at various levels:



Railway Board is responsible for policy decisions relating to container train operations. The General Manager/NR is responsible for execution of concession agreement between all container operators and IRs. The operating and commercial departments of Zonal Railways are responsible for operating the container traffic and recovery of all dues from container operators respectively. Traffic accounts department is responsible for maintaining the record of earnings and monitoring the receipt of earnings.

Earlier coverage of the subject

A Para on Container Operations in Indian Railways was featured as Audit Para no.2.1 of Report no. 34 of 2010-11, highlighting the following issues:

- Inconsistencies in charging haulage charges for a Twenty Feet Equivalent Unit (TEU) and Forty Feet Equivalent Unit (FEU)
- Diversion of rail traffic to Container Train Operators (CTOs),
- Non-recovery of haulage charges by the route of actual carriage
- Non-recovery of haulage charges of IR owned brake vans attached to container trains
- Non-maintenance of proper records of land leased out and recovery of license fees

Audit Scope and Objectives

The audit covered a period of four years i.e. from 2012-13 to 2015-16 and was aimed at examining

1. Whether the container operators were permitted operations as per the policy framework;
2. Whether the charges due from CTOs were recovered timely and whether an effective monitoring system was in place to oversee the private container train operations.

Audit Criteria

The performance was assessed with respect to the following criteria:

1. Policy framework issued by IR in 2006
2. Concession agreements signed by Competent Authority
3. Various circulars/orders/instructions issued by the Railway Board from time to time relating to operation of container trains.

Audit Methodology and samples

The audit methodology included the examination of policy related files/records in Railway Board, Container trains operations related record at Zonal Railways as well as Divisional Headquarters, Traffic Accounts offices and selected Container Rail Terminals/Inland Container Depots (CRTs/ICDs) besides analysis of the relevant quantitative data.

There were 314 notified Container Rail Terminals/Inland Container Depots (CRTs/ICDs) over IR as of March 2016. However, only 195 CRTs/ICDs were operational. Of these 121 terminals (56 ICDs and 65 CRTs) were selected for detailed review. The year wise revenue earned from 121 selected terminals is given below:

Table 2.10 – Details of revenue earned from Container Trains Operators[64] (CTOs) at selected terminals

Number of Terminals	No. of CTOs	Year	Number of rakes handled	Traffic Handled (Million Tonnes)	Freight earnings (₹ in crore)
121	33	2012-13	31791	35437982	3669
121	33	2013-14	33671	38137855	4119
121	33	2014-15	35110	40649310	4684
121	33	2015-16	33179	40853493	4788
		Total	**133751**	**155078640**	**17260**

Source:-Details collected from Commercial Department in Zonal Railways

As can be seen that Railways earned revenue of ₹ 17260 crore by handling traffic of 155.08 million tonnes during the period from 2012-13 to 2015-16 in respect of 121 selected terminals in 16 Zonal Railways examined in this study.

[64] Container Trains Operators refers to the parties which had entered into an Agreement with the Indian Railways for running container trains. These Container Trains Operators include 16 private parties and CONCOR, a Railway PSU.

Audit Findings

2.2.2 Selection of container train operators (CTOs) and execution of agreements

As per rule 7 of the Indian Railways (permission for operators to move the container trains on Indian Railways) Amendment Rules 2006, the agreement shall be signed by the General Manager, Northern Railway, but shall be deemed to have been signed by the respective Railway Administration where a container train is to be moved. Based on the record made available to audit, it was observed that container train services were being operated on various Zonal Railways by 33 CTOs during 2012-13 to 2015-16, however, the Concession agreements were executed with only 17 CTOs. Nothing on record was found to show if any concession agreements was executed between Railway Administration and 16 CTOs listed below:

Table 2.11 Details of the 16 Container Train Operators with no Concession Agreement with Indian Railways

S.no	Name of the container train operator	Period of operation
1	Navkar Corporation	2012-13, 2013-14, 2014-15
2	JSW Ispat Ltd	2012-13, 2013-14, 2014-15
3	Ramkrishna Rasayani Ltd	2012-13, 2013-14, 2014-15
4	Kanpur Logistics Park	2012-13, 2013-14, 2014-15
5	HTPH	2012-13, 2014-15
6	ARIK	2012-13, 2013-14, 2014-15
7	DPWORLD	2012-13, 2013-14, 2014-15
8	SMART	2012-13, 2013-14, 2014-15
9	Kirloskar	2012-13
10	Indo Aryan	2012-13, 2013-14, 2014-15
11	TIPL	2012-13, 2013-14, 2014-15
12	HIPL	2012-13, 2013-14, 2014-15
13	FSTR	2012-13, 2013-14, 2014-15
14	Trans Rail	2013-14
15	HTPL	2013-14, 2014-15
16	Indian Infrastructure Logistics Private Limited	2013-14, 2014-15

Source: Details collected from the Commercial Department in Zonal Railways

2.2.3 Growth of Container Traffic

Initially, IR permitted CONCOR to carry piecemeal traffic stipulating that CONCOR will recover the freight at IR tariff rates from the customers and retain 18 *per cent* freight collected for services rendered. Subsequently from 1 November 2006, all commodities except Ores, Minerals, Coal and Coke carried in containers were charged at haulage rates. The haulage charges notified from time to time were applicable to all container operators including CONCOR. Further, a separate rate of haulage termed as container rates (85 to 90 *per cent* of the railway tariff rates) were also prescribed for notified commodities like Sugar, Oil cake, seeds, food grains, chemical manures, iron & steel and petroleum and gases etc. The year wise container traffic performance vis-a-vis Indian Railways' traffic during the period from 2010-11 to 2015-16 is tabulated below:

Table 2.12 Details of tonnes loaded

Year	Indian Railway		Container traffic		Percentage of container traffic with reference to total IR's traffic
	Tonnes loaded (in Million Tonnes)	*Per cent growth*	*Tonnes loaded (in Million Tonnes)*	*Per cent growth*	
2010-11	921.73	-	37.59	-	4.08
2011-12	969.05	5.13	38.02	1.14	3.92
2012-13	1008.09	4.03	41.04	7.94	4.07
2013-14	1051.64	4.32	43.6	6.24	4.15
2014-15	1095.26	4.15	48.83	12.00	4.46
2015-16	1101.51	0.57	46.18	0.00	4.19

Source: Data obtained from Traffic Directorate of Railway Board

It was observed that though container traffic increased from 37.59 MT in 2010-11 to 46.18 MT in 2015-16, the share of container traffic with reference to total IR's traffic registered a marginal increase[65] since 2010-11. Average annual growth in the container traffic has been around 4.57 *per cent* during 2010-11 to 2015-16.

2.2.4 Receipt of the Railways' dues from the CTOs

Transportation of containers in the form of rakes is the responsibility of IR. Loading/unloading operations of the containers are performed by CTOs and the IR provides locomotives, crew and path for movement of the containers for the designated destinations. For the movement of container trains, besides recovering haulage charges, Railways are required to recover certain cost from the CTOs which included haulage/hire charges for the Railway's brake vans, Siding charges, shunting charges, busy season surcharge, stabling charges etc. Status on the recovery of such charges from the CTOs is discussed in the succeeding paragraphs.

2.2.4.1 Non-recovery of haulage charges for usage of railway owned brake vans

Prior to 1 April 2012, Brake Van[66] charges were being recovered at 110 *per cent* of haulage charges of one TEU (Twenty Feet Equivalent Unit) as per Rate Circular no.15 of 2009. As per Rate Circular (RC) 2 of 2012 effective from 1 April 2012, Brake Van hire charges were to be recovered at the prescribed rate of ₹ 1500 per day per brake van. Northern Railway was given the responsibility for collection of hire charges in respect of each CTOs over Indian Railways. In January 2012, Northern Railway, however, expressed their inability to maintain the record of the railway brake vans used by the parties across IR network and had requested Railway Board to resolve the issue.

An examination of the position of Railways owned brake vans hire charges at selected terminals over all 16 Zonal Railways revealed that:

- Details relating to railway brake vans allotted to the CTOs and hire charges recovered were found on record in NR only. An amount of ₹ 5.83 crore was

[65] 4.09 *per cent* in 2010-11 to 4.8 *per cent* in 2015-16.

[66] A four wheeled unit attached at the end of the goods train which has the braking system for use in emergency situation. It is occupied by Guard of the Goods train.

recovered towards the brake van allotted by NR to the CTOs during 2012-13 to 2014-15.

- Details of the railway brake vans allotted and the hire charges recovered were not made available to audit in 11 Zonal Railways[67].
- In four Zonal Railways (NER, NWR, SCR and SER), though record relating to railway brake vans allotted was made available, the details of the hire charges recovered were not made available.

In the action taken note on Audit Para No.2.1 of Report no. 34 of 2010-11, on the issue of recovery of brake van charges, the Ministry stated (July 2015) that the system improvement had been initiated by way of taking one-time payment towards the cost of brake van from the parties so that the tedious calculation of day to day charges is avoided.

2.2.4.2 Loss due to non-recovery of Shunting Charges

When a Railway locomotive is utilized for shunting operation in the siding, separate Shunting Charges are to be recovered from the siding owner. These are recovered on the basis of actual shunting time at the rate equal to All India Engine Hour Cost (AIEHC) for 'Train Engine' or 'Shunting Engine' as the case may be. As per Rate Circular (RC) 14 of 2013, rates of AIEHC for different kind of engines with effect from 1 July 2013 of Indian Railways are given below:

Table 2.13 Shunting charges

Type of Engine	*Cost Per Hour (figures in ₹)*	
	Broad Gauge	***Meter Gauge***
Shunting Engine	5180	7560
Train Engine	8510	13750
Electric Engine	10120	Not Available

Review of record relating to shunting charges at 121 selected CRTs/ICDs over IR revealed that in six Zonal Railways (NR, NWR, SECR, SER, SR and WR), an amount of ₹ 9.81 crore was outstanding during 2012-13 to 2015-16 as per details given below:

Table 2.14 Loss due to non-recovery of shunting charges

Zonal Railway	Name of CRTs/ ICDs	Name of CTO	Year	No. of rakes	Shunting charge (in ₹)		
					Chargeable	Actually charged	Outstanding
NR	TICD, ICOD & CWCN	CONCOR	2012-13 to 2015-16	2517	136708960	43601882	93107078
NWR	ICD-Kala Bakra		2012-13 to 2014-15	2634	12454500	12416350	38150
SECR	Monnet Ispat and Energy Ltd. Siding Bhupdeopur	ILSL, CONCOR, ARIL, BXTS, GIPL, ETAP	2012-13 to 2015-16	114	367560	0	367560

[67] CR, ER, ECR, ECoR, NCR, NER, SR, SECR, SWR, WCR and WR

Table 2.14 Loss due to non-recovery of shunting charges

Zonal Railway	Name of CRTs/ ICDs	Name of CTO	Year	No. of rakes	Shunting charge (in ₹)		
					Chargeable	Actually charged	Outstanding
	(CRT/ PMSB/ BEF), CRT/ MNDH						
SER	*Rourkela & TATA*	B2B, ARIL, KRIBHCO, CONCOR	2012-13 to 2015-16	724	5069084	548500	4520584
SR	IGCS	CONCOR	2012-13 to 2015-16	73	29540	19420	10120
WR	PPSP, HZL, SBT, RTM, CKYR	CONCOR, ARIL, GRFL, FSTR, ADIL, APIL, IIPL, KRIL	2015-16	2194	38374185	38300505	73680
		Total		**8256**	**193003829**	**94886657**	**98117172 Say ₹ 9.81 crore**

Source:-Details collected from the Commercial Department in Zonal Railways

The shunting charges were not leviable at any CRTs/ICDs in nine Zonal Railways[68]and in two Zonal Railways (CR and SCR) no shunting charges were outstanding during the entire period of review as the same were recovered correctly as per the prescribed rates.

2.2.4.3 Inadequacies in weighment arrangement available for container traffic in sidings or enroute

Railway Board in October 2006 issued instructions that all rakes loaded at each loading point for each stream were required to be weighed at Associated Weighbridge/ Alternate Associated Weighbridge with the exception of rakes loaded with standard size bags of uniform size. Overloading, if any, should be intimated to Traffic Accounts Office. Subsequently in December 2009, detailed instructions regarding weighment of container trains were also issued by Railway Board. Zonal Railways were advised that the extant instructions to weigh container trains may be followed scrupulously. Further, vide Rate Circular (RC) 30 of 2010 weighment of rakes was made mandatory in respect of commodities being charged at container class rate[69]. Audit examination of weighment facilities at 121 selected terminals over IR revealed that:

- Weighbridges were available only in 39 (32.23 *per cent*) out of 121 CRTs/ICDs test checked in audit. One weighbridge installed in SWR was not functioning.
- Weighment was supervised by the Railway Staff at only at 24 terminals (out of 39) leaving 15 terminals in four ZRs (ECoR, NR, SR, WCR) without supervision by the Railway staff.

[68] CR, ECoR, ECR, ER, NCR, NER, NFR, SWR and WCR

[69]Container class rates for the notified commodities (Cement, Iron& Steel, Bricks and Stones, Alumina, Petroleum products and gases) are levied by applying 15 *per cent* concession on the applicable class rate as published in Goods Tariff.

- Out of 15 terminals, where weighment was not supervised by Railway staff, no overloading was detected at 14 terminals and overloading of 2.70 MT was noticed at one terminal of ECoR (GHNH) and penalty was accordingly recovered.

Audit also examined the position of weighment done *enroute* and observed overloading of 14458.32 MT in 9724 wagons in 10 Zonal Railways during the period 2012-13 to 2015-16. As against the penalty of ₹ 5.90 crore due for recovery, ₹ 5.87 crore was recovered leaving outstanding amount of ₹ 0.03 crore in two ZRs (ECoR & SR). No overloading was detected in *enroute* weighment done in NR, NCR & WCR. *Enroute* weighment of containers was not done in remaining three Zonal Railways (ECR, NFR and SCR[70]).

2.2.4.4 Recovery of maintenance charges

Outstanding Track Maintenance Charges

In January 2012, Railway Board liberalized[71] siding rules. As per Para 6.2 of circular, the maintenance of track in the siding shall be done by the parties at their own cost. However, it was decided that Railways would not charge Inspection Charges. Wherever track maintenance is done by Railways at the cost of siding owner, the party shall continue to bear the cost.The results of review of record relating to maintenance charges at selected terminals during the period 2012-13 to 2015-16 are indicated in the following table:

Table 2.15 Position of maintenance charges of track outstanding as on 31 March 2015

Zonal Railway	Amount outstanding	Reasons for maintenance charges outstanding for recovery
CR, NFR and SECR	9.16 crore	Maintenance charges of ₹ 1.79 core were outstanding against the CRT/JSLK/KDTR due to dispute between Railway and private party on account of railway property. The reasons for outstanding (₹ 7.37 crore in CR and NFR) were not found on Railway record
SER	Not available	Detailed records were not provided, the position of billing and recovery could not be ascertained by audit

Source: Details collected from the Commercial Department in Zonal Railways

No maintenance charges were outstanding in the remaining 12 Zonal Railways[72] as the maintenance was done by the CTOs themselves.

Outstanding charges relating to maintenance of Container flats[73]

After introduction of the container train operations on the Railway Network, the Railway Board issued instructions (April 2006) on maintenance of privately Owned Container Flats including CONCOR.

Prior to 1 April 2006, five *per cent* of the capital cost of the wagons was being deposited by operator on annual basis with Northern Railway and the entire cost including the cost of maintenance organization, spares etc. was being charged to work charged estimates, sanctioned for this activity. However, with effect from

[70] One out of 13 CRTs
[71] Freight Marketing circular No.1 of 2012
[72] ECoR, ECR ER, NCR, NER, NR, NWR, SCR, SR, SWR, WCR & WR
[73] Flats refers to the base with bogie on which containers are placed

1 April 2006 *in lieu* of separate recovery of maintenance charges, 4.76 *per cent* of haulage charges recovered from operators (including CONCOR) was to be set apart towards the cost of maintenance of stock.

Matter regarding failure to observe the prescribed procedure on SCR resulting in short realisation of maintenance charges to the extent of ₹ 13.31 crore at Rayanpada in Secunderabad division of SCR was taken up in Audit in February 2014. The amount remained un-recovered till March 2016.

2.2.4.5 Non levy of detention charges of locomotives which were not attached/ released within free time

Para 6.3.2 of Concessional agreement provides that detention of engine beyond free time on siding owner's account would result in increase in cost of engine usage per hour, which should be recovered from CTOs. Detention Charges should be levied for the period of detention beyond the permissible time at the rates prescribed by the Railway Board from time to time.

Audit reviewed the position of detention of locomotives at 121 selected terminals and it was observed that at seven terminals in NCR, NFR, NR, NWR and SWR, the cases of detention of locomotives which were not attached or detached and released within the free time of two hours, were noticed. In these cases the necessary detention charges were either not recovered or short recovered. As a result, these Railways suffered a loss of ₹ 2.80 crore due to non-levy/short levy of detention charges as per details given below:

Table 2.16 Non-levy of detention charges in respect of Locomotives during 2012-13 to 2015-16

Zonal Railway	Terminals affected	Detention Charges Due (₹)	Detention Charges Recovered (₹)	Undercharges (₹)
NCR	1 (ICDD)	8940930	0	8940930
NFR	1 (AMINGAON)	265603	0	265603
NR	2 (DDL, AHH)	17075776	0	17075776
NWR	(2) MDRV, GOTN	609750	172800	436950
SWR	1 (ICDW)	1381715	0	1381715
Total	**07**	**28357994**	**172800**	**28016754**
				₹ 2.80 crore

Source: Details collected from the Commercial Department in Zonal Railways

The reasons for short-recovery of detention charges from siding owners were, however, not found on record. In the remaining terminals over 11 Zonal Railways[74], no case of such detention of locomotives beyond free time (two hours) was noticed on the part of siding owners.

[74]CR, ECoR, ECR, ER, NER, SCR, SECR, SER, SR, WCR & WR

2.2.4.6 Loss due to non-adjustment of salary of Railway staff deputed at container siding

Rate Circular No.45 of 2009 issued by MoR stipulated that the cost of Railway staff posted at CRTs/ICDs for documentation works, issue of RRs etc. was to be borne by CTOs and shall be charged separately.

The position of recovery of staff cost, at terminals where railway staff was posted, was examined and the following was noticed:

1) 61 Railway staff were posted in 36 terminals in five Zonal Railways[75]. As on 31 March 2016, against an amount of ₹ 22.46 crore due for recovery as staff cost for the period from 2012-13 to 2015-16, only ₹ 6.47 crore was recovered leaving an amount of ₹ 15.99 crore outstanding.

2) In five Zonal Railways[76], staff cost of ₹ 11.95 crore was not recovered in respect 54 Railway staff posted on 21 terminals during the period of review.

2.2.4.7 Loss due to non-levy of stabling charges

In terms of RC 97 of 2006, Stabling Charge are levied on stabling of rolling stock of container operator on railway track, beyond four hours due to any reason attributed to container operator like (i) party unable to receive such stock in their siding; and (ii) party declines to accept such stock in their siding. Stabling charge is leviable at the rate of ₹ 300 per wagon per day or part of a day on detention beyond four hours. With effect from 1 April 2013[77], these charges were enhanced to ₹ 500 per wagon per day or part of the day from the time of arrival to the time of removal. A review of position of levy of stabling charges at selected CRTS/ICDs revealed the following:

1. At 35 Terminals of 11 Zonal Railways[78] the stabling charges of ₹ 77.02 crore were recoverable during the period of review. Of these, ₹ 58.07 crore was actually recovered leaving outstanding of ₹ 18.95 crore in respect of eight ZRs[79]. As on March 2016, out of total stabling charges of ₹ 18.95 crore to be recovered, an amount of ₹ 17.72 was recoverable in NR and SER only.
2. No stabling charges were due in five Zonal Railways[80].

2.2.4.8 Recovery of Land license fee from Container Train Operators

As per rules[81], charges to be levied at the rate of six *per cent* of the market value of the land leased were applicable uniformly to CONCOR as well as other CTOs. The rate of annual license fee for the land leased to the outsiders was fixed at six *per cent* of the land value with a provision of annual revision of the land value at the rate of seven *per cent*. Further, in 2008, Policy of licensing of railway land to

[75] CR, ECoR, NCR, NF and, NR
[76] ER, NFR, NR, SER and SR
[77] Rate Circular 5 of 2013
[78] CR, ECoR, ER, NCR, NR, NWR, SCR, SECR, SER, SR & WR
[79] CR, ECoR, NCR, NR, NWR, SECR, SER & WR
[80] ECR, NER, NFR, SWR & WCR
[81] Railway Board's letter No. 2005/LML/18/8 dated 10-2-2005

CONCOR was revised[82], as per which railway land was given to CONCOR on Twenty Feet Equivalent Unit (TEU) basis whereby the charges levied on per TEU basis was ₹ 500.

A review of records for the period 2010-11 to 2015-16 pertaining to license fee in respect of selected Container Terminals revealed the following:

1. In 21 terminals of 11 Zonal Railways (all Zonal Railways except CR, ECR, ER, NER and WR), an amount of ₹ 41.17 crore was outstanding as on 31 March 2016.
2. Outstanding in most of the cases was attributed to non-preferment of bills. At two terminals (GDGH of NR & CSRP of SECR), the private operators did not deposit the license fee due to differential treatment in fixation of rate.
3. No revision of rate of land license fee on TEU basis was done for the past eight years and license fee of ₹ 500/- per TEU was continued to be levied on CONCOR.

Irregularity in revision/updation of land license fee - Besides above the following irregularities in revision of land license fees were also noticed during detailed study in various Zonal Railways:

1. During the review of records of land licence fee pertaining to land leased to CONCOR in 14 ZRs (SWR, NR, WCR, CR, ECR, ECoR, NCR, NER, NWR, NFR, SCR, SER, SECR & SR), it was observed that license fee of ₹ 500 per TEU handled was not revised/ enhanced by seven *per cent* annually by the Railway Administration. This resulted in a loss of revenue of ₹ 156.85 crore for the period 2008-09 to 2015-16[83].
2. As per instructions[84], renting[85] on immovable property will attract service tax at 12.36 *per cent*. During review of land licence fee record at five Zonal Railways (NWR, NR, NCR, SER & NFR), it was noticed that though the land license fee was deposited time to time by CONCOR, service tax at the rate of 12.36 *per cent* for the period from October 2012 to March 2015 amounting to ₹ 14.59 crore were not collected along with the land license fee.
3. A plot of Railway land measuring 19.89 acres was leased by NFR Administration to CONCOR at Aminagaon (AMJ) on 29 April 2005. As per extant order of Railway Board, license fee was to be recovered on the basis of number of TEUs handled (inward & outward). During audit, it was observed that record in respect of number of inward TEUs was not maintained at ICD/AMJ. Para-3.2 of the Contract Agreement, executed

[82] Ministry of Railways letter No. 2001/LML/13/55 dated 24-1-2008

[83] In nine ZRs (SWR, WCR, CR, ECoR, NER, NWR, SCR, SER & SECR), loss of revenue as a result of non-revision of land license fee worked out for the period from 2008-09 to 2015-16 and in remaining five ZRs (NR, SR, NFR, NCR & ECR), it was worked out for 2010-11 to 2015-16.

[84] Para 2 of RB's letter No. 2012/LML/25/15 dated 28 September 2012

[85] Renting of immovable property was defined in the Service Tax Act (Chapter V of Finance Act 1994) Section 65B as "allowing permitting or granting access, entry occupation, usage or any such facility, wholly or party, in an immovable property, with or without the transfer of possession or control of the said immovable property and includes letting, leasing, licensing or other similar arrangements in respect of immovable property"

between Railway and CONCOR, stipulated that total number of TEUs handled during the period (inward & outward) should be certified by the Operating/Commercial Department of Railway. However, no such certification was done by the railway administration. As a result, land license fee was recovered from CONCOR on the basis of records maintained (TEUs handled inward & outward) by CONCOR Authority and there was no scope of verification of the accuracy of the amount by the railways.

2.2.5 Review of Mechanism for monitoring of movement of container trains

After introduction of Freight Operations and Information System (FOIS) in IR, the movement of container trains is being monitored through the Rake Management System (RMS) leaving minimal scope for manual monitoring.

It was noticed that provision was available in FOIS for capturing container traffic related data[86]in the same way as the data for other types of goods traffic. It was further noticed that various types of reports are generated by FOIS (as per the requirement of Railway users) for monitoring Goods traffic/train operations.

A test check of returns or data pertaining to container traffic available on TMS (Terminal Management System) of FOIS (Freight Operation Information System) revealed the following:

1. Details of only last 35 days was available on FOIS for outward container rakes of each siding/CRT.
2. Number of containers, name of commodity, type of containers and loaded weight was not available in FOIS returns/reports.
3. E-payment details were mentioned under the title “Charges”, instead of “E-payment”.
4. No details were available on TMS regarding weighment of containers on in-motion weigh bridges of Railway or through associated weigh bridges within the container siding of any Zone.

The aspects relating to monitoring mechanism were also reviewed in all Zonal Railways and the following cases of inadequate internal control mechanism were noticed:

i. Returns regarding outstanding debits of IOCD and TICD siding over Northern Railway were not sent to Accounts office/Headquarters office during the period from April 2012 to March 2016. Similarly, in NFR, no return/information was received from Agthori station or CONCOR at Railway Traffic Accounts Office/MLG during the review period. Besides, no action was found to be taken by the Railway Traffic Accounts Authority for ensuring correctness of haulage charges paid by CONCOR.

[86] Details like rake/consist formation, originating/destination details, placement details, demand/ forwarding note, commodity details (Container), container loading, computation of Demurrage, RR Generation/Freight computation, Loco attachment/detachment, BPC details, train ordering/departure, Train Arrival/Termination, Wagon consist examination, Unloading, WTR Details, Delivery, Removal, Wharfage etc.

ii. Over NR, Stabling charges at ICOD siding during the period of review and at ICMB siding from January 2015 onwards were either not paid or reflected in the monthly balance sheet and without mentioning in Balance sheet, proper watch on recovery of these charges could not be made by Traffic Accounts office. Traffic Accounts office never pointed out these lapses. In SECR stabling charges were taken in goods sheds instead of demurrage charges.

iii. In NR, allotment of IR owned brake vans for container operation as well as recoveries thereof was not monitored either by goods staff deployed at four terminals (TICD, ICOD, ICMB & DDL) or by Accounts Office authorities. Goods staff posted at selected ICDs over Northern Railway were not aware whether these charges were being recovered.

iv. ECoR has put in place monitoring mechanism to monitor container operations from CRTs/sidings/goods sheds. One designated section under the personal supervision of Deputy Chief Commercial Manager/Freight Services is in charge of monitoring the container traffic originating from ECoR. Further, Traffic Inspector of Accounts and Commercial Inspectors have been deployed to find irregularity, if any, committed in transportation of container traffic.

v. In CR, NER, SWR and SR, there was no specific mechanisms for monitoring movement of container trains.

2.2.6 Conclusion

The primary objective of promoting Container Operations by the private operators was to increase the rail share of traffic by offloading sundry and piecemeal traffic to the private operators, which the Railways had decided not to carry with the objective of improving its operational efficiency through rake load movement and to augment its own earnings. The container traffic carried through Private Containers (including CONCOR) registered an annual increase of about 4.57 *per cent* during 2010-11 to 2015-16 and chances of achieving the target of 210 million tonnes by 2020 as envisaged by Indian Railways in its vision Document 2020 appear remote, as the end of 2015-16, the container traffic loaded by these CTOs stood at 46.18 million tonnes.

Details of the recovery of the brake van allotted to CTOs and hire charges realized for the same from them was not found on record. Besides, various other charges like shunting charges, charges for detention of rakes beyond free time, stabling charges and land license fee, which were recoverable from CTOs were not realized in full. The mechanism of recovering the staff cost for commercial staff deployed in various CRTs/ICDs was not effective. There was no specific mechanism for monitoring movement of container trains in CR, NER, SWR and SR.

2.2.7 Recommendations

It is recommended that

1. *IR may consider allowing the Container Train Operators for running the container trains by entering in to standard agreement in cases where private parties were operating container trains without formal agreements.*
2. *IR needs to devise an effective internal control mechanism to ensure recovery of various charges due from the container train operators.*
3. *IR may put in place effective mechanism for monitoring the movement of container trains so as to ensure punctuality in movement and to attract more business from private container operators.*
4. *Container operations by private parties have the potential of expanding on account of the respective strength of IR infrastructure and private sector (container orientation). IR should, therefore, identify bottlenecks in safe and smooth movement of container operation and take suitable measures to tackle these bottlenecks.*

2.3 Northeast Frontier Railway (NFR) : Wasteful expenditure on preservation of injudiciously selected sections as heritage and subsequent withdrawal of the decision

Injudicious decision of preservation of two sections in Northeast Frontier Railway as heritage without assessing their potentiality for tourism/assessing their historical importance led to wasteful expenditure of ₹ 27.33 crore on their preservation/dismantling.

Railway Board issued guidelines (April 1999) for preservation of heritage structure to all General Managers of Indian Railways. Initially, on the basis of the information collected from Zonal Railways, 32 buildings/precincts and 11 bridges were identified as heritage structures. Any additions and/or deletions from this list was to be decided based on assessment duly considered by the Heritage Committee[87]. Two cases of preservation of Heritage Line without assessing their viability from the point of view of historical importance/heritage/tourism were noticed, where NFR Administration incurred a wasteful expenditure of ₹ 27.33 crore.

A. On the initiative of NFR Administration, Railway Board (September 2008) approved the preservation of the Mahur–Harangajao (Meter Gauge) section for heritage/tourism. Financial approval of the work at a cost of ₹ 21.72 crore was provided after four years from its administrative approval in 2008. An expenditure of ₹ 8.01 crore was incurred on preservation of the project up to September 2014.

NFR Administration retracted (April 2014) from their earlier position and apprised Railway Board to reconsider the decision for retention of Mahur–

[87] A committee constituted of officials from the Railway Board, Zonal Railways, persons from the public who are working in the field of conservation of heritage, persons interested in conservation of heritage etc.

Harangajao section as heritage/ tourism on the ground that the section was facing frequent breaches and considerable expenditure would be required to restore it. It was also stated that the area did not have any tourist activity and found no place under tourist map of India. Subsequently, Railway Board decided to drop the proposal of preserving the heritage section and the work was finally stopped in September 2014.

Chief Secretary, Government of Assam wrote (October 2014) to General Manager (GM), NFR for preservation of the site. In the same month Member, North Eastern Council and MLA & Chairman ASTC also wrote to the Chairman, Railway Board requesting him to take necessary steps for preservation of the said section as heritage. Executive Director (ED), Heritage asked GM, NFR (November 2014) to hold talks with all the stake holders before reversing the decision. Additional GM, NFR informed (July 2015) ED, Heritage that though talks were held with Assam Government, Assam Tourism Development Corporation and IRCTC, commitment for bearing of cost had not been received.

While the matter of consultation with other stake holders was in progress, NFR Administration dismantled the section and executed two Contract Agreements (CAs) worth ₹ 4.19 crore in March and July 2015 against which, an expenditure of ₹ 3.17 crore was incurred on dismantling till October 2016. It was observed that despite dismantling the structure, NFR Administration wrote to the State Government of Assam (Jan 2016) seeking full compensation of the capital cost of the project. No response was received from the State Government in this regard.

Thus, the decision for preservation of the said section as heritage/tourism, without exploring the feasibility by consulting stake holders[88] was not well conceived. Commencement of work for preservation and subsequently dropping of the project resulted in a wasteful expenditure of ₹ 11.18 crore[89].

The matter was brought to the notice of NFR Administration in November 2015. It was replied that the expenditure on heritage work was mainly for replacement of wooden bridge sleeper by steel channel sleeper (dual gauge) and it would be reused in BG section in future and labour cost of insertion was the only loss. However, the fact remains that only five *per cent* of the replaced steel channel sleepers were of dual gauge, which could be utilised in BG section in future.

Thus, the decision for preservation work of the section without considering its heritage/tourism value followed by subsequent withdrawal of the project, especially when discussions with stakeholders were going on, resulted in wasteful expenditure of ₹ 11.18 crore.

B. In July 2008, Gauge Conversion (GC) work of MG track from Aluabari Road to Siliguri (76 kms) was approved by Railway Board. At the request of NFR

[88] As required by the Railway Board Guidelines issued in the year 1999
[89] ₹ 8.01 crore for the project plus ₹ 3.17 crore for dismantling

Administration, Railway Board approved (September 2008) preservation of Siliguri to Bagdogra (9.7 kms) Meter Gauge (MG) track as heritage (falling in Aluabari Road to Siliguri section) with either gauntleted[90] track or separate alignment. NFR Administration's proposal to convert the stretch of 8.05 kms, out of total 9.7 kms, as gauntleted track consisting of both BG and MG lines together and for the rest with separate BG and MG lines was approved by Railway Board in May 2010 at a cost of ₹ 16.15 crore as Material Modification to Gauge Conversion (GC) work of MG track from Aluabari Road to Siliguri. The cost of the project was enhanced to ₹ 272.11 crore which was later revised (November 2011) to ₹ 435.87 crore.

Gauge Conversion (GC) work of MG track from Aluabari Road to Siliguri, has since been completed and the project has been opened to traffic. Up to March 2016 an expenditure of ₹ 435.57 crore was incurred on the entire project. The cost of the Material Modification of the gauntleted track was not shown separately in the revised estimate and thus the actual expenditure on the heritage work was not ascertainable. Even if the initial sanctioned estimate amount was spent, the expenditure incurred on the preservation of heritage line would be ₹ 16.15 crore. Besides, ₹ 24 lakh was spent on procurement and transportation of one Rail Bus for running on the above said heritage line. NFR received another Rail Bus from WR on transfer basis.

Two Rail Buses were in operation on Siliguri to Bagdogra line (to and fro) from 19 July 2011 with a capacity of 70 persons[91] each. Between February 2012 and December 2012, services of the two Rail Buses were suspended. Subsequently, the service of one Rail Bus was started again in May 2013 on a weekly basis to keep the cultural heritage in existence and for maintenance of track and loco. This service, too, was cancelled in December 2015 due to poor response from passengers. Since its introduction in 2011, these Rail Buses could earn ₹ 27,778 only through ticket sales. Further, due to the gauntleted track having diamond crossing[92], speed restriction was imposed, which resulted in avoidable extra expenditure on account of additional fuel consumption and other costs.

The matter was brought to the notice of the NFR Administration in March 2016. Divisional Railway Administration replied that the work was done as per Railway Board instructions.

Thus, NFR Administration's decision for retaining MG track for Heritage purpose was not based on any technical or analytical study of either potential earnings or tourist importance. The decision to develop the section as heritage, thus, resulted in wasteful expenditure of ₹ 16.15 crore.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

[90] An arrangement in which railway tracks run parallel on a single track bed and are interlaced/overlapped such that only one pair of rails may be used at a time.
[91] 50 seating and 20 standing
[92] A diamond crossing is the point where two railway lines cross each other, forming the shape of diamonds at the crossing point.

2.4 East Central Railway (ECR) : Non preferring of bills for shunting charges

ECR Administration did not prefer bills for shunting charges as per Railway Board's circular (February 2009) for utilization of Railway engine for shunting activity in siding premises of Bina Coal Siding of Dhanbad division, which resulted in loss of revenue of ₹ 24.28 crore during the period January 2010 to March 2016.

In order to improve the utilization of the rolling stock and timely clearance of freight trains from their sidings/terminals, Railway Board introduced (July 2004) the Engine-on-Load (EOL) scheme. The scheme *inter alia* states that

- Under EOL operations, the train engine will remain available during loading or unloading operation in the siding and wait on Railway's account so as to work the train immediately after loading/unloading operation is completed.
- The siding holders will be required to opt for the EOL operation under an agreement with the Zonal Railway Administration.
- For mechanized loading in coal sidings with EOL facility, the free time allowed would be three hours[93] and no shunting charges would be levied.

Scrutiny of records of Bina Coal Siding in Dhanbad division of ECR revealed that there was no agreement between Bina Private Siding and the ECR Administration for EOL, yet the diesel engine remained in on-position with rakes, while mechanized loading of wagons was being done.

Since the EOL scheme was not applicable to this siding, utilizing diesel engine for loading/unloading operation in the siding on Railway's accounts was not correct and shunting charges[94] should have been levied. It was noticed that at Bina Coal Siding though diesel engine remain attached during the whole process of loading, no bills for shunting charges were raised by ECR administration against the siding owner.

As worked out in audit, ECR Administration during the period from January 2010 to March 2016 supplied their diesel engine with load in on position for 29532 hours in respect of 6287 rakes to Bina Coal Siding for which total shunting charge of ₹ 24.28 crore[95] should be levied against the siding owner. In reply to an audit query Divisional Administration, Dhanbad stated (November 2016) that free time allowed for mechanized loading in the coal siding was as per the Rate Circulars 74 of 2005 and 97 of 2006, which stipulated a free time of five hours for mechanized loading. This indicates that the siding was not under EOL scheme and siding charges should have been levied and recovered.

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[93] Rate Circular no.21 of 2004, Rate Circular no. 23 of 2012

[94] Railway Board's instructions (06 February 2009) clarified that shunting charges are leviable for utilization of Railway's locomotive to perform shunting operation at siding, irrespective of the fact whether the siding is notified for charging freight on through distance basis or otherwise.

[95] Shunting charges has been calculated on the basis of all-India Engine Hour Cost notified by Railway Board from time to time.

Thus, the failure of ECR Administration to prefer bills of shunting charges as per Railway Board's circular (February 2009) for utilization of Railway engine for shunting activity in siding premises resulted in loss of revenue of ₹ 24.28 crore.

The matter was referred to Railway Board in November 2016; their reply has not been received (February 2017).

2.5 North Central and South Central Railways (NCR and SCR): Irregular levy and collection of Superfast Surcharge from passengers

North Central and South Central Railways levied and collected ₹11.17 crore from passengers on account of Superfast surcharges, without providing facility of Superfast Trains.

In terms of Railway Board's Commercial Circular no. 105 of 2006, the average speed of the trains is single criteria considered for declaring the Mail/Express trains as Superfast trains for the purpose of levy of Supplementary Charge (i.e. Superfast Surcharge). Average speed of 55 kmph or more for Broad Gauge trains and 45 kmph or more for Meter Gauge trains has been fixed by the Railway Board for declaring the Trains as 'Superfast' trains. The average speed is calculated by dividing the end-to-end distance by the total journey time. The average speed criteria need to be satisfied in both up and down directions for a particular pair of train. Zonal Railways are empowered to declare the train as Superfast train when it fulfils the requisite speed criteria. As an exception, Howrah-Kalka Mail has been categorized as a Superfast train for travel between Delhi and Howrah only.

The Superfast surcharges are fixed by the Railway Board from time to time. Railway Board, while revising the Superfast surcharges, fixed the Superfast surcharges for different class of coaches viz. General/Second class, Sleeper Class, AC (Chair Car, AC-3-Economy class, AC-3-Tier, First Class, AC-2-Tier) and AC First/Executive Class at ₹ 15, ₹ 30, ₹ 45 and ₹ 75 respectively which were effective from 01 April 2013. Superfast charges are levied on all passengers irrespective of distance travelled separately for each journey.

Audit conducted a test check in North Central and South Central Railways and studied the data on punctuality of Superfast trains during 2013-14 to 2015-16. The status of running of 11 Superfast trains (out of 36 Superfast trains in North Central Railway) and 10 Superfast trains (out of 70 Superfast trains in South Central Railway) was examined from the data collected from Integrated Coach Management System (ICMS). **Annexure 2.13**

The study revealed the following:

1. The 21 Superfast trains (selected for review over NCR and SCR) had reached the destination station late between 13.48 *per cent* and 95.17 *per cent* days of their operation/running.
2. Out of 16,804 days of trains operation of these 21 Superfast trains, the trains had reached the destination stations late on 5,599 days (33.32 *per cent* of total days of train operations).

3. Out of 5,599 days where the trains were delayed, the Superfast trains did not meet the criteria of average speed of 55 kmph on 3,000 occasions (53.58 *per cent* of the total delayed trains).

4. Out of the 21 trains reviewed in audit, 11 trains (four trains over NCR and seven trains over SCR) had been delayed on more than 30 *per cent* of their runs. Train Nos.12319-Kolkata Agra Cantt. Express and 12404-Jaipur Allahabad Express reached their destinations late on 95 *per cent* and 68 *per cent* occasions respectively.

5. Out of the 21 trains reviewed in audit, 10 trains (seven trains over NCR and three trains over SCR) had been delayed on less than 30 *per cent* of their runs. Train Nos.12034-Shatabdi Express and 22444-Kanpur Bandra Express had been delayed on 25 *per cent* and 24 *per cent* occasions respectively.

Based on the train composition (number of different classes of coaches and seating capacity), NCR and SCR administrations collected superfast charges amounting to ₹ 11.17 crore during the period 2013-14 to 2015-16 on days, where these 21 trains did not attain the average speed for a 'Superfast' train, but Superfast Surcharge was levied and collected from the passengers.

Rules for refund of charges on failure to provide air-conditioning facility in AC coaches exist in railways, wherein, the railways are liable to refund the difference between the fare of AC and non-AC classes of tickets. However, rules for refund of superfast surcharge to passengers in cases where Superfast services have not been provided to the passengers, have not been framed by the Railway Board.

The matter of irregular levy and collection of superfast surcharge was referred to Railway Board in January 2017. Their reply is still awaited (February 2017).

2.6 Eastern Railway (ER): Non-realisation of detention charges for overloaded wagons warranting load adjustment

Non-levy of detention charges through Railway Receipts by railway administration for load correction of overloaded wagons in respect of five coal companies in Asansol Division of Eastern Railway led to non-recovery of ₹ 10.70 crore for the period May 2008 to May 2016.

Railway Board's instructions[96] stipulated that wagons must be evenly loaded so that the load bore equally on all springs and no overloading beyond the marked, increased or restricted carrying capacity was allowed. Railway Board further directed (November 2004)[97] that where in-motion weighbridges do not exist, weight/volume ratio method will continue to be applied to ensure that no overloading takes place. However, wagons overloaded will be adjusted by the consignors prior to issue of Railway Receipt (RR). Also, demurrage will be charged for detention of the rake till the weight is adjusted.

[96] Rule 1508 of Indian Railway Commercial Manual (Volume II)
[97] Railway Board letter No. TCI/2004/109/4 dated 4 November 2004

Railway Board further directed (October 2006)[98], that punitive charges[99] for overloading, if any, should be realised at the originating point itself and it should be mentioned in the RR that rake has been weighed and that all the charges including punitive charges have been collected. It was also directed (March 2007)[100] that in cases of gross overloading, where load adjustment/detachment had to be resorted to, detention charges from the time of completion of weighment to the time of completion of load adjustment/detachment would be realised in addition to the applicable punitive charges. Detention charges, levied for extra detention to wagons, would be treated in the same manner as demurrage charges in all respects.

In September 2011, Railway Board decided[101] to levy a penalty of ₹ 5000 as detention charges per overloaded wagon in case of detention of a rake after weighment warranting load adjustment at the originating station itself in case of detection of overloading at originating point. Detention Charge at the prevailing rate of Demurrage on all the wagons in the rake from the time of completion of weighment to the completion of load adjustment plus penalty of ₹ 5000 as Detention Charge per overloaded wagon was leviable. It was also clarified that as Detention Charges were not waivable, it should be collected with Railway Receipts (RR).

Scrutiny of records pertaining to implementation of above orders on Asansol Division revealed that during May 2008 to May 2016 detention charges to the extent of ₹ 10.70 crore for load correction of overloaded wagons against five coal companies[102] had not been realised. It was observed that Eastern Railway Administration had not raised demand for detention charges at the time of generation of RRs and had raised the same subsequently. However, when the demands for detention charge were eventually made, the coal companies did not agree for payment. Further, demand for April and May 2016 was yet to be raised by Eastern Railway Administration.

On this being pointed out by Audit (February 2016), Railway Administration stated (April 2016) that the issue has been taken up with the Railway Board and also discussed in Rail-Coal interface meeting. However, it was seen that even after the Rail-Coal interface meeting (May 2014), Railway Board had not changed the policy regarding detention charges[103] and as such, detention charges are payable. As the divisional authorities failed to implement Railway Board's orders for recovery of the detention charges through RRs, the outstanding dues on account of detention charges started accumulating.

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[98] Rate Circular No. 86 of 2006

[99] Punitive charges are freight leviable on the entire load of the commodity in excess of the permissible carrying capacity plus loading tolerance, if any. Punitive charges are levied for the entire distance to be travelled by the train.

[100] Rate Circular No.40 of 2007

[101] Rate Circular No.32 of 2011

[102] (i) Eastern Coalfields Ltd. (ii) Bharat Coking Coal Ltd. (iii) Central Coalfields Ltd. (iv) Integrated Coal Mines Ltd. (v) Bengal Emta Coal Mines Ltd.

[103] Rates Master Circular (July 2014)-TC I/2014/108/4 dated 11 July 2014

Thus, due to non-levy of detention charge through RRs in Asansol Division in violation of Railway Board's orders, railway administration could not realise detention charges of ₹10.70 crore from the coal companies. Eastern Railway Administration in their subsequent reply (August 2016) stated that from June 2016 onwards, detention charges were collected through e-payment along with RRs. However, detention charges of ₹ 10.70 crore against these five coal companies up to the period of May 2016 continues to remain outstanding.

The matter was referred to Railway Board in November 2016. In reply, they stated (February 2017) that there is no provision to collect detention charges in RR through system till now and no Head has been specified in RR through which due detention charges can be specified and realized. They further stated that detention for overloading are collected in RR through 'SD' (Siding Charge) column from June 2016. Thus, suitable provision needs to be made in RR for specifying and realizing detention charges for overloaded wagons through the system.

2.7 Metro Railway, Kolkata (MR): Delay in implementation of Integrated Security System

The Integrated Security System in Metro Railway, Kolkata was yet to be implemented fully five years after the scheduled date of completion. Delay in supply of location plans to the contractor, delay in allowing access to the OFC backbone to the contractor, unclear terms and conditions of the contract etc. led to delay in implementation of the Integrated Security System project. Security measures as envisaged under ISS thus remained incomplete.

The Integrated Security System (ISS) project was included in the Works Programme of Metro Railway/Kolkata (MR) in 2009-10 at a cost of ₹ 25.31 crore. Accordingly, through an open tender in January 2010, the lowest bidder M/s BCL Secure Premises (P) Ltd., New Delhi was offered the job of supply, installation and commissioning, operation & maintenance of Internet Protocol (IP) based Surveillance System[104], at 23 Metro Railway station premises and Metro Rail Bhavan in February 2011 at an all-inclusive cost of ₹ 17.07 crore. The date of completion was fixed as 23 August 2011. After granting twelve extensions, the contract was terminated on 9 July 2015 due to poor progress of work. Metro Railway Administration paid ₹ 9.48 crore to the contractor up to April 2014. Metro Railway Administration initiated the process of hiring a new agency for 'Repairing of baggage scanners and comprehensive maintenance and repairing of CCTV system installed at Metro Railway stations and control Room for three

[104] **(A) Security related items** included baggage screening system, portable scanner, multi zone door frame metal detectors, hand held metal detector, bomb basket, bomb suppression blanket, bomb suit, explosive detector, NLJD super broom advanced and automatic vehicle scanner, CCTV system, Access control, Personal Baggage scanners and Explosive detection & disposal system;
(B) CCTV surveillance system included High Resolution Day and Night IP cameras, MPEG-4 Encoder with analytic support, software for secured web interfacing and web cast, video management and analytics software, networking components, workstations for network management and monitoring etc.

years' in February and March 2016 respectively. Agency for the same is yet to be appointed (October 2016).

Audit reviewed the progress of implementation of the work and observed that:

- Metro Railway Administration took 17 months to 34 months in responding to the request of the ISS contractor demanding the location plans for CCTV, Door Frame Metal Detectors (DFMD), and Automatic Vehicle Scanners etc.
- The contract conditions *inter alia* provided for supply of 57 Door Frame Metal Detectors and 60 Hand Held Metal Detectors (HHMD) costing ₹ 1.06 crore and ₹ 2.33 lakh respectively. Payment of ₹ 1.63 lakh was made to the contractor against supply of HHMD. The contract conditions however, did not clearly mention that the contractor was required to supply network equipped DFMDs and also had to network them. It was observed that the DFMDs offered by the contractor were as per Railways' specification and network compatible, but he did not provide the necessary networking. This created a dispute between the Railways and the contractor and the contractor did not supply the accessories including network module. Though no payment was made, 57 multi zone DFMDs were not installed.
- The S&T Department of the railways delayed the access to the OFC backbone to the contractor[105] and networking of stations got delayed. As a result, surveillance through CCTV could not be done centrally from Security Control at Metro Bhavan. Further, though CCTVs had been installed, the video analytic software which could facilitate Intrusion Detection, Left Object Detection, Overcrowding Detection, Camera Tampering Detection, help trigger audio-video alarm and provide pre-warning to security personnel (October 2016) was not implemented.
- As per original location plan of installation of CCTV camera, total eight Pan Tilt Zoom (PTZ) cameras, 43 C-mount cameras were to be installed at nine different locations covering Yards, Crossings/Y-sidings & tunnel mouths. These were considered necessary as these were the outlets at different locations other than at stations and were identified as risk areas for infiltration. It was observed that no cameras had been installed on the identified locations as required access to networking was not provided by the Railways (October 2016).
- 23 baggage scanners were installed in October 2012, in each 23 stations for a single direction only, against the requirement of 46 scanners. 14 out of 23 scanner machines remained out of order as on 17 October 2016. Since their installation in October 2012, these 23 scanners remained inoperative for approximately 25 *per cent* of the time. It was also observed that these scanners were installed without UPS (Uninterruptible Power Supply) in 2012 and the contractor was required to supply these later. However, as the

[105] The project commenced in February and was to be completed in August 2011. The access to OFC backbone was given to the contractor by the Railway Administration in April 2014.

contract was terminated, these were not supplied by the contractor and would have to be purchased afresh.

- From the scheduled date of completion of the project (August 2011) till March 2015, 12 extensions were granted to the contractor mainly on account of the Railway Administration's fault. Only three extensions were granted for delays on account of the contractor with token penalty.
- Security gadgets viz. 25 Bomb Baskets and 25 bomb suppression blankets, Explosive Vapour Detector, NLJD Super Broom Advanced, and Surge Protection Box for CCTV were not supplied.
- Two Automatic Vehicle scanners (UVSS) were supplied, but not installed.

Metro Railway Administration floated two tenders (February & March 2016), one for maintaining the CCTV system for three years and another repair of baggage scanners for one year at an estimated cost of ₹ 7.96 crore and ₹ 12.60 lakh respectively. The maintenance contract for CCTV was yet to be finalised and the other tender was discharged.

Thus, five years after the scheduled date of completion only CCTV and baggage screening system could be implemented completely. Delay in supply of location plans to the contractor, delay in allowing access to the OFC backbone to the contractor, unclear terms and conditions of the contract etc. led to delay in implementation of the Integrated Security System project. A number of components of the Integrated Security System viz. access control and explosive detection and disposal system were yet to be implemented. Thus, not only security measures as envisaged under ISS remained incomplete, in the absence of maintenance arrangements for CCTV and baggage scanners and also due to non-implementation of video analytic software and networking of stations for surveillance through CCTV, the expenditure of ₹ 9.48 crore incurred so far remained largely unfruitful.

The matter was referred to Railway Board in November 2016. In reply they stated (February 2017) that through the ISS contract Metro Railway has received material worth ₹ 13.58 crore, of which only 70 *per cent* payment have been made. They further stated that nearly 95 *per cent* of the supplied material have been installed and Metro Railway is using the installed /commissioned items fully except few installed and subsequently failed defective baggage scanners. However, none of the four parts of ISS were fully completed, six year after the issue of LOA as detailed below:

(a) Access Control - Door Frame Metal Detector supplied, but not installed,

(b) Surveillance System - CCTV installed, but without video analytic software, which would be done by the new agency yet to be engaged,

(c) Baggage Scanner – installed, but some subsequently failed,

(d) Bomb Detection - Bomb suit, Bomb suppression blanket, Bomb basket, Explosive vapour detectior etc. not supplied.

2.8 Northern Railway (NR): Short-recovery of license fee from Banks for additional/excess space provided/occupied by them for ATMs

Failure to recover the license fee for additional/excess space provided/occupied by banks for ATMs as per laid down rules and applying wrong category to the stations, led to short recovery of ₹ 9.40 crore from banks at 97 Railway stations over Northern Railway.

Ministry of Railways during August 2006 to June 2007 signed Memorandum of Understandings (MOUs) with 16 Nationalised Banks for installation of Automated Teller Machines (ATMs) at various stations over Indian Railways. A standard form of agreement was made an integral part of the MOU, which *inter-alia*, stated that Railways agrees to allot space of 6 sqm to banks for installation of ATMs. For internet ticketing kiosk, an additional space of 1.5 sqm was to be provided. No additional license fee was to be charged for this additional area above 6 sqm.

Railway Board on 03 September 2009 issued further instructions that at those locations where it was essential for banks to provide e-ticketing kiosk along with ATMs as per MOU and banks have not done the same; the banks may be asked to complete installation of e-ticketing kiosk latest by 31 December 2009, failing which, the space allotted to them may be reduced to 6 sqm. Railway Board further instructed that

- This space of 1.5 sqm may be restored only when the banks provide e-ticketing kiosk.
- At these locations, the agreement with the banks should not be renewed unless they provide e-ticketing kiosk.
- Zonal Railways should also explore the feasibility of making a provision in the agreement to be signed with the banks in future, for collection of cash generated at the stations and make it with mutual consent.

Railway Board, in August 2012, further clarified that

- At the time of renewal of agreement for installation of ATM, the condition for providing e-ticketing kiosk may not be insisted upon.
- At those locations where e-ticketing kiosk have been provided and Banks have no objection in continuation of the same, they be allowed to continue with the same on the existing terms and conditions.
- At those locations where banks are not interested to continue with the e-ticketing kiosk and they want to remove this facility or e-ticketing kiosk have not been provided at all, banks may be given option of either reducing the area to 6 sqm by making alteration in the kiosk structure at their own cost or to pay enhanced licence fee for this additional area of 1.5 sqm, at double the rate charged for the 6 sqm area.

Scrutiny of records related to allotment of space for ATMs and realization of license fee as well as agreement executed between banks and Northern Railway in respect of 147 ATMs was done. It was seen that in 102 locations allotment of

space/ area occupied by banks for ATMs was more than 7.5 sqm (6+1.5 sqm for e-ticket kiosks), but licence fee from the banks was recovered for 6 sqm of area only. The area allotted/ occupied by banks in Northern Railway ranged from 5.95 sqm at Patiala by State Bank of Patiala to 27 sqm at Dehradun by State Bank of India.

In 97 out of 102 locations, e-ticket kiosk had not been provided. It was observed that at these locations neither the space was reduced to 6 sqm nor license fee for additional space of 1.5 sqm was charged at double the rate (w.e.f 1 September 2012) as instructed in Railway Board's directive of August 2012. NR Administration did not recover license fee in respect of the additional area occupied at these locations which led to short recovery of license fee of ₹ 5.02 crore (double the license fee for the extra space) for the period from 1 September 2012 to July 2016. The loss would continue, till remedial action is taken by the Railway Administration.

Railway administration also did not raise the issue of excess area provided/occupied by the banks in excess of their agreements. Had railway administration raised the issue they would have realized license fee to the tune of ₹ 3.46 crore at normal license fee rate.

The matter was taken up with the Railway Administration in February and March 2016. In response the Railway administration stated that Banks were asked in October 2014 to deposit license fee at double the license fee for the additional area occupied by them. However, despite lapse of 18 months of issue of notice neither recovery has been made, nor any bank agreed to pay this amount.

Agreement with banks further stipulated that the license fee were payable as per category of stations notified by the Railway Administration. It was however, noticed that license fee in respect 13 stations were recovered incorrectly by treating the concerned stations lower than that notified. This resulted in short recovery of ₹ 0.92 crore as worked out by audit.

Thus, failure to recover the license fee for additional/excess space provided/occupied by banks for ATMs as per laid down rules and applying wrong category to the stations, led to short recovery of ₹ 9.40[106] crore from banks at 97 Railway stations over Northern Railway.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

2.9 Eastern Railway (ER): Short earning of revenue due to improper utilisation of Higher Capacity Wagons

During September 2011 to March 2016, Eastern Railway carried coal for longer lead traffic in lower capacity wagons instead of available higher capacity wagons. While the higher capacity wagons were utilised for shorter lead traffic. This resulted in short earning of revenue to the tune of ₹8.52 crore.

[106] ₹ 5.02 crore + ₹ 3.46 crore + ₹ 0.92 crore

While addressing the Chief Operations Managers' (COMs) conference on 21 and 22 April 2011, Advisor Traffic Transportation (Mobility), Railway Board observed that the *operating mantra* 'CRT' (Crew, Running, Terminals) had to be given emphasis by the Chief Operating Managers (COMs) while booking freight. The focus area should be Net Tonne Kilometre (NTKM), Stock utilisation, 25 t axle load clearance, reviewing sticky Origin-Destination flows etc.

Further, Member (Traffic), Railway Board also stressed (October/November 2014) the need to give higher priority for booking of long lead traffic. The Member also observed that Railways should focus on earnings and not just on loading targets and that the *mantra* should be to earn more from the same stock.

Out of different types of wagons (various carrying capacities) used by Indian Railways, open wagons, such as BOXNHL (70 tonne), BOXNR (69 tonne), BOXN (66 tonne), BOXNEL (67 tonne) and BOXNHA (68 tonne), are used for coal loading in Indian Railways. The BOXNHL wagons have the highest permissible carrying capacity and that should be given preference over other wagons at the time of booking of longer lead traffic to generate more revenue.

In Eastern Railway, during September 2011 to March 2016 coal originating from collieries around Pakur and Andal areas was transported to short lead (from 16 to 686 kms) destinations by 454 rakes of higher capacity wagons. Extra earning due to more loading in higher capacity wagons for the said shorter lead traffic was ₹ 2.85 crore. On same dates 454 rakes of lower capacity wagons were used for transporting coal to longer lead traffic. If higher capacity rakes were booked for longer lead traffic (from 206 to 1746 kms), railways could have earned ₹ 11.37 crore more.

Thus, Railway Administration lost the opportunity to earn additional amount of ₹ 8.52 crore by supplying rakes of higher capacity wagons for short lead traffic, instead of long lead traffic.

The matter was brought to the notice of Railway Administration through a Special Letter (April 2015). Railway Administration stated (May 2015) that supply of rakes for loading depends on the real time availability of the rakes in and around the loading points. It was also stated that higher capacity stock cannot be kept idle only to pick up long lead traffic while short lead traffic is readily available. Further, supply of higher capacity stock is dependent upon a number of parameters such as validity period, circuit of operation, critical situation of power houses, need for conserving the rakes, rake holding, engine holding, route congestion, maintenance block on the route and restrictions.

Audit has, however, captured the booking particulars of only those pair of rakes, where on the same dates, both higher and lower capacity wagons were available at the serving stations and also, both long and short lead traffic were booked from the sidings served by these serving stations. As such Audit compared cases where rakes of lower capacity wagons were supplied for long lead traffic and rakes of higher capacity wagons supplied for short lead traffic, from the same loading area, on the same days and on the basis of real time

availability of both types of rakes. The distance between the points from where these two types of rakes were loaded was only 6 to 48 kms. Further, the parameters stated by the Railway Administration that have a bearing on supply of rakes are general in nature and are applicable equally for rakes consisting of higher capacity wagons as well as other types of wagons.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

2.10 North Central Railway (NCR): Non-revision of interest and maintenance charges of private sidings

Delays in processing the proposal for revision of interest and maintenance charges in respect of six private sidings at various level (i.e. Division & Zonal Headquarter) of NCR Administration resulted in non-billing of charges as per the revised rates and consequential short recovery of interest and maintenance charges of ₹7.82 crore.

Para 1806 of Indian Railway Code for Traffic (Commercial) Department and 1827 of Indian Railway Code for Engineering Department states that the applicant of private sidings should pay annually, interest and maintenance charges to the Railway Administration as follows:

(i) Interest is to be charged on the book value, of the portion of the cost of siding borne by the Railway at the prevalent rate of dividend payable by the Railways to the General Revenue as may be fixed from time to lime, and

(ii) Repair and maintenance charges are to be recovered @ of 4.50 *per cent* on the cost of the portion of siding borne by the Railway or its present day cost, whichever is higher. For calculating these charges, the cost of the portion of siding borne by the Railway will be revalued every five years in accordance with such general or special orders as may be issued by the Railway Board from time to time.

Further, Railway Board instructions[107], *inter alia* states that in case, wherever private sidings are maintained by Railways, maintenance and repair charges are to be levied on basis of staff cost, tools and plant cost, cost of replacement of small fittings and departmental charges etc. Instructions further state that a review of these charges should be made every five years applicable from 1st April and the interregnum charges be increased by 10 *per cent* on the base rate every year.

Audit reviewed the records of six private sidings[108] of Jhansi Division of NCR, where repair and maintenance are being carried out by the NCR Administration and observed that

[107] letter No. 58/ P-7/SA/13 dated April 21/23 1982

[108] Reliance Siding, Lalpur, POL Siding, Karari (for M/s HPCL, M/s BPCL, M/s IOCL), BHEL Khajraha, Parichha Thermal Power House(PTPH) Siding Parichha, Diamond Cement Parichha Siding and POL Siding Rairu (M/s BPCL)

- The bills for interest and maintenance charges in case of these six sidings maintained by Railways were raised at the pre revised rates as fixed on 01 April 1997 (i.e. the initial years of their allotment).
- The revision in rates of interest and maintenance charges every five years as per the above codal provisions and Railway Board's instructions of April 1982 were due on April 2002, April 2007 and April 2012. It was however seen that the bills were raised at the earlier fixed rates (1997) and these rates were yet to be revised.
- Jhansi Division initiated a proposal for revision of interest and maintenance charges in respect of these six sidings in December 2011. However, the same was yet to be finalized owing to delays at every level viz. delay of 8 to 116 months for submission of proposal by Civil Engineering department, up to three months for vetting by Accounts Department, up to two years for approval by Divisional Railway Manager (DRM) for further submission to Zonal Headquarters and up to 32 months for return of approval from Zonal Headquarter. Final approval of DRM/Jhansi was yet to be given (August 2016).
- Audit assessed amount of short recovery of ₹ 7.82 crore on account of non-revision of interest and maintenance charges in respect of these six sidings as per the guidelines of Railway Board (April 1982) along with examples of earlier revision (January 2000) by Central Railway, Mumbai.

Thus, delays in processing the proposal for revision of interest and maintenance charges in respect of six private sidings at various level (i.e. Division & Zonal Headquarter) of NCR Administration resulted in non-billing of charges as per the revised rates and consequential short recovery of interest and maintenance charges of ₹ 7.82 crore.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

2.11 South East Central Railway (SECR): Loss due to allowing excess free time for combination of manual and mechanised loading in cement sidings

There is an urgent need for policy decision by the Railway Board to prescribe permissible free time lesser than that allowed for manual loading for loading in covered wagons, where a combination of manual and mechanised loading is being used. At present such sidings are allowed free time applicable for manual loading, there is a potential loss of revenue of around ₹ 6 crore per annum on account of loss of carrying capacity of the wagons.

Railways grant permissible free time for loading/ unloading of wagons depending upon types of wagons (open and covered), working pattern of sidings and nature of loading in Railways terminals/ sidings. There are two types of loading viz. Mechanised loading and Manual loading. Permissible free time allowed is more in manual loading than mechanised loading. Railways impose demurrage charges for time taken in loading beyond permissible time to discourage terminal detention and improve availability of wagons.

As per Railway Board's Rate Circular 74 of 2005, mechanised loading is not applicable for covered wagons. Subsequent Railway Board Circulars 84 of 2006 and 01 of 2012 reiterated the same. As per RC 01 of 2012, free time allowed for manual loading of a group of 31 or more BCN (covered wagon) and 46 or more BCNHL (another type of covered wagon) was 9 hours and 11 hours respectively. Moreover, Railway Board clarified in October 2006 and August 2013 that in case both manual and mechanised operations are used for loading/ unloading of a rake, the more restrictive free time i.e. free time for mechanised loading/ unloading will be permitted.

During the check of five[109] private cement sidings of SECR, the following loading pattern was observed for loading of cement bags in BCN/ BCNHL (covered) wagons:

Mechanised loading of cement being done in a wagon in South East Central Railway

Cement bags were brought at loading platform through a conveyer belt, a machine called Auto loader was attached with the belt; the cement bags coming by conveyer belt were put into the wagon by the Auto loader. The loading procedure adopted requires only two persons in wagon, one person handles the Auto loader and another person helps in uniform stacking of bags in wagons. Eight such machines can be operated simultaneously in different wagons. Joint studies were conducted by Audit Team with Commercial staff (February 2013 to February 2016) to assess the time required for loading of one wagon by the system revealed that it takes only 35 to 45 minutes for BCN wagon and 60-70 minutes for BCNHL wagon to be loaded depending upon the carrying capacity of these wagons.

In the light of the above, it is observed in Audit that the BCN rake (42 wagons) and BCNHL rake (58 wagons) should be loaded in five hours and seven hours respectively including ½ hours for rake formation as loading is done in part placements on eight such machines being operated simultaneously against permissible free time for loading of nine hours and 11 hours respectively. As such, though a combination of manual and mechanised loading is being used for loading of covered wagons, these five cement sidings of SECR continue to avail permissible free time for manual loading only. By revising free time as per actual nature and time taken for loading, earning capacity of wagons for four hours per rake could have been increased.

The matter was brought to the notice of Railway Administration in March 2013, February 2014, March 2014, March 2016 and September 2016. During tripartite meeting (June 2015), SECR Administration accepted the audit contention and stated

[109]Ambuja Cement Siding/ Bhatapara (MRBL/BYT), Ultratech Cement Siding/Hatbandh (MGCH/HN), Ultratech Cement siding/Rawan/Hatbandh (ULCH/HN), Century Cement Siding/Baikunth (CCS/BKTH) and Lafarge Cement Siding/Akaltara (LIPL/AKT)

that the matter was referred (April 2015) to Railway Board for guidance. Further, while replying to the Draft Para in October 2016, Railway Administration accepted that less time is being consumed in loading of cement bags through conveyor belt (mechanised loading) as compared to manual loading by almost 50 *per cent*. Railway Administration further stated that all old cement sidings have multiple loading platforms which take more time in placement and later amalgamation after loading and average loading time in these sidings was 08.20 hrs.

The reply may be viewed in light of the fact that time required/taken for placement of wagons and formation/amalgamation of rake remains the same for both manual loading as well as mechanised loading. As such, the difference in time taken would be on account of manual or mechanised loading in the wagons and not on account of placement/amalgamation of rakes, which would be done in either case. The fact remains that in the absence of a prescribed free time for mechanised loading in covered wagons, parties continue to avail nine hours of permissible free time. SECR has not conducted study to assess the impact of introduction of mechanised loading on average time of loading in cement sidings and hence they are allowing the same permissible free time of nine hours applicable for manual loading, which needs revision.On the matter being referred to Railway Board, all Zonal Railways have been asked (August 2016) to provide details of mechanised loading of covered wagons.

Therefore, there is urgent need for taking policy decision by the Railway Board to prescribe permissible free time for mechanised loading in covered wagons. Until that is done, higher permissible free time applicable for manual loading will continue to be allowed to these five sidings, where a combination of manual and mechanised loading is being used. This has resulted in potential loss of revenue of ₹ 18.91 crore during the period from 2013-14 to 2015-16 (upto February 2016) on account of loss of earning capacity of these wagons and railways will continue to suffer loss of ₹ 0.54 crore per month (₹ 18.91 crore/ 35 months) till remedial action is taken.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

2.12 East Coast Railway (ECoR) : Loss on account of non-weighment of rakes

Due to non-weighment of rakes despite existence of weighbridges enroute as well as at the destination station, Railway Administration sustained loss of ₹ 1.46 crore on account of non-recovery of punitive charges[110].

In terms of para 1422 to 1427 of Indian Railway Commercial Manual, Volume-II, loose goods, bulky goods or goods in bulk, which cannot be weighed on the ordinary weighing machine, should be weighed on a wagon weighbridge at the forwarding station if available or at a convenient weighbridge station *enroute*

[110] As per Ministry of Railways Rates circular No.19/2012, Circular No.TC-1/2006/109/6 Part-II, dated 23.07.2012, where the commodities are over-loaded in Railway wagon, the Railway Administration shall recover punitive charges as provided in parts I, II and III of the situation at 'A' and 'B' of the Schedule, from the consignor, the consignee or the endorsee as the case may be, for the entire distance to be travelled by the train hauling the wagon from the originating station to the destination point, irrespective of the point of detection of overloading.

which should, as far as possible, be the first weighbridge station. In case of non provision of weighment facilities at forwarding station, freight charges should be invoiced on sender's declared weight. However, it shall be the duty of the destination station to weigh the rakes not weighed at forwarding station/ *enroute* weighbridge, if weighbridge is available there and recover undercharges, if due, before delivery of goods.

Ministry of Railways (Railway Board) vide their Circulars of October 2004 and November 2004 emphasised that weighbridges should be installed preferably at originating points, so that there is 100 *per cent* weighment of all rakes. It was further mentioned that in cases, where the wagons were not weighed at the originating point due to non-availability of a weighbridge or due to the weighbridge being out of order, or any other operational reason, the originating station should send a message for weighment of such rakes to the commercial control of the Division where first available *enroute* weighbridge is located. Divisional commercial control after receiving the message for weighbridge will give memo to Divisional Operating control which will ensure weighment.

Further, Railway Board instructed[111] (October 2006) that Chief Operations Manager (COM) of each Railway will also notify Alternate Associated Weighbridge where weighment will be done, if the Associated weighbridge is defective and advise the same to all Zonal Railways and Board's office. Accordingly, Zonal Railways were to notify associated weighbridges and alternate associated weighbridges for each loading point. A reliable means of communication should be set up among the associated weighbridges, alternate associated weighbridges and loading points concerned for communicating results of weighment.

Based on the Railway Board's instructions of October 2006, ECoR notified[112] a list of nominated associated weighbridges and alternate associated weighbridges for loading points available in their Railway. For loading station Nayagarh, Kendujhargarh and Sukinda Road were nominated as the associated weighbridge and alternate associated weighbridge respectively.

During scrutiny (November 2014) of the accounts and records of Chief Goods Supervisor, Sukinda Road, it was observed that from March 2011 to October 2014, out of total 117 iron rakes booked from Nayagarh/Daitari to Sukinda Road Goods shed, only 17 rakes were weighed at Kendujhargarh (13 rakes) and at Sukinda Road (four rakes) weighbridges. For the remaining 100 rakes, freight charges were recovered on the Sender's Weight Accepted (SWA) basis despite availability of associated weighbridge at Kendujhargarh and alternate associated weighbridge at Sukinda Road. The reasons for non-weighment of these rakes were not on record.

Scrutiny further revealed that overloading was detected in all the rakes for which punitive charge of ₹ 25.34 lakh was recovered. The total overloading detected in 17 rakes was 1694.6 tonnes and the quantity of overloading ranged

[111] Rate Circular No.86/2006 of October 2006
[112] vide Commercial Circular No. 125(G)/07 in May 2007 (subsequently revised in August 2014)

from 7.7 tonnes to 291.35 tonnes. Thus, average excess load and punitive charges collected per rake worked out to 99.68 tonnes and ₹ 1.49 lakh respectively.

The matter was referred to Railway Board in June 2016 with the following observations:

(i) There is system failure in observing the instructions of Railway Board. Although weighment facilities existed at weighbridge at Kendujhargarh and Sukinda Road, out of 117 rakes only 17 rakes were weighed and overloading was detected in all cases. Thus, there was a need to ensure that rakes were subjected to weighment as per RB's instructions.

(ii) Non-weighment of rakes encourages overloading malpractices, which lead to loss of revenue and damage to rolling stock and tracks as well. Railway Board must ensure that their instructions of weighing the consignments are followed and recovery of penalty is done from the defaulting consignor/ consignee.

In reply, Railway Board informed (December 2016) that weighment of one more rake was done at Kendujhargarh for which punitive charge was collected at Nayagarh and that total number of rakes was 116 and not 117. They further stated that Commercial Circulars of May 2007 and August 2014 stipulates that for the loading point Nayagarh, Kendujhargarh is the associated weighbridge for the loads towards Jakhapura and Sukinda Road is nominated as the alternate associated weighbridge. The reply further stated that for loads upto Sukinda Road, Sukinda Road weighbridge is not nominated as alternate associated weighbridge due to operational constraints.

However, the fact remains that out of 116 rakes, all 18 rakes weighed (14 at Kendujhargarh and four at Sukinda Road) were found overloaded. Weighment of remaining rakes at Kendujhargarh was not carried out as the weighbridge Kendujhargarh was out of order for five years eight months (in long spells) during the period May 2009 to October 2015. It was the responsibility of the Railway to ensure that the weighbridge at Kendujhargarh was made operational timely and in case of any delay alternative arrangements to weigh all the rakes from Nayagarh to Sukindia Road should have been made, especially in view of the fact that overloading was detected in all the 18 rakes which were weighed at Kendujhargarh and Sukinda Road during the period 2013-14.

On the analogy of average overloading per rake the total quantity of overloading in respect of 98 rakes booked on 'Sender's Weight Accepted' basis works out to 9769.1 tonne and punitive charges of ₹ 1.46 crore was compromised.

Chapter 3
Traction

Member Traction at Railway Board is overall in charge of the Electrical department of Indian Railway. He is also responsible for Railway Electrification Workshops (exclusively for locomotives) and Energy/Fuel Management.

At Zonal level, Chief Electrical Engineer (CEE) is responsible for operation and maintenance of Electric Locos, Electric Multiple Unit train (EMU), Mainline Electric Multiple Unit train (MEMU), maintenance and operation of Overhead Electrical Equipment (OHE), electrical coaching stock etc. Maintenance of Diesel locomotives is supervised by Chief Motive Power (Diesel). Production Units (CLW and DLW) are managed independently by General Managers reporting to Member Traction at Railway Board.

The total expenditure of the Electrical department including manufacturing units of locomotives (CLW and DLW) during the year 2015-16 was ₹ 27593.01 crore. During the year, apart from regular audit of vouchers and tenders, 412 offices of Electrical department including CLW and DLW were inspected by Audit.

This chapter includes two long paragraphs. One relates to Diesel Locomotive Works, wherein Audit assessed the system of indigenization of suppliers for locomotive components and vendor development consequent to Transfer of Technology from a foreign firm. The second long paragraph is related to 'Energy conservation measures in Indian Railways' where Audit reviewed the steps taken by Indian Railways for energy conservation, both for diesel and electric energy.

In addition, this chapter also includes two individual paragraphs highlighting issues such as extra expenditure in import of crankcases, a locomotive component; and extra expenditure due to change of traction from electric to diesel locomotive and *vice versa*.

3.1 Diesel Locomotive Works (DLW) : Indigenization of suppliers for locomotive components and vendor development consequent to Transfer of Technology from foreign firm

3.1.1 Introduction

Diesel Locomotive Works (DLW) at Varanasi was established in 1961 in collaboration with M/s Alco, USA for manufacturing of locos (2600 Horse Power). The first locomotive was dedicated to nation on 3 January 1964. In order to upgrade technology and capacity in terms of High Horse Power (HHP), Indian Railways entered into a contract with M/s General Motors, now renamed as M/s Electro Motive Diesel (EMD) of United States of America (USA), in 1995 for Transfer of Technology (TOT) for manufacturing of 4000 HP diesel electric locomotives at DLW, along with the continuation of production of Alco locomotives. The first indigenous good and passenger version of HHP loco was manufactured at DLW in 2001 and 2003 respectively. DLW is managed by the General Managers under the overall supervision and control of the Railway Board. The General Manager (GM) is assisted by Principal Heads of the Departments (PHODs).

DLW manufactured a total 1783 HHP locos of various types till 31 March 2016. Average production cost of one locomotive of HHP is ₹ 13.80 crore and the material constitutes 88 *per cent* of the cost of locomotive.

Table 3.1 – Loco produced during the past five years at DLW, Varanasi

Year	ALCO Loco	HHP Loco	Total
2011-12	69	190	259
2012-13	63	231	294
2013-14	38	266	304
2014-15	17	249	266
2015-16	13	317	330
Total	**200**	**1253**	**1453**

Audit examined the progress as regard to TOT and status of indigenization, and vendor development mechanism at DLW during the period 2011-12 to 2015-16. The study has been undertaken with an objective to assess

- Whether TOT obtained from M/s EMD (USA) resulted into reduction of imports and the facilities created after the TOT were utilized for indigenization of loco components.
- Whether adequate vendor base was developed to have multi-sourcing of supplies to ensure competitive prices for procurement of materials.

Audit findings

3.1.2 Continuing imports despite purchase of Transfer of Technology for indigenization

Railway Board entered into an agreement (October 1995) with General Motors, now known as M/s EMD (USA), for TOT relating to 4000 HP, 1676 mm gauge,

GT46CW Model locomotive and family of Diesel Engines[113] on payment of US$ 1.75 crore (in four installments) extending over a period of ten years (1996-2006). The agreement *inter alia* provided for:

- Complete transfer of technology to manufacture 4000 HP locomotives.
- Complete drawings and details for 5000 plus HP locomotives

The payment schedule for obtaining TOT was decided in four installments viz.

(i) First 30 *per cent* of total TOT fee was to be paid on receipt of engineering/ manufacturing drawings and project reports,

(ii) Next 30 *per cent* was to be paid after successful indigenization of 50 *per cent* of the manufacturing cost of locomotive or after a period of five years whichever is earlier,

(iii) Next 25 *per cent* of the amount was to be paid after 75 *per cent* of indigenization of loco, and

(iv) Last 15 *per cent* was to be made after 95 *per cent* of indigenization.

Audit noticed that payment of three installments had been made till August 2003 i.e. after expiry of 7.5 years of the contract period. Last installment of 15 *per cent* was not paid due to non-achievement of 95 *per cent* indigenization level. At the end of TOT contract (February 2006) DLW claimed to have achieved 70 *per cent* indigenization. Audit, however, observed that the status of imports had not changed since then (i.e. after further expiry of 10 years) as can be seen from the following table:

Table 3.2 – Share of purchases through imports for last five years *(₹ in crore)*

Year	Total Purchase	Indigenous	Imported	Percentage of Import
2011-12	2612	1827	785	30.05
2012-13	3071	1642	1429	46.53
2013-14	4222	2563	1659	39.29
2014-15	3500	2560	940	26.86
2015-16	4222	2826	1396	33.06
Overall Average			**1250**	**35.16**

It is seen that import percentage as of March 2016 is 33 *per cent,* which indicates that there is no significant improvement in indigenization after February 2006.

Further, Audit review of the Category 'A' items (which constituted 70.22 *per cent* value of total material consumption in the year 2014-15) revealed that out of 31 such items, 15 items were still being imported even after 10 years of expiry

[113] Family of 710 diesel engines means 12, 16 and 20 (locomotive application) only cylinder GM diesel engines.

of TOT agreement in 2006. Six[114] of these items were imported fully and nine items[115] partly.

Thus, despite TOT, DLW was yet to attain the envisaged level of indigenization. It continued imports of one-third of its requirement, (average import of last five years 35.16 *per cent*), by payment of foreign exchange of about ₹ 1250 crore per annum. Further, most of the imports (almost 91.73 *per cent* - ₹ 4329 crore) were made from the single supplier M/s EMD (USA) from whom the technology was transferred. Adequate vendor base for indigenization was also not developed as discussed in Para 3.1.5.

In reply, DLW stated (September 2016) that indigenization was being pursued by design office of Chief Design Engineer (DLW) and a Committee had been constituted in June 2015 to identify items for vendor development for indigenization and multi-sourcing of HHP items in a phased manner.

3.1.3 Non-utilization of facility created for in-house production consequent to Transfer of Technology

Consequent to TOT of HHP Locomotive from M/s EMD (USA) involving payment of US$ 1.75 crore during 1996 to 2006, creation of facilities at DLW were sanctioned in phases for in-house production of components of HHP Locos as given below:

Phase I: ₹ 43.27 crore was sanctioned during 1997-1998

Phase II: ₹ 155.54 crore was sanctioned during 1998-1999

Phase I included seven projects which were completed (November 2006). Phase II included nine projects. The project envisaged purchase of Machinery and Plant (M&P) for production of the Crankcase fabrication and machining, Cylinder Head & Liner Machining & Assembly, Turbo Machining and Assembling, Connecting Rod Machining, Piston Pin and Camshaft, Engine Power Pack and Engine & Turbo Test Sales. DLW Administration stated (July 2016) that all the projects were completed except connecting Rod Machining. Audit observed that total four projects/facilities (out of which three were stated to be completed) were either not performing or under-performing.

Audit further noticed that no time schedule had been laid down either by Railway Board or by DLW for completion of these remaining projects. Audit undertook a detailed analysis of these four projects. The results of findings in respect of four such cases are discussed in subsequent paragraphs.

[114] Crankshaft, cylinder head stud assembly, cylinder power assembly fork, cylinder power assembly blade, Ecotip super stack injector, AC-AC traction system

[115] Turbo wheel impeller balance assembly, turbo inlet scroll assembly, turbo dwelling assembly, machined pistoned, cylinder liner stud, fully machined crankcase, traction alternator, 3 phase induction traction motor, supply of AC-AC traction system.

3.1.3.1 Connecting Rod Machining: Unfruitful investments of ₹ 16.63 crore and loss of envisaged savings of ₹ 75.18 crore

Phase II Project *inter alia* provided for setting up of facilities for machining of Connecting Rod fork and blade at an estimated cost of ₹ 14.37 crore in year 1998-99.The expected savings of this project was ₹ 6 lakh per loco[116]. Procurement of relevant machines had been going on since October 2003. The implementation of this project was not completed as of July 2016 as the machines[117] procured at the total cost of ₹ 16.63 crore, were not put to use.

Audit further noticed that one of the machines (CNC-HMC) for which purchase order was placed in 2013 could not be procured till date. The procurement of the machine is expected to be completed in October 2017. In reply to Audit query, DLW agreed (June 2016) that production of HHP Connecting Rod could not be started due to non-availability of CNC-HMC machine and same was expected to be commissioned by October 2017.

Thus, the whole project, despite expenditure of ₹16.63 crore and under implementation since 2003, had remained non-operational over the years. Due to non-completion of the project, DLW had to procure loco components (connecting rod blade and connecting rod fork) from outside sources (indigenous as well as foreign suppliers). In respect of 1253 HHP locos manufactured during 2011-12 to 2015-16, the expected savings of ₹ 6 lakh per loco (₹ 75.18 crore for 1253 locos) could not be derived. The machinery procured over the years is also liable to become obsolete and usability might have been impaired as 10-12 years have already passed since its commissioning and lying idle.

3.1.3.2 Cylinder Head, Liner Machining and Assembly: Unfruitful expenditure ₹21.81 crore and loss of expected savings of ₹ 125.30 crore

Phase II Project *inter alia* provided for setting up facilities for in-house manufacturing of Laser Hardened Cylinder Liner Stud Assembly at a total cost of ₹ 13.22 crore. The saving expected was ₹ 10 lakh per loco. Eleven machines[118] for this project were procured and installed between 2004 and 2014 at a total cost of ₹ 21.57 crore.

Audit observed that a Laser Hardening Machine (Surface Hardener) procured in March 2004 at a cost of ₹ 6.19 crore from M/s Sunag Engineering Corporation, USA was commissioned in December 2006 after a delay of two and half years. The machine went into breakdown in December 2011 due to its defective electrodes and capacitors. During the period December 2006 to December 2011, the machine was intensively being utilized for surface hardening operation on cylinder liner of locos. The retro-fitment was sanctioned only in February 2015

[116] calculated in the year 1998-99
[117] Ultrasonic Washer, Buffing Machine, Dot matrix stamper, Wheel blast, Internal Grinder, Creep Feed Grinder, Induction hardening
[118] Laser hardening, bead blast, liner washer, liner leak tester, CNC-VTL, profile check gauge, HMC, Paint booth, Honing machine, radial drill, EOT crane.

after delay of more than three years. The retro-fitted machine was received in January 2016 which was yet to be commissioned. Due to breakdown and delay in retro-fitment of the machine, raw material worth ₹ 2.17 crore purchased in 2008-10 for manufacturing of Cylinder Liner Stud Assembly had been lying in stock unutilized. Further, Honing machine received in July 2014 at a cost of ₹ 4.13 crore was also not yet commissioned.

In reply, DLW accepted (July 2016) that during the last five years, Cylinder Liner Stud Assembly had never been manufactured and requirement was met from imports only from M/s EMD (USA).

Thus, the entire expenditure of ₹ 21.81 crore incurred on creation of facilities for in-house production of Laser Hardened Cylinder Liner Stud Assembly remained unutilized. Further, the expected savings of ₹ 10 lakh per Loco estimated in the year 1998-99 could not be achieved. In respect of 1253 HHP locos manufactured during 2011-12 to 2015-16, the expected savings of precious foreign exchange worth ₹ 125.30 crore could not be derived.

3.1.3.3 Piston Pin and Camshaft: Unfruitful expenditure ₹ 18.47 crore and loss of expected savings of ₹ 313.25 crore

Phase II Project *inter alia* provided for an amount of ₹ 17.27 crore for setting up of facilities for in-house manufacturing of Piston, Pin and Camshaft. The expected saving of this project was ₹ 25 lakh per loco. Six machines[119] were purchased and commissioned between April 2003 and December 2013 at a total cost of ₹ 12.66 crore.

Audit observed that in addition to above machines, DLW separately procured (under M&P programme 2008-09), a CNC Cam Grinding machine at a cost of ₹ 5.81 crore from M/s Morara, Italy for in-house manufacturing of above items. The machine was commissioned in February 2011. However, the machine remained in breakdown condition since March 2011.

Despite creation of facilities at a total cost of ₹ 18.47 crore (₹ 12.66 crore + ₹ 5.81 crore) for in-house manufacturing of Piston, Pin and camshaft, it was observed that 17081 Piston Pin at a total cost of ₹ 32.28 crore were imported during 2011-12 to 2013-14 from M/s EMD (USA). Further, 8817 Piston Pin at a total cost of ₹ 10.91 crore were purchased from indigenous sources during 2012-13 to 2015-16 due to non-functioning of CNC Cam Grinding machine commissioned in February 2011. Similarly, 3465 Camshafts were purchased from indigenous sources during last five years at a total cost of ₹ 57.82 crore. DLW could produce in-house only 137 Piston Pin and 7 numbers of Camshafts during 2014-15 and 2015-16.

[119] CNC chucker milling machine, CNC cam milling machine, CNC horizontal machining centre, turning centre, drilling machine, cam milling machine

In respect of 1253 HHP locos manufactured during 2011-12 to 2015-16, the expected savings of ₹ 25 lakh per loco (₹ 313.25 crore for 1253 locos) could not be achieved.

3.1.3.4 Shortfall of in-house production of Crankcase: Wasteful expenditure ₹ 45 crore and loss of expected savings of ₹ 290 crore

Phase II Project, *inter-alia*, provided (November 2010) for procurement of Machinery and Plant for Crankcase fabrication and machining at a total cost of ₹ 18.72 crore and ₹ 35.21 crore respectively. The savings of ₹ 50 lakh per loco on account of in-house fabrication and machining of Crankcase was expected to be achieved. For machining of crankcase, one portal milling machine received in September 2004 was commissioned in June 2005, but it was handed over to Workshop for regular production only in November 2008, after delay of three years.

Further, for setting up facilities for production of 200 Locomotives, Railway Board sanctioned (2008-09) an amount of ₹ 78.46 crore. Two portal machines were required for the machining of 200 Crankcases per year. As such, the second machine was sanctioned (estimated cost ₹ 33.02 crore) along with the provision for construction of a New Block Shop (cost of ₹ 13.96 crore) to accommodate new portal milling machine.

Audit observed that against the indent (May 2008) of DLW, Central Organisation for Modernisation of Workshop (COFMOW) awarded (June 2010) the contract for procurement of the machine to M/s Cincinnati Machining, USA through an Indian agent M/s MAG India Ltd., Bangalore with scheduled delivery time as May 2011. On receipt of the foundation drawings submitted by the firm, DLW realised that sufficient space was not available in New Block Shop and therefore cancelled the order in September 2012.

This implies that new Block Shop was constructed to accommodate new portal machine disregarding the dimensions of the portal machines and also without waiting for foundation drawings of the machine.

While portal milling machine against the indent of May 2008, was under procurement, DLW obtained a separate sanction under M&P works programme 2010-11 for ₹ 45 crore for purchase of third portal milling machine. On the indent (April 2010), COFMOW procured the machine from the same contractor (M/s Toskurim, Czech Republic) in August 2014 and the machine was commissioned in November 2015.

COFMOW concluded (September 2013) another contract with M/s Toskurim, Czech Republic through their Indian agent M/s Swastik Overseas, New Delhi for procurement of the milling machine, which was received in May 2015, but yet to be commissioned.

During 2011-12 to 2015-16, DLW fabricated 673 crankcases of which only 556 crankcases could be machined at DLW. Machining of the remaining crankcases

was outsourced. Further, to meet their overall requirement, DLW procured 580 machined crankcases from M/s EMD (USA) for their remaining (1253-673[120]) requirement.

Thus, outsourced procurement of 580 crankcases resulted into loss of envisaged savings of ₹ 290 crore @ ₹ 50 lakh per Crankcase.

Thus, it could be seen from above instances that indigenization project envisaged in the year 1998-99 after procurement of TOT worth US $1.75 crore and commenced in the year 2003, is not yet complete even after lapse of 13-14 years and there is hardly any reduction in dependence on outsourcing in general and on imports in particular. The envisaged savings of ₹ 803.73 crore by DLW through these indigenization projects were not achieved.

3.1.4 Wasteful expenditure in production of 5500 HP locos: ₹ 54.51 crore

Transfer of Technology contract concluded with M/s EMD (USA) in 1995 also included provision of complete drawings and details for 5000 plus HP locomotives. On the basis of TOT received, Rolling Stock Programme (RSP) for 2009-10 had provided for manufacturing of 30, 5500 HP locomotives at a total anticipated cost of ₹ 420 crore. Keeping in view the advantages of improved fuel efficiency and emission control with higher balancing speeds as envisaged in the designing of 5500 version designed by DLW and RDSO jointly in consultation with M/s EMD (USA), Railway Board directed (October 2010) to procure materials for 10 prototype 5500 HP locomotives.

Audit observed that for manufacturing of 10 locos, DLW procured material worth ₹ 173.04 crore including imported material worth ₹ 63.76 crore. DLW manufactured the first prototype of the loco during 2011-12 at a total cost of ₹ 17.29 crore and dispatched (January 2013) to Sabarmati diesel-shed of Western Railway. The loco was commissioned in February 2015 after two years due to delay in clearance by Commissioner of Railway Safety. During the operation, multiple problems were reported (April 2015). The second loco manufactured by DLW at a cost of ₹ 18.62 crore during 2014-15 was also dispatched to Sabarmati Diesel Shed which was commissioned in July 2015. This loco also showed multiple problems such as Electrical/Mechanical maintenance and design during the operation.

While analyzing the loco problems, Railway Board found (September 2015) that the height of locomotives was beyond Indian Railway Schedule of Dimensions (IRSOD) and convened DLW and RDSO to sort out the problem. While problems in first and second Locos were under study, DLW manufactured three more locos and dispatched to Gooty Diesel Shed of South Central Railways.

Thus, without assessing the performance of two prototype locos and without fine-tuning the design, DLW continued to manufacture these locomotives disregarding the multiple problems faced in first and second loco observed in

[120] Crankcases fabricated in-house

the diesel-sheds. This resulted in wasteful expenditure of ₹ 54.51 crore (average manufacturing cost of ₹ 18.17 crore) in manufacturing of three locomotives, for which DLW should have waited until the results of the prototype were known and design fine-tuned accordingly. Further, material worth ₹ 55.12 crore purchased during 2011-12 is also lying in stock as of date.

In reply, DLW stated (August 2016) that on advice of Railway Board in May 2014, production of 5500 HHP locomotives were continued. It was further stated that decision taken in September 2015, did not speak to put on hold the further production which was started in November and December 2014. Reply of DLW reflects complete lack of sense of commitment towards their own responsibilities. If Railway Board did not ask them to put on hold further production, they should have requested Railway Board to let them put on hold further production until the appropriateness and efficacy of new design was proved.

3.1.5 Non-development of new vendors

As per bid conditions for procurement contracts, the purchases of items is to be made from RDSO or DLW approved sources. Further, as per Railway Board instructions (September 1999), Vendor Development Cell at DLW was required to lay down norms for development, inspect firms for their approval, review the vendors based on quality and performance of material supplied, upgrade vendors from Part II to Part I or from development to regular status and *vice versa*. At DLW, Chief Designing Engineer (CDE) is responsible for development of vendors for supply of various items of HHP locomotives.

It was observed that CDE, DLW had not laid down any norms/ procedure for vendor development. There was no register / list of receipt of applications, assessment and registration of vendors for their development. In reply to Audit query, CDE admitted (February 2016) that there was no written procedure for assessment and development of new vendors. They however, informed that online registration was now running with effect from May 2015. The list of Vendor Assessment Forms received, assessed and registered were called for by Audit. These were however, not made available to Audit by the CDE. CDE also did not provide details of new vendors added to Vendor List in the last five years. The status of vendor base (approved sources) in respect of DLW controlled items (2110 items), as provided by DLW as on 31.3.2016 was as under:

Table 3.3 - Number of indigenous approved sources

Divisions	Total Items	'Nil'	Single	Two	≥ 3
1. Electrical Machine	141	9	69	24	39
2. Engine	982	351	273	212	146
3. Traction Control	83	25	18	18	22
4. Vehicle	904	22	43	51	788
Grand Total	**2110**	**407 (19%)**	**403 (19%)**	**305 (14%)**	**995 (47%)**

Analysis of the above data showed that

- About 19 *per cent* of the total items had no indigenous sources and for their procurement, DLW was fully dependent on imports.
- For about one third of the total items, there were monopolized sources of supply as single or two sources in totality.
- For about only less than 50 *per cent* items the number of vendors was three or more.

Test check of 48 high value items (Category A and B) over five years of RDSO/DLW controlled items in Vendor Directory revealed that

- Out of 39 items having single Part I source in 2011-12, for 17 items (44 *per cent*) DLW continued to have a single source in 2015-16; for 18 items there was one Part I source, for two items two Part I sources and for the remaining two items three Part I sources only were added during 2015-16.
- Of the nine items having two Part I sources in 2011-12, five items (55 *per cent*) continued to have two Part I sources and for remaining four items one Part I source for each item was added during 2015-16.

Thus, DLW made only minor additions in the list of existing vendor base, which resulted in weak implementation of the development of multi-sourcing policy of the Indian Railways.

Also, non-development of new vendors led to continued dependence upon the foreign supplier leading to expenditure in foreign currency and resulted in monopolization in certain items. Audit also noticed cases of procurements, where DLW's failure to develop new vendors, led to dependence on foreign supplier or single supplier. Audit findings on these cases are discussed in subsequent paragraphs.

3.1.5.1 Rejection of tenders pending suitability assessment

While reviewing the tender cases of procurement for last five years, Audit noticed two instances where the tenders from new suppliers were rejected on the ground of suitability assessment pending/ to be decided later, though there was sufficient time available for completion of suitability assessment as the time taken between tender opening and its finalization was about three months or more. In these cases, the benefit of cheaper competitive price was not availed by DLW, due to non-completion of suitability assessment as discussed below:

- In response to tender floated for Cylinder Head Stud Assembly, six tenders were received on 4 July 2011. DLW rejected (30.09.2011) all the lower priced offers on the plea of pending suitability confirmation from RDSO and awarded the purchase order to M/s EMD (USA) at the highest tendered rate of ₹ 54151 per item in October 2011, for purchase of 2366 numbers at a total cost of ₹ 12.81 crore. The tenders received in July 2011 were actually accepted in October 2011 and during these three months DLW could have

obtained suitability of lower priced tenders from RDSO, instead of rejecting the same.

- In response to tender floated for purchase of Cylinder Head Stud Assembly, seven tenders were received on 3 June 2013. Offer of L1 to L5 ranging from ₹ 42,994 to ₹ 60,223 were rejected (22.07.2013) on the ground that the suitability for placing order to be given/decided later on. Offer of L6 M/s GE India Pvt. Ltd at ₹ 69936 was considered for extended trial order for 592 Cylinder Head Stud Assembly. DLW placed regular order of 3372 items upon M/s EMD (USA) @ ₹ 70712/- (the highest rate bidder) in August 2013. It was observed that the tenders received in June 2013 were actually accepted in August 2013 and during this time, DLW again could have obtained suitability of lower priced tenders from RDSO, instead of rejecting the same.
- It was further observed that in the above two instances, lower offers of M/s Maven Engineering Corporation, USA and M/s Ashok Iron works, Belgaon, (both are unapproved sources) were not considered by the Tender Committee.

It is evident from the above instances that DLW failed to take opportunity to develop indigenous sources at lower prices and continued to procure materials from foreign supplier at higher costs.

3.1.5.2 Continued purchases from single source

Review of records for procurement of various items at DLW, showed that even for non-technical/low-technical items, procurement from single suppliers continued years after years and no new vendor was allowed entry in the exiting vendor list leading situation of monopoly. This would be evident from the following instances:

i) Ecotip Injector

Ecotip Injector is critical assembly of fuel injection system, consisting of fuel metering pump and nozzle. In vendor directory, only M/s Inter-State Mcbee LCC, USA was listed as Part I approved source. No Indian source had been developed and approved despite the fact that a development order was placed on M/s Bosch Limited, Bangalore, which was successfully completed in March 2013.

DLW had been importing this item from the foreign supplier since 2003 onwards and purchased 36917 Ecotip Injectors between August 2001 and March 2016, at the rate ranging from US$ 395 to US$ 562, without any competition. Of these, DLW purchased 6000 Ecotip Injectors were purchased in 2013-14, 2507 in 2014-15 and 6177 in 2015-16. Thus, even after lapse of 15 years, DLW had not developed indigenous sources of this item.

ii) Radiator Cooling Fan

Radiator Cooling Fan is required for cooling of locomotives. DLW obtained technology of this item from M/s EMD (USA) and transferred to M/s Daulat Ram Engineering Services Private Limited (DRESPL), Bhopal. This item was first

procured in April 2005 from DRESPL at the rates ranging from ₹3.17 lakh to ₹4.55 lakh per unit and subsequently, at rates ranging from ₹ 4.23 lakh to ₹ 5.31 lakh up to October 2015 without any competition (3975 fans procured March 2001 to October 2015). Tenders though invited and offer received from other firms, were rejected on the ground of unsuitability and unapproved source. This led to monopoly of M/s DRESPL, rates of which were being accepted by comparing its own last purchase rates. No cost break up of rate of single source had been analyzed and found on record.

iii) Sealant compound

Sealant compound is required for application for pipe sealant which is a lock for high pressure for hydraulic & pneumatic fitting. DLW had been purchasing this item from a single source, M/s New Engineering System Pvt. Ltd. Varanasi at the rate ranging from ₹ 4990 to ₹ 7014 per kilogram from February 2008 to September 2013. DLW purchased 4886 Kilograms of item at total cost of ₹ 3.36 crore from above firm between 2008 and 2016 by rejecting other offers received.

In test check, Audit noticed that DLW received three offers in July 2014. The lowest offer was from M/s Haryana Chemical at ₹ 4357 per kg. However, the lowest offer was rejected on the ground that it had not mentioned the name of product in the offer and never supplied similar type of material to DLW. The rejection of lowest offer was not correct as in the tender tabulation statement it was stated that the firm had complied with SOR and indicated name of product as (GRIP) also. The highest priced offer of M/s New Engineering, Varanasi at ₹ 7154 per kg was accepted and Purchase Order placed in September 2014 for Purchase of 685 kgs at the total cost of ₹ 49.02 lakh. The rejection of lowest offer resulted in extra expenditure of ₹ 18.89 lakh in one Purchase order and also led to non-development of new source.

iv) Floor Mat

Audit scrutiny revealed that DLW purchased Floor Mat from M/s Emprise Marketing, Lucknow continuously since 2011-12. The eligibility criterion for the purchase of this item was that the tenderer should be a past supplier. Due to this unwarranted eligibility criteria, new suppliers could not become eligible for the said item. A total of 1235 floor mats had been purchased from M/s Emprise Marketing, Lucknow continuously from 2011-12 to 2015-16 as single source at a total cost of ₹ 51.55 lakh and DLW restricted the entry of new suppliers.

Thus, DLW did not take effective steps for development of new sources to ensure competitive rates and continued to remain largely dependent on the single source supplier.

3.1.6 Conclusion

Indigenization project envisaged in the year 1998-99 after procurement of TOT worth US $1.75 crore and commenced in the year 2003, was not completed

even after lapse of about 13-14 years. As a result, DLW continued import from foreign/indigenous suppliers and could not achieve savings as envisaged. DLW also did not take effective steps for development of new sources to ensure competitive rates and continued to remain largely dependent on the single source suppliers. Considering that IR is now going in for massive electrification as electric traction is considered more environment friendly as well as economical, indigenization project in DLW needs a fresh look before large scale investment is committed to this project.

The matter was referred to Railway Board in January 2017; their reply has not been received (February 2017).

3.2 Diesel Locomotive Works (DLW): Extra expenditure of ₹ 59.28 crore in import of crankcases

Despite specific instructions of Railway Board (August 2014) not to import crankcases, but to improve in-house production and indigenous sources and also to revise the production plan of locos, if required, DLW violated directives of Railway Board and continued import of crankcases from M/s EMD at higher cost and incurred extra expenditure of ₹ 59.28 crore in importing 81 crankcases between September 2014 to November 2015.

Crankcase Machining Assembly (Crankcase) is a main structural part of High Horse Power (HHP) Locomotives. Consequent upon Transfer of Technology (TOT) of manufacturing HHP Locomotives from M/s General Motors (now M/s Electro Motive Diesel (EMD)) of United States of America, Railway Board sanctioned (July 1999) ₹ 155.54 crore for creation of infrastructure at Diesel Locomotive Works (DLW), Varanasi for in-house fabrication and machining of 100 crankcases per year. For enhancing the capacity to 150 crankcases per year, Railway Board sanctioned ₹ 97.69 crore in the Works Programme 2008-09.

Audit reviewed the records related to procurement of crankcases by DLW since 2013-14. It was observed that in response to the tender floated by DLW in August 2012, three[121] quotations were received (October 2012) for procurement of 168 crankcases for production of HHP locos during 2013-14. The lowest rate (₹ 69.96 lakh per unit) was received from M/s EC Blades & Tool, Panchkula (L1). High Level Tender Committee (TC) of DLW though recommended this firm for development order, L2 was not considered due to pending orders and regular purchase of crankcases was recommended from L3, M/s EMD at the rate of ₹ 124 lakh per unit. The reasonability of rates was justified by comparing the same with the last purchase rate of M/s EMD itself. TC recommendation was sent (December 2012) to Railway Board, which was returned back to DLW stating that recommended rate was not compared with the cost of in-house production and indigenous sources. TC then compared the rates and found that recommended rate was 109 *per cent* higher than in-house production rate of ₹

[121] M/s EC Blades & Tools Pvt..Ltd. Punchkula (1st Lowest), M/s Amtek Transportation Systems Limited/New Delhi (2nd lowest) and M/s EMD/USA (3rd lowest but DLW Part I source).

59.42 lakh per unit and 72 *per cent* higher than the rate of the indigenous source (₹ 73.80 lakh). Subsequently, DLW submitted (January 2013) supplementary recommendations of TC to Railway Board. Railway Board, directed (May 2013) DLW for negotiation with M/s EMD to explore the possibility of reduction in rates. However, despite negotiations, the rate was not reduced by M/s EMD and DLW recommended the same rates to Railway Board. Finally, in August 2014 Railway Board while communicating the following observations of Hon'ble Minister of Railways (MR) directed DLW to furnish the comments on the said observations and re-submit the case:

1. The cost of importing fully machined crankcase is 2.5 times that of the in-house production as well as sourcing indigenously. It is stated that balance quantities have been planned to be sourced indigenously. However, it is not stated as to what steps are being taken to source indigenously.
2. The production capacity status of indigenous firms has been assessed as on 2012, but the same has not been updated as on today, which might have undergone considerable changes and may enable us to source indigenously more quantity than procuring the crankcase assembly by trade.
3. It is surprising to note that other than our in-house production, there is only one source of supply, which is quite expensive one also. Does it mean that in the entire world, every other Railway is procuring only from this single source? If not, why Indian Railways is confined to this single source?
4. There is a possibility of reduction in DLW's loco production and accordingly the requirement of crankcase assembly should also come down.
5. Fresh look at the entire tender is needed and purchase proposal should be revisited on account of higher import cost, indigenous sourcing not encouraged and reduction in the need for locos.

In view of the above observations of Railway Board, TC of DLW recommended (September 2014) that the projected in-house production and supply from indigenous sourcing will meet the requirement and the tender was finally discharged. The TC further stated that for the year 2014-15, they had already met the shortfall of 19 crankcases through emergency procurement and that from 2015-16 onwards, in-house production capacity would be able to meet the requirement of 240 crankcases including supply from all the indigenous firms.

Audit observed that the General Manager, DLW in exercise of his delegated financial powers for emergency procurement, had imported 176 crankcases from the same firm, M/s EMD during March 2013 to March 2014 at the higher rates ranging between ₹ 127 lakh to ₹ 149 lakh through nine Purchase Orders as given in the following table:

Table 3.4 Comparison of cost between cost of import and in-house production

Purchase Order No & date	Quantity	FOB Rate in US $	Landed rate in lakh (₹)	In-house production rate in lakh (₹)	Difference in lakh (₹)	Extra expenditure in lakh (₹)
Import during March 2013 to March 2014						
13111865 dt.21.03.13	35	1,76,313	127	59.42	67.58	2365
13111883 dt.25.05.13	35	1,75,750	128	59.42	68.58	2400
13111913 dt.17.08.13	30	175,750	145	59.42	85.58	2567
13111971 dt.30.10.13	33	1,75,750	148	59.42	88.58	2923
14112100 dt.22.02.14	10	1,75,750	149	59.42	89.58	896
14112102 dt.01.03.14	33	1,75,750	149	59.42	89.58	2956
Total	**176**					**14107**
Import during September 2014 to November 2015						
14112164 dt.23-09-14	25	1,75,750	139	59.42	79.58	1990
15112322 dt.02-04-15	32	-	-	-	-	1860
15112400 dt.02-11-15	24	1,67,762	146	59.42	86.58	2078
Total	**81**					**5928**

From the above table, it can be seen that rates were 2.14 times to 2.5 times more than the in-house rate (₹ 59.42 lakh) involving additional cost of ₹ 141.07 crore.

Despite discharging the tender in September 2014, General Manager, DLW continued procurement from M/s EMD and imported another 81 crankcases during September 2014 to November 2015 in contravention to the Railway Board's observations. This procurement was made without the prior approval of Railway Board.

Thus, even after specific instructions of Minister of Railway not to import crankcases and to improve in-house production and indigenous sources, DLW imported further 81 crankcases resulting in extra expenditure of ₹ 59.28 crore during the period from September 2014 to November 2015.

In reply, DLW Administration stated (August 2015) that as acceptance of tender opened in October 2012 was pending with Railway Board, emergency purchase was made to meet the target of 270 HHP locomotives as production capacity at DLW was limited to 108 crankcase per year. It was also stated that prior approval of Railway Board was not required in emergency purchase of

crankcase. DLW further cited the breakdown of fabrication machine[122] as the reason for import beyond August 2014.

Thus, there were specific instructions of Railway Board (August 2014) not to import crankcases, but to improve in-house production and indigenous sources and also to revise the production plan of locos, if required. DLW however, violated directives of Railway Board and continued import of crank cases from M/s EMD at higher cost and incurred extra expenditure of ₹ 59.28 crore in importing 81 crankcases between September 2014 to November 2015.

The matter was referred to Railway Board in January 2017; their reply has not been received (February 2017).

3.3 Energy Conservation measures in Indian Railway

3.3.1 Introduction

Indian Railways (IR) is one of the largest transportation and logistics networks of the world, which as of March, 2016, *inter alia* runs 23,024 trains (passenger and goods) daily throughout its networks of 66,687 route kilometers connecting areas across the length and breadth of the country. IR carries nearly 3.03 million tonnes of freight traffic and 22.5 million passengers every day.

Total expenditure on energy/fuel during 2015-16 was ₹ 25783.63 crore as compared to ₹ 16730 crore in 2010-11. Considering such growing annual expenditure on energy consumption (diesel as well as electricity) for train operations efforts made in the area of energy conservation are of utmost significance. Efficient use of available resources of energy and effective monitoring of implementation of energy conservation measures are the catalyst in promoting efficiency and reduction of Energy bills. Indian Railways has taken several measures for energy conservation including:

a) Introduction of Three Phase Electric Locos and EMUs with regenerative braking features saving up to 20- 30 *per cent* of the energy.
b) Saving energy through improved measures in diesel traction such as:
   - Shutting down of locos where expected detention is more than 30 minutes and
   - Monitoring the fuel consumption with reference to Trip Ration[123].
c) Energy Audits to improve energy efficiency of Railway offices, stations buildings and workshop

Audit studied the fuel conservation measures taken up by Indian Railways during the six year period from 2010-11 to 2015-16 to assess their effectiveness.

3.3.2 Energy Conservation- Electrical Energy

Audit findings on the measures initiated by Indian Railways on electricity usage are discussed in the succeeding paragraphs.

[122] Portal Milling Machine.
[123] Quantity of fuel required in diesel loco for its scheduled journey over a designated section

3.3.2.1 Implementing the Three Phase technology in locomotives

With the increase in the train loads and need for the higher speed (both for passenger and freight trains) to enable hauling of more traffic with the existing infrastructure, it became important to upgrade existing technology of electric locomotives and thus IR decided to go for most modern Three Phase High Horse Power (HHP) electric locomotives, in which regeneration of power is available. About 15-20 *per cent* energy, is regenerated in the process of braking. Regenerative braking effort is available from the full speed till dead stop. Consequently, the overall efficiency of operations is higher. Maintenance cost of a 3-phase locomotive is also less as compared to conventional locos.

IR acquired 30 (10 passenger and 20 freight) High Horse Power (HHP) state of the art microprocessor controlled three phase drive electric locos from M/s Bombardier Transportation (earlier called ABB), Switzerland along with transfer of technology (TOT) to manufacture them indigenously at Chittaranjan Locomotive Works (CLW). First indigenously built 3-phase electric locomotive was turned out by CLW on 14 Nov 1998.

As of 31 March 2016, CLW manufactured 1075 three phase HHP locomotives, which included 705 freight locos and 370 passenger locos. During this period CLW also manufactured 2206 conventional Electric Locos. As such, 76 *per cent* of the total electric locos manufactured during 1998-99 to 2015-16 were conventional. The last conventional loco was turned out from CLW in October 2015. From 2016-17 onwards, no targets have been fixed for production of conventional locos and production of conventional locos has been stopped. Thus, IR has switched over from conventional electric locos to HHP three phase locos completely.

3.3.2.2 Non-induction of Three Phase Technology in Electric Multiple Units (EMUs)

Ministry of Railways decided to replace the existing Electrical Multiple Units (EMUs) with the new ones fitted with regenerative brakes by adopting three phase technology with Insulated Gate Bi-polar Transistor (IGBT) based system initially in Mumbai suburban area of Western Railway and Central Railway. During braking, the system is capable of regenerating 25 to 30 *per cent* of the energy used and these passenger trains have the ability to draw the same from the Over Head Equipment (OHE). The regenerated electrical energy reduces the consumption of equivalent grid electrical energy required by the powering train, thereby conserving electrical energy. Regenerated energy is recorded in the device (Data Card) fitted in the locomotive.

Audit reviewed records in respect of energy regeneration in the Three Phase EMUs for the period 2010-11 to 2015-16. Review of related records for the year 2010-11 to 2015-16 relating to 153 EMUs (85 EMUs in CR) and (68 EMUs in WR) revealed that electricity regeneration almost near the target of 35 to 40 *per cent* as indicated in the table below:

Table 3.5			
Period	**Number of EMUs test checked**	**Target for energy regeneration (%)**	**Energy regenerated (range in %)**
2010-11 to 2015-16	CR-85	35 – 40	28 - 43
2010-11 to 2015-16	WR-68	35 – 40	32 - 37

It was however, noticed that EMU over NR, ER and SER were not provided with regenerative braking features and EMUs with power regeneration features were provided in CR and WR only.

In view of the benefits derived in terms of the energy regeneration, IR needs to introduce regenerative braking features in EMUs of other Zonal Railways (NR, ER and SER) as well, where EMUs are run.

3.3.2.3 Feeding back of regenerated energy to Grid and claiming credit from Power Supply Companies

Three phase electric locomotives and EMUs inducted by Indian Railways have features of regenerative braking. The energy regenerated is being monitored through the energy meters installed in the locos. Regenerated energy could be used by the trains running in opposite direction. If no train is running in opposite direction, the regenerated energy would be fed back to the grid. Though the energy regenerated is fed to the grid, there is no metering arrangement/mechanism in regard to the energy fed back to the grid or used by the locos in the close vicinity. Further, there is no arrangement between the Railway Administration and the respective power supplying companies/State Electricity Board for claiming credit for the unused portion of the regenerated energy fed to the grid.

During the review of the records of Chief Electrical Engineer (CEE)/CR/Mumbai it was seen that though 3 Phase Electric Locos in Central Railway regenerated the power and fed such power to Maharashtra State Electricity Distribution Company Limited (MSEDCL) grid system, no credit was, however, given to Central Railway by MSEDCL. Though Chief Electrical and Distribution Engineer (CEDE) had taken up the issue with Maharashtra Electricity Regulatory Commission (MERC) regarding the methodology by which Railway had to register as a power producer to get credit of regenerated energy, no final action in this regard was taken (December 2016).

The matter of obtaining credit for the regenerated energy was also taken up by Traction Department of Bangalore division in SWR with Chairman, Bangalore Electricity Supply Company (BESCOM) in 2012. BESCOM, however, replied that there were no guidelines regarding net metering of an installation where power is regenerated and supplied to the grid. Matter was also referred (May 2014) to the Karnataka Electricity Regulatory Commission (KERC), no response was, however, received.

It is thus seen that though Railways have been able to derive savings in the energy consumption as a result of regenerative features of Three Phase technology, they have not devised any mechanism for metering and claiming credit for the unused portion of the regenerated energy fed to the grid.

3.3.3 Energy Conservation - Diesel Energy

Audit reviewed the measures initiated by Indian Railways specific to diesel usage. Audit findings are discussed in the succeeding paragraphs.

3.3.3.1 Shutting down of Diesel locos when expected detention is more than 30 minutes

Railway Board (May 2008) reiterated their earlier policy of shutting down locos when the detention at any location was likely to be more than 30 minutes. Operating Department (control room) should inform driver if expected detention was more than 30 minutes at any place and instruct the driver for switching off the loco. In the ATN on Para 2.1 (Fuel Management in Indian Railways) of Report No. 9 of 2000, Railway Board stated that locos were shut down to the extent operational exigencies permit and it was not always possible to predict the duration of detention. It was, however, observed that there was no mechanism of shutting down locomotives in all cases where expected detention was more than 30 minutes.

En-route detention of goods trains involves avoidable fuel/energy consumption. To analyze the extent of en-route detention across the zones, Audit collected the details of goods train detained *en-route* for 30 minutes and more from CRIS for the month of March 2015 and December 2016. The data furnished by CRIS showed that shutting down of locos was not done in cases of *enroute* detentions in excess of 30 minutes. The cost of diesel and electricity consumed as a result of detention of locos beyond 30 minutes is shown in the table below:

Table 3.6

Month of test check	Diesel traction			Electric Traction		
	Nos. of occasions the locos were detained	*Locos detained beyond 30 minutes (in hours)*	*Cost of diesel consumed (₹ in crore)*	*Nos. of occasions the locos were detained*	*Locos detained beyond 30 minutes (in hours)*	*Cost of electricity consumed (₹ in crore)*
March 2015	58301	3268	31.25	81230	3391	15.44
Dec 2016	46150	1623	15.52	77268	1681	7.66

Chief Project Engineer/CRIS while sharing the FOIS data (for the month of December 2016) pertaining to detention of goods trains at selected interchange points and detention of train (driven by diesel and electric locos) in excess of 30 minutes mentioned that any information regarding switching off the electric engine or shutting down of the diesel engine is not available in FOIS.

As discussed with railway administrations in Zonal Railways, the practice of shutting down the diesel engine was not being followed in most of the Zonal Railways. In WR, SECR and SCR, Zonal Railway administrations have issued further instructions for shutting down locos when detention of more than 30 minutes is expected and efforts are being made to enforce the same. In CR and NWR, though instructions have been issued, whether these are being followed could not be verified. In NCR and SER, the practice was not being followed. In SWR, instructions were issued for shutting down diesel locos where detention was expected to be more than 60 minutes. However, reasons for deviations from Railway Board orders were not recorded.

By not shutting down diesel engines, if the detention is expected to be beyond 30 minutes, Railways incur extra expenditure on fuel consumption.

3.3.3.2 Delay in handing/taking over trains at interchange points of zones

Chief Operations Manager of each Zone prepares a working time table for each division to be adhered to by operating staff for working of Goods trains. Adjacent Zones should also adhere to the schedule timings given in the working time tables. Detention of goods trains at interchange points would involve avoidable fuel/energy consumption. Audit observed that there were differences in the handing /taking over time recorded in the interchange points of the zones.

To analyze the extent of detention at interchange points over all the zones, Audit reviewed the details of goods train detained at 117 selected interchange points for thirty minutes and above from the records of Center for Railway Information System (CRIS) for the month of March 2015 and December 2016 as indicated below.

Table 3.7

Period of test check	Diesel traction			Electric Traction		
	Nos. of trains detained at interchange points	*Total detention beyond 30 minutes (in hours)*	*Cost of diesel consumed (₹in crore)with reference to Col. 3*	*Nos. of trains detained at interchange points*	*Total detention beyond 30 minutes (in hours)*	*Cost of electricity consumed (₹in crore)with reference to Col. 6*
March 2015	2850	19925.92	3.18	4190	27771.63	2.10
Dec 2016	3102	25952.52	3.36	5787	51529.06	3.80

The value of fuel/energy consumed worked out to ₹ 5.28 crore and ₹ 7.16 crore in March 2015 and December 2016 respectively.

Thus, due to detention of locos at the interchange points, Railways incur extra expenditure on fuel consumption. Minimising detentions would help in saving the cost of fuel consumption. Excessive detention at interchange points results in unproductive loco hours, which is likely to impact loco availability.

3.3.3.3 Consumption of fuel with reference to the Trip Ration

Trip ration[124] is the quantum of section wise diesel consumption fixed in respect of diesel locos by Senior Mechanical Engineer (Operating) in the Divisional Headquarter. Fixing of trip ration is a mechanism to fix and monitor consumption of diesel on designated sections. As per Para 1.10.8.2 of Indian Railway Maintenance Manual for Diesel Locomotive, Sr. DME (Operating) should fix trip ration after conducting trials. Normally, Trip Ration should be revised in the month of January every year after conducting trials. Trip Ration should further be reviewed in the month of July for any changes required. At Divisional level, after conducting trials, Divisional Railway Manager should circulate the latest section-wise/service wise trip rations to all fueling installations as and when revision is done. Further, driver wise consumption of HSD oil should be maintained in the divisional office and action against the drivers bursting trip ration should be taken up suitably. Audit test checked position of trip ration fixed in the zones and observations are tabulated below.

Table 3.8

Zonal Railway	Status on fixing trip ration and monitoring thereof
CR	The trip ration is fixed service wise and loco type wise based on trials at Divisional level duly allowing for fuel oil consumption due to unscheduled halt, train running through via loop line, shunting purpose, idle hours, caution orders and signal on approach etc. on the load to be hauled. Loco pilots are counselled for fuel economy.
ECR	Trip ration was fixed, but the process of fixing the same was not found on record. Excess consumption with reference to the trip ration fixed was noticed in nine cases in Mughalsarai Division and the same was attributed to chain pulling in trains by passenger.
ECoR, NR and NEFR	Trip ration has been stated to have been fixed, but nothing on record was found to show if the same was monitored with reference to trip ration fixed.
NCR	Trip ration was fixed in the year 2010, 2011 and during October to December 2016 in Jhansi and Allahabad division. In Agra division trip ration was fixed during October to December 2016.
NWR	Trip ration was fixed in Ajmer division in May 2015 and in fag end of the year in Jodhpur division. Loco pilot-wise consumption of HSD oil is being maintained in the Divisional Office and poorly performing loco pilots are counselled.
SECR	Trip ration was once fixed in June 2008 and was revised thereafter in October 2016. No record was, however, found to indicate if any action was taken against the loco pilot bursting the trip ration.
SWR	No trip ration was fixed in respect of Bangalore Division. While in respect of Hubli Division, trip ration was fixed on the basis of Specific Fuel Consumption (SFC) fixed by Railway Board. No monitoring of the trip ration was, however, done in these two divisions.

Reasons offered by the Railway Administration for excess consumption with reference to trip ration are given in the table below:

[124]Quantity of fuel required in diesel loco for its scheduled journey over a designated section

Table 3.9 - Reasons for variation in consumption of HSD oil with reference to trip ration	
Zonal Railway	**Reasons**
NR	Consumption of HSD oil exceeded the trip ration due to excess load, more number of coaches and late arrival of trains. However, such issues are required to be taken into consideration while fixing the trip ration.
SECR	Excess fuel oil consumed was due to traffic detention (Line not clear on approach of signal and passing over loop line) and large number of temporary caution.
ECR	In nine cases excess consumption of diesel with reference to trip ration was attributed to chain pulling in trains by the passengers.
SER	Divisional Authority attributed the reason to heavy detention in sections in Chakradharpur division.

No other zone assigned reasons for the excess consumption with reference to Trip Ration. Thus, many Zonal Railways were not fixing trip rations for various sections as envisaged in Indian Railway Maintenance Manual for Diesel Locomotives. There is a need to monitor consumption of fuel with reference to trip rations fixed in most of the Zonal Railways.

3.3.4 Energy Audit

After enactment of the Energy Conservation Act 2001, there was a thrust for adopting energy efficient measures. Energy conservation through energy audit techniques was considered to be a major opportunity for improving operating efficiency as well as in achieving the cost reduction.

Energy audit encompasses verification, monitoring and analysis of use of energy, including submission of recommendations for improving energy efficiency with cost benefit analysis and an action plan to reduce energy consumption. On the basis of guidelines issued by Bureau of Energy Efficiency (BEE), RB directed (July 2007/2008) all Zonal Railways to conduct energy audit of areas like major administrative buildings, hospitals, pumping installations, loco sheds, major railway stations and workshops as a onetime exercise and send the reports to them. It further directed that energy audit of all Traction Sub Stations and Workshops be taken up periodically. As per the notification, every designated customer viz. TSS, Loco Sheds, Railway Production Units and workshops shall have its first energy audit conducted within 18 months of the notification issued by Government under clause (i) of section 14 of the Energy Conservation Act 2001. The interval of time for conduct and completion of subsequent energy audits shall be three years with effect from the date of submission of the previous energy audit report by the accredited energy auditor to the management of the designated consumer.

Position of energy audit conducted by accredited auditors was reviewed and it was observed that no energy audit was conducted in eight Zonal Railways[125], two Production Units and Metro Railway during the period of review. The

[125]ER, ECR, NER, SR, SER, SWR,WR and WCR

detailed position of Energy Audits conducted in the selected units of following activity centres in Zonal Railways during the period of review has been discussed in succeeding paragraphs:

- Traction Substations (TSSs)
- Stations, Buildings, Workshops and loco sheds
- Railway Production Units

3.3.4.1 Traction Substations (TSSs)

Review of records at 98 TSSs of 32 selected divisions of 17 Zonal Railways including Metro Railway, showed that energy audit was conducted only in the following places:

- Energy audit of one TSS in Bilaspur of SECR was conducted in 2010-11.
- Energy audit of one TSS at Diwana in Panipat in Delhi division of NR was conducted in 2015-16. However, recommendations of energy audit were partially implemented. A saving of ₹ 2.42 lakh was assessed on implementation of four recommendations. Further, Energy audit of TSS-Chanakyapuri in NR was conducted in 2015-16 and saving was assessed at ₹ 20.13 lakh on implementation of two recommendations.
- Energy audit of Krishna Canal TSS in Vijayawada division of SCR was conducted in November 2015.

3.3.4.2 Stations, Buildings, Workshops and loco sheds

Review of the records in Zonal Railways in respect of the energy audit of Stations Building, Workshops and loco sheds in Zonal railways revealed the following:

(i) Energy Audit of station buildings, Workshops and loco sheds was conducted during the review period by Bureau of Energy Efficiency (BEE) accredited energy auditors on seven Zonal Railways as indicated below:

Table 3.10

Zonal Railway	Station buildings	Workshops	Loco Sheds
CR	Nasik Road, Bhusawal	Manmad	-
NR	New Delhi, Delhi	-	Ghaziabad
ECoR	Vishakhapatnam, Khurda Road	Mancheswar Coach workshop	-
NCR	Allahabad	Jhansi	-
NFR	Katihar	-	-
NWR	Ajmer, Marwar, Phalna, Bhilwara, Jodhpur	Bhagat ki Kothi	Ajmer, Jodhpur
SCR	Kacheguda	-	Vijayawada, Kacheguda
SECR	Bilaspur	-	-

(ii) No record was available to show the number of activity centres (Stations, Buildings, Workshops and loco sheds) due for energy audit except in NR and NWR.

(iii) Recommendations of the energy audit were partially implemented in NR, NWR and SCR.

(iv) A saving of ₹ 3.34 crore was anticipated as a result of implementation of the recommendation of the energy audit on CR, ECoR, NWR and SECR. Details of the implementation of the recommendations of energy audit were not made available to Audit in respect of these four Zonal Railways.

(v) In other zones where the recommendations of the energy audit were either implemented or partially implemented, savings in energy bill anticipated as a result of implementation of the recommendation of the energy audit was not found on record.

3.3.4.3 Railway Production Units

Energy audit was conducted in Integral Coach Factory (ICF), Perumbur, in February 2013 covering performance assessment of compressors, furnaces, cranes and hoists, pressing machines, turning centres, substations, pumping Installations, lighting and other electrical systems. Similar Energy audit was also conducted in ICF in July/Aug, 2015. A saving of ₹ 1.33 crore per annum was anticipated as a result of implementation of the recommendations of the energy audit conducted in 2013. Though the recommendations were implemented, post audit activity wise energy consumed not assessed. Similar savings amounting to ₹ 1.59 crore was anticipated as a result of implementing the recommendation of the energy audit done in 2015. Implementation of recommendations was in progress (September 2016). No energy audit was, however, undertaken in respect of CLW, and DLW during the period 2010-11 to 2015-16.

Thus, instructions of Railway Board and regulation of Bureau of Energy Efficiency (BEE) on energy audit were not complied with by 50 *per cent* of Zonal Railways in their major energy consumption areas. Further, though the recommendations were implemented/ partially implemented, post audit activity wise energy consumed was not assessed.

3.3.5 Conclusion

Railways have initiated several energy consumption measures. These included switching over to three phase electric locos and induction of three phase technology in Electric Multiple Units. IR issued instructions for switching off diesel locos if expected detention was more than 30 minutes. IR also issued instructions for exercising control over diesel consumption through fixing of trip ration. To control energy consumption, IR also adopted mechanism of Energy Audit.

The last conventional loco was turned out from CLW in October 2015. From 2016-17 onwards, no targets have been fixed for production of conventional locos and production of conventional locos has been stopped. Thus, IR has switched over from conventional electric locos to HHP three phase locos completely. However, EMUs/MEMUs with the regenerative braking features has

been inducted in CR and WR only. These were yet to be inducted in other Zonal Railways viz. NR, ER, SER, SR and SCR. Test check in audit also revealed that instruction of non-shutting down of locos (in cases of expected detention of more than 30 minutes) were not followed resulting in excess consumption of energy/fuel. Besides, excessive detentions were also observed at the interchange points test checked in audit leading to excess consumption during idling of locos. All Zonal Railways were not using the mechanism of Trip Ration for monitoring and controlling consumption of fuel. Energy Audits were conducted sporadically and recommendations were partially implemented. Post audit activity wise energy consumed was also not assessed. Thus, energy conservation measures are needed to be adopted in more effective ways so as to achieve savings in energy consumption.

The matter was referred to Railway Board in June 2016; their reply has not been received (February 2017).

3.4 West Central Railway (WCR): Extra expenditure due to change of traction from electric to diesel locomotive and vice versa for placement/release of rakes in the electrified siding notified for charging on 'through distance basis' and loss of earning capacity due to detention of wagons

WCR administration did not adhere to the conditions laid down for charging freight on 'through distance basis' as per which there should be no detention to engine except for change of ends. This resulted in an extra expenditure of ₹ 3.77 crore on unwarranted haulage of diesel locomotives from/ to Kota station up to/from the Bhonra serving station. Railways also sustained loss of earning capacity of ₹ 5.70 crore due to detention of wagons at the Bhonra serving station as a result of change in traction.

The rules[126] relating to 'charging freight on through distance basis in case of sidings' provides that 'the system of charging freight on through distance basis shall be extended to all block rakes going into the siding directly or indirectly with the engine pulling or pushing, provided (a**)** there is no detention to engine except for change of ends and (b) no separate shunting staff is required exclusively for this purpose.

The siding for Chambal Fertilizer and Chemicals Limited (CFCL siding) dispatches fertilizer to various destinations and is served by Bhonra station in Kota division. The siding was electrified and Commissioner of Railway Safety (CRS) accorded sanction in December 2007 for running of electric locomotive up to the siding. This siding was notified for charging of freight on through distance basis in April 2009, which meant that the engines carrying rakes to and from CFCL siding should not be detained at serving station except for change of ends.

[126] Clause 1.1 of Master Rate Circular (regarding freight on through distance basis)2014 dated 24 September 2014

It was observed that during April 2013 to October 2016, 826 out of 1443 empty rakes were received at Bhonra station hauled by electric locomotives. These rakes were subsequently placed in the siding for loading using diesel locomotives. Similarly, 1034 out of 1443 loaded rakes released from CFCL siding were brought to Bhonra station using the diesel locomotive, and were subsequently hauled to destination by electric locomotives. Diesel locomotives on each occasion of placement/release were called from Kota station, which is 30 kms away from Bhonra. Due to this change of traction, the rakes were detained at the serving station both during placement and release. Hauling of diesel engine from Kota to Bhonra for placement/release of rakes from the siding was unwarranted and led to extra expenditure of ₹ 3.77 crore.

The matter was pointed out (July 2015)[127] to WCR Administration through a special letter. The Electrical Traction Department (July 2015) opined that there was no constraint in direct placement and release of rake by electric locomotive. The Operating Department (August 2015) stated that for safety considerations Over Head Equipment (OHE) has to be kept in off position and residual charge, if any, should be discharged and to undertake this activity, one staff has to be deputed from Chief Goods Supervisor/CFCL office to the farthest end for switching off OHE and till such time the loading process cannot be commenced due to safety considerations.

The reply indicated that there was difference of opinion within the different departments of Railways. During April 2013 to October 2016, 616 out of 1443 inward rakes brought up to the serving station using electric/diesel loco were placed by the same loco in the siding for loading. Similarly, 407 out of 1443 outward rakes released by electric/diesel loco up to the serving station from the siding were moved to destination station by the same loco. Thus, change of traction from electric loco to diesel and vice versa for loading/release of rakes into/from CFCL siding despite being an electrified siding and capable of accepting BCN/BOXN rakes with electric locomotive[128] was not necessary.

Thus, WCR administration did not adhere to the conditions laid down for charging freight on 'through distance basis' as per which there should be no detention to engine except for change of ends. This resulted in an extra expenditure of ₹ 3.77 crore on unwarranted haulage of diesel locomotives from/ to Kota station up to/from the Bhonra serving station. Railways also sustained loss of earning capacity of ₹ 5.70 crore due to detention of wagons at the Bhonra serving station as a result of change in traction[129].

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

[127] Reply to draft para issued to the Railway Administration (July 2016) is awaited.
[128] w.e.f. 20.05.2008
[129] Change of electric loco to diesel loco and vice versa for placement/release of rake into/from the siding.

Chapter 4
Rolling Stock

At Railway Board level, Member Rolling Stock is overall in-charge of Mechanical Engineering Department, including Workshops and Production Units (other than locomotives). The works related to EMU/MEMU, and electrical maintenance of all coaching stock is also the responsibility of the Member Rolling Stock.

At Zonal level, the Chief Mechanical Engineer (CME) is responsible for overall supervision and maintenance of all coaches, freight stock etc. Chief Workshop Engineer (CWE) is overall in-charge of the functioning of workshops dealing with maintenance of rolling stock and related items. Production Units are managed independently by General Managers reporting to Member Rolling Stock at Railway Board.

The total expenditure of the Department during the year 2015-16 was ₹ 37144.96 crore. During the year, apart from regular audit of vouchers and tenders, 528 offices of the Department were inspected.

This chapter includes one review on 'Management of linen in Indian Railways'. In this review Audit assessed adequacy and effectiveness of procurement, handling, storage of linen (bedsheets, blankets, pillow, pillow cover) along with effectiveness of mechanism of washing and distribution of linen. This chapter also includes a local review on 'Working of Coach Rehabilitation Workshop located at Bhopal.

In addition, this chapter includes five individual paragraphs highlighting the issues such as use of wagons after POH for storage of scrap instead of traffic; injudicious procurement of material for manufacturing coaches; deficient planning in procurement and non-installation of machines etc.

4.1 Management of Linen in Indian Railways

4.1.1 Introduction

Indian Railways (IR), with network of 58825[130] route kilometres, runs 3362[131]Mail/Express trains daily. The coaching stock of IR consist of 390 Air Conditioned First Class coaches (7500 berths), 2375 Air Conditioned Sleeper (2-tier) coaches (112350 berths) and 5302 Air Conditioned 3-Tier Sleeper coaches (345091 berths)[132]. A robust system for procurement, washing and distribution of linen is therefore necessary to provide clean, hygienic, well ironed and good quality linen to all passengers travelling in AC Classes.[133] In order to achieve this objective, Railway Board Policy Circular of 1999, laid down the following strategies:

i. Procurement of good quality linen
ii. Modern and exclusive mechanised washing facility by involving expertise from private sector
iii. Eco-friendly packaging of sets of bed rolls for passengers
iv. Development of proper storage facility at stations and on trains; and
v. Improved logistics for storing, transportation and loading and unloading, etc.

Background

Minister of Railways (MR) in the budget speech[134] for the year 2009-10 declared that Indian Railways would take up improved linen management to bring about a significantly improved quality of washing through modern mechanized automated laundries. To streamline management of linen, Railway Board entrusted (December 2009) the work of washing, storage, supply and distribution of linen kits in trains to the Mechanical (Carriage & Wagon) Department of the railways as a single window agency. Mechanical Department were instructed (2012) to initiate action for setting up automated/mechanised laundries for washing/cleaning of linen through BOOT (Build, Own, Operate and Transfer) model through professional agencies having adequate experience and expertise in operating automated/mechanised laundries capable to handle the workloads of the respective coaching depots. Railway Board issued (January 2010) further comprehensive guidelines covering areas of management of linen in Store Depots, Stock Verification, issue of linen, test check on receipt of linen, inspection of washed linen, inspection of plant and machinery of the washing contractor, inventory of linen, life of linen kits, condemnation of linen etc.

Organisational Structure

The organisation chart relating to linen management is shown below:

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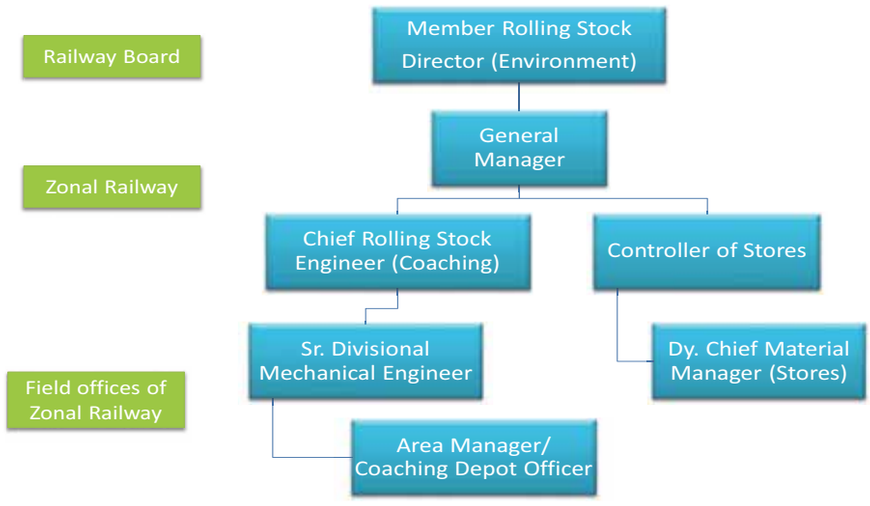
[130] Broad Gauge Route-*Source : Indian Railway Year Book 2014-15*
[131] Broad Gauge Route-Source *: Indian Railway Year Book 2014-15(Table VI Passenger Business)*
[132] Broad Gauge Stock - *Source: Indian Railway Annual Statistical Statement Book 2014-15 (Statement 10)*
[133]Railway Board's Policy Circular 19 issued vide No. 97/TG-V/17/P dated 7.1999
[134] Paragraph 15 of Budget Speech 2009-10



At the Railway Board level, the overall monitoring of Linen Management is done by Environment Directorate, under Member (Rolling Stock). At the Zonal level, procurement of stores is done by Controller of Stores (COS) who is assisted by Dy. COS and Assistant COS. Distribution of linen in trains is supervised by Mechanical Department (to some extent by Electrical Department on some ZRs). At the field level, the day to day functioning of the linen management is the joint responsibility of Area Manager/Coaching Depot Officer and Senior Divisional Mechanical Engineer.

Audit Scope and Objectives

The Theme Based Audit covered a period of three years from 2013-14 to 2015-16 and included management of linen provided in the AC coaches in trains. Linen provided to the Railway Hospitals and Railway Rest House have not been covered in the review. The study was taken up with a view

1. To assess the adequacy and effectiveness of procurement, handling and storage of linen; and
2. To review functioning of mechanised laundries and assess the effectiveness of mechanism of washing and distribution of linen.

Audit Criteria

The following were the audit criteria for the study:

- Railway Board's Policy Circular 19 of 1999
- MR budget speech for the year 2009-10
- Introduction of new Accounting head for booking expenditure on Linen Management

- Railway Board's circular on 'Setting up of mechanised laundry for linen washing on Build, Own, Operate, Transfer (BOOT) model[135].
- Railway Board's instruction[136] entrusting the Mechanical Department (C&W) as a single window agency.
- Other orders and circulars issued by the Railway Board and Zonal Railways from time to time.

Audit Methodology and Sample

The scope of the audit included examination of records pertaining to assessment and procurement of linen, management of linen at Stores and Coaching depot, setting up and working of mechanised laundries, washing and distribution of linen, quality check of washed linen, inspection of linen by the various authorities and passenger complaint redressal mechanism in IR.

Records relating to guidelines/instructions issued by the Railway Board and their implementation in Zonal Railways were checked in audit during June 2016 to September 2016. Records of Stores, Mechanical, Commercial, Civil, and Electrical Engineering departments at Zonal Railway Headquarter and the Divisional Offices were examined to ascertain the initiatives and performance towards improving quality of washed linen. Joint inspection was conducted with the railway officials for verification of situation on ground. Feedback was also obtained from passengers through limited passenger survey conducted in Mail/Express trains including Rajdhani, Duranto, Garib Rath Express trains.

Entry conferences were held at Zonal Railways level to discuss the audit objectives, scope and methodology. Exit conferences were held at Zonal Railways and Railway Board level to discuss audit findings and recommendations. The response of Railways have suitably incorporated in the report.

The criteria for selection of sample and the sample selected are detailed below:

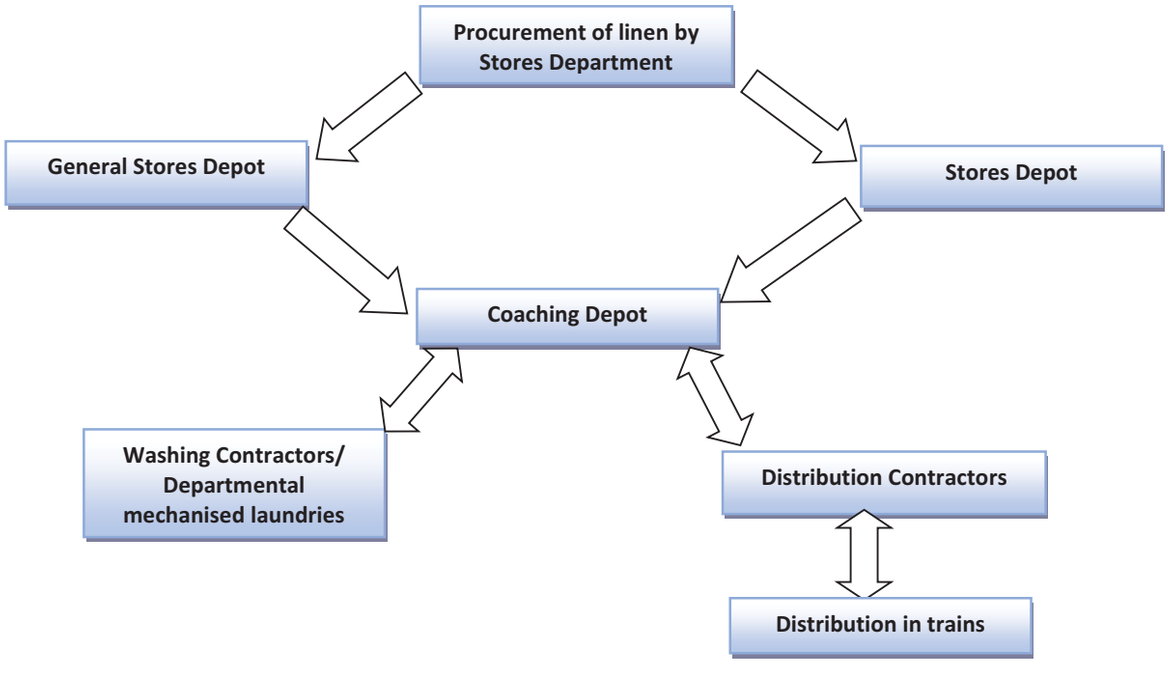
Table 4.1 – Criteria for sample selection and sample selected

S. no	Sample description	Total population	Criteria for selection	Sample size selected
1.	General Stores Depot/ Stores Depot	32	One/two Major depots where linen procured is received in each zone	26
2.	Coaching depots (which supply linen to trains)	117	Two major depots in each zone having linen service according to priority in numbers of train services	33
3.	Mechanised laundries	32	Two Departmental Mechanised Laundry in each zone according to washing capacity	26
4.	Procurement contracts	619	50 *per cent* subject to maximum ten covering all items of linen in each zone during the review period	191

[135] Railway Board's letter No. 2009/M(C)/165/6 dated 14.1.2011 and 04.07.2012
[136] Railway Board's letter No. 2009/M(C)/165/6 dated 17.12.2009

Table 4.1 – Criteria for sample selection and sample selected				
S. no	**Sample description**	**Total population**	**Criteria for selection**	**Sample size selected**
5.	Washing contracts	118	50 *per cent* subject to maximum four each of the selected coaching depot during the review period	76
6.	Distribution contracts	84	50 *per cent* subject to maximum four each of the selected coaching depot during the review period	65
7.	Passenger survey	--	One Rajdhani One Duronto One Garib Rath Three Mail and Express trains	79 trains and 25 passengers per train

The following flow chart depicts the important locations and responsibility points in management of linen in Indian Railways:



Railway Board, in November 2010, to facilitate separate budgeting and accounting of expenditure on linen related activities introduced following Accounts heads under Demand No.8-Abstract 'F' –Operating Expenses –Rolling Stock and Equipment in Appendix I, of the Classification of Revenue Expenditure of Indian Railway Finance Code Vol.II (Reprint Edition 1996):

Minor head	Sub-head	Detailed heads
500-Carriages and Wagons (existing)	590-Cost and maintenance of linen	591-Cost of Linen 592-Washing & Other expenses on linen

All Zonal Railways except two (ECR and NR) started booking of expenditure on linen accordingly by 2015-16. However, due to delayed implementation of booking of expenditure on appropriate heads actual expenditure on linen management could not be ensured.

Audit findings

Audit Objective 1. To assess the adequacy and effectiveness of procurement, handling and storage of linen.

4.1.2 Assessment of requirement and procurement of linen

Availability of linen supplied to passengers on board depends upon replacement of old and condemned linen with new linen. Railway Board instructed (January 2010) that railways should make proper assessment of daily requirements and make fresh procurements, if required. There should be enough buffer stock so that train services are not affected and it should be able to take care of exigencies like running of special trains and augmentation of train lengths at short notices.

Railway Board in the Policy circular No.19 of 1999 fixed the items of bedroll kit and standard to be provided to 1st AC, 2nd AC and 3rd AC passengers - One bed roll kit containing two bed sheets, one face towel, one blanket and one pillow cover with pillow, bath towel (for 1st AC only). The quality[137] of linen varies in 1st AC and 2nd AC and 3rd AC. All the polyvastra items are to be procured from Khadi and Village Industries Commission (KVIC) and rest from Association of Corporations and Apex Societies of Handlooms (ACASH).

As per policy of Government of India circulated by Ministry of Commerce, Department of Supply[138], purchase is to be made from ACASH under Ministry of Textiles on single tender at prices fixed by Ministry of Textiles. Similarly, purchase from KVIC under Ministry of MSME[139] is also to be made on Single Tender basis at price fixed by KVIC. Accordingly, Railway Board decided[140] (October 2014) to dispense with the need to go for formalities of tender committee for placement of order on KVIC, ACASH and the purchase power

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[137] ***For 1st AC***
- (i) Superior soft woollen blanket from reputed manufacture(One)
- (ii) High density polyurethane foam pillow of 36X50 cm. size(One)
- (iii) Polyvastra Bedsheet size 140X229 cm (white) two per passenger
- (iv) Bath towel of terry towel quality with size 60X120 cm (white) from reputed manufacture(One)
- (v) Face towel of terry towel quality with size 40X60 cm (white) from reputed manufacture
- (vi) Pillow Cover 69X46 cm

For 2nd AC and 3rd AC
- (i) Blanket of reputed manufacturer (one)
- (ii) Washable foam pillow 30X45 cm size (one)
- (iii) Bed sheets from reputed manufacturer size 140X229 cm (white) two per passenger. Polyvastra bed sheets for Ac-2 Tier of Rajdhani Trains
- (iv) Face towel from reputed manufacturer size 40X60 cm (white)
- (v) Pillow Cover 50X36 cm

[138] Letter No. P.III/10(4)/7 dated 28.7.89

[139] Ministry of Micro Small and Medium Enterprises

[140] Railway Board's letter No. 2009/RS9G)/113/1 dated 29.10.2014

rests on the authority up to their normal acceptance power of purchase without going into the formalities of Tender Committee examination.

During the check of records of General Stores depots of various Zonal Railways for the period 2013-14 to 2015-16, it was seen that inventory is classified in Indian Railways at A, B and C category based on money value of utilization of inventory in the preceding year. The items are identified with a unique PL number. A periodical and regular review of actual consumption, the forecast consumption, revision of limits, rephrasing of deliveries for A, B and C category items are required to be done monthly by COS, half-yearly by Dy. COS and annually by Assistant COS respectively. Accordingly, for linen items, Zonal Railway Administrations decide the categorization and review period for Category A, B and C items. A minimum and maximum limit should also be fixed for the quantity of each 'stock item' of stores in a depot at any time below or above which the balances should not ordinarily be allowed to go. The minimum stock limit should be fixed as low as possible depending upon the prevailing market conditions and the proximity of the depot to the normal source of supply so as to avoid under stocking. Similarly, the maximum stock limit should be fixed in such a way so that the unnecessary locking up of capital, risk of deterioration of stores, extra storage and protection arrangement, accumulation of surplus by unnecessary advance purchase of stores could be avoided. It was observed that the various Zonal Railways after undertaking a review of the linen items keep buffer stocks, which varied from zone to zone, and decide on the re-order quantity during designated months of the year (laid down separately for various linen items depending upon the same being A, B or C category item). Procurement process is being initiated for the stock required as per Estimated Annual Consumption (EAC) (for the intervening period between the demand generation and for the period under agreement) which require almost 6-7 months and purchase order is being placed for the ensuing year. No system of automatic demand generation by the system whenever stock closes to/ goes down from the buffer stock limit and commencement of procurement process has come to notice.

Information of closing stocks in GSD as on 31 March 2016 revealed that while in respect of some of the linen items in selected GSDs, the stock in hand was less than one month's requirement, in respect of others it was more than 12 month's requirement (as given in table below). Maintaining appropriate stock levels helps in better inventory management and issue stock to users, viz. various coaching depots as per their requirements.

Table 4.2 – As on 31 March 2016, stock in hand of various linen items more than a years' requirement of EAC in GSD

Zonal Railway	*Item(s) of linen*	*Estimated Annual Consumption (EAC) (in nos.)*	*Closing balance as on 31st March 2016*	*Closing stock in terms of months' requirement*
NCR/ Kanpur Central	Towel hand khadi bleached hucka bucka	14000	15561	13
NCR/ Jhansi	Pillow Cover (Polyvastra)	240	503	25

Table 4.2 – As on 31 March 2016, stock in hand of various linen items more than a years' requirement of EAC in GSD				
Zonal Railway	**Item(s) of linen**	**Estimated Annual Consumption (EAC) (in nos.)**	**Closing balance as on 31st March 2016**	**Closing stock in terms of months' requirement**
NER	Towel Turkish bath	916	1234	16
NER	Polyester staple Fibre Pillow (DP-II)(2nd AC)	7328	9654	16
NWR/Jodhpur	Washable Pillow (DP-I)(1st AC)	4108	4238	12
NWR/Ajmer	Polyester staple Fibre Pillow (DP-II)(2nd AC)	10260	14436	17
SCR	Face Towel	10000	12269	15
SCR	Polyester staple Fibre Pillow (DP-II)(2nd AC)	20000	21522	13
SER/Hatia	Bed Sheet (Polyvastra)	600	665	13
SECR/Durg	Bed Sheet (Polyvastra)	5	14	34
SECR/Durg	Pillow Cover (Polyvastra)	8	101	152
SECR/Durg	Washable Pillow (DP-I)(1st AC)	586	1965	40
SWR/Hubli	Bed Sheet (Polyvastra)	3130	3189	12
SWR/Hubli	Pillow Cover (Big size)	1320	4235	39
SWR/Mysore	Polyester staple Fibre Pillow (DP-II) (2nd AC)	360	475	16

- In NER, Turkish bath towels (for 1stAC) were procured in excess of the estimated annual consumption of 916 resulting in higher level of stock of 1234 (March 2016). The items were lying in stock for 31 months, as the available stock was enough to cater to requirements of linen for a period of 7 months.
- In NFR, SECR, SR and NWR, no 'polyvastra' bed sheet were procured and provided to the respective category of passengers during the period under review. Bed roll kits distributed in1st, 2nd& 3rd AC coaches were of the same quality. No bath towels were distributed to the 1st class AC Coach passengers as per norms.

Annual requirement of various linen items was not being assessed properly leading to stocking of significantly high or low levels of stock. Maintaining stocks much below the buffer level led to continual usage of linen even after their life cycle was over, thereby effecting quality. On the other hand, maintaining significantly high level of stocks would enhance risk of quality deterioration, while in storage.

During Exit Conference, Railways stated (February 2017) that in 2013-14 ACASH was not able to supply linen as per requirement. It was further stated that the position improved subsequently. Audit, however, stated that the position of under stocking and over stocking reflected in this para is as on 31 March 2016.

4.1.3 Storage and handling of linen

4.1.3.1 At General Stores Depot

New linen purchased is received at the General Stores Deport (GSDs) of various Zonal Railways, from where the same is issued to various Coaching Depots on the basis of their requirements. On receipt of the new linen at Store Depot, the Railway Board prescribed (January 2010) some checks viz. marking of manufacturer's name, month & year of manufacturing, batch number/ lot number on the linen items including quarterly stock verification. It was also prescribed that at least five *per cent* of new supply received from the stores depot should be inspected by Senior Supervisor/Senior Section Engineer (SSE) of Mechanical Department.

In joint inspections at GSDs during June 2016 to September 2016, it was observed that

- There was lack of proper storage facility in the six[141] GSDs of four Zonal Railways. Storing facilities such as racks were not available and bundles were mostly kept on floor.
- Sealed bundles were not marked with batch number, manufacturers' name along with size and year of manufacture in nine[142] GSDs in eight Zonal Railways.
- In WR new linen was stored in a haphazard manner exposed to dust and dirt in GSDs at Mahalakhsmi and Sabarmati.

Fig 2: Improper stacking resulting damages to Linen at Mahalakshmi General Stores Depot, Western Railway (3 August 2016)

- Quarterly Departmental Stock Verification had not been carried out in the 22[143] GSDs of 15 Zonal Railways during the period of review.

[141]Mettuguda-SCR, Mancheswar-ECoR, Mahalaxmi and Sabarmati –WR, Kharagpur and Hatia-SER

[142]Mancheswar-ECoR, Samastipur-ECR, Howrah-ER, Pandu-NFR, Sabarmati-WR, Raipur-SECR, Kharagpur and Hatia-SER, Perambur-SR

[143]ECoR (GSD/Mancheswar), ECR (GSD/Samastipur), ER (GSD/Howrah), NCR (GSD/Jhansi & Kanpur), NER (SD/Gorakhpur), NFR (GSD/Pandu), NR (GSD/Alambagh-Lucknow, GSD/shakurbasti), NWR (GSD/Ajmer & Jaipur), SCR (GSD/Mettuguda), SECR (GSD/Raipur and SD/Bilaspur), SER (GSD/Kharagpur, Hatia & TATA), SR (GSD/Perambur), SWR (GSD/Hubli), WCR (GSD/Bhopal) WR(GSD/Mahalaxmi and Sabarmati)

- Tags indicating name of manufacturer, month and year of manufacturing were not provided on each pillow cover and hand towel in five[144] GSDs in five Zonal Railways.
- In four[145] Zonal Railways, check for quality in each lot for dimensions, colour, feel and workmanship etc., was not done by Sr. Supervisor /SSE of Mechanical department in respect of polyester Staple fiber pillow, Towel Turkish bath, Pillow covers and Bed sheets (Polyvastra) as seen during joint inspections during June 2016 to September 2016.
- In 11[146] GSDs in nine Zonal Railways, five *per cent* check of new supply of linen received in the Depot had not been undertaken by SSE of Mechanical Department during the period of review.
- Where five *per cent* check was done, it was noticed that in seven GSDs in six Zonal Railways, 4100 bed sheets[147], 4113 pillows[148] and 14553 woollen blankets[149] valuing ₹ 64.94 lakh had been rejected during the review period for reasons such as received in wet condition, damaged condition, failed lab test, etc. These were yet to be replaced by the supplier (March 2016). In one such case in SCR, 20,000 bed sheets were rejected but rejection was later withdrawn due to non-availability of adequate stock in GSD, Mettuguda.
- In NER and SECR, it was observed that the quality of blanket was not good, as the borders of the blankets supplied by ACASH were not stitched properly and they were being stitched again at Coaching Depot for their longevity by deploying departmental staff as seen during joint inspection during June 2016 to September 2016.
- At GSD/Kharagpur', bundles of face towels were kept in a room with broken windows susceptible to damage due to seepage of rainwater.

Fig. 3: Storage of linen in a room with broken window in GSD, Kharagpur, South Eastern Railway (31 August 2016)

- In NER, it was observed that the stock at General Stores Depot had already completed 2 to 7 months life from the date of its manufacture before it was received at GSD/Gorakhpur. In SER, bed sheets (life cycle of 12 months) and pillow covers (life cycle of 9 months) remained unutilised

[144]SECR (GSD/Raipur), NFR (GSD/Pandu), NR (GSD/Shakurbasti), NCR (GSD/Jhansi), WR (GSD/Sabarmati)
[145]Mahalaxmi and Sabarmati–WR, Mettuguda-SCR, Shakurbasti-NR, Kahargpur, Hatia and Tata-SER
[146]Perumber-SR,Bhopal- WCR ,Gorakhpur- NER ,Kanpur- NCR, Pandu- NFR, Shakurbasti- NR, Jodhpur-NWR , Mettuguda-SCR, Kharagpur, Hatia & Tata-SER
[147]Currey Road-CR, Bilaspur-SECR, Sabarmati-WR
[148] Mettuguda-SCR
[149]Mahalaxmi & Sabarmati-WR, Hubli-SWR

for seven months and similarly face towels (life cycle of 9 months) remained unutilised for five months at General Stores Depot. This indicated that lot received first were not issued first.

Further, stock verification of stores by departmental officers holding the stores (Mechanical Department in case of linen) as well as Accounts Department has been prescribed in the rules[150]. Any shortage and excess of stores detected during verification should be adjusted following the prescribed procedure. It was observed that during 2013-14 to 2015-16, Departmental Stock Verification had not been carried out in nine[151] General Stores Depot in six Zonal Railways. In WCR, no stock verification of General Stores Depot, Bhopal was carried out by Account Department in 2015-16.

Thus, provision of inspection of a prescribed percentage of new supply was not being used effectively, to ensure, quality of the linen received. The storage space at General Store Depot was not adequate and items were not stored in proper environment. The storage was also not done in an organised manner and First in First out (FIFO) methodology was not followed for issue. As a result, linen stock was kept for long periods in unsuitable conditions, which had an impact on their quality of cleanliness and hygiene.

During Exit Conference, Railways agreed (February 2017) that the storage of linen needed attention.

4.1.3.2 Storage, issue and condemnation of linen in Coaching Depot

Coaching Depots have the responsibility to hold stock of linen consisting of fresh stock in stores, handover used and dirty linen to the washing contractor and keep stock of washed linen for distribution in trains. There are no guidelines from the Railway Board or Zonal Railways regarding optimal stock of numbers of bedroll kits to be provided in passenger trains with air conditioned coaches. The Coaching Depot fixes the number of bedroll kits to be provided in trains based on their own past experience on number of AC coaches, distance covered, *enroute* stoppages, passengers boarding and de-boarding *enroute* etc. To avoid any shortages and replace bedrolls in case of complaints in the train, extra bedroll kits are provided. As the Coaching Depots have to accordingly hold higher stock of linen, this has an impact on the storage space in the Coaching Depots as well as trains.

Fig 4 Condemned linen and running stock stored at the same place at Hatia, South Eastern Railway (22 August 2016)

[150] Chapter XIII & XXXII of Indian Railway Code for the Stores Department (Volume II)
[151] Perambur-SR, Pandu- NFR, Jhanshi and Kanpur- NCR, Secunnderabad- SCR, Howrah-ER, Santragachi, Hatia and Tata-SER

(a) Storage of linen in Coaching Depots

Review of records at 33 Coaching Depots during June 2016 to September 2016 brought out the following:

- Condemned linen and running stocks were stored at the same place at Coaching Depot, Hatia leaving wide scope for use of condemned linen and condemnation of usable linen.
- In Coaching Depot Basin Bridge & Thiruvananthapuram in SR, proper Stock Register had not been maintained for linen. At Basin Bridge, entire quantity of linen received from GSD has been handed over to the contractor without maintaining stock on hand. Further, pillow covers were being stitched from the used bed sheets to tide over the shortage at Basin Bridge.

Fig 5: Bed rolls were stored in Office of SSE/Coaching Depot, Durg/South East Central Railway (27 September 2016)

- There was lack of proper storage facility such as racks etc. in Bangalore City Coaching Depot (SWR) and Durg Coaching Depot (SECR), Santragachi (SER).
- In NR, short quantity of pillow covers were loaded in the eight[152]trains. In a few cases, used pillow covers were also provided to the passengers.

(b) Availability of stock in Coaching Depots

Data in respect of linen kits[153] issued to trains by selected 33 Coaching Depots in various Zonal Railways was collected for the year 2015-16. It was seen that as on 31 March 2016, excess provisions[154] of linen kits over and above the requirements of to and fro journeys were being carried in trains, as can be seen from the data below:

[152]Pillow cover (ACASH-II AC) – Train no.12402 (Magadh Express), 12205 (Nanda Devi Express), 12445 (Uttar Sampark Kranti Express), 22416 (Andhra Pradesh SF Express) and Pillow cover (polyvastra) – Train no. 12425 (New Delhi Jammu Tawi Rajdhani Express), 12442 (New Delhi Bilaspur Rajdhani Express), 12440 (New Delhi Ranchi Rajdhani Express), 12454(New Delhi Ranchi Rajdhani Express)

[153]Two packets of linen, one blanket and a pillow were used for to and fro journey of a train

[154] Excess Bed sheets = No. of linen provided - 2 (2 for each Passenger) X 2 Journeys (for to and fro) X No. of berths

Excess Pillow Cover/ Towel = No. of linen provided - 1 (1 for each Passenger) X 2 Journeys (for to and fro) X No. of berths

Excess Blanket/ Pillow = No. of linen provided - No. of berths

Table 4.3–Percentage of excess linen carried in trains over and above the requirement

Zonal Railway	Bed Sheet (ACASH)	Bed Sheet (Polyvastra)	Pillow Cover (ACASH-IIAC)	Pillow Cover (Polyvastra)	Face Towel	Towel Turkish bath	Woollen Blanket	Polyester Staple Fibre Pillow (DP-II)(2nd AC)	Washable Pillow (DP-I)(1st AC)
CR	1 to 116	20 to 40	0 to 58	Not used	0 to 58	0	0 to 7	0 to 5	Not used
ECoR	21 to 48	28 to 346	24 to 39	28 to 346	41 to 51	0	7 to 17	6 to 14	6 to 8
ECR	20 to 27	21 to 28	25 to 42	30 to 44	26 to 42	27 to 38	0 to 11	0 to 2	0 to 6
ER	0 to 68	0 to 300	0 to 68	0 to 300	0 to 83	0 to 225	3 to 28	2 to 27	0 to 620
NCR	0 to 18	0	0 to 18	0	0 to 18	0	0	0	0
NER	0 to 54	25	0 to 36	25	0 to 24	20 to 25	0 to 9	0 to 9	0
NFR	20 to 50	Not used	20 to 50	Not used	20 to 50	Not used	0 to 5	Not used	0 to 2
NR	0 to 35	0 to 108	0 to 25	0 to 108	0 to 72	0	0 to 25	0 to 25	0
NWR	2 to 37	--	0 to 21	--	0 to 32	--	0 to 8	0 to 8	--
SCR	0 to 90	0	0 to 90	0 to 50	0 to 90	20	0 to 6	0 to 6	--
SER	0 to 100	1 to 22	0 to 100	22 to 54	0 to 100	0 to 22	0 to 11	4 to 7	0 to 11
SECR	17 to 18	Not used	34 to 36	Not used	34 to 36	0	4 to 77	Not used	4 to 77
SR	0 to 48	--	0 to 48	--	0 to 48	--	0	0	--
SWR	0 to 152	--	0 to 152	--	0 to 152	0 to 56	0 to 16	0 to 16	--
WCR	0 to 41	25 to 67	0 to 44	25 to 67	0 to 45	0	0 to 6	0 to 6	0
WR	8 to 324	--	0 to 145	--	0 to 145	--	0 to 23	0 to 23	--

Carrying of provisions more than 1.5 times to double the requirements in a large number of cases, put a strain on the storage space available in the trains.

During Exit Conference, Railways stated (February 2017) that they have received references from Zonal Railways about shortage of space in depot and trains. They further stated that Railway is exploring supply of linen from intermediate stations as per demand, which would address the space constraints in trains.

The position of availability of new linen at Coaching Depots for the three year period covered in the review was checked in audit and it was seen that no norms had been prescribed for maintaining stock levels of various linen items in the coaching depots. As on 31 March 2016, the closing stock of the following

items were more than two years' requirement, indicating high levels of stock in Coaching Depots:

Table 4.4 – Stock of fresh linen in hand over and above two years requirements as on 31 March 2016

Zonal Railway	Coaching Depot	Item	EAC	Closing balance of fresh stock as on 31 March 2016	Stock in hand in terms of months' requirement
NER	Lucknow	Washable Pillow (1st AC)	40	115	35
NR	New Delhi	Bed Sheet (ACASH) & (Polyvastra)	9940	56895	69
NR	New Delhi	Pillow Cover (ACASH-II AC) & (Polyvastra)	20710	46270	27
NWR	Jaipur	Woolen Blanket	2075	7208	42
SER	Santragachi	Towel Turkish bath	157	1,200	92
SWR	Yeshwanthpur	Bed Sheet (Polyvastra)	1200	3864	39
SWR	Yeshwanthpur	Pillow Cover (Polyvastra)	1500	3393	27
SWR	Yeshwanthpur	Washable Pillow (DP-I) (1st AC)	120	2094	209

The new stock at Coaching Depot should be the minimum possible and should be determined keeping in view the time required for transfer of stock from GSD.

Further, stock verification of store items is required to be done as per laid down rules. It was observed that during the period of review in 15[155] Coaching Depots in 10 Zonal Railways, no departmental stock verification was done and in eight[156] Coaching Depots of six Zonal Railways, no stock verification was done by the Accounts Stock Verifier. Records were not made available in NER. An amount of ₹ 45.37 lakh[157] on account of shortages detected during stock verification was yet to be recovered in four Zonal Railways.

(c) Condemnation of linen

Railway Board revised (January 2010) the life of various items of linen kit[158].The condemnation of linen was to be carried out based on prescribed life or on a condition basis as per recommendation of a committee nominated by the Divisional Railway Manager (DRM). The condemned bedrolls items in railways were being treated as nil value scrap and disposed off by burning. As the condemned linen have some departmental use and residual value, the extant practice of disposal was later revised. Condemned linen are now sent to stores section under the coaching depot. Some of the linen items are issued for

[155] SR-(BOOT laundry/Basin Bridge & Kochuveli,) ECoR (Bhubaneswar and PURI), WCR-Jabalpur,Kota , SWR -(Bangalore City & Yesvantpur), SECR (Durg),NER-Lucknow Junction, NCR (Allahabad), CR (Nagpur, Wadibunder), SCR (Secunderabad), ER (Tikiapara)]

[156] SR (both BOOT laundries), SWR(Yesvantpur), NFR (CDO/Guwahati), SCR (CD/Hyderabad), ECR, ER (CD/Sealdah & Howrah)

[157] ECoR - ₹ 21.85 lakh, SCR - ₹ 4.42 lakh), NR - ₹ 3.81 lakh, WR - ₹ 15.29 lakh

[158] Bed sheet from 24 months to 12 month for Khadi supplied by M/s ACASH, 24 months for Polyvastra supplied by KVIC or mill made variety, Pillow cover & face towel from 12 months to 9 months, Pillow from 36 months to 24 months, Blanket from 60 months to 48 months.

departmental use and some are issued to the charitable organisation with approval of competent authority for use by the needy people. Balance stocks are intimated to the Stores Department for auction sale. It was observed that in SR condemned linen were burnt at BOOT Laundry/Kochuveli during 2015-16. In six Zonal Railways (SER, WCR, SCR, NCR, CR and ECoR), disposal was not carried out timely and linen were lying either in the coaching depot or Stores depot even after condemnation as seen during joint inspection by audit. This reduces storage space for linen which is in use. In NFR (Dibrugarh) condemned linen were not auctioned during the period under review.

The above findings show that the storage space in the Coaching Depots was not adequate and proper storing arrangements were not made at many places. No norms had been prescribed for optimal stock of bedroll to be carried in trains. To avoid any shortages and replace bedrolls in case of complaints in the train, extra bedroll kits were provided. This had an impact on the available storage space in the trains. Delay in condemnation of old stock also took away available space for storage in Coaching Depots.

Audit objective 2: To review functioning of mechanised laundries and assess the effectiveness of mechanism of washing and distribution of linen.

4.1.4 Setting up and working of Mechanised Laundries for washing linen

To bring a significant improvement in quality of washing, Zonal Railways were instructed (December 2009) for setting up automated/mechanised laundries for washing/cleaning through BOOT model by private parties.

Indian Railways planned to set up mechanised laundries under departmental and BOOT model. 45 such laundries were planned (at the selected coaching depots) at different times in different zones. Railway Board in January 2013 fixed the target dates between January and December 2013 for completion of the works of 17 laundries (including augmentation) and asked the status. The position of setting up of mechanised laundries was checked for the period 2013-14 to 2015-16 and it was observed that:

- As of 31 March 2016, out of the 17[159] laundries, ten[160] have been set up and work in respect of seven[161] was yet to be completed. As against five planned on BOOT model, only two have been completed. There were delays of up to 30 months due to revision of estimates, delays in vetting and delays in finalization of tenders.

[159]Wadibunder(BOOT), Nagpur(BOOT), Pune(BOOT)-CR, Danapur-ECR, Sealdah, Howrah, Malda Town-ER, Dibrugarh ,New Jalpaiguri-NFR, Santragachi(BOOT), Chakradharpur, Hatia-SER, Tiruvanantapuram(BOOT), Ernakulam-SR, Hubli, Mysore-SWR, Surat-WR

[160]CR-1 (Wadibunder), ECR-1 (Danapur), NFR-1 (New Jaipalguri), SER-2 (Chakradharpur and Hatia) SR-1 (Thiruvananthapuram), SWR-2(Hubli, Mysore), WR-1 (Surat), ER (Malda Town)

[161] CR-2(Nagpur, Pune), ER-2(Sealdah, Howrah), NFR-1(Dirbrugarh), SER-1(SSantragachi), SR-1(Ernakulam)

- Out of the remaining 28[162] laundries to be set up in various Zonal Railways, 20[163]mechanised departmental laundries had been installed and seven[164] were yet to be installed. There were delays of up to 35 months due to similar reasons.
- In two Zones (ECoR and NCR) no mechanical laundries were installed.
- Due to inadequate response of interested party for BOOT model laundries, railways installed departmental laundries. Audit reviewed available information of the handling capacity of the 26[165]departmental mechanized laundries and found that the capacity installed was not sufficient for the requirements of the railways and railways continued to meet bulk of its requirement through outsourcing (93 *per cent* of the total linen handled for washing by selected coaching depots) during the period under review. As per available information in respect of 21[166]departmental mechanised laundries it was seen that during the review period against the total capacity of washing of the 40082 MT, actual outturn was 29780 MT i.e. a shortfall of 10302 MT (26 *per cent*). The available capacity was not utilised fully mainly due to breakdown of machines.

Annexure 4.1 and 4.2

- Departmental mechanised laundries were established where interested parties did not come up for setting up the laundries under BOOT model. The departmental laundries maintain an account of consumables used and the number of washed linen. In 21 coaching depots of 11 Zonal Railways (CR, ER, NER, NFR, NR, NWR, SCR, SECR, SER, SWR, and WR) per tonne usage of consumables detergents and other chemicals varied widely. There was no system to check the quality of washing in case of departmental mechanised laundries unlike in the case of washing by contractors.

During Exit Conference, Railways agreed (February 2017) that the capacity available with them for washing in mechanized laundry is limited and most of the requirement was being met through outsourcing. They further stated that progress have been made in setting up of mechanized laundries over all Zonal Railways and as departmental staff is not able to manage the operation of mechanised laundries, these would be set up on BOOT model only. They also

[162]Samastipur-ECR,Gwalior,Allahabad-NCR,Gorakhpur,Lucknow,Kathgodam,Manduadih-NER,Benaras,Lucknow-NR,Secunderabad,Kacheguda(Depttl.),Kacheguda(BOOT),Tirupati(BOOT),Kakinada(BOOT)-SCR,Bilaspur,Durg-SECR,BasinBridge(BOOT),Mangalore(BOOT),Coimbatore(BOOT),Madurai(BOOT)-SR,Jabalpur,Kota-WCR,Indore,Grant Road, Ahamedabad(BOOT), Junagarh-WR, Jodhpur, Bikaner-NWR.

[163]Samastipur-ECR, Gorakhpur, Lucknow, Kathgodam, Manduadih-NER, Benaras, Lucknow-NR, Secunderabad, Kacheguda(Depttl.), Kacheguda(BOOT)-SCR, Bilaspur, Durg-SECR,Basin Bridge(BOOT)-SR, Jabalpur, Kota-WCR, Grant Road, Ahamedabad(BOOT), Junagarh-WR, Jodhpur, Bikaner-NWR.

[164]Gwalior,Allahabad-NCR,Tirupati(BOOT),Kakinada(BOOT)-SCR,Mangalore(BOOT),Coimbatore(BOOT),Madurai(BOOT)-SR,

[165]CR- Wadibunder, ECR – Danapur and Samastipur, ER – Sealdah and Howrah, NER – Kathgodam and Gorakhpur, NFR – Kamakhya and New Jalpaiguri, NR – Lucknow and Varanasi, NWR – Jodhpur and Bikaner, SCR – Secunderabad and Hyderabad, SECR – Bilaspur and Durg, SER – Santragachi, Hatia and Tata, SWR – Hubli and Mysore, WCR – Jabalpur and Kota, WR – Indore, Grant Road

[166]CR-1(Wadibunder), ECR-2(Danapur, Samastipur), ER-1(Sealdah), NER-2(Gorakhpur, Kathgodam), NFR-1(New Jalpaiguri), NR-1(Lucknow), NWR-2 (Jodhpur and Bikaner), SCR-2(Secunderabad, Kachiguda), SER-3 (Santragachi, Tata and Hatia), SWR-2 (Hubli and Mysore), WCR-2 (Jabalpur and Kota), WR-2 (Indore, Grant Road)

stated that they are ensuring setting up of high capacity mechanized laundries to take care of overall requirement.

4.1.4.1 Treatment of effluents of mechanised laundries

Railway Board (January 2011[167]) instructed that all effluents from the mechanised laundry conform to pollution control and obtain clearances from the statutory and non-statutory authorities required for installation and operation of the mechanised laundry. Dirty water released from the mechanised laundries is required to be treated in the Effluent Treatment Plant (ETP) or stored in a specially created soak pit for the purpose. Review of records of the period 2013-14 to 205-16 showed that

- Out of 30 mechanised laundries over 14 Zonal Railways, only in four cases (SCR-1 BOOT, SR-1 BOOT, WR-1 Departmental & 1 BOOT) clearance from the State Pollution Control Board was obtained.
- Out of 30 mechanised laundries over 14 Zonal Railways, in 15 departmental mechanised laundries over 10 Zonal Railways (CR-1, ECR-2, ER-2, NER-1, NR-2, NWR-1, SCR-1, SECR-1, SER-3, WCR-1) no ETPs were installed and the untreated water was allowed to be discharged without treatment. In three mechanised laundries (WCR-1, SCR-1, SWR-1) ETPs were not functional till March 2016. In Mechanised Laundry at Kamakhya (NFR), ETP was recycling only part of the waste water.

Annexure 4.3

Due to inadequate response from private parties, railways installed departmental mechanised laundries. However, these did not have sufficient handling capacity and railways continued to meet bulk of its requirement through outsourcing. The pace of setting up of departmental mechanised laundries was also slow. No quality check of washing through departmental mechanised laundries was done nor any norms prescribed for the same. Necessary clearances for operating 26 out of 30 mechanised laundries were not obtained from respective State Pollution Control Boards. ETPs were not installed in case of 15 out of 30 mechanised laundries. In respect of the remaining, ETPs were installed in the laundries, but these were not functional and one ETP was recycling only part of the waste water.

During Exit Conference, Railways agreed (February 2017) with the audit observations and stated that the issue needed to be addressed urgently. They stated that ETPs are being installed at all places and their working will be monitored regularly.

4.1.4.2 Washing of linen by contractors

Railways award washing contracts where either no departmental mechanised laundry facility is there or the available capacity is not able to meet the demand.

[167]Railway Board's letter No.2009/MC©/165/6 dated 14.01.2011 for setting up of mechanized laundry for linen washing on BOOT model (Para 6) should be same for any washing contractors or mechanized laundry

Railway Board stipulated the scope of work[168] for the contractors engaged in linen washing, which included collection of soiled linen from AC coach attendants from the platforms/washing lines and transportation to the laundry stores, supply of washed linen to coaches of trains, along with train-wise place/location where the linen is to be collected from/supplied to etc., standards for cleaning linen, removal of stains, washing, drying, calendaring, ironing in the automated laundry, packing of linen sets in environment friendly bags and storage and maintaining proper account of linen items.

Audit examined 76 selected outsourced contracts in 33 selected Coaching Depots for the period 2013-14 to 2015-16 along with the performance of the contractor. It was observed that there were variations in the rates of washing per item of linen across all the Coaching Depots. In some of the Zonal Railways, the rates were very low. A test check showed that, in some of the Zonal Railways where rates were very low, the percentage of rejection in bed sheets, pillow covers and face towels were higher, which indicated that very low rates resulted in compromise in quality.

Good practice

In SR, in two BOOT laundries at Basin Bridge, number of linen washed is not counted for arranging payment for washing. Instead, it is calculated based on the number of soiled linen/passengers issued with bedroll as per figures obtained from CRIS regarding actual number of passengers travelled (whichever is less) since both washing and distribution are being done by the same contractor.

In all Zonal Railways (except ECR and SWR) washed linen were rejected in varying quantities for poor quality of washing during the review period. (Bed sheet (ACASH) – 17 *per cent* in NER, pillow covers – 31 *per cent* in NER, face towels – 61 *per cent* in NER and woollen blankets – 5 *per cent* in NWR).

There were wide variations in the rates for washing of various items of bedroll. In Zonal Railways where the rates of washing were very low, had comparatively higher percentage of rejection. This indicated that at lower rates quality was compromised.

4.1.4.3 Washing and sanitisation of blankets

As per Railway Board instructions[169], washing of linen (except blanket) should be done after every single use and blankets should be dry-cleaned at least once in two months. It was observed that various Zonal Railways had provided periodicity of once in a fortnight/ month/once in two-three months for washing of blankets. Audit collected the data of number of blankets in use and number of blankets washed during the period of review in the 33 selected coaching depots. During the period of review (2012-13 to 2015-16), it was seen that

[168] Railway Board's letter No. 2009/MC(C)/165/6 dated 14.01.2011 for setting up of mechanised laundry for linen washing on BOOT model
[169] Policy Circular No.19 of 1999

- In 14[170] selected coaching depots of nine Zonal Railways (CR-2, ECR-1, NER-1, NFR-1, NWR-2, SCR-2, SR-2, WCR-2, WR-1) no blankets had been dry washed. Further, except seven[171] depots of five Zonal railways (ER – 1, NR – 2, SECR -1, SWR -2, and WCR - 1) linens had not been sanitised in any of the selected depots.
- In SCR, a specific clause had been incorporated in all the washing contracts for dry-cleaning of woollen blankets by utilising per chloro-ethylene operated dry-cleaning machines. However, contrary to the above contract provision, the woollen blankets were being wet washed.
- In three Zonal Railways (NCR, CR and WR), it was noticed during joint inspection that provision for dry cleaning of blanket every month was made in the contract, but it was not done monthly. Similarly, in SER (Coaching depot Santragachi), provision was made for twice in a month, but the same was not done.
- The process for sanitisation/disinfection of blankets was not prescribed. Audit observed that out of 33 coaching depots, provision of sanitisation of blankets existed in contracts for only six[172] depots in five Zonal Railways (CR - 1, ER -1, SECR -1, SWR -2, and WCR 1). Though no provision existed in the contracts of two depots of NR, blankets were sanitised at an interval of 30 days (Lucknow)/ 15 days (New Delhi) by 'hot air' method and no steam sterilization or chemical sterilization of blankets was done.
- It was observed that during 2015-16, in respect of 12 coaching depots of eight Zonal Railways as given below, blankets had been washed after an interval 6 to 26 months:

Table 4.5 – Percentage shortfall in washing of blankets in selected coaching depots

Zonal Railways	Depot	No. of blankets in use	Blankets required to be washed (No. of blankets x 6)	Blankets washed	Shortfall		Frequency (months)
					No.	*in per cent*	
CR	Lokmanya Tilak Terminus and Wadi bunder	13732	82392	12488	69904	85	13
ER	Sealdah	14500	87000	9127	77873	90	19
NCR	Gwalior	2456	14736	2616	12120	82	11
NFR	Guwahati	12799	76794	5957	70837	92	26
NFR	Dibrugarh	6305	37830	9687	28143	74	8
NR	Lucknow	5760	34560	2767	31793	92	25
SCR	Secunderabad	21987	131922	43580	88342	67	6
SER	Hatia	6,327	37962	6,327	31635	83	12
SER	Tatanagar	2778	16668	5698	10970	66	6

[170]CR-Lokmanya Tilak Terminus, Wadibunder; ECR-Darbhanga, NER-Lucknow; NFR-Guwahati; NWR-Jodhpur, Jaipur; SCR-Secunderabad, Hyderabad; SR-Chennai Central, Tiruvanantapuram; WCR-Jabalpur, KOTA; WR-Ahmedabad
[171]ER-Sealdah, NR- New Delhi, Lucknow; SECR- Durg; SWR- Yeshwanthpur, KSR Bengaluru City; WCR- KOTA
[172]CR – Nagpur, ER - NCC/ Sealdah, SECR – Durg, SWR –Yeshwanthpur & KSR Bengaluru City, WCR - Kota

Table 4.5 – Percentage shortfall in washing of blankets in selected coaching depots							
Zonal Railways	Depot	No. of blankets in use	Blankets required to be washed (No. of blankets x 6)	Blankets washed	Shortfall		Frequency (months)
					No.	*in per cent*	
WCR	Jabalpur	10028	60168	7634	52534	87	16
WCR	Kota	1282	7692	1282	6410	83	12

Annexure 4.4

4.1.4.4 Washing and sanitisation of Pillows

In March 2016, Railway Board instructed that washing of pillows should be done at least once in every six months or prior if required so as to provide neat and hygienic pillows to every passenger. Prior to March 2016, there were no instructions regarding washing of pillows. However, washable pillows where procured were required to be washed. It was observed that in the absence of instructions, pillows were not washed in any of the Zonal Railways except ECoR and NFR (where some of the stock was washed) during the period of review. The process for sanitisation/disinfection of pillows was also not prescribed.

Annexure 4.4

Thus, blankets and pillows were not dry cleaned and/or sanitised for long periods before supply to the passengers.

During Exit Conference, Railways stated (February 2017) that directives have been issued to wash blankets once in a month henceforth.

4.1.4.5 Quality of washed linen

(a) Quality of cleaning of linen items

Railway Board prescribed (January 2011) standards of cleanliness in linen:

(i) The average whiteness of new linen items after 5 washes shall be taken as the base reference i.e. an index of 100 *per cent*. The contractor must ensure at all times a minimum level of whiteness index of 75 *per cent* for all the constituents of the linen kit.
(ii) The washing contractor is also required to provide instruments for checking the whiteness of linen and other quality related parameters.
(iii) There should be no wrinkles or wetness after calendaring. Hand towels should retain their soft feel and water absorbing capacity. The washed linen should be hygienic, bacteria free, stain free and odourless.

Additional parameters in the washing contract are also provided like use of perfumes, softening chemicals for towels, starch for Bed sheets and Pillow covers for crisp feeling. Review at washing contracts for the period 2012-13 to 2015-16 at 33 Coaching depots showed that

- In 24[173] coaching depots of 14 Zonal Railways, neither any provision exists in the contract to provide instrument for checking whiteness of linen nor there is any system of checking the whiteness of linen by contractor or railways own arrangement. In the absence of electronic instruments for quality measurement and lack of penal provision in the contract for not adhering to the quality standards, it was difficult to enforce quality standards prescribed by the Railway Board.
- In 10[174]coaching depots of eight Zonal Railways, provision existed in the contract and checking was done by instrument, but calibration of the instrument was not done in three[175] coaching depots during the period of review.
- In 10 Zonal Railways, at 18[176]coaching depots provision did not exist for use of perfumes in the washed linen. Though provision existed in 17 coaching depots of 11 Zonal Railways for use of perfumes, in six[177]coaching depots perfumes was not used as seen during joint inspections.
- Similarly, provision did not exist in the contract for use of chemical for softening the towels in four depots of three[178]Zonal Railways. Though provision existed in 30 coaching depots of 16[179] railways for use of chemicals for softening the towels, the same was not used in two[180] depots.
- Provision did not exist in the contract for use of starch for bed sheets and pillow covers for crisp feeling in 22 depots of 11[181] Zonal Railways. Though provision exist in eight[182]Zonal Railways 13 depots for use of starch for the washed bed sheets or pillow covers during joint inspection by audit it was noticed that bed sheets did not feel crispy in three[183]Zonal Railways in five depots.

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[173]CR (Lokmanya Tilak Terminus, Nagpur), ECoR (Bhubaneswar, Puri), ECR (Rajendra Nagar, Darbhanga), ER (Sealdah, Howrah), NCR (ALlahabad, Gwalior), NFR (Dibrugarh), NR (Lucknow), SCR (Secunderabad, Hyderabad), SECR (Durg), SER (Santragachi, Tata, Hatia), SWR (YYeshwanthpur, Bengaluru city), WCR (Jabalpur, kota), WR (Bandra Terminal), NWR (Jaipur)

[174]CR (Wadibunder-BOOT model), NER (Kathgodham, Gorakhpur), NFR (Guwahati), NR (New Delhi), SECR (Bilaspur), SR (Chennai Central, Thiruvananthapuram), WR (Kankaria), NWR (Jodhpur)

[175]SR (Chennai Central, Thiruvananthapuram), NWR (Jodhpur)

[176]CR (Lokmannya Tilak Terminus, Wadibunder-Deptl & BOOT, Nagpur), ECR-Rajenda Nagar, Darbhanga), ER (Sealdah), NER (Kathgodam, gorakhpur), SECR (Bilaspur), SER (Tata and Hatia), SR (Chennai Central, Thiruvananthapuram), WCR (Kota), WR (Kankaria), NWR (Jodhpur and Jaipur)

[177]ECoR (Bhubaneswar, Puri), ER(Howrah), NFR (Dibrugarh), SCR (Secunderabad, Hyderabad)

[178] ECR (Darbhanga), SER (Tata and Hatia), WCR (Kota)

[179]CR (Lokmanya Tilak Terminus, Wadibunder-Depttl & BOOT, Nagpur), ECoR (Bhubaneswar, Puri), ECR (Rajendra Nagar), ER (Sealdah, Howrah), NCR (Allahabad, Gwalior), NER (Kathgodam, Gorakhpur), NFR (Guwahati, Dibrugarh), NR (Lucknow, New Delhi), SCR (Secunderabad, Hyderabad), SECR (Biaspur, durg), SER (Santragachi), SR (Chennai Cental, Thiruvananthapuram), SWR (Yeshwanthpur, KSR Bangaluru city), WCR (Jabalpur), WR (Bandra Terminus, Kankaria), NWR (Jodhpur, Jaipur)

[180]ER (Howrah), SER (Santragachi)

[181] CR (Lokmannya Tilak Terminus, Wadibunder Depttl & BOOT), ECR (rajendra Nagar, Darbhanga), ER (Sealdah, Howrah), NER (Kathgodam, Gorakhpur), NR (Lucknow, New Delhi), SECR (Bilaspur, durg), SER (Tata, Hatia), SR (Chennai Central, Thiruvananthapuram), WCR (Jabalpur, Kota),, WR (Kankaria), NWR (Jodhpur,Jaipur)

[182]CR(Nagpur), ECoR (Bhubaneswar, puri), NCR (Allahabad, Gwalior), NFR (Guwahati, Dibrugarh), SCR (Secunderabad, Hyderabad), SER (Santragachi), SWR (Yeshwanthpur, KSR Bangaluru city), WR (Bandra Terminus)

[183] CR (Nagpur), ECoR (Bhubaneswar, Puri), NFR (Guwahati, Dibrugarh)

(b) Inspection/Check of washed linen

Railway Board (January 2010) prescribed guidelines for checks to be conducted on washed linen and prescribed quantum of random sample check, periodicity and the level of inspection at washing plant before despatch of linen and while receiving the washed linen in the depot. Only in case of emergency, lots primarily rejected could be accepted after imposing suitable penalty. Such practice, however, was to be exercised very rarely, and only in cases where train services are likely to be affected due to shortages. It was also stipulated that no washing contract should be awarded without prior assessment of the availability of required infrastructure and capability and capacity of the firm. Audit review of records during the period of review (April 2013 to March 2016) related to inspections conducted during the period of review at selected Coaching Depots showed that

- Inspection at washing plant before despatch of linen by the Assistant Scale Officer/Sr. Supervisor/SSE, once in every quarter was not done in eight[184]Coaching Depots. Records of inspection done, if any, were not maintained in three[185]Coaching Depots.
- Inspection while receiving the washed linen in the Coaching Depots by the JA grade officer was to be done once in every quarter. This was not done in nine[186]Coaching Depots, not done in the prescribed schedule in two[187]Coaching Depots and no documentary evidences were available in two[188]Coaching Depots.
- At Assistant Scale Officer/Sr. Scale Officer level it was to be done once in every month. During the period of review the same was not done in three[189] Coaching Depots and not done as per prescribed schedule in six[190] Coaching Depots. Similarly, inspection of plant and machinery of the washing contractor before awarding of contract was not done in three[191] Coaching Depots during the period of review.

Fig 6: Wet bed rolls in Train No.18238 – Chhatisgarh Express (21 September 2016)

[184]SR-(Kuchuveli-BOOT), CR (Lokmannya Tilak Terminus), ER (Sealdah, Howrah), NR(Lucknow), WR (Bandra Terminus), SER (Santragachi, Hatia)
[185]SR (Basin Bridge-2013-14,14-15), NCR (Gwalior), NR (New Delhi).
[186]SR (Chennai Central, Thiruvananthapuram), SWR (Yashwanthpur, Bangaluru City), CR (Lokmannaya Tilak Terminus), ER (Howhar), NR (Lucknow, New Delhi), SER(Hatia)
[187]CR (Wadibunder), SCR (Hyderabad)
[188]NCR (Allahabad), WR(Kankaria)
[189] SR(Thiruvananthapuram, Chennai central),NR(Lucknow)
[190] CR(Lokmannya tilak terminus, Wadibunder), NCR(Gwalior), WR (Bandra Terminus), SCR (Secunderabad, Hyderabad)
[191] NR (Lucknow), SER (Santragachi, Hatia)

- Inspection of plant and machinery of the washing contractor for complying procedure/use of automatic plants and equipment etc. was to be done by Assistant Scale Officer/Senior Scale Officer once in every six months. During the period of review the prescribed inspection was not done in case of four[192]Coaching Depots. There was no documentary evidence as to whether or not the prescribed inspection was done in SECR and WR.
- Monthly report of summary of all inspection/test check was not available in seven[193] Zonal Railways during the period of review.

(c) Penalties on washing contractors for unsatisfactory performance

Railway Board fixed (January 2011) the penalties on washing contractors for unsatisfactory performances at various stages of linen management viz. delay in delivery of washed linen, loss or damage to linen, passenger complaints on the quality of washing, cleaning or ironing, packaging, loading & unloading, safe transportation etc.

Review of 76 Washing Contract Agreements in 33 Coaching Depots for the year 2013-14 to 2015-16 showed that

- In ten Zonal Railways (SWR, NFR, CR, ECR, WCR, ECoR, NER, SR, NR and NCR) there were instance of the rate of penalty in the contract for improper packaging being different (most of the cases less) from the rate prescribed by the Railway Board.
- In NCR there was no provision in the contract to levy penalty for unsatisfactory performance.
- In NR, though rejection of sample was 21.72 *per cent* and 12.79 *per cent* i.e. more than two *per cent*, the whole lot should have been rejected as per instruction of Railway Board, which was not done.
- In 13 (CR, ECoR, ER, NCR, NR, NWR, SCR, SECR, SER, SR, SWR, WCR and WR) Zonal Railways, during the period of review an amount of ₹ 6.26 crore was recovered from washing contractors due to their unsatisfactory performance and in eight Zonal Railways (CR, ECR, NCR, NFR, NWR, SER, SR and WR) an amount of ₹ 1.48 crore from 47 washing contractors was yet to be recovered.
- In 10 (CR, ER, NFR, NR, NWR, SCR, SR, SWR, WCR and WR) Zonal Railways, an amount of ₹ 4.75 crore was recovered from washing contractors on account of loss of linen and in two Zonal Railways (ECR and SCR) an amount of ₹ 1.19 crore was outstanding

There were deficiencies in the washing contracts which diluted the enforcement of quality assurance measures. Electronic instruments for quality measurement were not being used in most of the Zonal Railways. This was also not enforced through the terms and conditions of the contracts. Inspections of quality were not being done adequately. Large amounts were being recovered from washing contractors for unsatisfactory performance.

[192] SR (Basin Bridge, Kuchuveli-BOOT), SER (Santragachi, Hatia)
[193] NER, ECoR, ECR, NCR, NER, WCR,SER

During Exit Conference, Railways agreed (February 2017) that inspection and supervision of quality of washing was important and needed to be addressed. They stated that they are going for third party audits for monitoring coach cleaning and laundry.

4.1.4.6 Distribution of linen to passengers in trains

As per Policy Circular 19 of 1999, the distribution of linen was to be done by the railway staff i.e. by coach attendant in the coaches so that the activity was properly monitored. Railway Board modified the instructions in August 2005 and decided that where the availability of staff for such distribution is inadequate, the same can be handed over to a private party. Accordingly, Zonal Railways outsourced the bedroll distribution job along with additional job of escorting AC coach/coach attendant. In SCR it was observed that distribution of Coach Attendants across the two depots test checked were not uniform. While one attendant per coach was deployed on Tirupati Depot, two coaches were attended to by one attendant at Coaching Depot at Secunderabad and Hyderabad. This lack of uniformity leads to avoidable higher deployment leading to possible avoidable expenditure and needs rationalisation across depots on IR.

(a) Mechanism for ensuring recovery of amounts towards supply of linen on demand by passengers

In Sleeper Class of Duranto Express[194] and AC III of Garib Rath Express[195], passengers have an option to book and pay for bedroll along with the payment for ticket. Railways also have a provision to supply bedrolls on demand by the passenger on payment of ₹ 25 per kit in trains. It was observed that in three railways (SER, SR and NCR), no system existed to verify whether bedroll charges were collected from the passengers opting for bedroll in the train, and properly remitted as no separate record was being maintained either in Coaching Depot or in the Chief Ticket Inspector's office. During the passenger survey (undertaken between June 2016 to Sep 2016) in Garib Rath and Duranto Express it was seen that passengers who were provided linen on demand in the train were either not given any receipt though payments were made or no payment was collected.

(b) Recovery of penalty from defaulting distribution contractors

Railway Board (March 2006) specified the methodology to be adopted for recovery for loss of bed roll items based on their residual life. Railway Board reduced (January 2010) the life cycle of the linen items. However, the rate of recovery against loss of linen was revised only in 2015. Zonal Railways were also advised (September 2015) to keep a watch on regular defaulters reporting loss of linen and do counselling/training besides levying penalties.

Test check of records of 65 Distribution Contract Agreements over 33 coaching Depots for the year 2013-14 to 2015-16 showed that in SR, loss of linen distributed on train at Chennai Coaching Depot has not been quantified during

[194] w.e.f Oct 2009
[195] w.e.f. Dec 2012

the period from April 2013 to November 2013 and no recovery was made. During the period of review, an amount ₹ 7.42 crore was recovered in 11 (CR, ECoR, ECR, ER, NCR, NER, NFR, NR, NWR, SCR and SECR) Zonal Railways and ₹ 1.64 crore was outstanding in eight Zonal Railways (CR, ECoR, ECR, ER, NCR, NER, SER and SECR) from the distribution contractor for loss of linen.

Railways did not adhere to the statutory requirements in respect of the payments made to the labours of distribution contractors.

4.1.4.7 Storage space of linen in trains

Railway Board Policy Circular No.19 of July 1999 laid down strategy for supply of good quality linen to the travelling passengers and emphasized on developing proper storage facility at stations as well as in the trains. Railway Board also issued instructions (July 1995) to modify the layout of the existing AC 3-Tier coaches and reduce the number of berths from 67 to 64.

On board study was conducted in trains including Garib Rath Express as well as the platforms to assess the adequacy/inadequacy of storage space. During field/ joint inspections during August/September 2016 it was observed that

Fig 6

1. *Linen kept at the entrance of a coach in Gorakhdham Express (NER)*
2. *Bed rolls kept on berth in Train No. 18243-Bhagat Ki Kothi LHB coaches due to insufficient storage space in SECR (20.9.16)*
3. *Linen staked in vestibule of Garib Rath (12878) in SER (5.10.16)*
4. *Linen staked in passage of Garib Rath (12611) in SR (24.9.16)*
5. *Lines dumped wet & dirty platform at Ranchi Station, SER (22.8.16)*

- In none of the trains test checked, storage space was adequate. In Garib Rath, LHB type coaches, trains having more than two links were having limited space for storing linen.
- In four Zonal Railways (SER, NER, SR, WR), even fresh linen was being stored on the floor of the corridors /vestibules of the coaches, entrance/exit gates, near toilets etc.
- In Ranchi Station (SER), it was noticed that the platform was not fully covered with shed and linen were susceptible to getting wet, dirty and unhygienic during loading and unloading.

Thus, storage space in trains was inadequate and linen was stored on the floor, in the vestibules and near toilet, making it dirty and unhygienic to use.

4.1.5 Feedback and complaint redressal mechanism

4.1.5.1 Passenger Feedback

Monitoring of quality and adequacy of linen rests on passenger satisfaction through feedbacks. Railway Board instructed (Policy Circular No.19 of 1999) that on-board staff should give feedback about the quality of linen in their lobby offices. Also feedback from travelling passengers should be taken from time to time by developing suitable feedback forms to improve the services.

Railway Board further instructed (January 2011) that the contractor shall make arrangements for making feedback in the prescribed forms available to the passengers through the departmental on board AC staff/ACCI, who shall obtain passenger feedback from at least five passengers per AC coach in each direction. One feedback shall also be taken from Train Superintendent/Travelling Ticket Examiner (TS/TTE) for each direction over and above the feedback from passengers. Review of records for the years 2013-14 to 2015-16 showed that out of 33 coaching depots over 16 Zonal Railways:

- Provision for collection of passenger feedback existed in washing contract of only one Kankaria Coaching Depot, Ahmedabad Division of WR.
- In distribution contract only four Coaching Depots of two ZRs (Guwahati and Dibrugarh in NFR and Secunderabad and Hyderabad in SCR), provision for collection of passenger feedback existed.
- In NFR, no feedback was taken from the passengers in respect of any of the depots.
- In SCR, out of 579400 passengers to be surveyed for two depots, 393276 (68 *per cent*) passengers were surveyed out of which 48 *per cent* were not satisfied, but no penalty was levied.
- In SR, both washing and distribution contracts of Chennai and Thiruvananthapuram Coaching Depots provided for collection of feedback from passengers. However, details of passenger feedback collected were not made available to audit in any of the depots.

During Exit Conference, Railways stated (February 2017) that they would use feedback from passengers to bring about improvement in quality of linen services.

4.1.5.2 Passenger complaint and redressal system

Indian Railways has time and again reiterated its commitment to provide good quality fresh, bright, crisp, ironed and stain free linen to passengers. An effective complaint redressal mechanism is thus necessary for redressal of complaints of passengers: Passengers have an option to lodge their complaints through various means[196].

It was observed that during the period of review, 6726 complaints (*1559 in 2013-14 for 31 depots, 2768 in 2014-15 for 33 depots, 2399 in 2015-16 for 33 depots*) pertaining to linen had been lodged by the passengers in respect of 33 selected Coaching Depots over all Zonal Railways. A detailed review of 538 complaints over all Zonal Railways was done and it was seen that these complaints pertains to issue of bedroll not cleaned and ironed, non-supply of hand towel, dirty and unhygienic bedroll, blanket & pillow full of dirt etc. In most of these cases, action was taken by the railways and penalty of ₹ 500 to ₹ 2000 (₹10,000 in two cases and ₹ 4000 in one case) was imposed on the respective contractors. As regards complaints pertaining to Coaching Depots where Departmental Mechanised Laundries were doing the washing, no record was being maintained for rejection and replacement of linen.

Annexure 4.5

4.1.5.3 Passenger Survey by audit teams

In the absence of records relating to passenger feedbacks by the railway administration/ washing or distribution contractors as prescribed by Railway Board, audit conducted (June 2016 to September 2016) a passenger survey in 79 trains of all Zonal Railways randomly selecting 25 passengers in each train. The passenger survey by audit brought out the following:

- 23 *per cent* of the passengers graded the overall quality of linen (bedroll except blanket and pillow) as “Average” or “Poor”.

[196] ***138*** – Passengers can lodge complaints by dialling 138. The message is stored at commercial control of Divisional and Zonal Headquarter.
Complaint Monitoring System (URL: coms.indianrailways.gov.in) – This is a web based portal where a passenger can lodge complaint. This can be done through mobile app and SMS. Zonal Railway wise, division wise, complaint type wise reports can be generated, developed and maintained by CRIS.
Twitter: Complaints can be lodged through social networking site like twitter. The complaints are transmitted to respective departments.
Centralised Public Grievance Redressal and Monitoring System (CPGRAMS): Passenger can lodge complaints through this web portal/ mobile app of Department of Administrative Reforms and Public Grievances. Report is generated department wise, complaint type wise.
Passengers can lodge complaints through ***email/letter*** to GM/AGM/CCM/Sr.DCM. Subsequently these are transmitted to respective departments.
During journey, complaint book is maintained by TTEs and the book is supposed to be sent to the depot through Train Inspector.

- 48 *per cent* of the passengers were not aware about how to register the complaint and 55 *per cent* were of the view that complaint to Railway authorities would not serve any purpose.
- 91 *percent* of the passengers were satisfied with the behaviour of the bedroll distribution staff.
- 56 *per cent* of the passengers were uncomfortable in very cool temperature at night and 79 *per cent* of the passengers were of the opinion that blankets were required for cool temperature at night.
- 67 *per cent* of the passengers expressed that the blankets were not hygienic because of multiple use and 52 *per cent* felt that the blankets were not properly washed.

Adequate feedback was not being taken from passengers as per laid down norms. As regards complaints pertaining to Coaching Depots where Departmental Mechanised Laundries were doing the washing, no record was being maintained for rejection and replacement of linen.

4.1.6 Non-adherence to statutory requirements by Railways as Principal Employer

As per directions, railways as a principal employer must ensure that the distribution contractors have complied with the labour laws and the provisions of Employees Provident Fund (PF) Act and Employees State Insurance (ESI) Act. Linen distribution contractors are under statutory obligation to deduct mandatory PF & ESI contribution and this along with matching contribution is deposited in the respective accounts of the contractual labours. 65 distribution contracts were examined by audit and it was observed that

- In four Zonal Railways (ER, NCR, SER and WCR) and one depot (Jodhpur) of NWR, the estimate was not prepared based on Minimum Wages Act.
- In four Zonal Railways (ER, NCR, NWR and SCR), there was no provision for payments of wages through bank accounts.
- There was no documentary evidence to show that contractors furnished Bank Statements in respect of payments made to the labourers in any[197] of the Zonal Railways.
- In six Zonal Railways (SECR, NCR, NR, SR, CR, NER), no documentary evidence were submitted by the contractor as an evidence towards deduction of ESI, PF from the salary of the labourers. The procedure of submission of documentary evidence was not followed in one depot (Jodhpur) of NWR. In ER, documentary evidence (ECR, *i.e.*, Electronic Challan cum Return) was submitted by two distribution contracts. However, the information furnished in the ECR could not be validated in the official website of Employees' Provident Fund Organisation in respect of one distribution contractor.

[197]Except SR(Thiruvananthapuram)-NAP,WCR(KOTA)-NAP,ECoR(PURI,Bhubaneswar),WCR(Jabalpur),WR(Bandra Terminus & Ahmedabad),CR (Lokmannya Tilak Terminus),NR (Lucknow), SR (Chennai Central, Thiruvananthapuram)

- In two Zonal Railways (NER, NCR, (Allahabad & Gwalior)), the contractor made cash payments of wages and no recovery were made towards PF & ESI for the labours.

Thus, as Principal Employer, IR did not have a mechanism to ensure adherence of statutory provisions by the distribution contractors.

During Exit Conference, Railways agreed (February 2017) that adherence to labour laws by the contractors was an area of concern for the IR.

4.1.7 Conclusion

Annual requirement of various linen items was not being assessed properly leading to stocking of significantly high or low levels of stock. Provision of inspection of a prescribed percentage of new supply was not being used effectively, to ensure, quality of the linen received in General Stores Depots. The storage space was also not adequate and items were not stored in proper environment. The storage was also not done in an organised manner and First in First out (FIFO) methodology was not followed. As a result, linen stock was kept for long periods in unsuitable conditions, which had an impact on their quality.

The storage space in the Coaching Depots was also not adequate and proper storing arrangements were not made. The stock of new linen as on 31 March 2016 were much less than one month's requirement and coaching depots continued to use old/bad linen much beyond their service life. No norms had been prescribed for optimal stock of bedroll to be carried in trains. To avoid any shortages and replace bedrolls in case of complaints in the train, extra bedroll kits were provided. This had an impact on the available storage space in the trains as well. Delay in condemnation of old stock also took away available space for storage in Coaching Depots.

Due to inadequate response from private parties, railways installed departmental mechanised laundries. However, these did not have sufficient handling capacity and railways continued to meet bulk of its requirement through outsourcing. The pace of setting up of departmental mechanised laundries was also slow. No quality check of washing was done or any norms prescribed for departmental mechanised laundries. Necessary clearances for operating mechanised laundries were not obtained from respective State Pollution Control Boards and ETPs were either not installed, not functional or not functional effectively.

There were wide variations in the rates for washing of various items of bedroll. In Zonal Railways where the rates of washing were very low had comparatively higher percentage of rejection. This indicated that at lower rates quality was compromised.

Blankets and pillows were not dry cleaned and/or sanitised for long periods and supplied to the passengers. Electronic instruments for quality measurement were not being used in most of the Zonal Railways. Due to lack of penal provision in the contract for not adhering to the quality standards, it was

difficult to enforce them. Inspections of quality were not being done adequately and these were not able to ensure quality standards. Large amounts were being recovered from washing contractors for unsatisfactory performance, but, it did not act as a deterrent as no improvement was visible. Storage space in trains was inadequate and linen was stored on the floor, in the vestibules and near toilet, making it dirty and unhygienic to use.

Railway as principal employer was lacking in its responsibilities for ensuring compliance of the labour laws by the linen distribution contractors.

4.1.8 Recommendations

It is recommended that

1. *Internal control mechanism for monitoring the stock position as well as the procurement process needs to be rationalised and strengthened. Proper storage space may be provided for storage of linen in Store Depots, so that linen can be issued in an organised manner.*
2. *The new stock at Coaching Depots may be determined keeping in view the time required for transfer of stock from General Stores Depot. Adequate storage space may be provided for storage of linen in Coaching Depots. Similarly, norms for stock to be issued to the trains may be laid down so that storage problems in trains can be addressed.*
3. *Railways need to increase the pace of setting up of mechanised laundries and prescribe norms for quality standards for washed linen.*
4. *Railways need to keep a check on quality standards of washed linen. Quality benchmark for washing may be enforced. There is a need to strengthen supervision for enforcing contract terms and conditions.*
5. *A mechanism may be put in place to ensure strict compliance to norms of cleaning blankets and pillows as per required periodicity.*
6. *Effluent Treatment Plants may be set up wherever required after obtaining necessary clearances from State Pollution Control Boards while setting up departmental mechanised laundries. Effluent Treatment Plants should be maintained properly and kept in operational state so as to ensure effective treatment of waste water.*
7. *The mechanism of feedback from passengers may be effectively used for improving passenger satisfaction in respect of quality of linen.*
8. *Railways may strictly adhere to the statutory requirements in respect to the payments made to the labours of distribution contractors in regard to minimum wages, payment to bank accounts, provident fund, ESIC etc.*

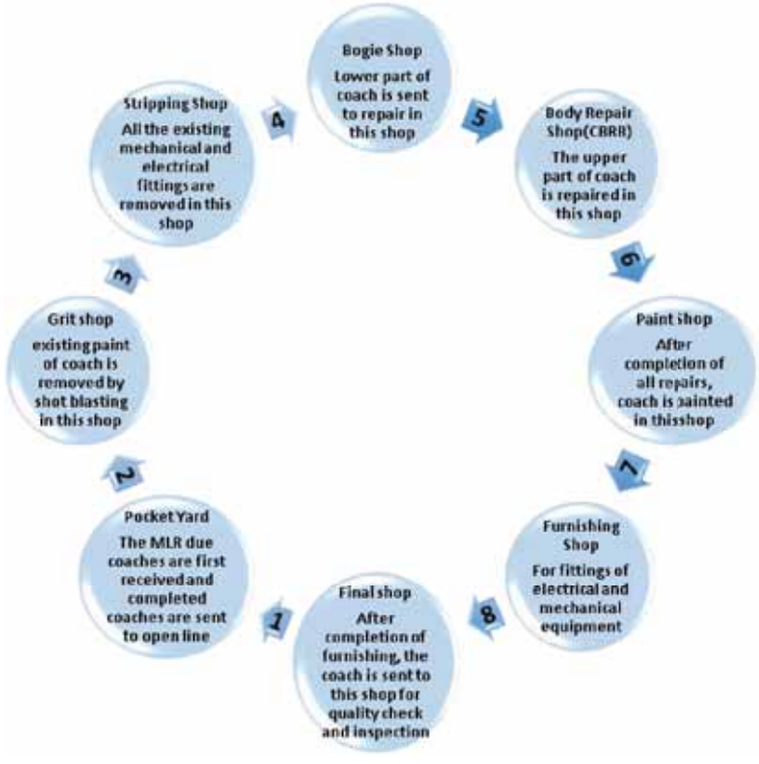
4.2 Working of Coach Rehabilitation Workshop, Bhopal

4.2.1 Introduction

The Coach Rehabilitation Workshop (CRWS), Bhopal was established in the year 1989 with the capacity for Mid-life Rehabilitation (MLR) of 300 coaches per annum. The life of a steel bodied Railway coach is defined to be 25 years. Rehabilitation work is carried out on the coach which lies in the age group of 12

to 15 years. In this activity, repair on corrosion and degenerated interior and furnishing is carried out to bring it to the level of "as good as new".

The activity of MLR of railway coaches is carried out through eight major shops. The shop-wise activities are depicted below:



This activity results in savings of repair cost in subsequent years of service of coaches apart from providing improved customer satisfaction to the passengers. In addition to above, other preventive maintenance of passenger coaches viz., Intermediate Overhaul (IOH) and Periodical Overhaul (POH) are also carried out in the workshop. The workshop caters to all the Zonal Railways.

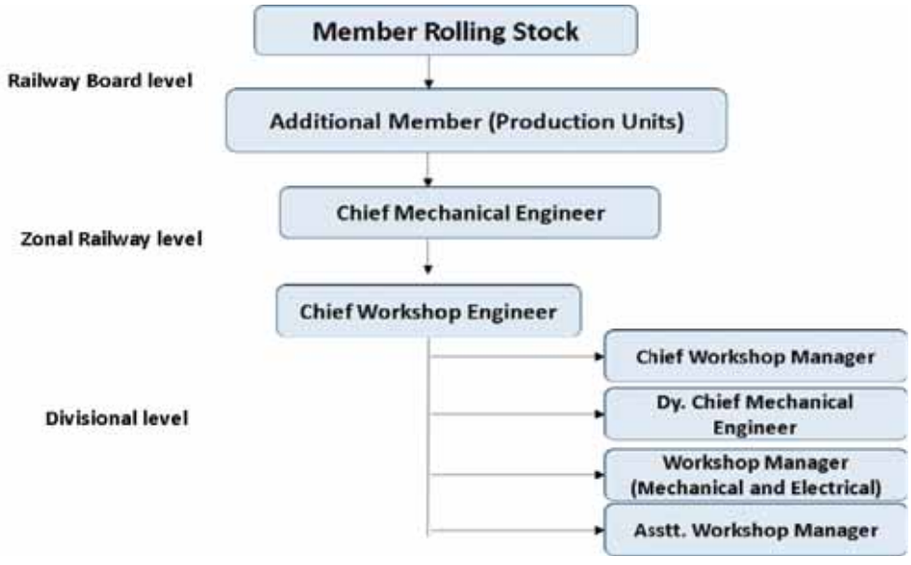
In 2005-06, the capacity of CRWS was enhanced from MLR of 300 to 500 coaches per annum. With the increase in population of coaches, need was felt for further increase in the capacity of the workshop. In the Works Programme of 2006-07, a work was sanctioned for enhancing capacity from 500 to 750 coaches. The work of capacity augmentation is still in progress and present out-turn of CRWS is below 600 coaches per annum.

Organizational Structure

At Railway Board's level, CRWS, Bhopal is under the control of Member Rolling Stock who is assisted by Additional Members (Production Unit).

At the Zonal level (WCR), Chief Mechanical Engineer (CME) and Chief Workshop Engineer (CWE) are responsible for implementing the policy guidelines/ orders of the Railway Board. The Workshop is headed by Chief Workshop Manager

(CWM) who is assisted by Dy. Chief Mechanical Engineer and Dy. Chief Mechanical Engineer (Model Rake) aided by Workshop Manager (WM) Mechanical and Electrical. Procurement of stores and disposal of scrap etc. is monitored by Dy. Chief Material Manager (Dy. CMM) who is assisted by Senior Material Manager (SMM) and Assistant Material Manager (AMM). Finance department is headed by Dy. FA&CAO and assisted by Workshop Account Officer (WAO). The hierarchy view is given below:



Audit Scope and Objectives

The Audit covered a period of three years from 2012-13 to 2015-16 and was taken up to examine

1. Whether planning, financing and execution of MLR activities were efficient, effective and economical;
2. Whether resources available for MLR activities were adequate and these were efficiently and effectively utilized.

Audit Criteria and Methodology

The audit was conducted keeping in view the following audit criteria:

- Indian Railway Code for Mechanical Department (Workshop), Indian Railway Stores Code Vol-I & Vol-II and other Codes and Manuals pertaining to Contract management, Establishment matters etc.
- Railway Board's Orders, Guidelines issued on the subject from time to time.
- Joint Procedural Orders issued by the Zonal Railways.

The records and data maintained at Zonal Headquarters office (WCR) as well as in the office of Chief Workshop Manager, Dy. Chief Mechanical Engineer, Dy. Chief Material Manager and Works Manager (Electrical) were reviewed. All the contracts awarded for MLR related activities (excluding petty works contracts)

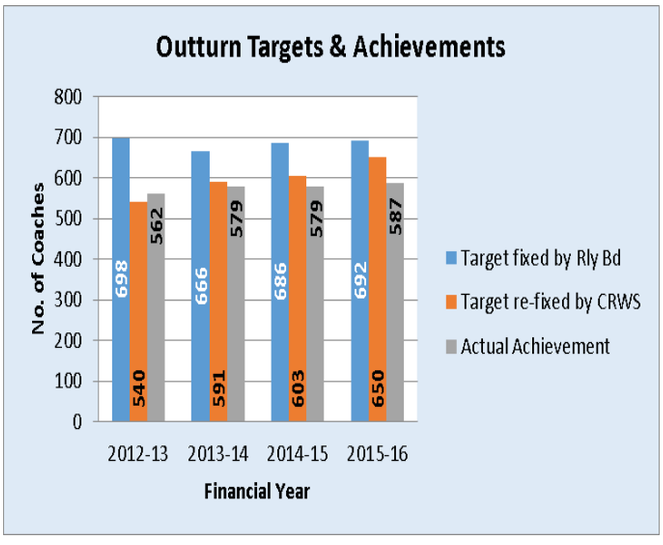
were reviewed. The audit findings were discussed with Chief Workshop Manager, Bhopal in October 2016.

Audit Findings

4.2.2 Planning, Financing and Execution of MLR activity

4.2.2.1 Target and Achievements of the workshop

The targets for outturn of MLR of coaches are fixed by the Railway Board on the basis of decision taken during Annual Meetings in Railway Board for 'Fixing the targets for POH and MLR', which is attended by all the mechanical heads of all Zonal Railways. However, it was seen that while fixing the MLR targets for CRWS, the manpower and infrastructure capacity of the workshop was not kept in mind. Audit noticed that during the period of review target for MLR of the coaches fixed for Railway Board could never be achieved and the same were re-fixed by CRWS itself on the ground of inadequate manpower availability. The targets set by Railway Board, revised by the Workshop and actual outturn are depicted in the graph.



As can be seen, that the workshop reduced the targets set by the Railway Board by 7 to 19 *per cent*. These were conveyed to Zonal Headquarters office (WCR) and intimated to the Railway Board, but no formal approval was taken.

The actual outturn during this period was ranging from 562 to 587 which was even less than the target re-fixed by the Workshop itself. The Workshop is nowhere near achieving the targets of 750 coaches per annum even though the capacity enhancement works for augmenting the capacity from 500 to 750 are in advanced stage of completion. The reasons for non-achievement of expected target was non-availability of manpower. Further, inordinate delay in completion of capacity enhancement work, delay in commissioning of important high value machines and their frequent failures resulted in lesser outturn.

During Exit Conference, the Workshop stated that targets are reduced keeping in mind the operated staff strength and various other activities undertaken by them such as development of Model Rakes, POH of coaches etc.

A review of the data of coaches received, outturned and under MLR process at the end of the year showed that though the number of coaches outturned have

increased, the coaches outturned as a percentage of coaches in hand has been decreasing over the past four years. One of the reasons for lesser outturn is inadequate capacity to hold coaches in the Pocket Yard, where coaches are received for MLR.

Table 4.6 – Status of coaches received and outturned by the Workshop

Year	Opening Balance	Coaches received	Coaches outturned after MLR	Closing Balance
2012-13	68	562	562	68
2013-14	68	609	579	98
2014-15	98	600	579	119
2015-16	119	606	587	138

Source: Holding Register of the workshop

4.2.2.2 Planning and selection of coaches for MLR

As per the criteria fixed by Railway Board, coaches in the age group of 12 to 15 years are selected for MLR activity. The number of coaches of each Zonal Railway is determined by the Railway Board and advised to the workshop regularly. The workshop authority has to plan the intake from various Zonal Railways as per number of coaches determined by the Railway Board.

Quarterly meetings of officials of CRWS/Bhopal and Zonal Railways are held to assess and monitor the intake of coaches due for MLR. Review of records of last three years, showed that 137[198] coaches, which did not belong to the age group of 12 to 15 years were sent to the workshop for MLR. This was 7.55 *per cent* of the total coaches (1815) received in the workshop for MLR during the period of review. Review of records of returned coaches showed that these were returned back to the respective Zonal Railways due to various reasons as given below:

Table 4.7– Status of coaches returned after being received in the Workshop

Reasons for return of coaches	CR	ECR	ECoR	ER	NCR	NER	NFR	NR	SCR	SER	SR	SWR	WCR	WR	Grand Total
MLR already done	1		1			2		2					1		7
Beyond Repair				15				1	1						17
Due for IOH Repair													2		2
Excess holding	3		14	6		2		4		2	2			1	34
New Coach						1		3					1		5
Overage	2	1	3	2		1	3	6	4	1	3	1	4	3	34
Underage		1	3		1		1	3			1		3		13
Coaches not accepted since Rajdhani, Janshatadi, EOG, VPH coaches	0	0	2	1	0	0	0	3	2	2	0	0	0	1	11
Others	0	0	0	3	0	0	0	5	0	1	0	0	3	2	14
Total															**137**

[198] 2013-14 – 32, 2014-15 – 39 and 2015-16 – 66

The above data shows that

- 34 coaches were returned, as the capacity to hold coaches in pocket yard was inadequate.
- 52 coaches were not due for MLR as these were overaged[199], underaged or just new. Nine of these coaches were more than 20 to 33 years old. This also indicated that once a coach misses the window for MLR, it is never subjected to rehabilitation, till it is condemned. While some issues can be addressed during POH and IOH, major repair such as corrosion repair, gritting followed by painting etc. cannot be done in POH/IOH.
- 11 coaches were returned as these belonged to Rajdhani, Janshatabdi, VPH etc. for which MLR is not done.
- Seven coaches received had already undergone MLR recently.
- 17 coaches were beyond repair and were going to be condemned shortly.
- 51 of these coaches were detained for five to 159 days in the workshop. Overall these coaches were detained for 1066 days leading to loss of earning capacity of ₹ 2.21 crore of coaches.

Receipt of a significant number of coaches not as per the criteria laid down and their subsequent return indicated that Zonal Railways were not exercising appropriate checks before sending coaches for MLR.

Annexure 4.6

4.2.2.3 Non-compliance of codal provision for preparation of deficiency list of fittings in coaches sending for MLR

As per Para 119 of Indian Railway Maintenance Manual (BG Coach), a joint check of deficiencies in the coach should be carried out by the representatives of Mechanical, Electrical and Security Departments of the Zonal Railways before sending the coach to workshop for MLR. On the basis of this joint inspection, a Deficiency List of fittings[200] should be prepared under joint signature of the three representatives and pasted on the coach. Copy of the Deficiency List should also be sent to the workshop and Railway Protection Force. On arrival of the coach to workshop, a joint check should again be carried out by the representatives of the three departments of the Workshop. In case any additional deficiency is noticed, a list of such deficiency should be reported to the base station for further necessary action.

During the check of related records at Stripping Shop of CRWS workshop, it was noticed that the above prescribed procedure is not being followed either by the base station or by the CRWS. The Deficiency List, as required, is not pasted by the base station on the coach, which indicates that no joint check of fittings was being carried out at base station before sending the coach to workshop for MLR. Similarly, on arrival of this coach to workshop, though a check of fittings is

[199] As per Railway Board letter dated 29.05.2006, the codal life of a passenger coach is 25 years
[200] Fan, wash basin, window shutter, wall protector, lavatory pan etc.

carried out by the Stripping Shop staff, the same is not being reported to the base station.

By not following this important procedure, Zonal Railways left the coaches susceptible to theft of fittings *en route*. When this issue was raised by Audit earlier in February 2013, the Workshop stated (June 2013) that all the Zonal Railways have been instructed to remove these fittings before sending the coach to workshop because these fittings are otherwise replaced during MLR. The fittings so removed by the base station could be used by them during routine maintenance. These instructions, however, were contrary to the above codal provision, wherein it was stated to prepare the Deficiency List of fittings to past on the coach rather than to remove the fittings. The facts remains that the provisions are not being followed correctly and by not highlighting the deficiencies at the base station, coaches are left susceptible to theft of fittings *en route*.

4.2.2.4 Time taken in MLR

Midlife Rehabilitation (MLR) of coaches are processed through seven main shops of the workshop. Supporting shops provide support for the activities undertaken by the main shops. Shop-wise activities undertaken can be summarized as follows:

Table 4.8- Activities undertaken by main shops

Shop	Activities undertaken by the shop
Pocket/ Yard Shop	This shop receives coaches from open line for MLR and MLR completed coaches are sent back to open line for onward despatch of coach to respective Zonal Railway
Grit Shop	The status of existing paint of coach is checked here. If the existing paint of coach is required to be removed, the coach is sent to this shop for removal of paint. If the painting of a coach is ok, this shop is skipped.
Stripping shop	All the existing electrical and mechanical fittings are retrieved from the coach (Body) and coach is made to skeleton. The stripped out material is sent to their respective supporting shops (Electric and train lighting, Carpentry).
Body and Air brake shop	The skeleton body of the coach received after stripping are sent here for corrosion repairs. The lower part of the coach is sent to CBRA shop (Bogie repair shop) and upper part of coach is sent to CBRB shop (Body repair shop).
Paint shop	After completion of repair by the Body shop, coach is sent for painting in this shop.
Furnishing shop	After painting, all the electrical, mechanical and carpentry items are re-fitted and made the body of the coach complete.
Final Shop	Completed coach body and completed bogie is again joined together to make it a complete coach. It is checked for quality purpose and advised to NTXR for checks. Once it is clear, it is sent to pocket yard for dispatch.

In addition to the above main shops, supporting shops are also involved in MLR activities such as separation of bogie and body of coach (Lifting Bay shop), separating wheel assembly, bearings etc. from coach (Bogie shop), repair of wheels/bearings (Shell shop), repair/replacement of electrical parts (Electric and Train Lighting shop), carpentry works (Carpentry shop) etc.

The standard time for each process has been fixed by the Rail India Technical and Economic Service (RITES) vide Para 6.8 of their report on 'Implementation of modified scheme at CRWS, Bhopal, Volume-I'. A total of 38.50 days has been prescribed for complete MLR of a coach.

Actual time taken in each such shop and total days taken in completion of MLR was studied for the period 2013-14 to 2015-16 and it was noticed that there is huge variation in number of days taken in various shops vis-à-vis prescribed norms. During this period, out of 1691 coaches for which MLR was undertaken, MLR for only 442 (26 *per cent*) coaches were completed within prescribed time limit of 38.5 days. The average time taken for MLR of these 1691 coaches during the review period was 57 days. The Workshop attributed the delays to shortage of man-power, frequent break-down of machineries etc. If MLR of all the coaches was done within the prescribed time limit, outturn of at least twenty *per cent* more coaches would have been achieved.

Audit reviewed the average time taken in main shops, where major MLR activities were done, and results are tabulated below:

Table 4.9– Number of days taken in shop activity as against prescribed norms

Name of the shop	***Norms* (in days)***	***Average no. of days actually taken for one coach***			***Average no. of days taken beyond the norms fixed by RITES for one coach***			***Aver age delay***	***Brief reasons for delay***
		2013-14	*2014-15*	*2015-16*	*2013-14*	*2014-15*	*2015-16*		
Pocket/ Yard Shop	**1**	26	13	5	25	12	4	13.67	Insufficient space (Nishatpura Yard).
Grit Shop	**1**	--	--	8	--	--	7	--	Grit was not done on any of the coaches received during 2013-14 and 2014-15
Stripping Shop	**4**	6	6	4	2	2	0	1.33	Manpower constraints
Bogie repair shop	**8**	5	5	4	-3	-3	-4	Nil	
Body repair shop	**6**	4	4	4	-2	-2	-2	Nil	
Paint shop	**6**	31	15	10	25	9	4	12.67	Frequent failure of PU Painting machine
Furnishing shop	**8**	7	5	4	-1	-3	-4	Nil	
Final Shop	**1**	4	3	2	3	2	1	2	Time taken by the NTXR on re-repair

**No. of days fixed by RITES for the shop for one coach*

It can be seen from the above table that

- Average time taken in the Yard Shop, Paint Shop has been much higher than the prescribed norms, during 2013-14. There has been improvement thereafter and during 2015-16 the delays have substantially been controlled. However, time taken by the workshop need to be further controlled so as to bring it with in the norms.

- The bogie-repair, body-repair and furnishing shops are able to complete the work within the prescribed norms.
- Delays in completion of activities in these shops is resulting in overall delay in completion of MLR activity and shortfall in outturn.
- Grit was not done on any of the coaches received during 2013-14 and 2014-15. It was also noticed that the Grit Blasting Machine[201] remained under breakdown from August 2014 to August 2015. In 2015-16, the Grit Shop on an average took eight days per coach as against the norm of 1 day.

During Exit Conference (October 2016), CRWS intimated that during the current year (up to September 2016), the average time of one coach for MLR has been brought down to approximately 44 days. However, the same is still more than the prescribed time period of 38.5 days.

4.2.2.5 Detention before and after MLR

Audit reviewed detention of coaches before and after the completion of MLR activities. The records of Pocket Yard of CRWS workshop were test checked for the year 2015-16 and it was noticed that coaches coming for MLR were kept waiting for required space in the workshop. Out of the 686 coaches sent by Nishatpura yard during 2015-16, 264 coaches were detained for 2557 days. There is no time period fixed for sending the coaches to Pocket Yard from Nishatpura yard and back to Nishatpura yard after completion of MLR. The detention was ranging from 1 day to 35 days with the average detention of 20 days under waiting condition. The loss of earning capacity due to detention of coaches for 2557 days, as worked out by audit, was ₹ 5.30 crore for the year 2015-16. The detention of coaches post MLR, was however not significant and ranged between 1 and 2 days.

Detention of coaches before the MLR activity increases the overall period of coach being out of service.

4.2.2.6 Post-Performance of MLR

To ensure the quality of MLR, the workshop needs to ensure that the quality of the work by the workman and the material used is optimum. Audit, however, observed that no specific norms has been prescribed for ensuring the workmanship in MLR.

Completed MLR coaches are checked by an independent authority of Indian Railway Conference Association (IRCA) through its Neutral Train Examiner (NTXR). The shortcomings pointed out by NTXR are re-repaired by the workshop. These are re-examined by the NTXR and finally sent to yard shop for onward dispatch of coach to respective Zonal Railways.

(i) Re-repair of MLR completed coaches on advice of NTXR

Audit observed that out of total 2286 coaches rehabilitated during the review period, 855 (37.40 *per cent*) coaches were found defective by NTXRs in the Final

[201] The machine is used for removing the existing paint of the coach and smoothening the surface after paint removal.

shop. These were then re-repaired by the Workshop. As such, every third coach turned out required re-repair of some sort. The total time consumed on re-repair of these 855 coaches was 2423 days and the average time spent for re-repair was 2.83 days per coach. The main lacuna as pointed out by the NTXRs are painting, stencil writings, buffer height margins and cleanings etc. These reflect deficiencies in the quality of workmanship. This was also one of the main reasons for detention of coaches.

Annexure 4.7

(ii) Online failure[202] of coaches post MLR

Audit observed that 87 out of 2286 coaches rehabilitated during the review period failed online. Out of these 87 coaches, 49 coaches failed within 100 days of MLR and remaining 38 coaches failed after 100 days of MLR. The reasons for online failure of coaches were defective material such as V-belt, Electronic Rectifier-cum-Regulating Unit (ERUU), Alternator pulley chain brake in 24 cases and in remaining cases, failure was on operational account such as improper handling by the crew, Carriage and Wagon staff etc. as can be seen from the table below:

Table 4.10 - Statement showing the details of Coach or Wagon Detachment cases from Running Trains

Year	No of Coaches/ Wagons Detached due to online failure	No. of coaches failed within 100 Days of MLR	No. of coaches failed after 100 Days of MLR	Description of the Failed Material	Reasons for Failure	Remarks
2012-13	44	32	12	Failed materials are V- belt, ERRU, Alternator pulley chain brake cylinder etc.	out of 44 cases in 08 cases material was found defective	Out of 87 cases of online failure of MLR coaches, the reason for failure was defective material in 24 cases
2013-14	19	7	12		out of 19 cases in 08 cases material was found defective	
2014-15	16	6	10		out of 16 cases in 06 cases material was found defective	
2015-16	8	4	4		out of 08 cases in 02 cases material was found defective	
Total	87	49	38			

4.2.3 Assets Management (Infrastructure and its up-gradation)

The records pertaining to proposals for Rolling Stock Programme, process of procurement, installation, commissioning and utilization of plant and machinery were studied in audit. The audit findings are discussed below:

4.2.3.1 Use of over-aged Machineries

Review of Machinery and Plant Register maintained in the Office of Chief Workshop Manager showed that as on 31 March 2016, 11 machineries costing

[202] Online failure means where coaches are detached in transit due to fault

₹1.59 crore had completed their codal life, but were not condemned till date. The Workshop stated (December 2011) that these machines had not been condemned as some of their parts had been put to alternative use which was beneficial to Railways. 'Phosphating Plant' costing ₹ 0.51 crore, was one of the over-aged machinery not in use since March 2002 due to an objection raised by State Pollution Control Board of Madhya Pradesh. In its place, a new Shot Blasting Machine was installed in February 2004. Some major parts of Phosphating Plant are being used in other activities and the cost of this machine still appears in Assets Register. As a result, Railways had to pay a dividend @ ₹ 3.28 lakh every year. The overall liability of payment of dividend against these over aged eleven machines lying idle was ₹ 10.33 lakh per annum.

4.2.3.2 Augmentation of capacity

CRWS, Bhopal was set up in 1989 with an initial capacity of MLR of 300 coaches per annum. To exploit maximum possible capacity of this workshop, three capacity enhancement works were undertaken from 2003-04 onwards as tabulated below:

Table 4.11 – Details of capacity enhancement works taken up at CRWS, Bhopal

S. no	Name of work	Estimated Cost (₹ crore)	Sanctioned year
(i)	Augmentation of facilities for enhancement of MLR outturn capacity from 300 coaches to 500 coaches per annum[203].	5.74	2003-04
(ii)	Augmentation of facilities for enhancement of MLR outturn capacity from 500 coaches to 750 coaches per annum[204]	30.00	2005-06

(i) The work of capacity enhancement of MLR outturn capacity from 300 coaches to 500 coaches per annum was sanctioned by the Railway Board in 2003-04 at an estimated cost of ₹ 5.74 crore. The work commenced on 30 July 2004 with the scheduled completion date as 29 July 2005. This augmentation work was completed (31 October 2012) with a delay of seven years due to revisions in the detailed estimate a number of times and paucity of funds. After completion of this work, expected outturn of 500 coaches have been achieved by the workshop.

(ii) The work of augmentation of facilities for enhancement of MLR outturn capacity from 500 coaches to 750 coaches per annum was sanctioned in August 2006 at the cost of ₹ 30 crore. After several revisions to detailed estimate, the work commenced on 26 December 2008. The scheduled date of completion of this work was 25 June 2010. The project included procurement and installation of total 37 mechanical and 27 electrical machineries at a total cost ₹ 4.54 crore. In addition, the project included procurement, installation and commissioning of high value machineries viz., Guillotine shearing machine, Grit blasting machine and Poly Urethane Painting machine. However, the project was yet to be completed (October 2016). The reasons for delay in completion of work as

[203] Pink book item no. 182
[204] Pink book item no. 296

stated by the workshops authority were shortage of funds and revisions of detailed estimate a number of times. The above work of capacity enhancement included construction of civil structure for machineries to be procured, extension of sheds and shops to accommodate more coaches, provision of additional pit lines and construction of Stores Depot etc.

4.2.3.3 Procurement and installation of Poly Urethane Paint line System

This machine is an automated spray painting system for painting of railway coaches. After cleaning the surface of the coach, surface is painted through this machine and then dried in baking oven. The procurement of this machine was solely for the purpose of capacity augmentation. The anticipated cost of this machine was ₹17.30 crore (₹13 crore for bare cost of machine and ₹4.30 crore for the construction of civil structure). The work of procurement and installation of this machine was sanctioned in 2008-09. After finalization of detailed estimate and administrative approvals, contract for supply of this machine was awarded by the COFMOW in March 2010. The machine was to be supplied within 10 months from the date of contract, but it was delayed till February 2013 for want of GA drawing which are to be finalized by the workshop authorities.

The work of construction of structure for this machine was assigned to Construction Organization of Bhopal Division. The tender for the construction of structure was awarded on 15 April 2009. The schedule date of its completion was 11 months from the date of award of contract but the work was completed in March 2016. Due to delay in finalization of drawing and designs and shortage of funds, the civil work got delayed and the machine could be commissioned in March 2016 after completion of construction of structure. Commissioning of this machine took seven years. Delay at various stages are tabulated below:

Table 4.12 – Delays in commissioning of PU Paint line System

Reasons	Delay in months
Delay in revision of estimate and provision of additional funds	6
Delay in award of contract for supply and commissioning of Paint System	5
Delay in clearance of GA Drawings	35
Delay in award of contract for erection of civil structure for Paint System	6
Delay in completion of civil structure work	25
Delay in commissioning	7
Total Delay (in months)	**84**

This was a high-tech automatic painting machine and painting time was expected to be reduced which would ultimately reduce the MLR days and increase the outturn. But due to delays in commissioning of this machine, Railway could not get the benefit of saving time on painting. The outturn of the workshop still remains between 562 and 587. Thus, the objective of investment on the PU Paint line System for capacity enhancement work did not serve the purpose.

Audit further analyzed post performance of the PU Paint line System during the period from April to June 2016. It was noticed that against the prescribed time of 6 days per coach, the Paint shop still taking 13 to 20 days as tabulated below:

Table 4.13 – Time taken in PU Paint Line System per coach

Month	No. of Coaches handled by Paint Shop	Total days taken	Average days per coach
April 2016	46	946	20.56
May 2016	45	894	19.86
June 2016	52	669	12.86

Delays in time taken for MLR activities thus, resulted in lesser outturn than envisaged.

During Exit Conference (October 2016), the Workshop accepted the audit observation and opined that the main reason for less outturn is manpower constraint. However, it was seen that despite augmenting manpower through outsourcing and paying incentive, the Workshop was not able to achieve the targets. Delay in installing/commissioning of machineries and frequent breakdown of new machines were also the reasons for less outturn.

4.2.4 Manpower

Proper assessment of manpower is the primary step in manpower management of any organization. The required manpower in workshop is to be assessed duly analyzing the activities, jobs, skills and time required for execution of jobs, availability of infrastructure etc. The capacity of any workshop would normally be related to the availability of manpower, plant and machinery and the workshop layout with the level of performance of men and machinery determining the outturn. Based on the Feasibility Study (February 2002) conducted by RITES on Incentive Scheme, Railway Board increased (03 May 2013) the sanctioned strength from 1909 to 2385 for targeted outturn of 647 coaches. Detailed analysis of manpower of major shops as on 31 March 2016 is given below:

Table 4.14 – Manpower related information for major shops

Name of shop	*Sanctioned strength*	*Men in position*	*Percentage vacancy*	*Supplemented through outsourced manpower during 2015-16*	*GIS amount paid (₹ in lakh)*
Stripping shop	119	89	25.2	0	50.97
Shell shop	80	47	41.3	0	29.11
Bogie shop	192	206	-7.3	0	121.26
Wheel shop	71	80	-12.7	0	49.93
Furnishing shop	432	342	20.8	9	201.66
Paint shop	154	126	18.2	16	73.86
Carpentry Shop	228	196	14.0	5	129.05
Body Repair shop (CBRA+CBRB)	690	532	22.9	30	353.86

Table 4.14 – Manpower related information for major shops					
Name of shop	*Sanctioned strength*	*Men in position*	*Percentage vacancy*	*Supplemented through outsourced manpower during 2015-16*	*GIS amount paid (₹ in lakh)*
Electric & Train Lighting (ETL)	194	165	14.9	2	93.94

It can be seen that

- While there were shortages in major shops, in Wheel Shop and Bogie Shop, the men-in-position was more than the sanctioned strength. This created an imbalance as, MLR activity is sum total of activities of all the shops and more manpower than required in some shops does not add on to the overall outturn. It was seen that incentive of ₹1.71 crore was paid in these shops for more work done, which was not justified.
- Despite supplementing manpower through outsourcing, large amounts were paid for incentive in Body repair shop, Paint shop, Furnishing shop and Carpentry shop.
- In these shops a total amount of ₹ 11.03 crore was paid as incentive during 2015-16. However, outturn could not be achieved as per the targets.

4.2.5 Non-revision of MLR cost under Rolling Stock Programme (RSP)

In March 2002, the Railway Board notified the bifurcation of the capital cost of the MLR to be charged under Rolling Stock Programme & Depreciation Reserve Fund. As per the guidelines, ₹ 25 lakh for AC coach and ₹ 12.5 lakh for Non-AC coach is to be charged as capital cost and ₹ 5 lakh for AC coach and ₹ 3.5 lakh for Non-AC coach is to be charged as POH cost (revenue expenditure on maintenance), which is to be debited to respective Zonal Railways.

With the passage of time, cost of wages and stores material has increased considerably but the above ceiling has not been revised by the Railway Board so far. Accordingly, the cost of MLR charged to RSP is only ₹ 25 lakh for AC coach and ₹ 12.5 lakh for Non-AC coach. The remaining amount is charged to Zonal Railways as POH cost.

By adopting the above procedure for booking of costs, the capital cost is being understated and the revenue cost (i.e. POH cost charged to Zonal Railways) is being over stated over the years. As such, the actual cost of MLR per coach is not correctly depicted.

4.2.6 Conclusion

Midlife Rehabilitation (MLR) of passenger coaches is the main activity of this workshop. The purpose of this activity is savings of repair cost in subsequent years of service of coaches apart from providing improved customer satisfaction to the passengers. The targets for outturn of MLR coaches are fixed by Railway

Board annually. These were reduced by the Workshop to the extent of 19 *per cent.* There were shortfalls in achievement of the reduced targets by the workshop.

A significant number of coaches received in the Workshop were not accepted for MLR and later returned after being detained in the Workshop (Pocket Yard), as these did not fit the criteria set for MLR. Zonal Railways were not exercising adequate checks and caution before sending the coaches for MLR. It was also seen that once a coach misses the window for MLR, it is never subjected to rehabilitation, till it is condemned.

The Pocket Shop had capacity constraints, which added to detention of coaches and also return of some of the coaches back to the Zonal Railways. There were delays in outturn in various major shops as against the prescribed norms on account of insufficient space and frequent failure of machineries. This resulted in short achievement of targets and detention of coaches causing loss of earning capacity. The capacity augmentation project undertaken by the workshop (500 to 750 coaches per annum), was yet to be completed (October 2016) as against the targets date of completion of June 2010.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

4.2.7 Recommendations

It is recommended that

1. *Zonal Railways may be directed to strengthen their controls in order to ensure that coaches due for MLR as per the laid down criteria, only are sent to MLR workshops.*
2. *Capacity of the Pocket Yard needs to be augmented on priority basis, so as to ensure that all coaches due for MLR are taken in.*
3. *Workshop may insist that the Zonal Railways must send the Deficiency lists along with coaches received for MLR.*
4. *CRWS, Bhopal may take effective steps to reduce the detention of coaches beyond the prescribed norms in various shops to ensure achievement of targets of coach outturn.*

4.3 North Central Railway (NCR): Detention of periodic hauled (POHed) wagons at Jhansi Workshop by using them for storage of scrap instead of carrying freight

NCR Administration used POHed wagons for storage of scrap wheels/axles instead of sending them to open line for carrying freight traffic. This led to detention of 318 POHed wagons (April 2012 to June 2016) and consequent loss of earning capacity of ₹22.87 crore.

The Performance of Indian Railways as a 'Goods Carrier' depends amongst others on the optimal utilisation of its rolling stock. To keep wagons (a rolling stock) fit for optimum traffic use, regular and periodical maintenance/ overhauling are necessary. Railways undertake regular maintenance and periodical overhauling (POH) in a time bound manner and as per laid down schedules at wagon sick lines and workshops. For wagons, Periodic overhaul is done after every six years and Routine overhaul (ROH)/Intermediate overhaul (IOH) after every two years.

Jhansi workshop of NCR is a major POH wagon workshop and handles 22 *per cent* of the POH work of Indian Railways. It receives various types of wagons for POH from Zonal Railways as per the plan fixed by Railway Board. After the modernisation of Jhansi workshop (with effect from October 1995) the permissible time for POH has been fixed as four days.

Scrutiny of records of Jhansi Workshop and its Stores Department was done by audit. During the year 2012-13 to 2015-16, POH of total 30,056 wagons[205] was done by Jhansi Workshop. It was seen that:

1. During this period, 289 wagons after POH were not sent immediately to the open line for traffic use, but with a delay of three to 607 days; average delay being 58 days. No time period has been prescribed for handing over of fit wagons after POH to open line.
2. These POHed wagons (289) were utilized by Jhansi Workshop for the purpose of storage of scrap wheels/axles during the period 2012-13 to 2015-16. After storing these wheels/axles in these wagons, rakes were formed to transport scrap wheel/axles to Rail Wheel Factory, Yelhenka, Bangalore.
3. The practice of storing the scarp wheels/axles was continuing and during April to June 2016, 29 wagons loaded with scrap wheel/axle were stabled in the Workshop. Scrap once identified is required to be handed over to Deputy Chief Material Manager/Scrap for further disposal/transportation.

Utilization of these 318 POHed wagons (up to June 2016) for storage of scrap wheels/axles led to detention of wagons and consequent loss of earning capacity of ₹ 22.87 crore[206].

The matter of detention of wagons for storage of scrap was taken up with Workshop authorities in March 2015. Workshop authorities in their reply stated (October 2015) that space for storage of wheels/axles was not adequate in workshop. They further stated that as the space is costly, the scarp was stored in wagons till a rake load scrap becomes available for transportation to Rail Wheel Factory, Yelhenka, Bangalore. However, NCR Administration in their further response (December 2016) stated that, storage space was not a constraint at Jhansi Workshop.

[205] BOXN/BOXN-HS – mainly used for loading coal, iron ore, stone etc.
[206] Loss of earning calculated as per statistical statement no.15 and 24 for the year 2012-13, 2013-14 and 2014-15

Thus, the POHed wagons are being used for storage of scrap wheels/axles and not used for traffic purpose for earning revenue. This leads to detention of wagons and consequent loss of earning capacity, which is avoidable.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

4.4 Integral Coach Factory (ICF): Injudicious procurement of material for manufacturing coaches for Kolkata Metro

Injudicious action of the ICF Administration in recommending BHEL for supply of electrics without ascertaining the eligibility criterion and procurement of material before approval of tender by the Railway Board, led to loss of ₹ 6.17 crore as the material procured had become obsolete due to change in policy for manufacturing of metro rakes.

Integrated Coach Factory (ICF), Chennai is a Production Unit of IR. It manufactures various types of railway passenger coaches including AC rakes for Kolkata Metro with conventional DC electrics[207].

For upgradation of technology, Railway Board instructed (November 2011) ICF to switch over to IGBT[208] based modern 3-phase technology for manufacture of metro rakes, as these were highly energy efficient. Considering the fact that ICF would take some time to switch over to the new 3-phase propulsion technology, Railway Board conveyed (March 2012) administrative approval to manufacture of seven additional rakes with conventional DC electrics to meet the immediate requirement of Kolkata Metro. Railway Board also asked ICF to confirm the feasibility of manufacturing these seven additional rakes in 2012-13, over and above the numbers planned as per the production programme 2012-13. In December 2012, these seven additional rakes were included in the production programme of ICF by Railway Board.

ICF initiated (April 2012) procurement process for manufacturing these seven rakes before the revision of production plan (December 2012) and floated (April 2012) tender for 'Procurement of electrics (propulsion equipment) for Kolkata Metro'. The tender was opened in May 2012 and ICF recommended (January 2013) the bid of BHEL for ₹ 178.69 crore to Railway Board for acceptance.

Audit observed that the Appreciation Committee of Railway Board met 11 times[209] during the period from October 2013 to September 2014 and deliberated with ICF on the eligibility of BHEL for the tender. Appreciation Committee viewed that the DC electrics supplied by BHEL during the last five years to Kolkata Metro had not completed two years in service on the date of opening of the tender, as stipulated in the tender document as one of the eligibility criteria and thus the offer of BHEL did not meet the eligibility criterion. Two years after the recommendation of ICF, Railway Board finally discharged

[207] Propulsion equipment - A propulsion system consists of a source of mechanical power, and a propulsor (means of converting this power into propulsive force).

[208] An insulated-gate bipolar transistor (IGBT) is a three-terminal power semiconductor device primarily used as an electronic switch which as it was developed, came to combine high efficiency and fast switching.

[209] The Appreciation Committee met 11 times – 3 Oct 2013, 8 Oct 2013, 3 Dec 2013, 8 Jan 2014, 10 Feb 2014, 19 Feb 2014, 25 Feb 2014, 28 Feb 2014, 29 April 2014, 28 Aug 2014, 2 Sep 2014

(January 2015) the tender and decided that henceforth, Metro rakes would be manufactured with modern 3-phase propulsion only.

While the deliberations on tender were going on, and apart from the procurement of electric, ICF Administration initiated process for procuring other materials such as doors, wheels, axle, side windows, light fittings, electrical cables, junction box, terminal board etc. related to manufacturing of the additional seven rakes for Kolkata, Metro and placed (April 2012 to July 2013) purchase orders for a value of ₹ 19.45 crore. These materials were delivered (July 2012 to September 2014) by the suppliers. However, due to the decision of Railway Board to discontinue production of Metro rakes with conventional DC Electrics, the material procured remained idle.

ICF Administration itself accepted (December 2015) that high value items are to be planned only after finalization of tender for procurement of electrics and stated that since the case was recommended for acceptance, no problem was anticipated in manufacturing of the rakes at that point of time. ICF further accepted that items procured for Kolkata Metro are non-moving and stated that it was due to change in policy of Railway Board to manufacture Metro rakes with modern 3-phase propulsion only.

As regards utilization of material, ICF Administration stated (April 2016) that materials worth ₹ 1.97 crore can be used, material worth ₹ 6.17 crore cannot be used and material worth ₹ 10.66 crore can be used after modification. They further stated continuous efforts are being made to liquidate the non-moving items by using them at alternative Workshops/ Production Units.

As checked by audit, as of June 2016, material worth ₹ 18.80 crore out of ₹ 19.45 crore were lying idle. Further, items worth ₹ 0.49 crore were issued to shop floor for alternate use after modification and ₹ 0.17 crore worth material issued to shop floor as it is for alternate use. However, there are no records to show that these materials were utilised.

Thus, injudicious action of the ICF Administration in recommending BHEL for supply of electrics without ascertaining the eligibility criterion and procurement of material before approval of tender by the Railway Board, led to loss of ₹ 6.17 crore as the material procured had become obsolete due to change in policy for manufacturing of metro rakes. Besides an amount of ₹ 12.63 crore was blocked on account of material which as ICF had stated, could be used as it is (₹ 1.97 crore) or after modification (₹ 10.66 crore) and was lying unutilized.

The matter was taken up with ICF Administration in October 2016. They stated (December 2016) that material worth ₹ 4.27 crore are to be spared to Kolkata Metro, material worth ₹ 0.06 crore has been issued to shop and the remaining material is planned for consumption from current year onwards. Audit, however, noticed that as on December 2016, no material has been spared to Kolkata Metro, material worth ₹ 0.71 crore were utilised and no plan has been drawn for consumption. Thus, material worth ₹ 18.09 crore are lying unutilised.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

4.5 South Eastern Railway (SER) :	***Deficient planning in procurement and non-installation of machines simultaneously in the same complex, led to non-achievement of objective of a self-sufficient Wheel Shop in the Wagon Shop at Kharagpur Workshop***

Deficient planning in procurement and non-installation of machines simultaneously in the Kharagpur Workshop under Modernisation Plan led to unfruitful investment of ₹5.90 crore.

In April 2006, Railway Board envisaged a Workshop Modernization Plan for replacement of over-aged Machinery & Plant (M & P) items of some identified workshops including Kharagpur Workshop b in South Eastern Railway (SER). The main objective was to reduce Periodical Overhaul (POH) time, reduction in manpower/increased outturn with same manpower and overall improvement in quality etc. Financial sanction for the Modernisation Plan was given by GM, SER in March 2008.

Under the Modernisation Plan, the Workshop identified the requirement of (i) one 500 T Horizontal Wheel & Axle Press Machine (ii) one Vertical Turning and Boring Machine (iii) one Universal Axle Journal 'Turning and Burnishing (AJTB) Lathe & (iv) one non-CNC Axle Turning Lathe and other machines for both the main and wagon workshop to make an independent and self-sufficient 'Wheel Shop' in the Wagon Shop. In the justification of Modernisation Plan, the Railway Administration emphasized the need for independent and self-sufficient Wheel Shop to cater to the works like Tyre Turning, press work, axle turning, journal burnishing etc. at the same place.

Four[210] machines were to be procured for setting up an independent and self-sufficient Wheel Shop in the wagon shop. Simultaneous commissioning and operation of the machines in one complex was vital for achieving better outturn.

Review of records in Kharagpur Workshop showed that the Workshop administration did not effectively plan simultaneous purchase and commissioning of all the machines in the same complex, which was required to achieve operational synergy in the chain of activities involving repair and overhaul of wagon wheels.

Initially, the four machines were planned for installation in Shop no.48 and AJTB & VTL machines were installed and commissioned at the Shop no. 48 in the year 2010 and 2011 respectively. However, due to addition of the work of POH of a new type of wagon (BVZI[211]) in the workshop, the space in Shop no. 48 was used

[210] Wheel & Axle Press machine, Vertical Turning Lathe (VTL), Universal Axle Journal Turning and Burnishing Lathe (AJTB) and Axle Turning Lathe (ATL)

[211] Bogie Brake Van: This 8-wheeled brake van was designed in 2004 with ICF bogie to achieve comfort level (Ride Index) equivalent to loco for goods guard and capable of running at 100 kmph. The brake van is 5 meter longer than BVZC brake van, which are 4 Wheeler Brake Van with Air Brake

for berthing of these wagons received in the workshop for POH and the location of Wheel Shop was changed to Shop no. 44 in April 2013. It was seen that AJTB was shifted to the new location in July 2016, but VTL was yet to be shifted to the new location (November 2016). Another machine (Wheel & Axle Press) was installed and commissioned in Shop no.44 in May 2013. As regards, the fourth machine it was initially planned to procure a non-CNC ATL machine. COFMOW in February 2008 however, suggested that instead of non-CNC ATL machine, SER should procure CNC ATL machine. However, the Workshop sent the requisition to COFMOW for procurement of CNC ATL machine only in July 2015, after a gap of more than seven years. This machine (CNC ATL machine) has not yet been received and two machines (Wheel and Axle Press and VTL) cannot be used until the CNC ATL machine is installed and commissioned. Workshop is managing by carrying wheel sets from the Wheel Shop in Wagon Shop to the Wheel Shop in Main Workshop and back; these two shops are two kms apart. This is not only impacting efficiency, but also resulting in recurring expenditure on to and fro transportation of wheel sets between Wheel Shop in Main Workshop and Wheel Shop in Wagon Workshop besides involving material handling and labour expenses.

The issue was brought to the notice of Railway Administration in July 2016. Railway Administration replied (September 2016) that primarily, it was decided that all the machines would be installed in the new shed (Shop No. 48) for a self-sufficient Wheel Shop. The AJTB & VTL machines were installed and commissioned at the Shop no. 48 in the year 2010 and 2011 respectively. But in due course the POH target of the Wagon shop kept on increasing and at the same time new stock started coming to the workshop for POH. This necessitated creating new berthing facility under EOT crane. It was then decided to utilize the remaining space of Shop no. 48 for berthing and POH of BVZI and install the machines in Shop no.44.

However, since the working of these four machines is inter-dependent and they were required to be installed at one location (Wheel Shop of wagon shop) to make the wagon shop self-sufficient and reduce cost of transportation and labour and cycle time for repair, the investment of ₹ 5.90 crore remained unfruitful and would continue to remain so, till CNC ATL machine is procured, installed and commissioned at the new location.

The matter was referred to Railway Board in December 2016. In reply, they stated (February 2017) that the decision to procure CNC ATL machine instead of conventional (Non-CNC) ATL machine was to achieve better productivity and quality. The same is likely to be received by February 2017 and it is expected that the machine would be installed and Wheel Shop fully operational by June 2017. They further stated that AJTB machine was installed in Shop No.44 in July 2016 and the other machine, VTL will be shifted to the Shop No.44 by February 2017. They also stated that Wheel Press had been giving outturn since the commissioning (May 2013) in Shop No.44.

However, as per the user of the machine (Sr. Section Engineer, Kharagpur), there is no outturn by Wheel Press and VTL machines in absence of ATL machine. The user also confirmed (December 2016) that no wheel disc was mounting and dismounting since October 2015 by the AJTB till December 2016 for the want of ATL machine.

4.6 South Eastern Railway (SER): Premature rejection of ERRUs

ERRUs, a type of electronic based maintenance free item costing ₹ 5.05 crore became defective without serving its full life and remained un-utilised in defective/ break-down condition in workshop/ coaching depots of South Eastern Railway

Passenger Coach battery is connected with the alternators through Rectifier-cum-Regulating Unit (RRU)/ Electronic Rectifier-cum-Regulating Unit (ERRU), which converts Alternating Current (AC) output of alternator into regulated Direct Current (DC) and prevents reverse flow of current from battery to the alternator during periods of non-generation. As the RRUs had some inherent limitations, Research Designs and Standards Organisation (RDSO) felt necessary to go for a better design using Insulated Gate Bi-polar Transistor (IGBT) device i.e. ERRU having additional safety features, higher reliability and maintenance free. RDSO standardised the specification of ERRUs in July 2008 to increase the reliability of the components and the specification was further upgraded. SER Administration started using the ERRU in place of RRU since 2011. As per RDSO's specification, ERRU is a maintenance free component, and the manufacturer has to give a declaration that no scheduled maintenance is required except visual checks for mounting and external damages. The prescribed life of an alternator regulator is 12 years.

Audit observed that there was lapse on the part of supplying firms in attending to the warranty failures. Concerned railway officials also failed to ensure timely repair of the defective ERRUs resulting in their accumulation. The performance of ERRUs was reviewed by Audit in Kharagpur Workshop for a period of six years from 2010-11 to 2015-16. It was observed that:

- Substantial numbers of ERRUs developed defects prematurely within a period of one to seven years (against the prescribed codal life of 12 years) due to reasons such as low voltage, high/low generation, burnt out etc.
- 399, 4.5 KW and 48, 25 KW ERRUs fitted in coaches were found defective during periodical maintenance/ overhaul between the periods from April 2010 and November 2015 in the Kharagpur Workshop.
- A similar check in the Coaching Depots of SER during the same period showed that 23, 4.5 KW at Santragachi Coaching Depot and 105, 25 KW ERRUs in three[212] coaching depots fitted in coaches were found defective during maintenance.

[212] 76 nos. in Santragachi of Kharagpur Division, 28 nos. in Hatia of Ranchi Division and one in TATA of Chakradharpur Division

- Chief Electrical General Engineer (CEGE)/SER advised (October 2014 and November 2014) the workshop to repair/upgrade the ERRUs by procuring kits. The workshop though initiated the proposal for repair/upgradation, the same could not materialise and instead it was proposed to enhance the stock by procurement. The response of ERRU suppliers was also very poor to address the warranty failures. The workshop in order to meet the repair needs of some ERRUs resorted to cannibalization of spares from the defective ERRUs thereby rendering the defective ERRUs completely redundant and of no use.
- It was also noticed that though defects were found in respect of ERRUs supplied by all the firms, but only one firm was de-listed (July 2015) by RDSO for not attending the warranty failure and upgradation work of the ERRUs.
- As of July 2016, 341, 4.5 kw ERRUs were lying in Kharagpur workshop premises in defective condition and it was decided for repair/upgradation of 42, 25 kw ERRU and 100, 4.5 kw ERRUs by ERRUs manufacturers (RDSO approved) through open tender. As assessed by railways, the cost of repair comes to almost 66 *per cent* of the cost of fresh procurement, which is on a higher side. Besides, the work of upgradation of 150 out of warranty defective 4.5 kw ERRUs was awarded at a cost of ₹ 93.75 lakh which was subsequently revised to ₹ 1.4 crore for 225 ERRUs.
- Chief Workshop Engineer (CWE), SER in December 2014 issued directions that proper documentation regarding rejection of components during overhauling/ periodic maintenance of rolling stocks is to be maintained and a monthly summary is to be drawn to ascertain the quantity of rejected ERRUs in a month. However, no systematic records were maintained by the Electrical Department of Kharagpur workshop for the defective and rejected ERRUs. Only some periodical status was prepared while reporting the defects to the higher authorities or supplying firms.

The matter was brought to the notice of Railway Administration in January 2016 and July 2016. They replied (September/October 2016) that

(i) ERRU was a newly developed item and was planned for replacement of RRUs with a view to provide better service. But it had some inherent problems which resulted in their failure. RDSO was continuously investigating the failure and making modifications in order to establish the working of ERRUs.

(ii) Action was taken on advice of CEGE/SER to go for repair/upgradation, but repair could not be arranged. In Shop also, repair/upgradation could not materialise as material and technical expertise was not available in the Shop/Shed. Turning out of coaches after POH from Workshop and also from Shed was not possible as good material were not available, so cannibalization was the only solution left with the Shop/Shed to get some defective ERRUs ready and turn out the coaches. However, the make-wise record of defective ERRU was always kept by the Shop/Shed. Failure of

almost all make was there because of new technology which was taking time to stabilize.

(iii) The failure of Stesalit make was very high and at the same time firm had not taken proper interest in rectification, so this firm was delisted by RDSO. However, other firms were responding immediately to rectify the failure. So they have not been delisted and still supplying ERRUs with modified version.

(iv) RDSO was approached for giving guidelines for repairing of the defective ERRUs in the month of August 2015 and June 2016. Now the instruction has been received for repair/ upgradation, Workshop is going for open tender for repairing of the defective ERRUs from approved vendor of the RDSO. Therefore, all efforts are being taken by the Railway Administration to utilize/repair the defective ERRUs as quickly as possible.

Thus, since ERRUs costing ₹ 5.05 crore became defective without serving full life and lying unutilized in defective/ break-down condition in workshop/ coaching depots of South Eastern Railway, RDSO/Zonal Railways need to diagnose various factors that might be at the root of defects and expeditiously take suitable remedial measures.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

4.7 Western Railway (WR): Loss due to non-revision of agreement clause for repair and maintenance charges for Rail Milk Tankers (RMT)

Non-revision of the clause in the agreement for maintenance charges for Rail Milk Tankers own by National Dairy Development Board resulted in loss to the Railway Administration.

Para 1417 to 1430 of Mechanical Code lays down the procedure to be adopted for working out various costs in respect of works undertaken in Railway Workshops for public/private bodies. Railway Board further issued (November 2014) a Special Parcel Train Operators Policy (SPTO) vide Freight Marketing Circular No.23 of 2014. Para 4.1 of this circular categorizes RMT under Category II (Coaching stock) and as per Para 7.2.2 of the circular 'maintenance charges at the rate of 5 *per cent* per annum shall be recovered for open line maintenance of such rakes apart from charges for POH which shall be as per actuals incurred by the workshop'.

Repairs and maintenance of 91[213] Rail Milk Tankers (RMT) owned by National Dairy Development Board (NDDB) is being carried out by the Railway Workshop at Pratapnagar as per an agreement executed between Commercial Department of Western Railway and NDDB from time to time. The current agreement executed on 23 April 2015 effective from 1 April 2015 is valid up to 31 March 2020. In terms of Clause 6.2 of this agreement, 'Maintenance charges at the rate of five *per cent* per annum on the capital cost of the bogies and under frame will be levied and revised capital cost will be worked out every year as per Railway

[213] For the year 2015-16

Board's guidelines issued vide their letter dated 14 December 2007'. Further, Para 6.5 stipulates that 'five *per cent* per annum charge on the capital cost on underframe and bogies would include cost of running maintenance as well as workshop maintenance'. As such, the agreement executed by the Commercial department covered the cost of maintenance in open line as well as workshop @ five *per cent* of the capital cost and not recovery of POH cost on actual basis as envisaged in the SPTO dated November 2014.

In this regard, Chief Workshop Manager, Pratapnagar (CWM/PRTN) worked out the estimated POH cost as ₹ 6.08 lakh per RMT (October 2013), which was revised to ₹ 6.65 lakh per RMT in July 2015. It was observed that this cost of POH as per actuals was not being recovered from NDDB, as the terms and conditions of the agreement did not provide for the same. The matter of such a huge gap between the charged cost as per the agreement and actual cost incurred as per mechanical code provisions was taken up by Chief Workshop Engineer/Church gate (May 2014) with the Chief Claims Officer where upon, Commercial Department clarified (8 July 2014) that the agreement had been executed as per Railway Board's guidelines issued in March 1993 and February 1995 and any modification to this agreement would require Board's approval. Chief Claims Officer and Chief Commercial Manager/ FS, WR referred the matter to Traffic Transport Directorate of Railway Board (June 2014 & October 2014) seeking clarification on the issue. Traffic Commercial Directorate/ Railway Board (November 2014) clarified that recovery of maintenance charges should continue as per the agreement executed.

Despite prolonged exchange of correspondence between Mechanical and Commercial Department at Zonal/Board's level, the agreement was renewed for a further period of five years in April 2015 without incorporating the clause for recovery of POH charges on actual basis. Subsequently, General Manager/WR vide his letter dated 27 May 2015 directed CCM 'to go for rider agreement for enhancing charges as per actual of next three months' and also took up the matter with Additional Member/Production Unit Railway Board on 16 October 2015 to revise guidelines conforming to codal provisions and Freight Marketing circular No.23 of 2014. It was clarified by Railway Board on 6 November 2015 that 'the issue is under consideration of the Nodal Directorates of Railway Board viz. Freight Marketing and Commercial and the same is being actively pursued for early decision. Meanwhile Contract Agreement terms should be adhered to'.

Thus, failure to incorporate clause in the agreement for recovery of POH charges on actual basis despite matter being taken up by the Mechanical Department of Western Railway led to non-recovery of ₹ 4.43 crore from National Dairy Development Board during April 2015 to Sep 2016.

The matter was referred to Railway Board in November 2016; their reply has not been received (February 2017).

Chapter 5
Engineering

The Engineering Department of Indian Railways is headed by Member Engineering at Railway Board and is responsible for maintenance of all fixed assets of Indian Railways such as Tracks, Bridges, Buildings, Roads, water supply, in addition to construction of new assets such as new lines, gauge conversion, doubling and other expansion and developmental works. Member Engineering is assisted by Additional Member (Civil Engineering), Additional Member (Works) and Advisor (Land & Amenities). He is also overall in-charge of Signal and Telecom departments at Railway Board level.

At Zonal level, the Engineering Department is headed by Principal Chief Engineer (PCE). The PCE is assisted by various chief engineers for track, bridge, planning, track machines, general matters etc. In addition, each Zonal Railway has a construction organization headed by a Chief Administrative Officer, Construction who is responsible for major construction works including survey works within the Zonal Railway and is assisted by various Chief Engineers (construction). As regard signal and telecom (S&T) department of Zonal Railway, Chief Signal and Telecommunication Engineer is the overall in-charge.

The total expenditure of the Civil Engineering Department and S&T department during the year 2015-16 was ₹ 35033.56 crore and ₹ 3500.14 crore respectively. During the year, apart from regular audit of vouchers and tenders, 1145 offices of Engineering department including Construction Organization of the Railways and 224 offices of S&T department were inspected by Audit.

This Chapter includes nine individual paragraphs relating to poor planning in land management, acquisition etc. leading to extra expenditure; avoidable expenditure due to delay in payment of spectrum charges; non-recovery of lease charges; delay in rebuilding of bridges; non-utilisation of pit-line facilities; award of contract without availability of clear site etc.

5.1 South Eastern Railway (SER): Unfruitful expenditure of ₹ 93.89 crore on the Bagnan-Amta and Deshpran-Nandigram New Railway line projects

Railway Board introduced a policy of recruitment of land losers as a compensation for acquisition of their land even though land could have been acquired using enabling provisions through notification of 'Special Projects' for expeditious land acquisition without making commitment of recruitment. When SER sought clarification on this issue, the Railway Board failed to take a clear stand on the policy. This created a situation of confusion and led to agitation by land losers. The work of the projects Bagnan-Amta and Deshpran-Nandigram New Railway Line projects in Kharagpur Division of South Eastern Railway had to be stopped and expenditure of ₹93.89 crore was rendered unfruitful.

Ministry of Railways (Railway Board) issued instructions[214] in October 2006 to all Chief Administrative Officers (Construction) of Indian Railways for due diligence to ensure that contracts should not be awarded without completion of the pre-requisites or in case action was warranted for expeditious completion of the work, the requisite works such as clearance of site and preparation of plans and drawings should be completed in time so that progress of work was not hampered.

In order to expedite the acquisition of land for railway projects, the Railways (Amendment) Act, 2008 was enacted by Parliament which empowered the Central Government to acquire land in a time bound manner by notifying the projects as Special Railway Projects. Accordingly, all Zonal Railways were advised (April 2010) to take action for notification of the projects involving land acquisition as Special Railway Projects with the approval of the respective Board Member through the concerned Directorates in the Board. Railway Board circulated (July 2010) policy for recruitment of land losers affected by land acquisition.

Railway Board approved (October 2009) new Broad Gauge lines from Amta to Bagnan and Deshpran to Nandigram as Material Modification projects of Howrah-Amta-Champadanga and Tamluk-Digha projects respectively. The requirement of land for Amta-Bagnan project and Deshpran-Nandigram projects was 168.30 acres and 194.34 acres respectively. In these two projects contracts for civil works were awarded during November 2009 to March 2011 at a total cost of ₹ 127.60 crore as detailed below:

Table 5.1

Name of the Project	Number of contracts awarded	Cost of the projects	Civil Works undertaken under the contract
Amta-Bagnan (16 kms)	Two (January 2010 and October 2010)	₹ 2.52 crore ₹ 30.71 crore	Earth work, major and minor bridges, blanketing, sand filing etc.
Deshpran-	Four	₹ 5.25 crore,	Earth work, major (including sub-structure and

[214] The instructions were issued in response to Audit Para No.3.3.12 on 'Non-completion of preliminary works before awarding of contracts' of C&AG's Report No.8 of 2005 (Railways)

Table 5.1			
Name of the Project	**Number of contracts awarded**	**Cost of the projects**	**Civil Works undertaken under the contract**
Nandigram (17 kms)	(November 2009, August 2010, December 2010 and March 2011)	₹ 14.67 crore ₹ 37.32 crore ₹ 37.13 crore	super-structure) and minor bridges, blanketing, sand filing, construction of sub-ways, supply of ballast, cement and steel, transportation of Path Way materials, construction of staff quarters and service buildings etc.
	Total	**₹ 127.60 crore**	

Audit observed that

- The Deshpran-Nandigram and Amta-Bagnan projects were notified as 'Special projects' vide Gazette Notifications dated March 2010 and June 2010 respectively. Though the 'Special Project' status of these projects enabled fast track acquisition of land by the Central Government by determining compensation based on market value of the land and setting up a time frame for payment of compensation to land owners, Railway Board introduced a policy (July 2010) regarding recruitment of land losers as a compensation to land owners.
- As per policy of Ministry of Railways, 413 recruitments were made for the Deshpran-Nandigram project. Against the required area, 163 acres was acquired.
- In February 2013, in view of the changed viewpoint of the Ministry of Railways (as expressed through various newspaper reports, but not communicated to the Zonal Railways formally) SER Administration expressed their inability to make further appointments and requested the Railway Board to communicate their decision on the issue. However, no response was given to SER by the Railway Board clarifying the stand of the Ministry on the issue.
- As no further recruitments were done, the land losers started agitation and stalled the works started by the Railways. No recruitments were made under the Amta-Bagnan project and no land could be acquired. The two contracts were foreclosed (March 2014 and April 2016) after payment of ₹ 25.54 crore.
- Despite acquiring land in the Deshpran-Nandigram project, all the four contracts were foreclosed due to agitation by land losers after incurring an expenditure of ₹ 32.58 crore.
- While the Railways incurred an expenditure of ₹ 58.11 crore (including price variation clause payments ₹ 4.74 crore) on these two Railway projects, an amount of ₹ 35.78 crore was also incurred towards other items such as stores, cost of land, establishment cost, telephones, vehicles etc.
- As all the works have now been foreclosed, the civil works done so far, would also not remain in workable condition for long.

Thus, Railway Board introduced a policy of recruitment of land losers as a compensation for acquisition of their land even though land could have been acquired using enabling provisions through notification of 'Special Projects' for expeditious land acquisition without making commitment of recruitment. When SER sought clarification on this issue, the Railway Board failed to take a clear stand on the policy. This created a situation of confusion and led to agitation by land losers. The work of the projects Bagnan-Amta and Deshpran-Nandigram New Railway Line projects in Kharagpur Division of SER had to be stopped and expenditure of ₹ 93.89 crore was rendered unfruitful.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

5.2 Northeast Frontier, Eastern, North Central, Northern and East Central Railways: Avoidable expenditure due to delay in payment of spectrum charges to Department of Telecommunication

Delay in payment of spectrum charges by NR and ECR led to payment of late fee/surcharge of ₹ 19.47 crore. In NFR, ER and NCR spectrum charges surcharges/late fee to the tune of ₹89.77 crore (including surcharge/late fee of ₹ 26.75 crore) were outstanding. Unless the spectrum charges are paid on time, late fee/surcharge would be imposed by Department of Telecommunication, which would have to be paid by the Zonal Railways, as there is no provision of waiver of late fee on spectrum charges.

Ministry of Railways (Railway Board) decided (September 1999)[215] to provide Mobile Train Radio Communication (MTRC) system on 'A', B' & 'C' routes and instructed General Managers (GMs)/Officers on Special Duties (OSDs) of all Zonal Railways to propose the works in Works Programme 2000-2001. Railway Board further instructed (September 2000)[216] GM (S&T) of NR, ER and NFR to submit application for allotment of frequency for various works related to MTRC to Wireless Planning and Co-ordination (WPC) wing of Department of Telecommunication (DoT). The application was required to be prepared taking into account Global System for Mobile Communications – Railway (GSM-R)[217] based technology.

The levy of spectrum charges in the shape of License fee and Royalty was effective from 1st June 2004[218] at the rates prevailing then. For delayed renewal of various licenses, surcharge/late fee was also chargeable at the rate of two *per cent* of the total spectrum charges payable[219] per month or part thereof. In case of delay of more than one year, the late fee was to be compounded annually.[220]

[215] Railway Board letter No.95/Tele/MW/5/Pt dated 10 September 1999
[216] Railway Board letter No. 2000/Tele/WCM/1/NFAP/Misc dated 08 September 2000
[217] GSM-R is an international wireless communications standard for railway communication and applications and is a secure platform for voice and data communication between railway operational staff including drivers, dispatchers, shunting team members, train engineers and station controllers.
[218] Department of Telecommunications letter No.R-11014/01/2004-LR/5676 dated 5 April 2004
[219] License fee and Royalty
[220] Department of Telecommunications letter No.R-11014/28/2004-LR/2447 dated 23 March 2005

Audit reviewed the matter regarding payment of spectrum charges in NR, ER, NFR and also other Zonal Railways. Frequency spectrums were taken by five Zonal Railways viz. NR, ER, NFR, NCR and ECR since February 2002. It was observed that NFR, ER and NCR had not paid spectrum charges to DoT on time and surcharge/late fee of significant amounts were payable by them as discussed below:

Northeast Frontier Railway

Northeast Frontier Railway Administration took 64 GSM-R frequency spectrums between April 2003 and February 2008. Telecommunication Departmrnt levied spectrum charges since June 2004 and Railway Administration paid a sum of ₹ 3.29 crore till July 2016. A check of records[221] further revealed that at the end of December 2013, total outstanding amount against NFR Administration was ₹ 28.76 crore that included a sum of ₹ 3.77 crore as late fee. Neither any late fee has been paid by NFR nor any demand note received from DoT for the period after 1 January 2014. Thus, NFR Administration would have to pay surcharge/ late fee at the rate of two *per cent* per month on license fee and Royalty charges to be compounded annually from 1 August 2013[222].

Eastern Railway

Eastern Railway Administration took 59 GSM-R frequency spectrums on Mugalsarai-Howrah route between February 2002 and October 2006. The total amount outstanding (September 2016) for payment to DoT towards license fee, royalty charges, spectrum charges and late fee for the period, April 2012 to September 2016 was ₹ 6.69 crore that included late fee of ₹ 1.29 crore. Eastern Railway Administration was yet (November 2016) to pay ₹ 6.69 crore to DoT.

North Central Railway

North Central Railway took GSM-R frequency spectrum on 90 stations on Ghaziabad-Kanpur-Mughalsarai route. The license for spectrum frequency was granted on 27 July 2007 and the agreement was signed on 13 October 2011. Total amount outstanding (September 2016) for payment to DoT towards licence fee, Royalty charges, spectrum charges and late fee for nine years from July 2007 to September 2016 was ₹ 54.32 crore that included surcharge/late fee of ₹ 21.69 crore. North Central Railway Administration was yet (November 2016) to pay ₹ 54.32 crore to DoT.

It was further observed that NR and ECR Administrations also delayed payment of spectrum charges to DoT and have already paid huge amounts towards surcharge/late fee.

Northern Railway Administration took four GSM-R frequency spectrums on 1182 stations on four[223] routes between April 2003 and October 2011. Despite clear

[221] DoT letter No. L-14022/05/2005-LR dated 1 July 2013

[222] As the spectrum charges up to 31 December 2013 were due to be paid by 31 December 2013 and thus late fee has been worked out w.e.f. 1 August 2013

[223] Delhi-Ludhiana-Jammu Tawi and Jallandhar-Amritsar-Pathankot, New Delhi-Palwal, Delhi-Jammu Tawi. Additional two BTS sites (Alawapur and Sujanpur stations) and Delhi-Sonepat-Jammu Tawi

terms and conditions, NR Administration was not clear until December 2009 as to how the payment of spectrum charges would be made to DoT. Adequate funds for payment under Revenue Head were not provided by the Railway Board and delay was on administrative account. When NR Administration approached WPC to grant exemption from paying any late fee, DoT intimated (November 2013) that there was no provision of waiver of late fee on spectrum charges. As on 31 March 2016, NR Administration paid an amount of ₹ 11.52 crore towards late fee/surcharge on delayed payment of spectrum charges.

East Central Railway Administration took 35 and 11 GSM-R frequency spectrums between April 2003 and December 2011. Total amount due (September 2016) for payment to DoT towards licence fee, royalty charges, spectrum charges, and late fee from April 2009 to September 2016 was ₹ 27.50 crore that included late fee of ₹ 7.95 crore. The amount due was paid to DoT upto September 2016.

Thus, delay in payment of spectrum charges by NR and ECR led to payment of late fee/surcharge of ₹ 19.47[224] crore. In NFR, ER and NCR, spectrum charges, surcharges/late fee was outstanding to the tune of ₹ 89.77[225] crore (including surcharge/late fee of ₹ 26.75[226] crore). Unless the spectrum charges are paid on time, late fee/surcharge would be imposed by DoT, which would have to be paid by the Zonal Railways, as there is no provision of waiver of late fee on spectrum charges.

The matter was taken up with NR, NFR, ER, NCR and ECR Administration between March 2016 and December 2016. Reply from all the railways except NFR was awaited (December 2016). Northeast Frontier Railway Administration in their reply (September 2016) stated that the provision of payment of spectrum charges for the period 1 June 2004 to 31 December 2012 was not included in the revised estimate by the Construction Organisation as it required revision of the estimate and approval by the Board. As there is no provision for waival of late fee, NFR administration would have to pay full charges including surcharge/late fee.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

5.3 Southern Railway (SR): Failure to settle the land acquisition matter on time led to avoidable expenditure liability of ₹ 50.68 crore

Southern Railway created infrastructure on land which actually did not belong to them and continued to occupy the same for a long time in violation of the codal provisions. They also did not use the opportunity to settle the matter timely by paying compensation as assessed by the State Government. This resulted in an avoidable expenditure liability of ₹ 50.68 crore towards compensation to the land owner.

[224] NR ₹ 11.52 crore and ECR ₹ 7.95 crore
[225] NFR ₹ 28.76 crore, ER ₹ 6.69 crore and NCR ₹ 54.32 crore
[226] NFR ₹ 3.77 crore, ER ₹ 1.29 crore and NCR ₹21.69 crore

Para 915 of Indian Railway Engineering Code states that 'When the award has been announced by the State Government, the Railway Administration may enter unto possession of the land but before doing so, the authority of the Land Acquisition office to its occupation should be obtained. When possession is taken, the land acquisition is completed and the land then vests absolutely in Government'.

For construction of new Broad Gauge line for section Karur-Dindigul-Madurai, Southern Railway (SR) Administration sent (January 1990) a requisition and schedule for acquisition of land[227] in Adiyanathu village near Dindigul station to State Government of Tamil Nadu. Audit observed that without waiting for acquisition, SR occupied (June 1990) the land and created structure on the land in contravention of above mentioned codal provisions.

State Government issued a notification for acquisition of land belonging to two parties (May 1991). One of the land owners[228] was given (March 1993) a compensation award of ₹ 16 lakh by the Railways. Meanwhile, the other land owner (East India Corporation Limited[229]) filed a writ petition (September 1992) in High Court of Madras requesting to quash the entire land acquisition proceedings, which was dismissed (January 1999) with direction to hold negotiation with the land owner and pay compensation for the land occupied by SR within a period of three months. State Government advised (May 2000) SR Administration to deposit ₹ 92 lakh for the land in possession by SR. Southern Railway Administration, without verifying the land records, informed (August 2000) that the said land was not required by the Railways as the construction of new line had already been completed even though permanent structure had been created on the said land. In pursuance of SR Administration's request, State Government declared the land acquisition proceeding lapsed and informed (March 2004) the same to the land owner.

Audit observed that in June 2004, the land owner served a notice on the State Government and Railways to pay damages (₹ one crore) for unauthorized occupation and use of the said land by the Railways and to relinquish the said land. Subsequently, a joint inspection by the representatives of Railways, State Government and land owners was done (May 2005) and it was found that the land was in occupation of Railways. Thereafter, SR Administration reversed its stand and requested (July 2005) the State Government to initiate land acquisition proceedings of the land for the purpose of constructing Rail Consumer Depot[230] and other buildings. Accordingly, State Government informed (July/August 2006) SR Administration to deposit ₹ 11.90 crore towards compensation for the land.

It was noticed that on the plea that the compensation was on high side, Construction unit/ Madurai of SR proposed to acquire the said land through

[227] Survey Nos. 1638/1D, 1644. 1645/1 and 1645/2
[228] Survey No. 1638/1D
[229] Survey No. 1644. 1645/1 and 1645/2
[230] for storing diesel for Railways locos and construction of building in connection with train operations

private negotiation in August 2006. State Government was approached (January 2008) after a delay of 17 months seeking clearance. This was however, not agreed to by them as the land was already occupied by the Railways.

No further action was taken by SR Administration for another five and a half years till the land owner (East India Corporation Limited) made a representation (January 2014) to SR Administration to re-convey the possession of land and pay damages towards unauthorized possession. The land owner also approached (January 2014) the Hon'ble High Court seeking action on their representation. The Court directed (June 2014) the State Government and SR Administration to take appropriate action within a period of six weeks. Southern Railway Administration, however, claimed that the land belonged to Railways and asked the land owner to settle the issue with State Government.

Subsequently, the land owner filed (April 2015) a contempt of court petition against SR Administration and sought ₹ 80 crore as compensation. As a result, SR Administration made fresh proposal (June 2015) for acquiring land which was already in possession of Railways for the past 25 years and deposited (July 2015) ₹ 10 crore with the State Government for acquiring the land. State Government examined the proposal and estimated (December 2015) the value of compensation to be paid to the company as ₹ 51.60 crore which included ₹ 31.88 crore being interest for 26 years. For the balance payment of ₹ 41.60 crore, SR proposed to make payment after receipt of formal requisition from State Government, which was still awaited.

As such, SR Administration did not address the issue in right earnest and went on changing their stand about requirement of the land, all the while occupying the land. Southern Railway Administration violated codal provisions by creating infrastructure on land which actually did not belong to them. They further did not utilize the opportunity to settle the matter by paying compensation of ₹ 92 lakh in May 2000 and again in July 2006 for settling the compensation of ₹ 11.90 crore as assessed by the State Government. Delay in settling the matter led to avoidable expenditure liability of ₹ 50.68 crore[231].

When the matter was taken up (September 2015), SR Administration stated that the delay in resolving the dispute was not on part of Railways but was due to non-cooperation by the land owners. However, the fact remains that while SR Administration continued to occupy the land and created permanent structure on the land, it did not pay legitimate compensation and also failed to settle the matter when the opportunity arose.

The matter was referred to Railway Board in November 2016; their reply has not been received (February 2017).

[231] ₹ 51.60 – ₹ 0.92 (initial cost)

5.4 South Eastern Railway (SER): Non-recovery of lease charges from NHAI

National Highway Authority of India (NHAI) executed the work of construction of bridge at Kolaghat on railway land. Railway Administration delayed raising of demand for lease charges and failed to sign an agreement with NHAI which resulted in non-recovery of lease charges of ₹19.94 crore.

As per Para 1003 of the Indian Railway Code for the Engineering Department, in case of transfer of land or buildings from Railways to another department of the Government, full market value of the land or buildings shall be charged. Railway Board (October 2001) intimated to the Zonal Railways that in all fresh cases, instead of transfer/relinquishment, the land shall be leased to the Government Departments (or undertakings) on long term lease basis for a period of 35 years against lumpsum payment of lease charges equivalent to 99 *per cent* of current market value of land and a nominal licence fee of ₹ 1000 per annum. The lease agreement shall be further renewable for another period of 35 years at a nominal licence fee per annum to be decided at that time.

The National Highway Authority of India (NHAI) in August 2011 approached the South Eastern Railway (SER) Administration for transfer of railway land measuring 26657.25 sqm (6.587 acres) for construction of new bridge at Kolaghat (West Bengal) over the river Roopnarayan for six laning of NH-6 under the National Highway Development Project (NHDP) Phase V. National Highway Authority of India also agreed to pay the requisite price/fees for the land. In this connection, a meeting was held between officials of SER and NHAI and SER was requested to provide the drawings, NOC, land value and draft lease agreement (September 2011). Kharagpur Division also certified that they had no future planning for the land required by NHAI (October 2011) and certified the plan showing the detail measurements of the railway land required by NHAI (January 2012).

In June 2012, almost after nine months from certifying the plan for land required by NHAI (January 2012), SER Administration forwarded the proposal for leasing of land measuring 26657.25 sqm at a total sum of ₹ 15.04 crore for a period of 35 years to NHAI for approval of Railway Board. It was observed that Railway Administration took unwarranted time in fixation of proposed lease charges and finally preferred a claim of ₹ 19.94 crore to NHAI in April 2014, after Railway Board approved the lease in March 2014. It was, however, observed that no agreement was signed by SER with NHAI for leasing the land for construction of new bridge. Meanwhile, NHAI executed the work of construction of bridge without execution of land lease agreement with the Railway and also without payment of the lease charges.

National Highway Authority of India (June 2014 and October 2014) requested the Zonal Railway to condone the lease charges stating that the NHDP was for the economic development of the Nation and therefore, as per the Government of India policy, no payment was being made for the Government land. However, after raising the demand for payment of lease charges to NHAI in April 2014, SER

Administration did not take any action to sign the lease agreement for land and to recover lease charges from NHAI. Request of NHAI for condonation of lease rent was also not forwarded to Railway Board for further decision on the matter.

When Railway Board further sought status of recovery of lease charges from NHAI by SER Administration (February 2016), it was informed that the construction work of bridge started in railway land without any authority by NHAI in March 2011 and bridge was completed in November 2012. SER Administration further quoted Para 813(B) of Indian Railways Works Manual, as per which Section Engineer (Works) is responsible for maintaining Railway land without any encroachment and stated that they had fixed responsibility of Section Engineer (Works), Kolaghat who failed to prevent the NHAI from construction of bridge in Railway land.

However, since the Divisional and Zonal Headquarters authorities were aware of the matter and correspondence was going on between SER and NHAI, it is unfathomable to expect that a Section Engineer should prevent NHAI from construction of bridge and stall an important project of six laning of NHDP Phase V. Fact remains that the SER administration instead of facilitating the project of NHAI did not take expeditious steps to resolve the matter, sign the agreement with NHAI and recover the lease charges, which also led to non-recovery of lease rent charges of ₹ 19.94 crore from NHAI (September 2016).

The matter was referred to Railway Board in November 2016. In reply, they stated (February 2017) that the process of obtaining approval of Railway Board involved State Government Revenue authority, Officials at Division and Headquarters levels, which took time and resulted in delay in demanding the license fee and other charges from NHAI. They further stated that being a Central Government body, NHAI should have been conversant with necessary formalities to be observed and it was expected that they would start their work only after making necessary payments, signing and executing proper agreements with Railways and only thereafter taking possession of land.

However, being the owner of the land, it was the responsibility of the Railways to execute license agreement, raise bills for lease and other charges on time to facilitate an important infrastructure project.

5.5 East Central Railway (ECR) : Delay in re-building of bridge resulted in compromising safety of passengers by running of train on existing bridge.

Delays on part of ECR Administration to provide necessary facilities/material/ site to the contractor led to delay in building of the new bridge. On the other hand, works taken up for strengthening of the existing bridge were also not completed on time due to lapses on part of the ECR administration. This resulted in continuation of Permanent Speed Restriction on the bridge and running of trains on this bridge, which is a safety hazard.

Kiul Bridge[232] is situated between Kiul and Luckeesarai stations on main line under ECR. The bridge was built in the year 1862.

In the year 1998-99, ECR proposed the repair work of the floor system of the bridge, when wide spread corrosion in the floor system was noticed. In 2002, ECR again proposed the work of regirdering of bridge due to heavy corrosion in the girders for long term safety of bridge. After sanctioning of regirdering work by Railway Board in 2003-04, General Manager, ECR inspected (December 2003) the bridge and pointed out that Kiul Bridge is a distressed bridge having serious corrosion problem and as a permanent measure it needs to be rebuilt.

Accordingly, ECR submitted (April 2006) estimates of the work for rebuilding of bridge (building a new bridge at nearby location) instead of regirdering and repair work of floor system of the existing bridge. Railway Board sanctioned (May 2007) rebuilding of the bridge at a cost of ₹ 42.01 crore. In the meantime, ECR imposed (July 2003) Permanent Speed Restriction (PSR) of 30/10 kmph[233] on the existing bridge due to corroded and weak girder of the bridge.

Audit noticed that ECR took more than two years to award (November 2009) the contract for construction of sub-structure of bridge at a cost of ₹ 15.79 crore. The work of rebuilding of bridge was scheduled for completion by May 2011. It was observed that the completion schedule was extended 12 times up by the railways up to February 2016. The extension were granted mainly due to reasons such as delay in sanction of variations, modification in drawing, rainy season, non-availability of clear site, delayed permission for diversion of road by State Government etc. Majority of these reasons were on account of lapses/delays on part of the ECR Administration. The work of sub-structure of bridge was completed in April 2016 after a delay of about five years. As of March 2016, the contractor was paid ₹ 19.83 crore including ₹ 3.69 crore as escalation payment for the work of substructure of the bridge.

Another contract for superstructure of the new bridge was awarded at the cost of ₹ 9.47 crore in August 2015 with schedule date of completion of August 2016. First extension for the work had already been given up to March 2017 due to delay in supply of girders and delay in availability for approach for start of assembly work, both of which were the responsibility of the railways. The present physical progress of super structure work was only 14 *per cent* for which an amount of ₹ 87 lakh was incurred (up to June 2016).

Due to delay in completion of work, the cost of work has increased from ₹ 42.01 crore to ₹ 71.42 crore for which revised estimate was yet to be submitted for sanction of Railway Board. As such, even after lapse of nine years of sanction of work (May 2007), the rebuilding work has not been completed.

Meanwhile, as the work of building of new bridge was getting delayed, a need was felt for repair of the existing old bridge for safe operations of trains. East

[232] Bridge no.136
[233] In up and down directions respectively

Central Railway took sanction of Railway Board, in works programme 2013-14, for the work of strengthening and metalizing of floor members of existing bridge at a cost of ₹ 3.25 crore. Though, the target date of completion of this work was September 2015, the work was yet to be completed after incurring an expenditure of ₹ 2.63 crore (October 2016). The reasons for delays were not found in the records of the ECR administration.

Another work for strengthening of the existing bridge by changing perforated girders was sanctioned by Railway Board in the Works Programme 2015-16 at a cost of ₹ 3.91 crore. This work was initially taken up in 1998-99 at a cost of ₹ 2.72 crore, but was not completed. The work was targeted for completion in December 2015. The same is also not completed (October 2016) though an expenditure of ₹ 5.79 crore, which is 48 *per cent* more than the sanctioned estimate, has been incurred so far.

Thus, delays on part of ECR Administration to provide necessary facilities/material/site to the contractors led to delay in rebuilding of the bridge. This led to extra expenditure of ₹ 3.69 crore on account of price escalation. As the new bridge could not be constructed as per laid down time schedule, ECR Administration had to take up works for strengthening of the existing bridge, which were also not completed due to lapses/delays on part of the ECR administration and have crossed their due date of completion 10 to 13 months back. Though Permanent Speed Restriction has been imposed, trains continue to run on the old distressed Kiul Bridge for the past 12 years, which is a safety hazard as repair works on the bridge have also not been completed as planned. Permanent Speed Restriction also led to incurring extra expenditure on detention to passenger trains, goods trains and train engines running on the section, additional fuel consumption and section capacity cost. The impact of speed restriction and slow running of the train on the bridge has been quantified to ₹ 17.58 crore[234] on account of the above parameters.

The matter was referred to Railway Board in November 2016; their reply has not been received (February 2017).

5.6 Northern Railway (NR): Opening of an additional leg of a Road Over Bridge for traffic without adequate safety measures

An additional single lane 3rd leg of ROB towards RDSO was constructed despite adverse opinion of Bridge Authority of State Government and Associate Finance at a cost ₹ 7.75 crore. This bridge has been opened for traffic in March 2015 without proper signages and tyre deflator and without conducting safety audit and taking measures for ensuring movement of traffic in only one way.

[234] The amount has been calculated based on the Cost Study Report conducted by RDSO in August 1991, which was updated in 2003-04 by SCR. As per this, savings of ` 3.46 crore per annum have been assessed if a speed restriction is removed.

The main objective of construction of a Road Over Bridge (ROB) or Road Under Bridge (RUB) is elimination of level crossings (LCs) which in turn serves to improve the efficiency of Railway operations and ensure safety of the public travelling by road and railways. The works for the construction of ROB, RUB in lieu of existing LCs are normally undertaken by Railways on cost sharing basis with the State Government.

Lucknow is a densely populated big city of Uttar Pradesh having a large road and rail traffic. To travel from Lucknow to Delhi, there are two rail routes, one via Kanpur and Aligarh and another via Hardoi and Moradabad. In Lucknow city, both the tracks pass near Alambagh where a road emerging from Talkatora to Chowk crosses tracks of both the routes, via Kanpur route at Kanpur crossing (LC 1B Tejikhera) and via Hardoi route at Hardoi crossing (LC 218A).

Research Designs and Standards Organization (RDSO) is a premier Institution of Indian Railways which advises the railways on critical technical issues related to designs and standards. Its offices, other allied buildings and residential houses are located adjacent to Kanpur crossing and on the left hand side of Talkatora Road. To avoid problems from frequent traffic at LC 1B Tejikhera, Railway Board sanctioned (April 2008) a work for construction of a RUB at cost of ₹ 2.39 crore for free passage between Administrative block, RDSO colony and Annexe I, II & other offices in RDSO (Lucknow).

Audit noticed that:

- With a view to eliminate both the level crossings under reference, a work for construction of two lane ROB in lieu of these level crossings was sanctioned in 2004-05 at a total anticipated cost of ₹ 31.46 crore on the basis of Travelled Vehicle Units (TVU). The cost of construction was to be shared by Railway and the State Government. The cost was revised to ₹ 36.84 crore in August 2008. The cost was revised again (January 2010) to ₹ 44.59 crore on account of Material Modification sanctioned (January 2010) by Railway Board for providing a 3rd leg (401 meter length and 5.50 meter width) to the ROB. The enhanced cost (₹ 7.75 crore) was exclusively on account of provision of 3rd leg and it was to be borne by Railways only as its inclusion in ROB over LC no. 1B was exclusively towards RDSO, the material modification was to solve traffic problems and inconvenience to users related to RDSO and the approval to material modification was as per the recommendation of Director General, RDSO.
- Bridge Authorities of State Government[235] ruled out (May 2008) the provision of T-junction towards RDSO from the main ROB as that would have been impractical on safety grounds; being accident prone. Also, the Associate Finance questioned the necessity for this Material Modification for providing 3rd leg towards RDSO when a separate RUB to connect RDSO colony was already sanctioned in 2008-09. However, despite adverse

[235] General Manager, Uttar Pradesh State Bridge Corporation Limited (UPSBC)

opinion of Bridge Authority of State Government as well as Associate Finance, a combined revised estimate was sanctioned (January 2010) by Railway Board with an additional burden of ₹ 7.75 crore for construction of 3rd leg exclusively on Railways.

- On technical side, the width of 3rd leg ROB was further reduced from 5.5 meter to 4.85 meter due to its loading pattern and problems of conflict in traffic flow. Both the structures i.e. RUB and ROB were constructed simultaneously and opened for traffic in December 2014 and March 2015 respectively with capital cost of ₹ 5.15 crore (7 meter wide two way RUB) and ₹ 7.75 crore (4.85 meter one way ROB).

The provision of additional 3rd leg of ROB[236] was specifically to cater to smooth and uninterrupted flow of one way small traffic to RDSO from Alambagh direction. It was designed to permit only one way traffic in view of its reduced carriage way width of 4.85 meter and existence of sharp curves leading to reduced visibility. The ROB was opened for traffic in March 2015 without proper safety arrangements viz. signages and tyre deflator. No safety audit was conducted by Railways Administration to discourage both way movement of traffic. Thus, the narrow additional 3rd leg below the normal standard width of carriage way remained unsafe and accident prone.

Thus, an additional single lane 3rd leg of ROB towards RDSO was constructed despite adverse opinion of Bridge Authority of State Government and Associate Finance at an expenditure of ₹ 7.75 crore. Further 3rd leg of ROB was opened without proper signages and tyre deflator and without conducting safety audit and measures for ensuring movement of traffic only in one way.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

5.7 Southern Railway (SR): Non-utilization of pit line facilities

A pitline (4th) in Madurai Coaching Depot was created at a cost of ₹ 6.08 crore and handed over to Mechanical Branch (March 2011). However, the assets created are yet to be put to gainful use due to various deficiencies.

In Madurai-Rameswaram section, a pit line was constructed (March 2011) in addition to the existing three pit lines at Madurai coaching complex. The work of construction of 4th pit line was sanctioned (March 2006) by Railway Board as a part of Gauge Conversion work of MDU-RMM section. As per the detailed estimate, the cost of creation of the 4th pit line including catwalk arrangements (₹ 78 lakh), water hydrants (₹ 30 lakh) and watering and drainage arrangements (₹ 8 lakh) was ₹ 1.16 crore. The 4th pit line was constructed in MDU coaching complex at a total cost of ₹ 6.08 crore and handed over (March 2011) by the Construction Organisation to the Mechanical Branch for maintenance of trains. Review of records of Madurai coaching complex revealed that

[236] towards RDSO from the main ROB

- Though constructed in March 2011, the 4th pit line could not be put to use till April 2016.
- The joint inspection carried out (September 2012) by Mechanical, Electrical and Open Line Engineering Department, pointed out various deficiencies in the 4th pit line. These deficiencies included non-connectivity of water pipelines to the existing pipe line, improper drainage system, incomplete civil and electrical works etc. Though some of these were rectified, the problems of blockage of drain, water logging of pathways and non-provision of steps and trolley pathways at the entrance of pit line were yet to be addressed (April 2016).

As such, the 4th pit line constructed at a cost of ₹ 6.08 crore could not be put to use and remained unutilized (April 2016). The matter was initially raised by Audit in May 2013. In response, SR Administration contended (October 2013) that the 4th pit line was being used as stabling line and essentially required for future needs. With regard to using the 4th pit line for coach maintenance, SR Administration stated (March 2016) that a full scale trial was conducted using the 4th pit line for one week. Blockages in the drain pipeline have been found and open line organization has been requested to get the blockages cleared as the pit line could not be put to use due to the blockages. The reply indicates that the 4th pit line has remained unutilized so far. Hence, the assets created at a cost of ₹ 6.08 crore have not been utilized at all (May 2016) due to non-completion of pending works.

The matter was referred to Railway Board in August 2016; their reply has not been received (February 2017).

5.8 Northern Railway (NR): Unfruitful expenditure due to award of contract without availability of clear site and drawings for execution of work

Railway's decision to award a contract for replacement of FOB without ensuring clear site and drawings resulted in unfruitful expenditure of ₹ 5.75 crore on fabrication of steel material for the FOB that would remain blocked till further decision for taking up the work. The existing foot over bridges are very old and not replaced/changed since installation. Till the time they are replaced, their use poses a threat to the safety of the passengers.

As per Railway Board's instructions (August 1980), contracts for works should not be awarded unless preliminary works such as site investigation, approval of plans, drawings and estimates of works are completed and there is no hitch in handing over the site to the contractor for executing the work.

Ministry of Railways (Railway Board) sanctioned (2006-07) two works for replacement of FOBs at Charbagh Railway station in Lucknow. The description of works was 'Replacement of first class FOB' and 'Replacement of second entry FOB', the anticipated costs being ₹ 2.42 crore and ₹ 2.71 crore respectively. Divisional Authority, Lucknow sanctioned (May 2009) the estimates for both the

works and awarded (November 2009) a consolidated contract[237] with target date of completion as August 2010.

The work progressed very slowly as Railway could not make available the approved designs in respect of work for replacement of both FOBs to the contractor in time. In regard to replacement of first class FOB, Railway Administration handed over to the contractor the design prior to October 2011, but the contractor did not start (February 2012) the work for replacement of first class FOB. The design in respect of replacement of second entry FOB needed revision and was made available by the Railway to the contractor in June 2012 only. However, the contractor while seeking extension for the validity of contract (May 2013) claimed that the design had not been handed over to them till 30 May 2013.

Further, when the contractor started the work for replacement of second entry FOB, the operating authorities of Charbagh, Lucknow (NR) station objected (Nov 2013) and got the work stopped on the grounds that no work within station premises could be undertaken without modification in Station Operations Rules. They were under the impression that line at Platform No.2 were required to be shifted for construction of foundation of the FOB and therefore they wanted revision in Station Working Rules prior to start of work. However, it was later found that, no line was required to be disturbed and modification in Station Operating Rules was not required. Lack of coordination between various departments delayed the execution of work.

Divisional Authorities extended the target date of completion (nine times), last in April 2014 that was up to 31 May 2014. Progress of work in April 2014 was insignificant (three *per cent*). Finally, in May 2014, the contractor expressed his inability to continue the execution of work in view of delays involved and escalation in cost of labour and construction material. The work is continued to be showed in the Works Programme of NR and Railway Administration took no action thereafter to carry out the work.

In the meantime, Divisional authorities had placed (April and September 2007), work orders on Bridge Workshop-Charbagh, Lucknow for fabrication of steel material for both the FOBs against which material worth ₹ 5.75 crore had been received during September 2008 to January 2014. The material was lying in open since then in Engineering Stores depot without being utilized.

In this connection, it was observed that

- Although both the works were sanctioned by Railway Board in 2006-07, their detailed estimates were sanctioned by Divisional Authorities in May 2009. Reasons for delay in sanction were not found recorded. Further, the work orders on Bridge Workshop-Charbagh, Lucknow for fabrication of steel material for steel FOBs were placed (April & September 2007) in 2007-08 i.e. before the sanction of detailed estimate. Consequently, NR Administration proposed to close (August 2016) the contract on administrative ground and

[237] including some other renovation and replacement works at Charbagh Lucknow Station and Yard

to revise the estimates for drawings. This will further delay the replacement works of FOBs.

- Although the approved drawings and clear site were not available with Railway to hand over to the contractor to initiate execution of works for replacement of FOBs, they awarded the contract (November 2009) with date of completion August 2010. The target date had to be extended up to 31 May 2014 when the progress of work was around three *per cent*. Since the contract is more than five years old and the contractor has expressed unwillingness to execute the work, chances of replacement of both the FOBs are remote.
- Delay in non-replacement of both the FOBs was directly related to passenger safety as both the FOBs are very old and required immediate replacement. While giving justification for placement of the first class FOBs in 2009, it was stated that 'all bottom channels, lateral bracings have been badly corroded'. The second entry FOB was installed in 1925 and its condition was worse when the proposal for replacement was given.

Thus, Railway's decision to award a contract without ensuring clear site and drawings and lack of coordination between departments resulted in unfruitful expenditure to the extent of ₹ 5.75 crore on fabricated steel material for the FOBs that would remain blocked till further decision for taking up work for replacement of FOBs. The existing FOBs are very old and not replaced/changed since installation. Till the time they are replaced, their use poses a threat to the safety of the passengers.

The matter was referred to Railway Board in September 2016; their reply has not been received (February 2017).

5.9 Southern Railway (SR): Uneconomic operation of Reinforced Cement Concrete (RCC) Depot

The output of RCC depot at Ponmalai is reducing over the years. The expenditure per unit of output has increased by almost 150 per cent in the last six years. The depot incurred additional expenditure of ₹ 5.68 crore on manufacturing items at a much higher cost as compared to market rates during this period. As operating the depot is proving to be an uneconomical proposition, there is a need for exploring alternative ways and means for gainfully utilizing the staff as well as usable assets of the depot.

The Reinforced Cement Concrete (RCC) depot started at Ponmalai (GOC) in 1952. The depot is located in an area of 33,184 sqm and have infrastructural facilities including massive curing pits and heavy cranes. The depot used to manufacture meter gauge (MG) pre-stressed concrete (PSC) sleepers and heavy RCC products. Production of MG sleepers was stopped in 1992 due to uni-gauge policy of IR and that of RCC products in 2003 due to switching over to pre-stressed concrete bridge slabs. Thereafter, this depot is manufacturing light weight RCC items like slabs, kilometer posts, speed breakers, dust bins, curve board and cement concrete items like slabs, paver blocks, bench sets etc.

Review of records of RCC depot revealed that there was no production plan or programme for manufacture of RCC/PCC[238] products since the year 2006. Moreover, no yardstick for production was fixed either by the Zonal Railway or by the Railway Board.

Audit observed that since the year 2007, no indents were being placed on the depot for manufacturing/production of various RCC items. As and when requisitions were received from open line and construction, these items/products were manufactured in the depot. The details in respect of staff, expenditure on labour component, expenditure on other components such as stores, payment to contractor and total output of the depot in cum for the past six years are given below:

Table 5.2

Year	Output (in cub. M)	No. of staff	Total expenditure (₹ in lakh)	Labour component (%)	Other expenditure component (%)	Expenditure per unit of output (₹ in lakh)
1	*2*	*3*	*4*	*5*	*6*	*7=4/2*
2010-11	792	46	177.23	67.41	32.59	0.22
2011-12	754	43	208.04	58.46	41.54	0.28
2012-13	655	40	176.96	79.31	20.69	0.27
2013-14	321	35	166.80	86.83	13.17	0.52
2014-15	426	25	219.01	66.87	33.13	0.51
2015-16	252	21	138.29	82.88	17.12	0.55

As can be seen, the quantum of output of manufactured items decreased from 792 cum in 2010-11 to 252 cum in 2015-16. On the other hand, the labour component increased from 67.41 *per cent* of total expenditure in 2010-11 to 82.88 *per cent* in 2015-16 despite decrease in number of staff from 46 in 2011 to 21 in 2016. The expenditure per unit of output increased by more than 150 *per cent.*

Audit further observed that a work study was conducted by SR Administration during February 2013, which pointed out that the labour charges, overhead charges establishment charges etc. were 500 *per cent* of the material cost and that the RCC products were costly at least by three times to that of the market price. The study report also mentioned that there had been very few addition of new items during the past years and products were also not specific to the railways and easily available in market. The work study opined that with the present level of production, outsourcing was more advantageous.

Audit worked out the difference in cost of production of items in the depot and cost of manufacturing these items as per the then prevailing market rates[239]. It was observed that the items produced by the depot costed ₹ 5.68 crore more than the market cost during 2010-11 to 2015-16. Audit also noticed that heavy RCC products worth around ₹ 70 lakh which were indented before 2003 were lying idle since then.

[238] Pre-stressed cement concrete

[239] SR provided the market rates for 2015-16 for RCC items and PCC items as ₹ 16,404 and ₹ 7,382 respectively. Audit calculated the market rates for previous years by reducing the same by 10 *per cent* every year.

The issue of uneconomic operation of the RCC depot was taken up with the SR Administration in November 2014. Southern Railway Administration agreed (September 2015) that the cost of RCC depot products were on the higher side due to high cost of labour and stated that steps would be taken to reduce the product cost by increasing lower category posts/ outsourcing the activities like sleeper plant.

From the trend of output and number of staff, it is evident that the SR Administration has been gradually scaling down the operations of the depot. However, considering that operating the depot is proving to be an uneconomical proposition, there is a need for exploring alternative ways and means for gainfully utilizing the staff as well as usable assets of the depot

The matter was referred to Railway Board in October 2016; their reply has not been received (February 2017).

Chapter 6
Staff Matters and Public Sector Undertakings (PSUs) of IR

Staff Matters in Indian Railways is being handled by Member (Staff) at Railway Board level. At Zonal Railway, Chief Personnel officer (CPO) is responsible for staff matters and their pay and allowances and Senior Divisional Personnel officer (Sr. DPO) in the Divisions.

There are 36 Public Sector Undertakings (PSUs) of Indian Railways as on 31 March 2016 under control of Ministry of Railways. These PSUs were set up by the Ministry with varied and specific objectives of raising finance for its rolling stock, manufacture of wagons, executing infrastructure projects, managing containerization of rail traffic, catering and tourism, station development, utilise railway telecommunication network etc.

This Chapter highlights one paragraph on non-recovery of subscription towards new pension scheme and two issues on Railway PSUs viz., Rail Vikas Nigam Limited (RVNL) and Indian Railway Catering and Tourism Corporation Limited (IRCTC), wherein Audit commented on award of the work of 'Maintenance of Accounts of RVNL' in contravention of CVC guidelines; and continuing payment of rent on office accommodation due to delay in construction of own office building.

6.1 South Central: Railway (SCR) — Non recovery of subscription towards New Pension System amounting to ₹77.07 lakh and equal amount of matching contribution

Non/improper implementation of New Pension Scheme at Nanded Division of South Central Railway, Secunderabad resulted in non-recovery of subscription of ₹77.07 lakh and equal amount of matching contribution.

Consequent upon the introduction of New Pension System (NPS) with effect from 1 January 2004 by Government of India, Railway Board issued instructions (19 February 2004) for implementation of the system. Accordingly, all Government servants who joined service in Indian Railways on or after 1 January 2004 shall contribute 10 *per cent* of the salary (Basic Pay and DA) from the first of the month following the month in which the Government servant has joined the service.

In Nanded Division of South Central Railway, Secunderabad, 146 persons joined service during the period from August 2011 to March 2016. However, deduction at the rate of 10 *per cent* of their salary, as required under the provisions of NPS, was not made till June 2016. At the instance of audit the deduction under the provisions with respect to 97 out of the 146 employees were started from June 2016.

Thus, non/improper implementation of NPS resulted in non-recovery of ₹ 77.07 lakh towards subscription and non-contribution of matching amount by the Government. Besides, applicable interest on subscription as well as contribution could not be provided.

The matter was brought to the notice of SCR Administration through Special Letter in April 2016. Railway Administration replied (July 2016) that application of 97 employees for allotment of Permanent Retirement Account Number (PRAN) had been received and forwarded to Central Pension Accounting Office for allotment of PRAN and recovery with respect to 97 employees had been commenced from the month of June 2016.

Railway Administration failed in getting details filled by the employees in the prescribed form from the first of the month following the month of joining of service, which was the duty of the bill-drawing officer as per instructions of Railway Board. As a result, SCR Administration failed to recover subscription towards NPS.

The matter was referred to Railway Board in December 2016. In reply, they stated (February 2017) that NPS recovery in favour of all employees have been recovered except seven, who are absent for long duration. They further stated that a JPO has been issued on 30 October 2016 in order to avoid such recurrences in future.

Railway Board may also ensure recovery of NPS subscription in other divisions, if any, where such subscription is not being recovered and deposited with Central Retirement Pension Accounting office.

6.2 Rail Vikas Nigam Limited (RVNL): Award of the work of 'Maintenance of Accounts of RVNL' to a firm on nomination basis in contravention of CVC guidelines

Selection of firm for 'Maintenance of Accounts of RVNL' on nomination basis in respect of RVNL and its subsidiary without following the guidelines of Central Vigilance Commission led to irregular expenditure of ₹5.07 crore during October 2005 to October 2016.

To bring greater transparency and accountability in award of contracts for Works/Purchase/Consultancy Central Vigilance Commission (CVC) vide its various circulars[240] had emphasized that open tendering was most preferred mode of tendering. Even in case of limited tendering, CVC insisted in transparency in preparation of panel. CVC guidelines further stipulate award of contract on nomination basis by the PSUs in inevitable[241] situations subject to certain conditions. CVC circular also states that tendering process or public auction was basic requirement of award of government contract as any other method especially award of contract on nomination basis would amount to breach of right to equality under Article 14 of the Constitution.

Rail Vikas Nigam Limited was incorporated (2003) for implementation of Railway Projects and the staff of RVNL including Accounts section were taken mainly on deputation basis from the Railways. The Board of Directors (BOD) in its 4th meeting (August 2003), authorized them to outsource the accounting services. Accordingly, RVNL requested two other Railway PSUs viz. IRCON International Limited and RITES Limited to provide list of Chartered Accountants firms. IRCON provided a list of 37 Chartered Accountants firms out of which RVNL shortlisted 10 firms and invited offers from these 10 shortlisted firms against which five firms participated. RVNL awarded the work of 'Maintenance of Accounts of RVNL' (June 2004) to the M/s Umesh Chand & Company (the Firm), initially at a cost of ₹ 38,000 per month from August 2004 to September 2005. Thereafter they continued to re-engage the same firm on nomination basis without inviting open tender from October 2005 till date. The remuneration was decided on the basis of volume of work mentioned in 'Terms of Reference' specified by RVNL in the Engagement letter every year, number of personnel deputed and annual rate of inflation. The monthly remuneration paid by them to the Firm during the year 2016 was ₹ 7.81 lakh (October 2016). During the period October 2005 to October 2016, RVNL incurred an expenditure of ₹ 5.07 crore. It was also seen that the same Firm was also awarded the contract on nomination basis without inviting open tender, from the financial year 2012-13 to 2015-16 for accounting services of High Speed Rail Corporation India Ltd. (HCIL), a subsidiary of RVNL. Total payment made by HCIL to the Firm during the period was ₹ 2.67 lakh.

[240] Circular no. 06-03-02-CTE-34 dated 20.10.2003, Circular no. 15/05/06, Circular no. 23/07/07 and Circular no. 18/12/12

[241] 'Inevitability' of the situation has been described in the CVC circular dated 5 July 2007 based on a Supreme Court Judgment, as 'Natural calamities and emergencies declared by the Government, where the procurement is possible from a single source only, where the supplier or contractor has exclusive rights in respect of goods or services and no reasonable alternative or substitute exist, where the auction was held on several dates, but there were no bidders or the bids offered were too low etc.

RVNL awarded the contract for accounting services on nomination basis to the Firm year after year in contravention of CVC Guidelines. The records of RVNL were examined to see whether such appointment was as per the rules framed by them. However, it was seen that RVNL did not have a Procurement Manual which laid down rules and procedures for procurement of goods and services.

The matter was referred to RVNL (June 2016). RVNL stated (September 2016) that the services of the firm had been retained on year to year basis to ensure continuity and smooth flow of work as the agency was well acquainted with systems and procedures and the accounting requirements of RVNL. The process of change over from one firm to another, for a sensitive matter such as maintenance of accounts, might prove not only difficult, but also disruptive. CVC/MoR's instructions in respect of appointing an agency on nomination basis were being followed and approval of Board of Directors for continuing the firm for maintenance of accounts up to 31 October 2017 had also been obtained. However, the fact remains that re-engagement of the same firm on nomination basis without inviting open tender year after year with no justification of 'inevitable' situation was in violation of the CVC guidelines.

Thus, selection of firm for 'Maintenance of Accounts of RVNL' on nomination basis in respect of RVNL and its subsidiary without following the guidelines of Central Vigilance Commission led to irregular expenditure of ₹ 5.07 crore during October 2005 to October 2016.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

6.3 Indian Railways Catering and Tourism Corporation limited (IRCTC): Continuing payment of rent on office accommodation due to delay in construction of own office building

Due to delay on part of the IRCTC in getting approval of Building Plan from Haryana Urban Development Authority (HUDA), award of work for construction and issue of drawings to the contractor, the work of construction of the Corporate Office building got delayed. The purpose of having their own office building was yet to be achieved and IRCTC continued to pay a rent of ₹5.10 crore per annum for various leased accommodation in Delhi.

Indian Railway Catering and Tourism Corporation Limited was running its Corporate Office from the leased premises scattered at various places in Delhi Area. As this was causing severe operational difficulties, IRCTC urgently needed a plot of land in NCR area for construction of required infrastructure so that complete synergy between IRCTC and Railways could be maintained. IRCTC approached (December 2007) HUDA for allotment of land for Corporate Office building. HUDA allotted (April 2010) land measuring 1994 sqm to them at Gurgaon at a total cost of ₹ 4.13 crore, possession of which was given to the IRCTC in May 2011 after making payment.

IRCTC submitted the building plans (August 2012) for approval of the competent authority as envisaged in the Clause 16 of the Terms and Conditions of Allotment of land. Audit observed that IRCTC furnished incomplete and unsigned plans to HUDA, which was returned by them for completing necessary formalities. After completion of formalities by IRCTC, the plan was approved by HUDA in July 2013. While submitting the project report to the Board of Directors (March 2012) the tentative date for completion was expected as November 2014. However, the contract for construction of building at a cost of ₹ 19.91 crore was awarded to the contractor, only in September 2014 (14 months after the approval of plans by HUDA). The project was scheduled to be completed within 18 months from the date of start of construction[242].

Owing to a number of delays in issue of various drawings and changes in drawings due to changed requirements, the contractor sought extension (February 2016[243]) of 275 days. The contractor was granted extension up to 31 January 2017 without penalty in November 2016. Only 50 *per cent* physical progress has been achieved till date, in a period of 25 months from the date of start of construction.

In another case, IRCTC was allotted a plot measuring 1850 sqm by HUDA in March 2010 for construction of R & D Centre, allied offices, Quality Control Centre with Laboratory at a cost of ₹ 1.55 crore[244]. The construction work was proposed to commence in 2012-13. IRCTC delayed registration of conveyance deed despite imposition of penalty by HUDA, which was finally registered in December 2015. However, the construction plan for the building were not submitted for which HUDA issued a show cause notice in October 2016. IRCTC's request for grant of extension of time up to December 2018 was pending with HUDA (October 2016).

The matter regarding delay in construction of building of Corporate Office was taken up with IRCTC Management in March 2016. In reply, the management stated that (May 2016) necessary efforts were made by them at every stage for expediting the work for setting up of the Corporate Office building at Gurgaon. The management further stated that as far as expenditure on rent paid/being paid for the accommodation at New Delhi is concerned the same cannot be termed as avoidable as the construction of building required definite time period.

Hence, due to extra time taken by IRCTC in various activities such as approval of Building Plan from HUDA, award of work for construction of building and delays in issue of drawings to the contractor the work of construction of the Corporate Office building got delayed. By failing to complete the construction within two years of offer of possession from HUDA, they had to pay ₹ 0.80 lakh to HUDA to get extension of time for completion of construction. The purpose of having

[242] 9 October 2014
[243] The contractor further sent letter /reminders for extension in May 2016 and September 2016
[244] Original cost of the plot was ₹1.66 crore. Due to encroachment HUDA allotted another plot to the IRCTC at a cost of ₹ 1.55 crore

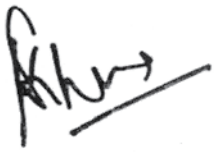
their own office building was yet to be achieved and IRCTC continued to pay a rent of ₹ 5.1 crore per annum for various leased accommodation in Delhi. Also, the work of R & D Centre, allied offices, Quality Control Centre with Laboratory which was targeted for completion in June 2014, was yet to start.

The matter was referred to Railway Board in December 2016; their reply has not been received (February 2017).

New Delhi
Dated: 31 March 2017

(Nand Kishore)
Deputy Comptroller and Auditor General

Countersigned



New Delhi
Dated: 3 April 2017

(Shashi Kant Sharma)
Comptroller and Auditor General of India

Annexure 2.1

Para 2.1.1

Sample selection of consolidated report on Theme Based Audit on "Parcel Business in Indian Railways"

Zonal Railway	*Parcel depots where separate Parcel Balance sheet is prepared*	*Outward Parcel way bills of selected Parcel Depots for 10th April, 20th July, 1st October and 30th January for each year of the review period*	*Selected Divisions*	*Tenders floated*	*Lease contracts awarded for operation of Parcel Special Trains / VPs/VPUs/VPHXs/ AGCs/SLRs etc.*	*Indents placed and cancellation of indents for reasons attributable to Railway and Party*	*Indents for Mango/ Orange /Banana traffic*	*Regular Mail/ Express/Ordinary Passenger trains due for classification by 20th May every year*	*Newly introduced Mail/Express/Ordinary Passenger trains/Holiday Special/Summer special /pooja special/Xmas special trains*	*Parcels over carried*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
CR	CSTM, Lokmanya Tilak Terminus, Pune, Nasik Road, Bhusawal, Kalyan, Devlali, Dadar, Sainagar Shirdi and Panvel	Same as in column 2	Mumbai, Pune	Special Trains and VP/VPU:- Headquarters (5+3). AGC/SLR:- Mumbai and Pune division(12)	A) Parcel Special Trains: Jalgaon and Kalyan stations B) VP/VPUs: 2013-14 : 15645/46, 12129 2014-15:- 22845 C) 2013-14- 12115, 15645, 12129 2014-15: 11027, 6345, 11077 2015-16:-12859, 11055, 11077	A) Parcel Special train:- Kalyan and Jalgaon for October 2013, September 2014 and August 2015 B) VPU/VPs:- Lokmanya Tilak and Wadi Bunder for September 2013, May 2014 and August 2015	Savda, Nimbhora, Raver stations	2013-14: 12137, 12151, Pune-11037 and 12221 2014-15:- 11093, 16339, 16351 and 12025 2015-16:- 11057, 11065, 12025 and 12129	2013-14:- 11021, 01019, 11305 and 01011 2014-15:- 01027, 01013, 02511 and 05024 2015-16:- 02065, 01001, 01301 and 01419	Lokmanya Tilak Terminal and Chhatrapati Shivaji Terminal
ER	Howrah, Sealdah Malda Kolkata, Bardhaman & Bhagalpur Asansol & Srirampur, Sheoraphuli & Chandannagar	Same as in column 2	Sealdah, Howrah	Howrah and Sealdah Division. VP-3, AGC/SLR-5)	A) Parcel Special Trains: NIL B) VP/VPUs: 2013-14 NIL 2014-15: 13049 / 50, 13105/06 2015-16: 13049 / 50 , 13105/06 C) AGC/SLR: 2013-14: 12333,15657,12363 2014-15: 12333,15657,15047 2015-16: 12333,13185,13131	Records of Howrah & Sealdah Parcel Depots for the month of June each year.100 % of indents cancelled in Howrah & Sealdah parcel Depots.	Nil	Howrah- 2013-14-13027, 2014-15- 12019, 2015-16- 13043, Sealdah- 2013-14-13133, 2014-15-13153, 2015-16-53135	Howrah -2013-14-15711, 2014-15-13063, 2015-16-03043 Sealdah-2013-14-03139, 2014-15-13119, 2015-16-02265	Howrah and Sealdah
ECR	Muktapur, Patna, Rajendra Nagar Terminal, Danapur, Darbhanga, Samastipur, Muzzafarpur, Barauni, Hajipur, Kaghariya	Same as in column 2	Danapur, Samastipur	Danapur and Samastipur Division AGC/SLR-7	Danapur Division & Sonepur Division	Muktapur Patna. Indents to be checked for the month of June 2013, June 2014 & June 2015.	NIL	12521/12522 (3436 Km) 16359/16360 (2987 Km)	2013-14 22351/22352 (2712 Km) 13043/13044 (703 Km) 2014-15 19421/19422 (1682 Km) 15559/15560 (2019 Km) 2015-16 19063/19064 (1593 Km) 14259/14260 (319 Km)	Muzaffarpur Patna

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Zonal Railway	*Parcel depots where separate Parcel Balance sheet is prepared*	*Outward Parcel way bills of selected Parcel Depots for 10th April, 20th July, 1st October and 30th January for each year of the review period*	*Selected Divisions*	*Tenders floated*	*Lease contracts awarded for operation of Parcel Special Trains / VPs/VPUs/VPHXs/ AGCs/SLRs etc.*	*Indents placed and cancellation of indents for reasons attributable to Railway and Party*	*Indents for Mango/ Orange /Banana traffic*	*Regular Mail/ Express/Ordinary Passenger trains due for classification by 20th May every year*	*Newly introduced Mail/Express/Ordinary Passenger trains/Holiday Special/Summer special /pooja special/Xmas special trains*	*Parcels over carried*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
ECoR	Vizianagaram, Bhubaneswar, Visakhapatnam, Kurdha Road, PURI, Brahmapur, Palasa, Sambalpur, Rayagada, Titilagarh	Same as in column 2	Waltair, Khurda Road	Waltair, Khurda Road-VPs-4, AGC/SLR-11	A) Special Trains/Parcel Cargo Trains: Nil B) VP: 12888-Leased from PURI, 12146 C) 2013-14 : 58504,12801, 18463 2014-15: 18507, 12896, 12074 2015-16: 12727,15639 ,12281	Bhubaneswar Visakhapatnam	Vizianagaram	Vizianagaram	2013-14 Waltair-18501 Khurda Road-18421 2014-15 Waltair-22801 Khurda Road-19454 2015-16 Waltair-22415 Khurda Road-02882	Visakhapatnam Puri
NR	New Delhi, H.Nizamuddin, Delhi, Ferozepur Cantt., Jalandhar City, Varanasi, Lucknow, Jalandhar Cantt., Tuglakabad and Pathankot	Same as in column 2	Firozpur Cant , Delhi	Moradabad and Ferozepur Division, AGC/SLR-32	A) Only Delhi Division is having lease contracts during the review period. In other Divisions no such lease contracts awarded during review period. B) No such lease contracts was awarded in Northern Railway during review period. C) Delhi and Ferozepur Division	New Delhi, Delhi	NIL	For the year 2013-14 to 2015-16 Train No. 12626 Train No. 14260 Downgraded Trains Train No. 12065 for the year 2014-15. Train No. 12429 for the year 2015-16.	For the year 2013-14: Train No. 22634, Train No. 22684, For the year 2014-15 Train No. 22680 Train No. 16230 For the year 2015-16 Train No. 15656 Train No. 06688	1) New Delhi 2) H. Nizamuddin

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Sample selection of consolidated report on Theme Based Audit on "Parcel Business in Indian Railways"

Zonal Railway	*Parcel depots where separate Parcel Balance sheet is prepared*	*Outward Parcel way bills of selected Parcel Depots for 10th April, 20th July, 1st October and 30th January for each year of the review period*	*Selected Divisions*	*Tenders floated*	*Lease contracts awarded for operation of Parcel Special Trains / VPs/VPUs/VPHXs/ AGCs/SLRs etc.*	*Indents placed and cancellation of indents for reasons attributable to Railway and Party*	*Indents for Mango/ Orange /Banana traffic*	*Regular Mail/ Express/Ordinary Passenger trains due for classification by 20th May every year*	*Newly introduced Mail/Express/Ordinary Passenger trains/Holiday Special/Summer special /pooja special/Xmas special trains*	*Parcels over carried*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
NCR	Agra Fort, Kanpur central, Agra Cantt., Allahabad, Gwalior, Aligarh Junction, Jhansi, Mathura Junction, Shikohabad, Dholpur	Same as in column 2	Jhansi, Allahabad	Allahabad and Jhansi VPS-2, AGC/SLR-8	A) NIL B) For the year 2013-14 one train number 12176 C) Selected Trains 13-14 = 1. Train No. 12417 2. Train No. 12451 3. Train No. 12162 14-15 = 1. Train No. 12417 2. Train No. 13168 3. Train No. 12451 15-16 = 1. Train No. 12178 2.Train No. 13238 3. Train No. 13240	Selection for this item Kanpur Central – 13-14 = September /2013, 14-15 = May /2014 15-16 = June / 2015 Agra Fort – 13-14 = October /2013, 14-15 = September / 2014 15-16 = March / 2016	NIL	Selection Allahabad 13-14 = 1. Train No. 11070 2. Train No. 12469 14-15 = 1. Train No. 12294 2.Train No. 18204 15-16 = 1. Train No. 14113 2. Train No. 14153 Agra Cantt. 13-14 = 1. Train No. 12178 2.Train No. 12162 14-15 = 1. Train No. 12320, 2. Train No. 15108	Selection 13-14 Allahabad 1. Train No. 04114 2. Train No. 04153 Jhansi 1. Train No. 11101 2. Train No. 51817 14-15 Allahabad 1.Train No. 22443 2. Train No. 04132 1. Train No. 01187 2. Train No. 04182 2015-16 Allahabad 1. Train No. 14155 2. Train No.04115 3. Train No. 04117 4. Train No. 04118	Kanpur Central and Agra Cantt. Station
NER	Lucknow Junction, Gorakhpur, Allahabad City, Ballia, Chhapra, Kathgodam, Kashipur, Ramnagar, Faridabad, Gonda	Same as in column 2	Lucknow, Varanasi	Lucknow Junction & Varanasi VPs-1, AGC/SLR-6	19038 12533 12581	Lucknow Junction, Gorakhpur 2013-14-July'13 2014-15-july'14 2015-16-january'16	NIL	13020 15205	2013-14 15115 15025 2014-15 15043 15031 2015-16 12583 11080	Lucknow Junction, Gorakhpur

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1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
NFR	Guwahati (New Guwahati), Dimapur, New Jalpaiguri, Alipurduar Jn., Lumding, Nowgaon, Katihar , New Tinsukia, New Alipurduar and New Coochbehar	Same as in column 2	Katihar , Lumding	1. Lumding 2. Katihar VPs-4, AGC/SLR-4	A)In NFR, 1 Spl Train run from New Guwahati to Patel Nagar during 2013-14. Hence selected. B)2013-14 = 15658 2014-15 = 15909 2015-16 = 15658 C) 2013-14 = 12378 2014-15 = 15658 2015-16 = 12505	A) 1. Guwahati 2. New Jalpaiguri B) Five Divisions viz. 1. Lumding 2. Katihar 3. Alipurduar Jn. 4. Rangiya 5. Tinsukia And selected locations at Sl. No.2 i.e. 10 stations.		During 2013-14 to 2015-16, Regular Mail/ Express/Ordinary Passenger trains have been classified in time. However 6 nos. of trains were selected from review, the details of which, if discrepancies found, will be given in annexure.	2013-14-05640/05639, 05903/05904 2014-15- 02502/02501 13281/13282 2015-16-22411/22412 12528/ 12527	Dibrugarh & New Jalpaiguri
NWR	JAIPUR, AJMER JODHPUR, LALGARH BHIWANI, BIKANER BHAGAT KI KOTHI, ALWAR BHILWARA, FALNA	Same as in column 2	Ajmer, Jaipur	JAIPUR, AJMER VPs-4 AGC/SLR-12	A) NIL B) 2013-14 12976 14724 2014-15 12968 2015-16 NIL C)2013-14 12978,12964,22475 2014-15 12988,12489,12495, 2015-16 19660,14707,12486	A) JAIPUR AND JODHPUR MONTH FEBRUARY EACH YEAR B) JAIPUR	NIL	2013-14 12978,12495 2014-15 12978,22475 2015-16 22632,18010	2013-14 18482,22632 2014-15 16588,16863 2015-16 15623,18246	JAIPUR, AJMER
SR	Chennai Central, Chennai Egmore, Tiruvandrum Central, Alwaye, Madurai, Kanniyakumari, Alleppey, Pondicherry, jalakuda and Mettypalayam	Same as in column 2	Thiruvananthapuram , Chennai Central	Chennai and Tiruvanantha puram Divisions Spl. TRAIN -1 VPs-5 AGC/SLR-9	Chennai and Tiruvananthapuram Divisions.	Chennai Central and Chennai Egmore stations (Month of June for each year)	NIL	⍰ Train No.17643 and 16731 for 2013-14. ⍰ Train No.12661 and 22403 for 2014-15. ⍰ Train No.12605 and 12672 for 2015-16.	⍰ Train No.22651 and 16183 for 2013-14. ⍰ Train No.22801 and 22654 for 2014-15. ⍰ Train No.22864 for 2015-16 as only one train was introduced.	Chennai Egmore and Trivandrum central.

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Sample selection of consolidated report on Theme Based Audit on "Parcel Business in Indian Railways"

Zonal Railway	*Parcel depots where separate Parcel Balance sheet is prepared*	*Outward Parcel way bills of selected Parcel Depots for 10th April, 20th July, 1st October and 30th January for each year of the review period*	*Selected Divisions*	*Tenders floated*	*Lease contracts awarded for operation of Parcel Special Trains / VPs/VPUs/VPHXs/ AGCs/SLRs etc.*	*Indents placed and cancellation of indents for reasons attributable to Railway and Party*	*Indents for Mango/ Orange /Banana traffic*	*Regular Mail/ Express/Ordinary Passenger trains due for classification by 20th May every year*	*Newly introduced Mail/Express/Ordinary Passenger trains/Holiday Special/Summer special /pooja special/Xmas special trains*	*Parcels over carried*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
SCR	Secunderabad, Hyderabad, Guntakal, Vijayawada, Guntur, Kachedguda, Nanded, Tirupati, Cuddapah and Eluru	Same as in column 2	Secunderabad, Vijayawada	Secunderabad (for Spl Train) Secunderabad & Nanded (for VP) Secunderabad and Vijayawada (AGC/SLR) SPL TRAIN -5 VPs-15, AGC/SLR-27	A) NIL B) Secunderabad and Guntakal Divisions are selected. C)Secunderabad Division and Vijayawada Division are selected.	Secunderabad and Vijayawada Stations with maximum indents are selected. Secunderabad Station – Indents for the Months of October 2013, April 2014 & June 2015; and Vijayawada Division – April of 2013, 2014 & 2015 are selected.	Mangoes: 2013-14 – 24 indents 2014-15 - 21 indents 2015-16 - 25 indents There is only one Station (Nuzvid) & the same is selected	I Secunderabad Divn: 2013-14: 1) 17007 (delay in notification) 2) 57156 2014-15: 1) 12604 (delay in notification) 2) 12714 2015-16 1) 17429 2) 11303 II Vijayawada Divn 2013-14 1) 17402 2) 17404- (delay in notification) 2014-15: 1) 17255 2) 17210 2015-16: 1) 17225	Secunderabad Division: 2013-14 07119 from 19.5.13 07145 from 10/2013 2014-15 12784 from 24.1.15 11075 from 18.2.15 2015-16 02764 from 10/2015 07109 from 12/2015 Vijayawada Division: 2013-14 07049 07207 2014-15 07102 07210 2015-16 07201 07262	Secunderabad Station (77 Trains) Tirupati Station (64 Trains) are selected.
SER	Howrah, Shalimar, Kharagpur, Abada, Mecheda, Tata, Hatia, Santragachi, Visnupur and Birbhum	Same as in column 2	Kharagpur, Ranchi	Kharagpur & Ranchi divisions. VPs-7, AGC/SLR-14	A) Kharagpur & Ranchi divisions B) VP booked only from Shalimar 2013-14- 19659/60, 2014-15-12834/33, 2015-16- 12870/69, C) One train each from Howrah, Shalimar & Santragachhi for the period under review 2013-14-12130, 22835, 12950, 2014-15-12841, 18030, 12883, 2015-16-18005, 19659, 22855.	Shalimar & Ranchi	Shalimar & Ranchi	2013- 14 12571 & 12867 2014- 15 12950, 18617, 12439 & 12835 2015- 16 12773, 12277, 12950 & 15661	2013- 14 22830, 22807, 18637 & 22891/2 2014- 15 22857, 22813, 18629 & 08637 2015- 16 22863, 02841, 08677	Howrah (46 Trains) and Ranchi (17 Trains)

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Zonal Railway	*Parcel depots where separate Parcel Balance sheet is prepared*	*Outward Parcel way bills of selected Parcel Depots for 10th April, 20th July, 1st October and 30th January for each year of the review period*	*Selected Divisions*	*Tenders floated*	*Lease contracts awarded for operation of Parcel Special Trains / VPs/VPUs/VPHXs/ AGCs/SLRs etc.*	*Indents placed and cancellation of indents for reasons attributable to Railway and Party*	*Indents for Mango/ Orange /Banana traffic*	*Regular Mail/ Express/Ordinary Passenger trains due for classification by 20th May every year*	*Newly introduced Mail/Express/Ordinary Passenger trains/Holiday Special/Summer special /pooja special/Xmas special trains*	*Parcels over carried*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
SECR	Itwari, Bilaspur, Raipur, Gondia, Korba, Champa,	Same as in column 2	Nagpur , Raipur	ALL VPs-2, AGC/SLR-9	A) ALL B)Train No. 12129/30 C) Durg (12853), Gondia (12106) & Gevra Road (18239)	Bilaspur & Itwari	NIL	Raipur - 13287 (Durg) & 58527 (R) Nagpur - 18249 & 11040 (G) Downgraded trains - 58219, 11040 (G), 12787, 16327, 58839, 58868, 58870 & 58840	Raipur - 18215 (Durg) & 18211 (Durg) Nagpur - 78821 (G) & 58877	Bilaspur & Durg
SWR	KSR Bengaluru, Yeshwanthpur, Hosur, Satellite Goods Terminal, Hubballi, Mysuru, Vasco-da-Gama, Ballari, Arsikere and Shivamogga Town	Same as in column 2	Bangalore City , Hubli	Bengaluru & Hubli VPs-3, AGC/SLR-8	A) 100% of selected Divisions, viz., Bengaluru & Hubli B)On Bengaluru Division, VPs were booked during the review period. 2013-14: Nil, 2014:15: Nos. 12627 & 12864, 2015-16: Nos. 12627 & 12864 C) 2013-14: Nos. 12286, 12864 & 12779; 2014-15: Nos. 16526, 16517 & 12779; 2015-16: Nos. 12295, 12864, 12905 & 22134.	Indents of Bengaluru: April 2013, April 2014 & April 2015; VSG: Sept. 2013, Sept. 2014 & April 2015	NIL	PWBs of 10 days from 1st June for each year. Samples selected were as under: 2013-14: Train No. 12246, 12295, 12779 & 17302 2014-15: Train No. 12864, 16526, 18048 & 56912 2015-16: Train No. 12649, 12741, 18464 & 56502	PWBs of first 10 days from date of introduction. Samples selected was as under: 2013-14: Train No. 16565/66, 17317/18, 16571/72 & 17319/20 2014-15: Train No. 22695/96, 22679/80, 17321/22 & 56921/22 2015-16: NIL	Bengaluru & Yashwantpur
WR	Ahmedabad, Vapi, Mumbai Central, Bandra Terminus, Surat, Vadodara, Valsad, Nagda, Dadar and Godhra	Same as in column 2	Ahmedabad, Mumbai Central	Mumbai Central & Ratlam Divisions for Parcel Special Trains(3)/ VPs/VPUs/VPHXs(9)/ and Mumbai Central & Ahmedabad Divisions for SLRs/AGCs-29	A)No Parcel Special Trains/Parcel Cargo Trains leased in Western Railway B) Lease contracts awarded in respect of Train No. 12903, 12919 during review period. C) Lease contracts awarded in respect of Train No. 12901, 12655 Navjeevan Express), 19309 during review period.	Vapi & Palanpur parcel Depot. (Month-April 2013, October 2014, January 2016)	NIL	For the Year 2013 Tr. No. 19568 Okha-Tuticorin(2735 kms) of and Tr. No. 19262 (2720 kms) of For the Year 2014 Tr. No. 12949 (2657 kms) and Tr. No. 19413 (2608 kms) For the Year 2015 Tr. No. 13426 (2123 kms) and Tr. No. 11049 (961 kms)	For the Year 2013-14 Tr. No. 22829 (2434 kms) and Tr. No. 09021 (1950 kms) For the Year 2014-15 Tr. No. 09021 (1950 kms) and Tr. No. 09309 (1736 kms) For the Year 2015-16 Tr. No. 09310 (2290 kms) and Tr. No. 09015 (1960 kms)	Bandra Terminus & Ahmedabad Station

Annexure 2.1

Para 2.1.1

Sample selection of consolidated report on Theme Based Audit on "Parcel Business in Indian Railways"

Zonal Railway	*Parcel depots where separate Parcel Balance sheet is prepared*	*Outward Parcel way bills of selected Parcel Depots for 10th April, 20th July, 1st October and 30th January for each year of the review period*	*Selected Divisions*	*Tenders floated*	*Lease contracts awarded for operation of Parcel Special Trains / VPs/VPUs/VPHXs/ AGCs/SLRs etc.*	*Indents placed and cancellation of indents for reasons attributable to Railway and Party*	*Indents for Mango/ Orange /Banana traffic*	*Regular Mail/ Express/Ordinary Passenger trains due for classification by 20th May every year*	*Newly introduced Mail/Express/Ordinary Passenger trains/Holiday Special/Summer special /pooja special/Xmas special trains*	*Parcels over carried*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*1-*	*11*
WCR	Habibganj, Itarsi, Jabalpur, Bhopal, Kota, Shamgarh, Katni, Bina, Satna and Rewa	Same as in column 2	Jabalpur , Kota	Jabalpur , Kota VPs-6, AGC/SLR-12	A)NIL B) Jabalpur, Kota	Jabalpur & Shamgarh	NIL	Upgraded Trains- 2013-14:- 51614, 2014-15 -11447, 12186, 2015-16 -12192, 58223 2013-14 59390, 59394 2014-15 - 12154, 51673 2015-16 -51811, 51883 Downgraded Trains 2013-14: 11447, 11449, 51701, 51751, 12192, 51117 & 12181, 12155	2013-14 (KOTA)-09807 & 9809 01711, 01701 2014-15 : 09807 & 09809, 22938 & 01656 2015-16 -KOTA -09807, 09812, 01656, 02188	Jabalpur, Kota
				Parcel Spl. Train -14, VPs-69, AGC/SLR-203			**7**	**128**		**32**

Annexure 2.2 a			
Para 2.1.4.1			
Status of Implementation of PMS Phase I and Phase II			
Zone	***locatons where PMS implemented fully***	***locatons where PMS implemented Partially***	***locatons where PMS is yet to be implemented***
PHASE I			
CR	Mumbai CST	Dadar, Kalyan, Nasik Road, Manmad, Bhusawal, Akola, Nagpur, Ballarshah	-----
ER	Howrah	-----	-----
ECR	Patna, Danapur, Mugalsarai	-----	-----
ECOR	Bhubaneswar, Khurdaroad, Puri, Cuttack, Behrampur, Palasa, Jhajpur Keonjhar Road, Bhadrak (BHC), Vishakhapattanam, Vizianagaram	-----	-----
NR	Nizamuddin, Delhi, New Delhi		-----
NCR	-----	Mathura, Agra, Gwalior, Jhansi	-----
SR	-----	Chennai Central	-----
SCR	-----	Kazipeth, Vijayawada, Tenali, Gudur, Secunderabad, Hyderabad, Renigunta, Guntur, Warangal, Kachiguda, Samalkot, Rajahmundry, Tirupati, Kakinada Port, Gudivada, Elluru, Nanded, Aurangabad	-----
SER	Tatanagar, Chakradharpur, Rourkela, Jharsaguda, Kharagpur, Balasore, Panskura, Mechada	-----	-----
SECR	-----	Gondia, Rannandagaon, Itwari, Raipur, Durg, Bilaspur, Raigarh	-----
WR	-----	Surat, Nagda, Ratlam, Vadodra, Valsad, Vapi, Borivali, Dadar, Bandra Ternimus, Mumbai Central.	-----
WCR	Kota, Sawai madhopur, Bharatpur, Bhopal, Bina, Itarsi	-----	-----

Annexure 2.2 a			
Para 2.1.4.1			
Status of Implementation of PMS Phase I and Phase II			
Zone	***locatons where PMS implemented fully***	***locatons where PMS implemented Partially***	***locatons where PMS is yet to be implemented***
PHASE II			
CR	-----	-----	Lokamanya Tilak Terminus, Khandwa, Pune, Solapur
ER	-----	-----	Asansol , Durgapur, Bardhaman
ECR	-----	-----	Gomoh, Dharbhanga, Dhanbad, Kodarma, Rajendernagar, Samastipur, Muzaffarpur, Hajipur, Barauni
ECOR			No station selected
NR	-----	-----	56 stations
NCR	-----	-----	Aligarh, Tundla, Firozabad, Etawah
NER	-----	-----	lucknow Jn., Chapra
NFR	-----	-----	Katihar, Kishanganj, New Jalpaiguri, New Cooch Behar, Dhupguri, Kokrajhar, New Alipurdaur, New Bongaigaon, Guwahati, Lumding, Dhipu, Dimapur, Dibrugarh Town, New Tinsukia, Mariani Jn.
NWR	-----	-----	Rewari, Alwar, Jaipur, Ajmer, Abu Road, Bhilwara, Udaipur City, Bikaner, Jodhpur, Pali Marwar, Nagaur, Barmer, Jaisalmer, Sikar
SR	-----	-----	Chennai Egmore, Katpadi, Salem, Erode,-Coimbatore, Palghat, Trichur, Alwaye, Ernakulam, Kottayam, Thiruvananthapuram Central, Nagarcoil, Kannyakumari, Villupuram, Pondicherry, Tiruchchirappalli, Dindigul, Madurai, Virudunagar, Tirunevelli
SCR	-----	-----	Raichur, Guntakal, Ananthpur
SER			No station selected
SECR			No station selected
SWR	-----	-----	Bangalore City, Yaswantpur, SSSP Nilayam, Hindupur
WR	-----	-----	Ahmedabad, Mehsana, Palanpur, Rajkot
WCR	-----	-----	Rewa, Satna, Katni, Jabalpur, Pipariya
Total	**32**	**48**	**143**

Annexure 2.2 b						
Para 2.1.4.1						
Statement showing number of stations selected and delay in implementation of PMS Phase I and Phase II						
Zonal Railways	*No of stations*		*Delay(in days)*		*Physical progress(in percentage)*	
	Phase I	*Phase II*	*Phase I*	*Phase II*	*Phase I*	*Phase II*
CR	9	4	46/72	72	100	Nil
ER	1	3	0	0	NR	No information
ECR	3	9	32	48	100	Nil
ECOR	10	0	60/62	0	100	No station
NR	3	56	0	0	47	Nil
NCR	4	4	0	0	No information	No information
NER	0	2	0	0	No station	Nil
NFR	0	15	0	77	No station	0 to 60%
NWR	0	14	0	3	No station	Nil
SR	1	20	66	68	100	Nil
SCR	18	3	0	0	100	Nil
SER	8	0	0	0	100	No station
SECR	7	0	0	0	100	No station
SWR	0	4	0	48	No station	Nil
WR	10	4	32	0	100	Nil
WCR	6	5	0	0	100	Nil
	80	**143**				

Annexure 2.3

Para 2.1.6.3 a

Statement showing details of inadequate response for leasing parcel space of SLRs during the period 2013-14 to 2015-16

Zonal Railway	Division	Year	Total no. of originating trains	No. of trains tendered for leasing SLRs	No. of trains not offered in the tender document for leasing of SLR	No. of trains leased out	No. of trains not leased out	No. of SLRs leased out	No. of SLRs not leased out and hauled empty	% offer ofSLR withtotal originating trains run (col7x100/col5)
CR	2	2013-14	252	248	4	13	235	23	497	98
CR		2014-15	264	249	15	33	216	44	521	94
CR		2015-16	417	402	15	41	361	54	876	96
ECR		2013-14	151	142	9	4	138	4	354	94
ECR		2014-15	151	27	24	3	24	3	300	18
ECR		2015-16	151	110	41	6	104	2	278	73
ECoR	1	2013-14	69	69	0	11	58	13	6	100
ECoR		2014-15	74	74	0	5	69	7	22	100
ECoR		2015-16	141	141	0	5	136	6	28	100
NR	2	2013-14	594	382	212	104	278	151	548	64
NR		2014-15	642	167	475	103	136	173	230	26
NR		2015-16	650	278	372	141	138	244	354	43
NCR	3	2013-14	111	86	0	14	72	26	185	77
NCR		2014-15	111	47		10	70	16	174	42
NCR		2015-16	112	53	NIL	12	74	17	180	47
NER	2	2013-14	198	159	95	11	148	14	420	80
NER		2014-15	227	208	161	2	206	3	361	92
NER		2015-16	249	290	208	5	285	8	788	116
NFR	2	2013-14	140	2	138	2	138	2	67	1
NFR		2014-15	140	42	98	0	140	0	46	30
NFR		2015-16	140	39	101	39	101	0	77	28
NWR	2	2013-14	141	100	41	28	72	37	196	71
NWR		2014-15	318	316	2	26	185	35	489	99
NWR		2015-16	183	183	0	15	133	16	341	100
SR	2	2013-14	269	232	37	16	216	24	575	86
SR		2014-15	286	73	213	14	59	18	150	26
SR		2015-16	276	240	36	26	214	37	582	87
SCR	2	2013-14	127	0	0	41	86	55	0	
SCR		2014-15	129	0	0	13	116	16	0	
SCR		2015-16	115	0	0	18	97	23	0	
SER	2	2013-14	93	93	0	13	84	15	191	100
SER		2014-15	150	149	1	25	134	34	309	99
SER		2015-16	155	155	0	22	138	28	318	100
SECR	2	2013-14		40	0	8	21	18	76	
SECR		2014-15		58	0	8	30	13	113	
SECR		2015-16		17		2	15	2	29	
SWR	2	2013-14	278	202	76	42	160	47	471	73
SWR		2014-15	128	107	21	19	88	27	247	84
SWR		2015-16	128	276	0	20	256	43	233	216
WR	2	2013-14	337	337	0	80	236	92	548	100
WR		2014-15	290	290	0	36	254	46	490	100
WR		2015-16	401	401	0	39	362	42	784	100
WCR	2	2013-14		60	13	17	43	17	43	
WCR		2014-15	149	48	54	11	37	13	37	32
WCR		2015-16	150	91	16	11	78	13	78	61

* *ER have Nil Position*

ECR (18 % for 2014-15), NR (26% to 43% during 2014-15 and 2015-16), NCR (42% to 47% during 2014-15 and 2015-16), NFR (1 % to 30 %), SR (25% 26% for 2014-15) and WCR (32% for 2014-15)

Annexure 2.4					
Para 2.1.6.4					
Statement showing delay in finalisation of tenders and award of the acceptance letter					
Zonal Railway	*Division*	*Number of Tender finalised with delay*	*Number of Trains (i.e FSLR I & II, RSLR I, AGC & VP) where delay occured*	*Range of excess time taken to finalise the tenders*	*Loss due to the delay in the process of the tender and award of the contract (₹)*
CR	Mumbai/Pune	5	5	4 to 48	3278313
ER	Howrah/Sealdah	6	112	5 to 167	100291991
ECR	DNR/SJP	4	12	2 to 148	3868460
ECOR	Waltair/Khurda Road	3	22	5 to 55	4835586
NR	Moradabad/Ferozpur	8	169	1 to 240	151096995
NCR	Jhansi/Allahabad/Agra	7	29	3 to 37	2466943
NER	Varanasi/Lucknow	9	29	2 to 58	7126560
NFR	Katihar/Lumding	3	6	8 to 124	9127292
NWR	Jaipur/Ajmer	10	64	1 to 73	21516009
SR	Thiruvananthapuram/ Chennai	12	74	7 to 102	197747581
SCR	Secunderabad/Vijayawada /Guntakal	14	74	1 to 74	34067636
SER	Kharagpur/Ranchi	14	95	3 to 222	152016561
SECR	Raipur/Nagpur	6	22	8 to 88	12300000
SWR	Kasturi/ Bengaluru	2	2	28 to 35	3435445
WR	Mumbai Central/ Ahemadabad	22	62	1 to 90	86230529
WCR	Kota/Jabalpur	6	18	1 to 82	16073580
		131	**795**		**805479481**

Annexure 2.5

Para 2.1.6.5

Statement showing potential loss of parcel earning due to non awarding of tender for want of NOC from other zonal Railways

Zonal Railways	Division	Train No.	Station From	Station to	Distance (km)	Scale	Weekly(W)/ Daily(D)	No. of days Train run in a week	No. of VPs per train	Lease Rate of existing contract (Rs.)	Date of expiry/ termination of existing contract	Date on which 'NOC' was asked for	Date of receipt of operational clearnce from destinatjion Railways	Parcel not loaded(no of days) excluding the month of expiry / termination (Col no. 14-13)*	Name of destination Railway from which Operational clearance (NOC) was not received	Loss of parcel earning (Rs.) due to delay in receipt of operationaal celearnce from the zonal Railway (col. No.11X12X15/2) **	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CR	Mumbai	22893/ 22894	Sainagar Shirdi	Howrah	1797	R	W	1	1	N/A	N/A	N/A	NIL	256	CR	27230208	32 months
		12322/ 12321	Chhatrapati Shivaji	Howrah	2161	R	D	7	1	N/A	N/A	N/A	NIL		ER	48500000	For the period of Jan 2013 to Sept 2013
		15645/ 46	Lokmanya Tilak	Guwahati	2573	R	W	2	1	N/A	N/A	N/A	NIL		NFR		
		18029/ 30	Lokmanya Tilak	Shalimar	1947	R	D	7	1	N/A	N/A	N/A	NIL		SER		
		18610/ 09	Lokmanya Tilak	Ranchi	2011	R	W	1	1	N/A	N/A	N/A	NIL		SER		
		12145/ 46	Lokmanya Tilak	Puri	1880	R	W	1	1	N/A	N/A	N/A	NIL		ECR		
ER	Howrah	13007/ 08	Howrah	Sriganganagar	1978	R	D	7	1	142944	(NWR)	10/10/2013	11/12/2013	33	NWR	2358576	Loading commenced from 04.06.14 after getting NOC.
		12938/ 37	Howrah	Gandhidham	2510	R	W	1	1	220702	4/11/2011	10/21/2013	12/11/2013	139	WR	15338789	
		12369/ 70	Howrah	Haridwar	1536	R	W	5	1	NO. (Reserve Price (RP) assessed by Audit: 205085)	New	6/9/2015	No Response	211	NR	21636468	Loss has been worked out up to 31/03/2016.
		13049	Howrah	Amritsar	1922	R	D	7	1	Addl. VP (RP assessed by Audit: 237119)	-	6/9/2015	No Response	296	NR	35093612	Loss has been worked out up to 31/03/2016.
		13043/ 44	Howrah	Raxaul	699	P	D	7	1	New. (RP assessed by Audit: 68734)	New	6/9/2015	No Response	296	ECR	10172632	Loss has been worked out up to 31/03/2016.
		12371/ 72	Howrah	Jaisalmer	2245	R	W	1	1	New. (RP assessed by Audit: 264722)	New	6/9/2015	No Response	42	NWR	5559162	Loss has been worked out up to 31/03/2016.
	Sealdah	12319/ 20	Kolkata	Agra Cantt.	1416	P	W	1	1	New. (RP assessed by Audit: 85577)	New	4/19/2013	12/7/2013	33	NCR	1412021	Loading commenced from 14.01.15 after getting NOC.

Annexure 2.5

Para 2.1.6.5

Statement showing potential loss of parcel earning due to non awarding of tender for want of NOC from other zonal Railways

Zonal Railways	Division	Train No.	Station From	Station to	Distance (km)	Scale	Weekly(W)/ Daily(D)	No. of days Train run in a week	No. of VPs per train	Lease Rate of existing contract (Rs.)	Date of expiry/ termination of existing contract	Date on which 'NOC' was asked for	Date of receipt of operational clearnce from destinatjion Railways	Parcel not loaded(no of days) excluding the month of expiry / termination (Col no. 14-13)*	Name of destination Railway from which Operational clearance (NOC) was not received	Loss of parcel earning (Rs.) due to delay in receipt of operationaal celearnce from the zonal Railway (col. No.11X12X15/2) **	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		12357/58	Kolkata	Amritsar	1812	R	W	2	1	New. (RP assessed by Audit: 152358)	New	4/19/2013	1/8/2014	75	NR	5713425	Loading commenced from 31.05.16 after getting NOC.
		12363/64	Kolkata	Haldibari	620	R	W	3	1	New. (RP assessed by Audit: 81296)	New	4/19/2013	11/7/2013	86	NFR	3495728	
		13155/56	Kolkata	Darbhanga	552	R	W	2	1	New. (RP assessed by Audit: 56603)	New	4/19/2013	3/26/2014	97	ECR	2745246	Loading commenced from 05.06.16 after getting NOC.
		13161/62	Kolkata	Balurghat	437	S	W	3	1	New. (RP assessed by Audit: 41927)	New	4/19/2013	11/7/2013	86	NFR	1802861	
		12379/80	Sealdah	Amritsar	1894	R	W	1	1	New. (RP assessed by Audit: 195750)	New	10/10/2013	4/24/2014	4	NR	391500	
		13185/86	Sealdah	Jaynagar	624	R	D	7	1	55690	10/21/2011	10/10/2013	11/12/2013	753	ECR	20967285	
		12329/30	Sealdah	Delhi	1448	R	W	1	1	143434	9/18/2013	6/9/2015	No Response	42	NR	3012114	Loss has been worked out up to 31/03/2016.
		12379	Sealdah	Amritsar	1894	R	W	1	1	New. (RP assessed by Audit: 234900)	New	6/9/2015	10/12/2015	125	NR	14681250	
		13119	Sealdah	Delhi	1640	P	W	2	1	New. (RP assessed by Audit: 142447)	New	6/9/2015	No Response	84	NR	5982774	Loss has been worked out up to 31/03/2016.
		13133/3	Sealdah	Varanasi	871	R	W	5	1	New. (RP assessed by Audit: 125646)	New	6/9/2015	No Response	211	NR	13255653	Loss has been worked out up to 31/03/2016.
		13167/68	Kolkata	Agra Cantt.	1461	R	W	1	1	New. (RP assessed by Audit: 198013)	New	6/9/2015	9/17/2015	2	NCR	198013	

Annexure 2.5

Para 2.1.6.5

Statement showing potential loss of parcel earning due to non awarding of tender for want of NOC from other zonal Railways

Zonal Railways	Division	Train No.	Station From	Station to	Distance (km)	Scale	Weekly(W)/ Daily(D)	No. of days Train run in a week	No. of VPs per train	Lease Rate of existing contract (Rs.)	Date of expiry/ termination of existing contract	Date on which 'NOC' was asked for	Date of receipt of operational clearnce from destinatjion Railways	Parcel not loaded(no of days) excluding the month of expiry / termination (Col no. 14-13)*	Name of destination Railway from which Operational clearance (NOC) was not received	Loss of parcel earning (Rs.) due to delay in receipt of operationaal celearnce from the zonal Railway (col. No.11X12X15/2) **	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Malda	12349/50	Bhagalpur	New Delhi	1219	R	W	1	1	New. (RP assessed by Audit: 168598)	New	6/9/2015	No Response	42	NR	3540558	Loss has been worked out up to 31/03/2016.
NER	Izatnagar	13020	Kathgodam	Howrah	1522	R	D	7	1	4805 Per Tonne	30.03.2015	NA	24.06.2015	86	HWH	9504290	
SECR	Raipur	12129/30	DURG	Shalimar	867	R	D	7	1	1st time contract	NA	NA	18.09.11	NA	CR	0	COM office of SECR takes more than one year to intimate commercial branch regarding NOC.
SECR		12251/52	DURG	Yashwantpur	1378	R	W	2	1		NA	NA	18.09.15	NA	SWR	0	In all 3 cases concerned railway takes 30 days to 62 days to give NOC.
SECR		15159/60	DURG	Chhapra	1083	R	D	7	1		NA	NA	14.10.15	NA	NER	0	
SECR		18215/16	DURG	Jammu Tavi	1936	R	W	1	1		NA	NA	18.09.15	NA	NR	0	
WR	Mumbai Central	12903/12904	Mumbai Central	Amritsar	1891	R	Daily	7	1	195750	24/06/2013	23/09/2013	26/11/2013	65	NR	6361875	excluding 90 days due to early termination of contract
WR		19019/19020	Bandra Terminus	Dehradun	1682	R	Daily	7	1	211140	17/11/2013	NA	22/11/2013	5	NR	527850	
															Total	**259481890**	

Annexure 2.6

Para 2.1.6.6

Statement showing financial impact due to cancellation of the indents by the party due to non supply of VP by Railway Administration

S.no	Zone	Year	2013-14		2014-15		2015-16		Total indents cancelled during 2013-14 to 2015-16 (col 4+6+8)	Potential loss of parcel freight during 2013-14 to 2015-16 (col 5+7+9)
			No. of indents cancelled	Potential loss of parcel freight	No. of indents cancelled	Potential loss of parcel freight	No. of indents cancelled	Potential loss of parcel freight		
1	2	3	4	5	6	7	8	9	10	11
1	CR		63	8577655	60	10511840	21	3557619	**144**	**22647114**
2	ER		0	0	402	0	0	0	**402**	**0**
3	ECR		0	0	0	0	0	0	**0**	**0**
4	ECOR		0	0	0	0	4	682690	**4**	**682690**
5	NR		153	8102920	227	11286499	322	17324126	**702**	**36713545**
6	NCR		3	486188	12	1344019	4	460719	**19**	**2290926**
7	NER		3	531039	0	0	3	597555	**6**	**1128594**
8	NFR		0	0	0	0	2	155084	**2**	**155084**
9	NWR		0	0	0	0	0	0	**0**	**0**
10	SR		1	131560	6	757344	44	5985290	**51**	**6874194**
11	SCR		11	2038285	5	784893	20	2732023	**36**	**5555201**
12	SER		3	330126	0	0	40	4140789	**43**	**4470915**
13	SECR		0	0	0	0	0	0	**0**	**0**
14	SWR		0	0	0	0	6	995404	**6**	**995404**
15	WR		5	413970	0	0	0	0	**5**	**413970**
16	WCR		0	0	0	0	1	62417	**1**	**62417**
	TOTAL		**242**	**20611743**	**712**	**24684595**	**467**	**36693716**	**1421**	**81990054**

Note 1: Position shown as 0 in col no 4,6.8 indicates that there is no cancellation of indent in zonal railway resultant in to no loss

Note 2: Calculation of potentiol loss (CR): Indent for one VPU (capacity 18 TON) placed at LTT for GHY distance 2593 KM cancelled. Potential loss

Annexure 2.7			
Para 2.1.7.1			
Statement showing details of weighment of Leased parcel traffic on daily basis			
Zonal Railways	***Whether weighment register maintained***	***Whether target of 20% weighment achieved (Yes/No)***	***Reasons for non weighment of parcel traffic***
CR	No	No	NAV
ER	Yes	No	NAV
ECR	Yes	Yes	NAV
ECOR	No	No	shortage of staff, non availability of separate weighing machine and lack of sufficient time for weighment
NR	Yes	No	shortage of staff, non availability of separate weighing machine and non working of In motion weighbridge at TKD.
NCR	No	No	NAV
NER	No	No	NAV
NFR	No	No	NAV
NWR	No	No	NAV
SR	No	No	NAV
SCR	Yes	No	NAV
SER	No	No	-Non-availability of Weighing Machine, Inadequate infrastructure, no order of competent authority for weighment of leased SLR.
SECR	Yes	No	NAV
SWR	No	No	NAV
WR	Yes	No	shortage of staff, non availability of separate weighing machine
16	WCR	No	No

Annexure 2.8					
Para 2.1.7.2 a					
Details of Enroute weighment of VPs during the review period					
Railway	*Number of VPs/VPHs booked during the review period*	*Number of VPs/VPHs where enroute weighment was not done during the review period*	*Number of VPs/VPHs where enroute weighment was done during the review period*	*Overloading detected*	*Loss of parcel freight ties if all leased Parcel Vans were checked for overloading(₹)*
CR	3294	3291	3	3	28492424
ER *	6869	6869	0	0	0
ECR	402	402	0	0	0
ECoR	162	162	0	0	0
NR	8116	2822	5294	414	667323
NCR	2937	2937	0	0	0
NER	235	235	0	0	0
NFR	1407	1407	0	0	0
NWR	1844	1825	19	0	0
SR	1841	1827	14	14	890653033
SCR	3975	185	3790	1	0
SER	11327	11327	0	0	0
SECR	NA	0	NA	NA	0
SWR	2258	2250	8	0	0
WR	454	454	0	0	0
WCR	729	729	0	0	0
	45850	**36722**	**9128**	**432**	**919812780**

* In ER all the VPs were weighed at the originating points.

Annexure 2.9					
Para 2.1.7.2 b					
Details of Enroute weighment of AGC/SLRs during the review period					
Zonal Railways	*Number of AGC/SLRs booked during the review period*	*Number of AGC/SLRs where enroute weighment was not done during the review period*	*Number of AGC/SLRs where enroute weighment was done during the review period*	*Overloading detected*	*Loss of parcel freight, if all leased AGC/SLRs were checked for overloading (₹)*
CR	97279	97205	74	73	3295920881
ER*	87652	87652	0	0	0
ECR	6511	0	6511	0	0
ECoR	1609	1603	6	6	8786198
NR	149535	130174	19361	0	0
NCR	12892	12814	78	0	0
NER	10579	10579	0	0	0
NFR	2764	2764	0	0	0
NWR	4688	4588	100	0	0
SR	39404	39337	67	67	1391879042
SCR	40410	27284	13126	0	0
SER	55807	55807	0	0	0
SECR	1649	1518	131	0	0
SWR	33715	32421	1294	4	0
WR	5325	5321	4	4	59639408
WCR	13088	13088	0	0	0
Total	**562907**	**522155**	**40752**	**154**	**4756225529**

Annexure 2.10								
Para 2.1.7.2 c								
Joint inspection of the re-weighment of the SLR/AGC (Inward)								
S. no	*Zonal Railways*	*Train No*	*AGC/ SLR*	*Packages*		*Weight*		*Penalty Charged*
				As per Manifesto	*Actuals*	*As per Manifesto*	*Actuals*	
1	CR	17032		150	101	3755	3563	Nil
		12321		103	59	3972	3965	Nil
2	ER	12334	AGC	61	55	990	605	Nil
		12334	SLR	150	104	3980	3791	Nil
3	ECR	13019	SLR	50	20	1400	680	Nil
		13019	AGC	40	35	800	700	Nil
4	ECoR	12728	SLR	150	150	3900	3800	Nil
		17487	SLR	95	95	3950	3900	Nil
5	NR	12192		115	115	3950	4787.9	RS 33450 collected for extra weight of 788 Kg
		12581		210	90	3900	3017.4	Nil
6	NCR	14152		30	18	3930	2130	Nil
		12034		120	88	3800	3413	Nil
7	NER	12004		249	170	3200	2015	Nil
		12534		130	60	3400	2280	Nil
8	NFR	15654						Rs 23560 collected for 168 Kg extra
		12345						
9	NWR	12414	RSLR	190	195			Rs 5000 for extra packages
		12414	FSLR	155	105			Nil
10	SR	12623	RSLR	20	16	400	290	Nil
		12623	FSLR	35	33	600	595	Nil
11	SCR	17057	FII	178	148	3920	3520	Nil
		17017	FII	135	126	3820	3296	Nil
12	SER	12774	FSLR	221	197	2800	3827	Nil
		18029	AGC	250	250	950	740	Nil
13	SECR	18238	FSLR	35	40	2212	2275.6	Rs 5000 for extra packages
		18238	RSLR	85	85	1600	2272	Rs. 38,572/- pointed out by audit.
14	SWR	12976	RSLR	203	160	3899	3749	Nil
		12628	FSLR	280	165	3950	3032	Nil
15	WR	12926	AGC	100	43	995	1720	Rs 84000 collected for 700 kg extra
		12479	SLR /RSLR	61	61	3280	3758	Nil
16	WCR	12190	FSLR	179	162	3910	3613	Nil
		12122	RSLR	175	119	3930	3283	Nil

Annex 2.11

Para 2.1.8.1

Statement showing the details of overcarried parcels for the period 2015-16 (June 2015 and Nov 2015)

Name of Zonal Railway	Name of Division	Station	Month & Year of Arrival	No of cases of over carriage	Loss of freight due to over carriage (Rs.) of General Parcel and Motor cycle	Total no. of parcels received (Inward)		Total number of parcel overcarried		%age of overcarried	
						Jun-15	Nov-15	Jun-15	Nov-15	Jun-15	Nov-15
CR	Moradabad	Chhatrapati Shivaji	Jun-15	517	263474	124429	---	1970	---	1.58	---
	Moradabad	Lokmanya Tilak	Jun-15	334	248653	113034	---	1477	---	1.31	---
	Moradabad	Chhatrapati Shivaji	Nov-15	441	252977	---	102575	---	2021	---	1.97
	Moradabad	Lokmanya Tilak	Nov-15	508	402791	---	101272	---	2541	---	2.51
				1800	**1167895**						
ER	Sealdah	Sealdah	Jun-15	400	198837	90285	---	2068	---	2.29	---
	Howrah	Howrah	Jun-15	615	460248	20413	---	2985	---	14.62	---
	Sealdah	Sealdah	Nov-15	349	184999	---	93928	---	1418	---	1.51
	Howrah	Howrah	Nov-15	1013	459721	---	25551	---	5839	---	22.85
				2377	**1303805**						
ECR	Sonepur	Muzaffarpur	Jun-15	118	122659	33143	---	1056	---	3.19	---
	Danapur	Patna	Jun-15			NMA	---	NMA	---	0.00	---
	Sonepur	Muzaffarpur	Nov-15	130	132830	---	33374	---	1012	---	3.03
	Danapur	Patna	Nov-15			---	NMA	---	NMA	---	0.00
				248	**255489**						
ECoR		PURI	Jun-15	42	578749	7090	---	8755	---	123.48	---
		Vishakhapattnam	Jun-15	67	198737	32442	---	1229	---	3.79	---
		PURI	Nov-15	75	586680	---	8210	---	9268	---	112.89
		Vishakhapattnam	Nov-15	42	117243	---	40338	---	1195	---	2.96
				226	**1481409**						
NR	Delhi	New Delhi	Jun-15	127	132320	527390	---	779	---	0.15	---
		Hazrat Nizammudin	Jun-15	212	199063	340561	---	1600	---	0.47	---
		New Delhi	Nov-15	130	148321	---	522168	---	738	---	0.14
		Hazrat Nizammudin	Nov-15	463	179125	---	350926	---	1262	---	0.36
				932	**658829**						
NCR	Agra	Agra Cantt.	Jun-15	41	23081	17008	---	216	---	1.27	---
	Allahabad	Kanpur Central	Jun-15	25	8212	27602	---	109	---	0.39	---
	Agra	Agra Cantt.	Nov-15	44	23969	---	18777	---	259	---	1.38
	Allahabad	Kanpur Central	Nov-15	28	7463	---	35387	---	85	---	0.24
				138	**62725**						
NER	Lucknow	Lucknow	Jun-15	102	31852	141954	---	2079	---	1.46	---
	Lucknow	Gorakhpur	Jun-15	298	194721	NMA	---	NMA	---	0.00	---

Annex 2.11

Para 2.1.8.1

Statement showing the details of overcarried parcels for the period 2015-16 (June 2015 and Nov 2015)

Name of Zonal Railway	Name of Division	Station	Month & Year of Arrival	No of cases of over carriage	Loss of freight due to over carriage (Rs.) of General Parcel and Motor cycle	Total no. of parcels received (Inward)		Total number of parcel overcarried		%age of overcarried	
						Jun-15	Nov-15	Jun-15	Nov-15	Jun-15	Nov-15
	Lucknow	Lucknow	Nov-15	82	65509	---	NMA	---	NMA	---	0.00
	Lucknow	Gorakhpur	Nov-15	531	222595	---	148542	---	2678	---	1.80
				1013	**514677**						
NFR	Limbdi	Guwahati	Jun-15	170	77118	NMA	---	NMA	---	0.00	---
	Tinsukia	Dibrugarh	Jun-15	232	176280	NMA	---	NMA	---	0.00	---
	Limbdi	Guwahati	Nov-15	162	55144	---	NMA	---	NMA	---	0.00
	Tinsukia	Dibrugarh	Nov-15	205	233644	---	NMA	---	NMA	---	0.00
				769	**542186**						
NWR	Jaipur	Jaipur	Jun-15	121	128058	35048	---	1228	---	3.50	---
	Ajmer	Ajmer	Jun-15	264	143395	18115	---	1599	---	8.83	---
	Jaipur	Jaipur	Nov-15	116	136320	---	45464	---	1454	---	3.20
	Ajmer	Ajmer	Nov-15	135	92108	---	21944	---	912	---	4.16
				636	**499881**						
SR	Thiruvanantha puram	Thiruvananthapuram	Jun-15	922	316816	4158	---	922	---	22.17	---
			Jun-15				---		---	0.00	---
			Nov-15	127	89365	---	6536	---	127	---	1.94
			Nov-15			---		---		---	0.00
				1049	**406181**						
SCR	Secundrabad	Secundrabad	Jun-15	101	53534	55933	---	484	---	0.87	---
	Guntakal	Tirupati	Jun-15	124	57504	10118	---	503	---	4.97	---
	Secundrabad	Secundrabad	Nov-15	118	49240	---	44793	---	550	---	1.23
	Guntakal	Tirupati	Nov-15	66	33060	---	18492	---	246	---	1.33
				409	**193338**						
SER	Kharagpur	Howrah	Jun-15	380	95943	4791	---	380	---	7.93	---
	Ranchi	Ranchi	Jun-15	47	22949	27262	---	47	---	0.17	---

Annex 2.11

Para 2.1.8.1

Statement showing the details of overcarried parcels for the period 2015-16 (June 2015 and Nov 2015)

Name of Zonal Railway	Name of Division	Station	Month & Year of Arrival	No of cases of over carriage	Loss of freight due to over carriage (Rs.) of General Parcel and Motor cycle	Total no. of parcels received (Inward)		Total number of parcel overcarried		%age of overcarried	
						Jun-15	Nov-15	Jun-15	Nov-15	Jun-15	Nov-15
	Kharagpur	Howrah	Nov-15	214	63343	---	18248	---	214	---	1.17
	Ranchi	Ranchi	Nov-15	30	13715	---	29795	---	30	---	0.10
				671	**195950**						
SECR		Itarasi	Jun-15	16	17642	NMA	---	NMA	---	0.00	---
		Bilaspur	Jun-15	67	594857	NMA	---	NMA	---	0.00	---
		Itarasi	Nov-15	15	3787	---	NMA	---	NMA	---	0.00
		Bilaspur	Nov-15	119	119671	---	NMA	---	NMA	---	0.00
		Durg	Jun-15	198	126048	NMA	---	NMA	---	0.00	---
		DURG	Nov-15	471	143477	---	NMA	---	NMA	---	0.00
				886	**1005482**						
SWR	KSR /Bengaluru	KSR /Bengaluru	Jun-15	98	71667	93344	---	98	---	0.10	---
	KSR /Bengaluru	YESHWANTPUR	Jun-15	15	10437	21540	---	15	---	0.07	---
	KSR /Bengaluru	KSR/ Bengaluru	Nov-15	128	98029	---	85528	---	128	---	0.15
	KSR /Bengaluru	YESHWANTPUR	Nov-15	79	114364	---	25173	---	79	---	0.31
				320	**294497**						
WR	Mumbai central	Bandra Terminus	Jun-15	429	283877	82390	---	1731	---	2.10	---
	Aduturai	Ahmedabad	Jun-15	462	205679	170813	---	2269	---	1.33	---
	Mumbai central	Bandra Terminus	Nov-15	425	254083	---	58505	---	1470	---	2.51
	Aduturai	Ahmedabad	Nov-15	557	175539	---	174713	---	1684	---	0.96
				1873	**919178**						
WCR	Jabalpur	Jabalpur	Jun-15	4	3430	36810	---	19	---	0.05	---
	KOTA	KOTA	Jun-15	103	87156	12042	---	507	---	4.21	---
	Jabalpur	Jabalpur	Nov-15	28	13804	---	60370	---	66	---	0.11
	KOTA	KOTA	Nov-15	83	23509	---	20400	---	247	---	1.21
				218	**127899**						
			Total	**13565**	**9629421**			**34125**	**35523**		

Annexure 2.12

Para 2.5

Statement showing punctuality of Superfast trains over North Central Railway and South Central Railways

S no	Period	Train No.	Station from	Station to	Whether the train is superfast	Whether the superfast charges are levied	No. of days of operations	No. of days delayed	% of delayed run (Col. 9/Col.8)	No. of days delay where superfast speed not met	% of delayed run where superfast criteria not met (Col.10/Col.8)	% when superfast criteria not met out of delayed run (Col.10/Col.9)	Assessed superfast charge levied per trip (in Rs.)	Excess collecting of superfast charges (Col.10x Col.11) (In Rs.)
1	2	3	4	5	6	7	8	9	9A	10	10A	10B	11	12
1	2013-16	12418	New Delhi	Allahabad	Yes	Yes	992	232	23.39	71	7.16	30.60	47970	3405870
2	2013-16	12196	Ajmer	Agra Fort	YES	YES	1010	321	31.78	314	31.09	97.82	27030	8487420
3	2013-16	12452	New Delhi	Kanpur	YES	YES	1002	152	15.17	79	7.88	51.97	44730	3533670
4	2013-16	12280	Nizamuddin	Jhansi	YES	YES	1011	186	18.40	134	13.25	72.04	33330	4466220
5	2013-16	12034	New Delhi	Kanpur	YES	YES	915	226	24.70	49	5.36	21.68	45630	2235870
6	2013-16	12548	Ahmedabad	Agra Fort	YES	YES	1024	149	14.55	113	11.04	75.84	35460	4006980
7	2013-16	12179	Lucknow	Agra Cantt	YES	YES	851	502	58.99	494	58.05	98.41	23490	11604060
8	2013-16	12319	Kolkata Terminal	Agra Cantt	YES	YES	145	138	95.17	62	42.76	44.93	39900	2473800
9	2015-16	22444	Bandra	Kanpur	YES	YES	45	11	24.44	3	6.67	27.27	32580	97740
10	2013-16	12210	Kathgodam	Kanpur	YES	YES	141	19	13.48	19	13.48	100.00	45360	861840
11	2014-16	12404	Jaipur	Allahabad	YES	YES	578	395	68.34	365	63.15	92.41	36390	13282350
12	2013-16	12763	Tirupati	Secundrabad	YES	YES	775	156	20.13	13	1.68	8.33	45540	592020
13	2013-16	12727	Vishakhapattnam	Hyderabad	YES	YES	1088	418	38.42	33	3.03	7.89	48780	1609740
14	2013-16	12759	Chennai	Hyderabad	YES	YES	1086	418	38.49	27	2.49	6.46	48870	1319490
15	2013-16	12701	Chhatrapati Shivaji	Hyderabad	YES	YES	1055	682	64.64	682	64.64	100.00	36720	25043040
16	2013-16	12703	Howrah	Secundrabad	YES	YES	1082	427	39.46	42	3.88	9.84	47430	1992060
17	2013-16	12705	Guntur	Secundrabad	YES	YES	1096	453	41.33	28	2.55	6.18	55485	1553580
18	2013-16	12708	H. Nizamuddin	Tirupati	YES	YES	454	136	29.96	8	1.76	5.88	39870	318960
19	2013-16	12712	Chennai	Vijayawada	YES	YES	1087	151	13.89	80	7.36	52.98	69120	5529600
20	2013-16	12761	Tirupati	Karimnagar	YES	YES	280	53	18.93	10	3.57	18.87	42480	424800
21	2013-16	12786	Bengaluru	Kacheguda	YES	YES	1087	374	34.41	374	34.41	100.00	50310	18815940
Total							**16804**	**5599**	**33.32**	**3000**	**17.85**	**53.58**		**111655050**

Note-(i) Loss of punctuality have been arrived after allowing delay of 15 minutes. (ii) In NCR, no. of days operated/no. of days delayed/no. of days where superfast speed not met have been worked out after excluding the period of 20

Annexure 4.1

Para 4.1.4

Statement showing the Status of Mechanised Laundries in Zonal Railways as on 31st March 2016

S. no	Zonal Railway	Location	Mode	Capacity (Tons)	Target Date	Present Status (as on 31st March 2016)	If no, percentage of		Remarks (along with date of completion)
						Yes/No	Physical	Financial	
1	CR	Wadibunder	BOOT	6	28.02.2013	19.04.2013	NA	NA	The laundry was commissioned in 2013. There was no delay
2	CR	Nagpur	BOOT	7.6 T/ day	31.10.2013	As per Dy. CME(COG) LTR DT 3-10-2016 Revised Tender schedule sent to FA&CAO for vetting.	NO	NO	
3	CR	Pune	BOOT	8 T/ day	31.10.2013	As per Dy. CME(COG) LTR DT 3-10-2016 Revised detailed esttimate sent t o FA&CAO for vetting.	NO	NO	
4	ECR	DANAPUR	DEPTT	1	25.01.2013	Yes (Operational since 21.12.2012)	NA	NA	-
5	ER	Howrah	DEPTT	1	30.08.2013 (for upgradation)	No (One mechanised laundry was already working at Howrah. However, the proposal for upgradation of this laundry is yet to be materialised)	NIL	Nil	HWH: LOA for procurement of equipments for upgradation of Mechanised Laundry at Tikiapara Coaching Complex, HWH has been issued to the firm M/s Fabcare Garments & Textile Machinery (P) Ltd vide LOA dated 14/06/2016 for Rs 1.34 crore.
6	ER	Sealdah	DEPTT	1	30.08.2013 (for upgradation)	No (One mechanised laundry was already working at Sealdah. However, the proposal for upgradation of this laundry is yet to be materialised)	NIL	Nil	SDAH: LOA for procurement of equipments for upgradation of Mechanised Laundry at New Coaching Complex, SDAH has been issued to the firm M/s P & K Scientific Products vide LOA No. MC/WC/Linen/2nd Revised/C/2015 dated17/02/2016 for Rs 1.63 crore.
7	ER	Malda Town	DEPTT	2	31.10.2013	Yes			Mechanised Laundry at Malda was commissioned in March 2015 and working smoothly
8	NFR	Dibrugarh	DEPTT	NIL	31.05.2013	No	NIL	NIL	Works related to set up of Mechanised Laundry is yet to start.
9	NFR	New Jalpaiguri	DEPTT	2	30.07.2013	Yes	NAP	NAP	Commissioned on August 2014
10	SER	Hatia	DEPTT	1	31.05.2013	Commissioned on 31.01.2014.			
11	SER	Santragachi	BOOT	10	30.08.2013	Estimate for Accounts vetting	Nil	Nil	-
12	SER	Chakradharpur	DEPTT	1	30.08.2013	Commissioned on 29.11.2013. Works started on 01.01.2014. Inaugarated on 11.02.2014	NAP	NAP	NAP
13	SR	KCVL/TVC	BOOT	3	NA	Yes	NAP	NAP	NAP
14	SR	Ernakulam (ERS)	BOOT	1	NA	No	NAP	NAP	Estimate under revision
15	SWR	Hubballi	DEPTT	1	30.06.2013	Yes	NAP	NAP	1 Ton per shift
16	SWR	Mysuru	DEPTT	1.5	30.08.2013	Yes	NAP	NAP	0.75 Ton per shift
17	WR	SURAT	DEPTT	1	29.05.2013	Yes	Not Appli.	Not Appli.	The laundry is set up departmentally & operation is on contractual basis

These 17 locations were listed in Railway Board's letter of Jan 2013, where they had called for the latest position of setting up of these mechansied laundries.

Annexure 4.2

4.1.4

Statement showing the position of selected mechanised laundries in the Zonal Railways

Zonal Railway	Location/ Coaching Depot where mechanised laundries installed	Mode of operation (BOOT/ Departmental)	Capacity of the laundries (in Ton)	Date of award of contract(Letter of Acceptance issued)			Date of completion of Works			Date of commissioning of Laundry	Total shift hours under breakdown	Whether fully run by departmental staff (Yes/No)	Total capacity of washing taking into consideration nos. Of shift since commissioning (cumulative quantity in tons) up to31.03.16	Actual out turn (Cumulative quantity in tons) from commissioning up to 31.03.16	Shortfall , if any as per capacity	Remarks
				For machine of mechanised laundry	Civil Engg. Works	Electrical Engg. Works	Installation of machine	Civil Engg. Works	Elect. Engg. Works							
CR	Wadibunder	Departmental	1 Ton	Deprtmental		28.01.2010	22.10.2009	31.01.2012	31.01.2012	29.11.2009	2664	Yes	***From FY 2013 to 2016, total cumulative quantity in tons is 1095 Tons.	***From FY 2013 to 2016, total cumulative quantity in tons is 762 Tons.	*333 Tons*	The shortfall was usually covered through BOOT laundry.
CR	Wadibunder	BOOT	6T	16.08.2011			19.04.2013			19.04.2013	815	NO	12600	12145.6	*454.4*	As per clause 4.4 of part IV of Agreement contractor has to ensure continuous suppply of linen in an uninterrupted manner.
ECoR	No mechanised laundry in ECoR															
ECR	Danapur	Departmental	01 Ton per shift of 08 hrs.	21.04.2011	27.10.2014	22.09.2010 (Limited)	18.04.2013	15.11.2015 (Terminate)	12.11.2012	21.12.2012	13707	No	1713	1214	499	
ECR	Samastipur	Departmental	01 Ton per shift of 08 hrs.	15.06.2010	25.01.2011	22.08.2011	03.09.2012	10.09.2013	_	03.09.2011	17082	No	2135	1523	612	
ER	Sealdah	Departmental	1	11.03.11	NA	NA	03.04.11	12.03.11	31.03.11	08.05.11	8X2=16	NO	4380	1691.5	2688.5	1. Shortage of production due to breakdown of M&P, 2. shortage of man power supply by out sourced agency
ER	Tikiapara/Howrah	Departmental	1	NMA	NMA	NMA	NMA	NMA	NMA	NMA	NMA	No	2 ton per shift	NMA	NMA	
NCR	Allahabad- not installed	Departmental	1.5	10.02.16	10.02.16	14.01.16	Not installed	Not completed	Not completed	NAP	NAP	NAP	NAP	NAP	NAP	
NCR	Gwalior- not installed	Departmental	2	02.12.15	02.12.15	02.12.15	Not installed	Not completed	Not completed	NAP	NAP	NAP	NAP	NAP	NAP	
NER	Gorakhpur	Departmental	2.5 T	08.07.2013	Not available	11.01.2013	27.02.2014	Not available	Not available	27.02.2014	0	No	4442.5	2798	1644.5	
NER	Kathgodam	Departmental	1.5 T	05.07.2013	13.03.2014	09.07.2013	24.03.2014	10.03.2015	25.02.2014	31.10.2014		No	1060.5	661.783	398.717	
NFR	Kamakhya/Guwahati	Departmental	3.5	02.12.2010	NMA	20.11.2013	NMA	NMA	NMA	June'11	NMA	NO	NMA	NMA	NMA	
NFR	New Jalpaiguri	Departmental	2	27.08.2013	NIL	27.08.2013	10.07.2014	NIL	10.07.2014	13.08.2014	NIL	NO	1250	723.64	526.36	Shortfall due to less demand than capacity.
NR	Varanasi	Departmental	01 Ton per shift of 8 hrs.	23.07.2015	13.02.2015	06.10.2015	Physically work was completed.Final bill yet to be passed.			01.12.2015	35:04 hrs.	No	122	146.72	0.00	about 1.2 Ton washing daily
NR	Lucknow	Departmental	01 Ton per shift of 8 hrs.	28.07.2015	06.01.2015	25.06.2015	Physically work was completed.Final bill yet to be passed.			21.03.2016	0	No	22	1.90	20.10	
NWR	Jodhpur	Departmental	5.6	04.06.2014	NAP	NAP	24.09.2014	NAP	NAP	25.09.2014	Nil	NO	2429.60	2002.44	427.16	
NWR	Bikaner	Departmental	2.25	11.06.2013	05.09.2013	6.01.2014	28.04.2014	30.4.2014	31.01.2015	07.05.2014	82.15	No	1998.70	1653.74	344.96	

Annexure 4.2

4.1.4

Statement showing the position of selected mechanised laundries in the Zonal Railways

Zonal Railway	Location/ Coaching Depot where mechanised laundries installed	Mode of operation (BOOT/ Departmental)	Capacity of the laundries (in Ton)	Date of award of contract(Letter of Acceptance issued)			Date of completion of Works			Date of commissioning of Laundry	Total shift hours under breakdown	Whether fully run by departmental staff (Yes/No)	Total capacity of washing taking into consideration nos. Of shift since commissioning (cumulative quantity in tons) up to31.03.16	Actual out turn (Cumulative quantity in tons) from commissioning up to 31.03.16	Shortfall , if any as per capacity	Remarks
				For machine of mechanised laundry	Civil Engg. Works	Electrical Engg. Works	Installation of machine	Civil Engg. Works	Elect. Engg. Works							
SCR	Secunderabad	Departmental	1 MT	10.06.2010	NAP	NAP	02.07.2010	NAP	NAP	24.12.2010	457	NO	3846	3789	57	
SCR	Kachiguda	Departmental	1MT	16.04.2010	NA	NA	20.10.2010	NA	NA	03.11.2010	247	NO	3948	3917	31	
SCR	Kachiguda	BOOT	6MT	16.06.2014	NAP	NAP	12.07.2015	NAP	NAP	12.07.2015	58	NO	3168	3091	77	
SER	Santragachi	Departmental	1 Ton (Per 8 Hrs.shift)	08.04.2014	-	-	26.02.2015	-	-	26.02.2015	(128 hrs in 2014-15 + 636 hrs in 2015-16) = 764 hrs	Yes	800	789.22	10.78	
SER	HATIA	Departmental	1 T/shift	11.03.2013			31.01.2014	28.09.2012	14.01.2013	30.01.2014	110 hrs in 2014-15 and 155 hrs in 2015-16	Yes	1486.87	921.69	565.18	
SER	TATA	Departmental	1 ton/Shift	16.09.2010	16.09.2010	16.09.2010	-	-	-	03.05.2012 (Except Flat Work Ironer)	19.39	Yes	2643	1761.16	881.84	Machine working 456:00 hrs under preventry maintenance due to shortage of Linen to dispatch in train.
SECR	Coaching Depot, Bilaspur	Departmental	1 ton/shift	16.11.2011	16.11.2011	16.11.2011	23.08.2012	1/9/1900		03.12.2012		No	3 ton/ day	3 ton/day		
SECR	DURG	Departmental	1 ton/shift	27.01.2011	27.01.2011	27.01.2011	03.04.2012	03.04.2012	03.04.2012	01.04.2012	nil	no	02 Shifts	2		
SR	Basin Bridge	BOOT	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
SR	Kochuveli	BOOT	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
SWR	Hubballi	Departmental	1	06.07.2012	NAV	NAV	Jul-13	NAV	NAV	06.09.2013	29	Yes	1960	1111	849	Currently running 2 shifts (2 Ton)
SWR	Mysuru	Departmental	0.75	07.08.2013	NAV	NAV	15.12.2015	NAV	NAV	18.12.2015	53	Yes	66	61	5	Currently running 2 shifts (2 Ton)
WCR	JABALPUR	Departmental	2 Ton	15.07.2015	02.01.2015	20.11.2014	25.10.2015	30.12.2015	16.11.2015	25.10.2015	531	NO	450	444.5	5.5	
WCR	KOTA	Departmental	01 T/Shift	28.10.2015	28.10.2015	28.10.2015	24.02.2016	24.02.2016	24.02.2016	24.02.2016	Nil	No	laundry started work on date 11.03.2016 cumulative quantity in tons since start of work = 188 tons (up to 15.09.2016)	188 tons	-	
WR	Indore	Departmental	1	23.07.2010	Not applicable	Not Available	1/16/2011	Not Applicable	16.01.2011	16.01.2011	2013-14- 43.55 Shift hours 2014-15- 4.8 Shift hours 2015-16-4.92 Shift hours	Yes	2710	2550.01	159.99	The shortfall is due to less linen requirement at INDB coaching depot.
WR		Departmental	2	17.03.2015	Not applicable	Not Available	14.07.2015	Not Applicable	Not Applicable	14.07.2015						Augmentation of Mechanised Laundry at INDB.
WR		Departmental	4	16.02.2016	Not applicable	Not Available	11.04.2016	Not Applicable	Not Applicable	11.04.2016						
WR	Grant Road	Departmental	3	14.05.2013	Not Available	Not Available	01.08.2015	Not Available	Not Available	01.08.2015	3.55 Shift hours	No	1458	1215	243	
WR	Ahmedabad	BOOT	Not applicable													

Annexure 4.3

Para 4.1.4.1

Statement showing the treatment of discharge water of mechanised laundry

Zonal Railway	Coaching Depot	Mechnised laundry constructed under BOOT model or departmentally	Date of commissioning of the mechanised laundry	Wheter clearance of Central Pollution Control Board was taken(Yes/No)	Whether clearnace of State Pollution Control Board was taken (Yes/No)	Whether clearnace of local authority,Municipal/Corporation Body was taken (Yes/No)	If provision exists for periodical renewal of clearance from the Pollution Control Board, tha same has been taken timely? (Yes/No). If no , from when clearance is due?	Whether any Effluent Tratment Plant(ETP) has been constructed for treatment of discharge water from the mechanised laundry	If ETP constructed, is it functional ?	Whether the treated water is used for any purpose? if yes, for what purpose.	Whether the discharge water is released to sewerage without treatment? (Yes/No)	Remarks
CR	Wadibunder	Wadibunder Departmental	29.11.2009	As the departmental mechanized laundry, Wadibunder was the pilot project in Indian Railways, Only the aspect of supply and erection of machinery ws taken into account. However the issue of clearances has been taken care of in further projects.								
ECoR	No mechanised laundry in ECoR											
ECR	Rajendra Nagar	Departmental	18.12.2012	No	No	No	Nil	No	Nil	Nil	yes	No provision has been included even in Estimate of set up of M. Laundry.
ECR	Samastipur	Departmental	03.09.2011	No	No	No	Nil	No	Nil	Nil	yes	
ER	Sealdah	Departmental	05.08.2011	NO	NO	NO	No	NO	NAP	NAP	YES	
ER	Tikiapara/ Howrah	Departmental	15.08.2010	No	No	No	No. Due from it's commissioning i.e. 15/08/2010	No	NAP	No	Yes	
NCR	Allahabad	Under construction-Departmental	not commissioned	No	No	No	NAP	No	NAP	NAP	NAP	Provision for ETP was not made in the estimate.
NCR	Gwalior	Under construction-Departmental	not commissioned	No	No	No	NAP	No	NAP	NAP	NAP	
NER	KATHGODAM	Departmental	24.03. 2013	No	NO	NO	NO	NO	NO	NO	YES	-
NER	Gorakhpur	Departmental	27.02.2014	No	NO	NO	NO	Yes	Yes	Washing Coaches	No	Discharge water of Mechanized laundry goes to ETP of Railway worksop/GKP
NFR	Guhawati	Departmental	June'2011	No	No	No	Yes	Yes	Yes	Out of daily used water of 101880 litres, 16000 litres of water recycled and utilised for washing of linen.	No	
NFR	New Jalpaiguri	Departmental	13.08.2014	No	No	No	Yes	Yes	Yes	No	No	
NR	Varanasi	Departmental	01.12.2015	NAP	NAP	NAP	NAP	NO	NAP	NAP	YES	
NR	Lucknow	Departmental	21.03.2016	NAP	NAP	NAP	NAP	NO	NAP	NAP	YES	
NWR	Jodhpur	Departmental	25.09.2014	No	No	No	NAP	Yes	Yes	Washing of Coaches	No	Discharged water from Laundry sent to ETP for treatment, plant already exist.(ETP commissioned on 30.9.12)
NWR	Bikaner	Departmental	07.05.2014	No	No	No	N.A	No	N.A	NO	Yes	Nil
SCR	Secunderabad	Departmental	24.12.2010	No	No	No	No	No	No	No	Yes	

Annexure 4.3

Para 4.1.4.1

Statement showing the treatment of discharge water of mechanised laundry

Zonal Railway	Coaching Depot	Mechnised laundry constructed under BOOT model or departmentally	Date of commissioning of the mechanised laundry	Wheter clearance of Central Pollution Control Board was taken(Yes/No)	Whether clearnace of State Pollution Control Board was taken (Yes/No)	Whether clearnace of local authority,Municipal/Corporation Body was taken (Yes/No)	If provision exists for periodical renewal of clearance from the Pollution Control Board, tha same has been taken timely? (Yes/No). If no , from when clearance is due?	Whether any Effluent Tratment Plant(ETP) has been constructed for treatment of discharge water from the mechanised laundry	If ETP constructed, is it functional ?	Whether the treated water is used for any purpose? if yes, for what purpose.	Whether the discharge water is released to sewerage without treatment? (Yes/No)	Remarks
SCR	Kachiguda	Departmental	03.11.2010	No	No	No	No	Yes	Yes	For coach cleaning at	No	
SCR	Kachiguda	BOOT	12.07.2015	No	Yes	No	Yes	Yes	No	No	Yes	
SER	Santragachi	Departmental	26.02.2015	No	No	No	No	No	NAP	NAP	Yes	
SER	Hatia	Departmental	31.01.2014	No	No	No	No	No	NAP	NAP	Yes	
SER	TATA	Departmental	03.05.2012	No	No	No	No	No	NAP	NAP	Yes	
SECR	Bilaspur	Departmental	03.12.2012	No	No	No	-	Yes	Yes	No	No	
SECR	Durg	Departmental	01.04.2012	No	No	No	No	No, but water recycling plant with facility for effluent treatment available.	NAP	No	Yes	Discharged water is released to sewerage without treatment and it is connected in to water recyling plant.
SR	Chennai Central	BOOT	01.10.2011	No	No	No	NAP	Yes	Yes	No	No	Clearance of State Polution Control Board is yet to be obtained even after a lapse of more than 5 years.
SR	Tiruvanantapuram	BOOT	01.04.2015	No	YES	No	Yes	Yes	Yes	No	N0	PCB clearance valid upto 31/10/2018. Treated water was not used for any purpose.
SWR	Hubballi	Departmental	06.09.2013	NAP	NAP	NAP	NAP	Yes	No	No	Yes	
SWR	Mysuru	Departmental	20.12.2015	NAP	NAP	NAP	NAP	Yes	Yes	Gardening	No	
WCR	Jabalpur	Departmental	28.10.2015	NO	NO	NO	NO	NO	NAP	NO	YES	
WCR	KOTA	Departmental	24.02.2016	NO	NO	NO	NO	YES	NAP	NAP	YES	
WR	Indore	Departmental	16.01.2011	Not Appli.	No	Not Appli.	No, Since 16/1/2011	Yes	Yes	NO	No	Till 25/03/ 2016 discharge water was released to sewerage
WR	Grant Road	Departmental	08.01.2015	Not Appli.	Yes	Not Appli.	Yes	Yes	Yes	NO	No	Till 31/03/ 2016 discharge water was released to sewerage
WR	Ahmedabad	BOOT Model	Dec-12	Not Appli.	Yes	Not Appli.	Yes	Yes	Yes	NO	No	

Annexure 4.4

Para 4.1.4.3 and 4.1.4.4

Statement showing the washing of Blankets & Pillows

Zoal Railway	Year	Coaching Depot	No. of Blankets in use	No. of Blankets washed during the year	Frequency of washing of Blankets as provided in the contract (in months/days)	Whether Blankets were dry washed (Yes/No)	Whether provision exists in the washing contract for Blanket washing	Whether provision exists in the washing contract for dry wash of blankets(Yes/No)	No. of Pillows in use		No. of Pillows washed		Frequency of washing of Pillows (in months/days)	Whether provision exists in the washing contract for Pillow washing
									Polyester Staple Fibre Pillow(DP-II)	Washable Pillow (DP-I)	Polyester Staple Fibre Pillow(DP-II)	Washable Pillow (DP-I)		
CR	2013-14	Lokmanya Tilak Terminus & Wadibunder	10630	13418	02- 03 months	No	Yes	No	1140	NO	NO	NO	NO	NO
	2014-15	Lokmanya Tilak Terminus & Wadibunder	12360	27333		No	Yes	No	1175	NO	NO	NO	NO	NO
	2015-16	Lokmanya Tilak Terminus & Wadibunder	13732	12488		No	Yes	No	1212	NO	NO	NO	NO	NO
	2012-13	Nagpur	3000	6122	1 Month	Yes	Yes	Yes	3000	0	0	0	Not Applicable	No
	2013-14	Nagpur	5000	9651		Yes	Yes	Yes	5500	0	0	0	Not Applicable	No
	2014-15	Nagpur	6500	17726		Yes	Yes	Yes	6000	0	0	0	Not Applicable	No
	2015-16	Nagpur	7000	21910		Yes	Yes	Yes	6500	0	0	0	Not Applicable	No
ECoR	2013-14	Bhubaneswar	8988	15053	2-Months	Yes	Yes	Yes	7170	208	0	0	NIL	No
	2014-15	Bhubaneswar	10814	31006		Yes	Yes	Yes	8715	283	0	0	NIL	No
	2015-16	Bhubaneswar	10685	33215		Yes	Yes	Yes	10482	472	12281	0	6-Months	Yes
	2013-14	PURI	9956	8544	2-Months	Yes	Yes	Yes	9525	92	NIL	NIL	NIL	No
	2014-15	PURI	11438	9285		Yes	Yes	Yes	9777	167	NIL	NIL	NIL	No
	2015-16	PURI	13656	31390		Yes	Yes	Yes	10472	61	NIL	NIL	NIL	No
ECR	2012-13	Rajendra Nagar	3715	__	60 days	Yes	Yes	Yes	3412	216	Nil	Nil	__	No
	2013-14	Rajendra Nagar	5176	37314		Yes	Yes	Yes	4520	256	Nil	Nil	__	No
	2014-15	Rajendra Nagar	7782	58524		Yes	Yes	Yes	4844	332	Nil	Nil	__	No
	2015-16	Rajendra Nagar	10066	68050		Yes	Yes	Yes	9454	612	Nil	Nil	__	No
	2012-13	Darbhanga	1572	4776	N.A	No	Yes	No	1263	78	No	No	N.A	No
	2013-14	Darbhanga	2101	12447		No	Yes	No	2027	94	No	No	N.A	No
	2014-15	Darbhanga	2101	4390		No	Yes	No	1434	122	No	No	N.A	No
	2015-16	Darbhanga	2219	8660		No	Yes	No	2904	170	No	No	N.A	No
ER	2012-13	Sealdah	11915	21912	Monthly	NA	Yes	Yes		11915	Not Available	Nil	NA	No
	2013-14	Sealdah	15317	11291		NA	Yes	Yes		15317	Not Available	Nil	NA	No
	2014-15	Sealdah	14500	6548		Yes	Yes	Yes		14500	Not Available	Nil	NA	No
	2015-16	Sealdah	14500	9127		Yes	Yes	Yes		14500	Not Available	Nil	NA	No
	2013-14	Tikiapara	10927	50527	2 month	Yes	Yes	Yes	11774	Nil	Not Available	Nil	Nil	Nil
	2014-15	Tikiapara	12293	50108		Yes	Yes	Yes	12619	Nil	Not Available	Nil	Nil	Nil
	2015-16	Tikiapara	11634	45335		Yes	Yes	Yes	13821	Nil	Not Available	Nil	Nil	Nil
NCR	2013-14	Allahabad*	3742	26756	One month	Yes	Yes	Yes	7117	NIL	NIL	NIL	NAP	NO
	2014-15	Allahabad*	4889	28253		Yes	Yes	Yes	3297	NIL	NIL	NIL	NAP	NO
	2015-16	Allahabad*	4407	33384		Yes	Yes	Yes	5551	NIL	NIL	NIL	NAP	NO
	2013-14	Gwalior	2703	2370	Once in two months	Yes	Yes	Yes	100	3134	NIL	NIL	NAP	NAP
	2014-15	Gwalior	2159	2761		Yes	Yes	Yes	80	3341	NIL	NIL	NAP	NAP
	2015-16	Gwalior	2456	2616		Yes	Yes	Yes	80	3110	NIL	NIL	NAP	NAP
NER	2013-14	Lucknow	2497	2846	237	No	Yes	No	2130	50	Nil	Nil	N.A.	No
	2014-15	Lucknow	2346	1536	126	No	Yes	No	2122	60	Nil	Nil	N.A.	No
	2015-16	Lucknow	2149	9112	759	No	Yes	No	2342	90	Nil	Nil	N.A.	No
NFR	2013-14	Guwahati	9789	3678	2 Months	N0	Yes	No	0	8795	NIL	280	6 monthly	Yes
	2014-15	Guwahati	12602	3061		NO	Yes	No	0	13193	NIL	2015	6 monthly	Yes
	2015-16	Guwahati	12799	5957		NO	Yes	No	0	20674	NIL	411	6 monthly	Yes
	2013-14	Dibrugarh	3147	5048	2 Months	Yes	Yes	Yes	0	2935	No provision exists for washing of	Nil	Nil	NO
	2014-15	Dibrugarh	4609	13614		Yes	Yes	Yes	0	4021		Nil	Nil	NO
	2015-16	Dibrugarh	6305	9687		Yes	Yes	Yes	0	5260		Nil	Nil	NO
NR	2012-13	Lucknow	3930	11176	1 Month	Yes	Yes	Yes	3930	0	0	NAP	NAP	No
	2013-14	Lucknow	3677	15950		Yes	Yes	Yes	3677	0	0	NAP	NAP	No
	2014-15	Lucknow	3920	16679		Yes	Yes	Yes	3920	0	0	NAP	NAP	No
	2015-16	Lucknow	5760	2767		Yes	Yes	Yes	5760	0	0	NAP	NAP	No
	2012-13	New Delhi	11800	129580	1 Month	Yes	Yes	Yes	11880	0	0	NAP	NAP	No
	2013-14	New Delhi	11900	117814		Yes	Yes	Yes	12040	0	0	NAP	NAP	No
	2014-15	New Delhi	13850	144418		Yes	Yes	Yes	13870	0	0	NAP	NAP	No
	2015-16	New Delhi	16340	170176		Yes	Yes	Yes	16610	0	0	NAP	NAP	No

Annexure 4.4

Para 4.1.4.3 and 4.1.4.4

Statement showing the washing of Blankets & Pillows

Zoal Railway	Year	Coaching Depot	No. of Blankets in use	No. of Blankets washed during the year	Frequency of washing of Blankets as provided in the contract (in months/days)	Whether Blankets were dry washed (Yes/No)	Whether provision exists in the washing contract for Blanket washing	Whether provision exists in the washing contract for dry wash of blankets(Yes/No)	No. of Pillows in use		No. of Pillows washed		Frequency of washing of Pillows (in months/days)	Whether provision exists in the washing contract for Pillow washing
									Polyester Staple Fibre Pillow(DP-II)	Washable Pillow (DP-I)	Polyester Staple Fibre Pillow(DP-II)	Washable Pillow (DP-I)		
NWR	2013-14	Jodhpur	3990	33000	2 months	No	Yes	No	3695	0	Nil	NAP	NAP	no
	2014-15	Jodhpur	5691	28204		No	Yes	No	4584	0	Nil	NAP	NAP	no
	2015-16	Jodhpur	6720	27558		No	Yes	No	6248	0	Nil	NAP	NAP	no
	2013-14	Jaipur	5721	19624	1 months	No	Yes	No	5811	0	Nil	NAP	NAP	no
	2014-15	Jaipur	6542	35542		No	Yes	No	5456	0	Nil	NAP	NAP	no
	2015-16	Jaipur	6765	28550		No	Yes	No	6005	0	Nil	NAP	NAP	no
SCR	2013-14	Secunderabad	19104	29625	Once in two months	No	Yes	No	17604	0	0	0	NAP	No
	2014-15	Secunderabad	20541	54891		No	Yes	No	20190	0	0	0	NAP	No
	2015-16	Secunderabad	21987	43580		No	Yes	No	20568	0	0	0	NAP	No
	2013-14	Hyderabad	5782	15584	Once in two months	No	Yes	Yes	5791	0	0	0	NAP	No
	2014-15	Hyderabad	5662	17979		No	Yes	No	5497	0	0	0	NAP	No
	2015-16	Hyderabad	6392	24849		No	Yes	No	6289	0	0	0	NAP	No
SER	2013-14	Santragachi	19,809	48,441	Once in 15 days	YES	YES	YES	19,299	510	NIL	NIL	NA	NIL
	2014-15	Santragachi	20,159	61,029		YES	YES	YES	19,649	510	NIL	NIL	NA	NIL
	2015-16	Santragachi	21,873	72,606		YES	YES	YES	21,333	540	NIL	NIL	NA	NIL
	2013-14	HATIA	4,678	5,238	Once in Every 2 months	YES	No	YES	Nil	4,678	No pillows washed till March 2016. Pillow washing started from April 2016, departmentally.			
	2014-15	HATIA	4,748	957		YES	No	YES	Nil	4,748				
	2015-16	HATIA	6,327	6,327		YES	No	YES	Nil	6,327				
	2013-14	TATA	1730	376	Once in Every 2 months	Yes	Yes	Yes	Nil	1730	Pillows are not washed			
	2014-15	TATA	1916	3552		No	Yes	No	Nil	1916	Pillows are not washed			
	2015-16	TATA	2778	5698		No	Yes	No	Nil	2778	Pillows are not washed			
SECR	2013-14	Bilaspur	3226	38708	Monthly	Yes	Yes	Yes	Nil	4619	N/A	Nil	N/A	N/A
	2014-15	Bilaspur	3995	46059		Yes	Yes	Yes	Nil	5640	N/A	Nil	N/A	N/A
	2015-16	Bilaspur	3592	43107		Yes	Yes	Yes	Nil	5293	N/A	Nil	N/A	N/A
	2013-14	DURG	2824 per month	28028 (Feb 13 to Mar 14)	ONE MONTH	yes	yes	yes	NO	NO	No	NO	NO	NO
	2014-15	DURG	3051 per month	24233		yes	yes	yes	NO	NO	No	NO	NO	NO
	2015-16	DURG	3051 per month	24879		yes	yes	yes	NO	NO	No	NO	NO	NO
SR	2013-14	ChennaiCentral	NA	118372	Once in a Month	NO	YES	No	NA	Nil	NAP	NAP	NAP	NAP
	2014-15	ChennaiCentral	NA	134736		NO	YES	No	NA	Nil	NAP	NAP	NAP	NAP
	2015-16	ChennaiCentral	NA	132982		NO	YES	No	NA	Nil	NAP	NAP	NAP	NAP
	2013-14	Tiruvanantapuram	0	0	Once in a Month	NO	YES	No	0	0	NAP	NAP	NAP	NAP
	2014-15	Tiruvanantapuram	0	0		NO	YES	No	0	0	NAP	NAP	NAP	NAP
	2015-16	Tiruvanantapuram	NA	60976		NO	YES	No	NA	Nil	NAP	NAP	NAP	NAP
SWR	2013-14	Yeshwanthpur	0	0	NAP	NAP	NAP	NAP	0	0	0	0	NAP	NAP
	2013-14	KSR Bengaluru City	0	0		NAP	NAP	NAP	0	0	0	0	NAP	NAP
	2014-15	Yeshwanthpur	6195	74340	Monthly	Yes	Yes	Yes	4499	0	0	0	NAP	No
	2014-15	KSR Bengaluru City	9080	108960		Yes	Yes	Yes	8580	0	0	0	NAP	No
	2015-16	Yeshwanthpur	7062	84744		Yes	Yes	Yes	6545	0	0	0	NAP	No
	2015-16	KSR Bengaluru City	12171	146052	Monthly	Yes	Yes	Yes	11031	0	0	0	NAP	No
WCR	2013-14	JABALPUR	7753	2553	PER MONTH	NO	YES	NO	7087	94	0	0	NAP	NO
	2014-15	JABALPUR	8413	17246		NO	YES	NO	7053	94	0	0	NAP	NO
	2015-16	JABALPUR	10028	7634		NO	YES	NO	8331	167	0	0	NAP	NO
	2013-14	KOTA	723	723	PER MONTH	NO	YES	NO	857	0	NAP	NAP	NAP	NAP
	2014-15	KOTA	1131	1131		NO	YES	NO	1208	0	NAP	NAP	NAP	NAP
	2015-16	KOTA	1282	1282		NO	YES	NO	1253	0	NAP	NAP	NAP	NAP
WR	2013-14	Bandra Terminus	9927	56138	Monthly	Yes	Yes	Yes	8803	0	0	0	Not Appli	No
	2014-15	Bandra Terminus	10418	57795		Yes	Yes	Yes	8305	0	0	0	Not Appli	No
	2015-16	Bandra Terminus	11795	31031		Yes	Yes	Yes	10420	0	0	0	Not Appli	No
	2013-14	Ahmedabad	12000	19437	Monthly	No	Yes	No	16000	0	0	0	Not Appli	No
	2014-15	Ahmedabad	13000	16349		No	Yes	No	16000	0	0	0	Not Appli	No
	2015-16	Ahmedabad	13500	34412		No	Yes	No	16500	0	0	0	Not Appli	No

** In Allahabad, NCR, no provision for washing of Pillows exists in the washing contract. Frequency of washing of blankets mentioned in washing contract as one month but the blankets were dry washed from 6 to 8 times in a year during 2013-16*

*** In SCR, before commencement of Mechanised laundries, clause existed for dry-cleaning of Blankets but were wet washed*

Annexure 4.5				
Para 4.1.5.2				
Statement showing the Passenger complaints				
Zonal Railway	*Year*	*Name of the selected Coaching Depot*	*Total number of complaints received during the corresponding year*	*Total from 2013-14 to 2015-16*
CR	2013-14	Lokamannya Tilak Terminus	18	61
	2014-15		29	
	2015-16		14	
	2013-14	Nagpur	14	157
	2014-15		40	
	2015-16		103	
ECoR	2013-14	Puri	214	464
	2014-15		198	
	2015-16		52	
	2013-14	Bhubaneswar	61	92
	2014-15		15	
	2015-16		16	
ER	2013-14	Tikiapara/Howrah	134	401
	2014-15		70	
	2015-16		197	
	2013-14	Sealdah	NA	96
	2014-15		45	
	2015-16		51	
NER	2013-14	Gorakhpur& Lucknow	8	43
	2014-15		8	
	2015-16		27	
NR	2013-14	New Delhi	62	326
	2014-15		144	
	2015-16		120	
	2013-14	Lucknow	8	86
	2014-15		48	
	2015-16		30	
NWR	2013-14	Jodhpur	22	64
	2014-15		14	
	2015-16		28	
	2013-14	Jaipur	6	111
	2014-15		34	
	2015-16		71	
SCR	2013-14	Secunderabad	132	468
	2014-15		171	
	2015-16		165	
	2013-14	Hyderabad	60	163
	2014-15		28	
	2015-16		75	

Annexure 4.5				
Para 4.1.5.2				
Statement showing the Passenger complaints				
Zonal Railway	*Year*	*Name of the selected Coaching Depot*	*Total number of complaints received during the corresponding year*	*Total from 2013-14 to 2015-16*
SECR	2013-14	Bilaspur	7	25
	2014-15		3	
	2015-16		15	
	2013-14	Durg	0	3
	2014-15		0	
	2015-16		3	
SER	2013-14	Santragachi	421	1994
	2014-15		918	
	2015-16		655	
	2013-14	Hatia	36	55
	2014-15		15	
	2015-16		4	
	2013-14	Tata	2	4
	2014-15		1	
	2015-16		1	
SR	2013-14	Trivandrum	0	0
	2014-15		0	
	2015-16		0	
	2013-14	Chennai Central	42	142
	2014-15		47	
	2015-16		53	
SWR	2013-14	Yeshwanthpur	13	171
	2014-15		138	
	2015-16		20	
	2013-14	Bangaluru	243	519
	2014-15		156	
	2015-16		120	
WCR	2013-14	Jabalpur	2	810
	2014-15		504	
	2015-16		304	
	2013-14	Kota	5	19
	2014-15		6	
	2015-16		8	
WR	2013-14	Bandra Terminus	NA	62
	2014-15		38	
	2015-16		24	
	2013-14	Ahmedabad	14	65
	2014-15		14	
	2015-16		37	
NCR	2013-14	Allahabad	12	66
	2014-15		10	
	2015-16		44	
	2013-14	Gwalior	1	39
	2014-15		8	
	2015-16		30	

Annexure 4.5				
Para 4.1.5.2				
Statement showing the Passenger complaints				
Zonal Railway	*Year*	*Name of the selected Coaching Depot*	*Total number of complaints received during the corresponding year*	*Total from 2013-14 to 2015-16*
NFR	2013-14	Guwahati	7	57
	2014-15		11	
	2015-16		39	
	2013-14	Dibrugarh	3	95
	2014-15		8	
	2015-16		84	
ECR	2013-14	Rajendranagar	11	53
	2014-15		33	
	2015-16		9	
	2013-14	Darbhanga	1	15
	2014-15		14	
	2015-16		0	
		16 Zonal Railways	**33 Coaching Depot**	**6726**

Annexure 4.6

Para 4.2.2.2

Statement showing the cases of incorrect selection of coaches for MLR during 2013-14 to 2015-16

S. no	Coach No.	Zonal Railway	Make	Built date	Date received in Pocket Yard	Year	Age as on receipt of coach at CRWS	Date of return back of coach as coach not fit for MLR	Coach detained for number of days & hauled unnecessary	Reasons
1	SE008837	SE	RCF	2000	4/8/2013	2013	13	4/12/2013	4	VPH not accepted for MLR at CRWS
2	ER99729	ER	RCF	1999	4/15/2013	2013	14	4/25/2013	10	Excess holding
3	ER99759	ER	BEML	1999	4/15/2013	2013	14	4/25/2013	10	Due to excess sagging
4	ER00412	ER	ICF	2000	4/15/2013	2013	13	4/25/2013	10	Due to excess sagging
5	ER99430	ER	RCF	1999	4/15/2013	2013	14	4/25/2013	10	Excess holding
6	ER99720	ER	RCF	1999	4/15/2013	2013	14	4/25/2013	10	Excess holding
7	SE008831	SE	RCF	2000	5/2/2013	2013	13	5/8/2013	6	VPH not accepted for MLR at CRWS
8	NF97704	NF	RCF	1997	5/4/2013	2013	16	5/8/2013	4	Overage
9	WR002146	WR	RCF	2000	5/23/2013	2013	13	5/27/2013	4	As per old stencil
10	WR062901	WR	ICF	2006	5/23/2013	2013	7	5/27/2013	4	As per old stencil
11	WR001328	WR	RCF	2000	5/23/2013	2013	13	5/27/2013	4	Excess holding
12	CR98052	CR	RCF	1998	5/31/2013	2013	15	6/3/2013	3	Excess holding
13	NR96217	NR	RCF	1996	6/12/2013	2013	17	6/12/2013	0	As per old stencil
14	NR98474	NR	RCF	1998	6/17/2013	2013	15	6/22/2013	5	Already MLRed at CRWS
15	ECO988118	ECO	RCF	1998	6/24/2013	2013	15	6/25/2013	1	Excess holding
16	ECO998158	ECO	RCF	1999	6/24/2013	2013	14	6/25/2013	1	Excess holding
17	SR90027	SR	ICF	1990	8/6/2013	2013	23	8/13/2013	7	Overage
18	WC92504	WC	RCF	1992	9/9/2013	2013	21	9/10/2013	1	Due for IOH Repair
19	ER99443	ER	RCF	1999	10/5/2013	2013	14	10/31/2013	26	Beyond Repair
20	ER00323	ER	ICF	2000	10/5/2013	2013	13	10/31/2013	26	Beyond Repair
21	ER99479	ER	ICF	1999	10/5/2013	2013	14	10/31/2013	26	Beyond Repair
22	NR7972	NR	RCF	1997	11/1/2013	2013	16	4/9/2014	159	Beyond Repair
23	SC97277	SC	RCF	1997	11/1/2014	2014	17	4/9/2015	159	Beyond Repair
24	ER00213	ER	RCF	2000	12/3/2013	2013	13	12/10/2013	7	Beyond Repair
25	ER00327	ER	ICF	2000	12/3/2013	2013	13	12/10/2013	7	Beyond Repair
26	ER00703	ER	RCF	2000	12/3/2013	2013	13	12/10/2013	7	Beyond Repair
27	ER00325	ER	ICF	2000	12/3/2013	2013	13	12/10/2013	7	Beyond Repair
28	ER00204	ER	RCF	2000	12/3/2013	2013	13	12/10/2013	7	Beyond Repair
29	WC06420	WC	RCF	2006	1/15/2014	2014	8	1/15/2014	0	Underage
30	WR981155	WR	ICF	1998	2/3/2014	2014	16	2/5/2014	2	Overage
31	NR98127	NR	ICF	1998	2/3/2014	2014	16	2/5/2014	2	Overage
32	EC98276	EC	RCF	1998	2/3/2014	2014	16	2/5/2014	2	Overage
33	ECO988256	ECO	ICF	1998	4/7/2014	2014	16	4/7/2014	0	Overage
34	ECO988729	ECO	BEML	1998	4/7/2014	2014	16	4/7/2014	0	Overage
35	ECO988714	ECO	RCF	1998	4/7/2014	2014	16	4/7/2014	0	Overage

Annexure 4.6

Para 4.2.2.2

Statement showing the cases of incorrect selection of coaches for MLR during 2013-14 to 2015-16

S. no	Coach No.	Zonal Railway	Make	Built date	Date received in Pocket Yard	Year	Age as on receipt of coach at CRWS	Date of return back of coach as coach not fit for MLR	Coach detained for number of days & hauled unnecessary	Reasons
36	SC97286	SC	ICF	1997	4/11/2014	2014	17	4/12/2014	1	Overage
37	SE98066	SE	RCF	1998	4/11/2014	2014	16	4/12/2014	1	Overage
38	SC98128	SC	RCF	1998	4/11/2014	2014	16	4/12/2014	1	Overage
39	NR98127	NR	RCF	1998	4/11/2014	2014	16	4/12/2014	1	Overage
41	SC98236	SC	RCF	1998	4/15/2014	2014	16	4/16/2014	1	Overage
42	SR98351	SR	RCF	1998	4/15/2014	2014	16	4/16/2014	1	Overage
43	SR98267	SR	RCF	1998	4/15/2014	2014	16	4/22/2014	7	Overage
44	WR981155	WR	ICF	1998	4/15/2014	2014	16	4/22/2014	7	Overage
45	SC98274	SC	RCF	1998	5/3/2014	2014	16	5/5/2014	2	Overage
46	NR01053	NR	RCF	2001	6/12/2014	2014	13	6/14/2014	2	EOG Coach not for MLR
47	WR011411	WR	RCF	2001	6/24/2014	2014	13	6/25/2014	1	EOG Coach not for MLR
48	SC00116	SC	RCF	2000	6/26/2014	2014	14	6/28/2014	2	EOG Coach not for MLR
49	SC99137	SC	RCF	1999	6/28/2014	2014	15	6/30/2014	2	EOG Coach not for MLR
50	ER01218	ER	RCF	2001	7/2/2014	2014	13	7/7/2014	5	Beyond Repair
51	ER01205	ER	RCF	2001	7/2/2014	2014	13	7/7/2014	5	Beyond Repair
52	ER01210	ER	RCF	2001	7/2/2014	2014	13	7/7/2014	5	Beyond Repair
53	ER01212	ER	RCF	2001	7/2/2014	2014	13	7/7/2014	5	Beyond Repair
54	ER01214	ER	ICF	2001	7/2/2014	2014	13	7/7/2014	5	Beyond Repair
55	ER01320	ER	RCF	2001	7/2/2014	2014	13	7/18/2014	16	Overage
56	ER03219	ER	RCF	2003	7/2/2014	2014	11	7/18/2014	16	Overage
57	WC91361	WC	RCF	1991	8/8/2014	2014	23	8/11/2014	3	Due for IOH Repair
58	NE99705	NE	ICF	1999	9/13/2014	2014	15	9/15/2014	2	Already MLRed at CRWS
59	ER03611	ER	ICF	2003	9/8/2014	2014	11	9/16/2014	8	Janshatabdi Coach not taken for MLR at CRWS
60	WC93421	WC	ICF	1993	10/10/2014	2014	21	10/21/2014	11	Overage
61	NR99059	NR	RCF	1999	11/10/2014	2014	15	11/12/2014	2	Not accepeted since Rajdhani coach
62	NR15629	NR	RCF	2001	11/1/2014	2014	13	11/12/2014	11	Not accepeted since Rajdhani coach
63	CR02122	CR	RCF	2002	11/1/2014	2014	12	11/29/2014	28	Excess holding
64	ECO998064	ECO	ICF	1999	11/1/2014	2014	15	12/6/2014	35	Excess holding
65	CR01110	CR	RCF	2001	12/9/2015	2015	14	12/10/2015	1	Excess holding
66	ECO03107	ECO	RCF	2003	12/5/2014	2014	11	12/17/2014	12	Excess holding
67	NR04291	NR	RCF	2004	1/20/2015	2015	11	1/22/2015	2	Underage
68	ER00329	ER	ICF	2000	1/31/2015	2015	15	2/3/2015	3	Beyond Repair
69	ER01226	ER	RCF	2001	1/31/2015	2015	14	2/3/2015	3	Beyond Repair
70	NC09538	NC	ICF	2009	2/13/2015	2015	6	2/14/2015	1	Underage
71	NE90222	NE	RCF	1990	3/24/2015	2015	25	3/24/2015	0	Overage

Annexure 4.6

Para 4.2.2.2

Statement showing the cases of incorrect selection of coaches for MLR during 2013-14 to 2015-16

S. no	Coach No.	Zonal Railway	Make	Built date	Date received in Pocket Yard	Year	Age as on receipt of coach at CRWS	Date of return back of coach as coach not fit for MLR	Coach detained for number of days & hauled unnecessary	Reasons
72	WC92052	WC	RCF	1992	4/16/2015	2015	23	4/19/2015	3	Overage
73	NR02161	NR	RCF	2002	3/12/2015	2015	13	3/23/2015	11	Reason not given
74	NR17075	NR	RCF	1991	4/5/2015	2015	24	5/8/2015	33	Overage
75	WC90221	WC	RCF	1990	4/21/2015	2015	25	4/21/2015	0	Overage
76	WC90401	WC	RCF	1990	5/14/2015	2015	25	5/23/2015	9	Overage
77	NR03458	NR	ICF	2003	5/16/2015	2015	12	5/23/2015	7	CBC Traffic Coach not for MLR
78	NR03125	NR	RCF	2003	5/16/2015	2015	12	5/23/2015	7	CBC Traffic Coach not for MLR
79	NR033723	NR	ICF	2003	5/16/2015	2015	12	5/23/2015	7	CBC Traffic Coach not for MLR
80	ER01209	ER	RCF	2001	5/22/2015	2015	14	6/19/2015	28	Excess holding
81	ER00334	ER	ICF	2000	5/22/2015	2015	15	6/19/2015	28	Excess holding
82	ER00331	ER	ICF	2000	5/22/2015	2015	15	6/19/2015	28	Excess holding
83	SE018057	SE	ICF	2001	6/12/2015	2015	14	6/24/2015	12	Reason not given
84	NR153428	NR	ICF	2015	6/15/2015	2015	0	6/15/2015	0	New Coach not for MLR
85	NR153430	NR	ICF	2015	6/15/2015	2015	0	6/15/2015	0	New Coach not for MLR
86	NR153421	NR	ICF	2015	6/15/2015	2015	0	6/15/2015	0	New Coach not for MLR
87	ER00456	ER	RCF	2000	6/17/2015	2015	15	6/26/2015	9	Reason not given
88	SR07734	SR	ICF	2007	7/2/2015	2015	8	7/6/2015	4	Underage
89	ECO02702	ECO	ICF	2002	7/2/2015	2015	13	7/6/2015	4	Janshatabdi Coach not taken for MLR at CRWS
90	ECO02603	ECO	ICF	2002	7/2/2015	2015	13	7/6/2015	4	Janshatabdi Coach not taken for MLR at CRWS
91	CR82896	CR	ICF	1982	7/9/2015	2015	33	7/11/2015	2	Overage
92	SW85462	SW	ICF	1985	7/9/2015	2015	30	7/11/2015	2	Overage
93	EC06234	ECO	BEML	2006	8/11/2015	2015	9	8/13/2015	2	Underage
94	NE15205	NE	RCF	2015	8/11/2015	2015	0	8/13/2015	2	New Coach not for MLR
95	NR13707	NR	RCF	1996	8/11/2015	2015	19	8/13/2015	2	Overage
96	ECO03102	ECO	RCF	2003	9/19/2015	2015	12	9/28/2015	9	Excess holding
97	ECO03220	ECO	RCF	2003	9/19/2015	2015	12	9/28/2015	9	Excess holding
98	NR03202	NR	ICF	2003	9/21/2015	2015	12	9/28/2015	7	Excess holding
99	NR96204	NR	RCF	1996	9/21/2015	2015	19	9/21/2015	0	Overage
100	ECO04216	ECO	ICF	2004	9/28/2015	2015	11	9/28/2015	0	Excess holding
101	ECO03228	ECO	RCF	2003	9/28/2015	2015	12	9/28/2015	0	Excess holding
102	SR01245	SR	ICF	2001	9/30/2015	2015	14	10/7/2015	7	Excess holding
103	ECO018234	ECO	ICF	2001	9/30/2015	2015	14	10/7/2015	7	Excess holding
104	ECO04051	ECO	ICF	2004	9/30/2015	2015	11	10/7/2015	7	Excess holding
105	NR02216	NR	ICF	2002	10/5/2015	2015	13	10/17/2015	12	Excess holding
106	SR03259	SR	ICF	2003	10/10/2015	2015	12	10/14/2015	4	Excess holding

Annexure 4.6

Para 4.2.2.2

Statement showing the cases of incorrect selection of coaches for MLR during 2013-14 to 2015-16

S. no	Coach No.	Zonal Railway	Make	Built date	Date received in Pocket Yard	Year	Age as on receipt of coach at CRWS	Date of return back of coach as coach not fit for MLR	Coach detained for number of days & hauled unnecessary	Reasons
107	NR03002	NR	ICF	2003	10/10/2015	2015	12	10/14/2015	4	Excess holding
108	NF97108	NF	RCF	1997	10/10/2015	2015	18	10/14/2015	4	Overage
109	NF7205	NF	ICF	1995	10/10/2015	2015	20	10/14/2015	4	Overage
110	ECO05255	ECO	RCF	2005	10/24/2015	2015	10	10/26/2015	2	Underage
110	ECO04051	ECO	ICF	2004	11/23/2015	2015	11	11/24/2015	1	Excess holding
111	ECO03102	ECO	RCF	2003	11/27/2015	2015	12	11/28/2015	1	Excess holding
112	ECO04133	ECO	RCF	2004	11/27/2015	2015	11	11/28/2015	1	Excess holding
113	WC03409	WC	ICF	2003	12/9/2015	2015	12	12/9/2015	0	Underage
114	NF05115	NF	RCF	2005	12/9/2015	2015	10	12/9/2015	0	Underage
115	WC02101	WC	RCF	2002	12/9/2015	2015	13	12/9/2015	0	Already MLRed at CRWS
116	CR96315	CR	ICF	1996	12/31/2015	2015	19	12/31/2015	0	Already MLRed at CRWS
117	CR99453	CR	ICF	1999	1/11/2016	2016	17	1/12/2016	1	Overage
118	WC09432	WC	ICF	2009	1/11/2016	2016	7	1/12/2016	1	As per old stencil
119	WC07003	WC	BEML	2007	1/11/2016	2016	9	1/12/2016	1	As per old stencil
120	ECO10404	ECO	ICF	2010	1/19/2016	2016	6	1/22/2016	3	Underage
121	ECO998053	ECO	ICF	1999	1/19/2016	2016	17	1/22/2016	3	Already MLRed at CRWS
122	NR02156	NR	ICF	2002	1/21/2016	2016	14	1/21/2016	0	Already MLRed at CRWS
123	WR008045	WR	ICF	2000	2/1/2016	2016	16	2/3/2016	2	Overage
124	WC02568	WC	ICF	2002	2/5/2016	2016	14	2/5/2016	0	Reason not given
125	WC13406	WC	RCF	2013	2/8/2016	2016	3	2/11/2016	3	New Coach not for MLR
126	NR05302	NR	RCF	2005	2/18/2016	2016	11	2/27/2016	9	Underage
127	NR96215	NR	RCF	1996	2/20/2016	2016	20	2/27/2016	7	Overage
128	WC05051	WC	RCF	2005	2/20/2016	2016	11	2/23/2016	3	Underage
129	EC10500	EC	ICF	2010	2/27/2016	2016	6	2/27/2016	0	Underage
130	NR10862	NR	RCF	2010	2/27/2016	2016	6	2/27/2016	0	Underage
131	SE038234	SE	RCF	2003	3/15/2016	2016	13	3/18/2016	3	Excess holding
132	SE028240	SE	ICF	2002	3/16/2016	2016	14	3/18/2016	2	Excess holding
133	NE00287	NE	ICF	2000	3/16/2016	2016	16	3/18/2016	2	Already MLRed at CRWS
134	ECO04051	ECO	ICF	2004	3/21/2016	2016	12	3/22/2016	1	Excess holding
135	NE01105	NE	RCF	2001	3/21/2016	2016	15	3/22/2016	1	Excess holding
136	NE01207	NE	RCF	2001	3/21/2016	2016	15	3/22/2016	1	Excess holding
137	NR04303	NR	RCF	2004	3/21/2016	2016	12	3/22/2016	1	Excess holding
Source: Coach Movement Register									**1066**	

Annexure 4.7			
Para 4.2.2.6 i			
Statement showing extra time taken in re-repairing of MLR coaches			
Month & Year	*No. of coaches sent to NTXR for inspection*	*No. of coaches rejected by NTXR during 1st inspection*	*Time taken in extra repair work*
Apr-12	36	8	10
May-12	51	7	13
Jun-12	50	8	11
Jul-12	49	18	34
Aug-12	48	20	74
Sep-12	48	20	40
Oct-12	46	24	57
Nov-12	43	8	11
Dec-12	49	15	29
Jan-13	51	18	39
Feb-13	50	15	37
Mar-13	47	18	37
Apr-13	48	20	125
May-13	50	19	35
Jun-13	48	22	40
Jul-13	53	20	37
Aug-13	47	22	45
Sep-13	47	24	79
Oct-13	46	20	42
Nov-13	43	21	47
Dec-13	50	22	43
Jan-14	52	24	117
Feb-14	48	21	59
Mar-14	48	21	43
Apr-14	46	18	119
May-14	50	18	57
Jun-14	49	17	66
Jul-14	52	15	33
Aug-14	47	14	77
Sep-14	54	16	48
Oct-14	42	9	26
Nov-14	48	15	30
Dec-14	51	21	58
Jan-15	51	18	52
Feb-15	43	17	28
Mar-15	50	16	39
Apr-15	48	21	58
May-15	49	19	33
Jun-15	50	24	77
Jul-15	47	17	64
Aug-15	35	17	57
Sep-15	38	13	31
Oct-15	44	10	20
Nov-15	43	10	20
Dec-15	47	21	76
Jan-16	50	22	80
Feb-16	47	24	75
Mar-16	57	28	95
Total	**2286**	**855**	**2423**