

Chapter 2: Traffic - Commercial and Operations

The Traffic Department comprises four streams viz., Traffic, Commercial, coaching and Catering & Tourism. The activities related to these streams are performed by the concerned 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 service 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 planning of transportation services – both long-term and short-term, management of day to day running of trains including their time tabling, ensuring availability and proper maintenance of rolling stock to meet the expected demand and conditions for safe running of trains is, however, managed by Traffic Directorate.

The management of passenger and parcel services is done by Coaching Directorate and activities related catering and tourism are managed by Catering & tourism Directorate.

At the zonal level, the traffic department consists of two department, viz., Operating department and Commercial departments. 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 are under charge of Divisional Railway Manager of the concerned Division.

The total expenditure of the Traffic Department during the year 2012-13 was `6363.75 crore. Total Gross traffic receipt during the year was ` 1,23,732 crore¹. During the year, apart from regular audit of vouchers and tenders etc., 1183 offices of the department including 559 stations were inspected.

This chapter includes following two Thematic Audits:

- (i) **Performance of Weighbridges in Indian Railways** – In this thematic audit, Audit noticed that Railway Board failed to ensure weighment of all freight traffic. Audit observed that out of 1176 loading points in Indian Railways, 759 did not have their own weighbridges. They were largely (65 *per cent*) dependent on privately owned weighbridges for weighment especially for bulk consignments such as coal, iron-ore etc. The performance of weighbridges was not being checked regularly by the Railway Administrations. This has increased risk of revenue loss in carrying freight of bulk consignments. Audit also noticed deficiencies in their proper up-keep and maintenance.

¹ Indian Railway year book 2012-13

- (ii) **Maha Kumbh Mela 2013** – Audit commented on the arrangements made by Railways (North Central, Northern and North Eastern) for the Maha Kumbh Mela, celebrated at Allahabad during 14th January to 10 March 2013. Audit revealed that Railways failed to establish proper coordination with the State authorities to regulate the influx of pilgrims towards Allahabad station. The stampede at Allahabad station on 10th February 2013 highlights the lack of necessary coordination and cooperation with the State Government.

In addition, this chapter incorporates five Audit Paragraphs highlighting individual irregularities pertaining to underutilization of traffic assets that led to revenue loss to Railways and loss on account of incorrect application of rules.

2.1 Performance of Weighbridges in Indian Railways

Executive Summary

Indian Railways (IR) is the single largest mode of transport for long haul freight movement. Goods are transported either in bags or loose. The bagged consignments are loaded in uniform standard bags and are exempt from mandatory weighment. Generally bulk commodities such as coal, iron ore etc are transported loose. These are required to be weighed at the originating station by weighbridges, en-route or at the destination points. This is essential to plug the leakage of revenue but also to discourage overloading of wagons/rakes to avoid damage to rolling stock and track/path.

Railway Board has emphasized that all loading points should be covered by weighbridges so that there is 100 *per cent* weighment of all rakes. Out of 1176 loading points as on March 2013, 759 (64.54 *per cent*) were not provided with weighbridges. Railway Administrations failed to identify even associated/alternate² weighbridges for 562 loading points. Four Zonal Railways failed to notify any associated weighbridges for their 261 loading points. Despite less number of weighbridges only 76 weighbridges were sanctioned during the period 2008-13, of these 31 weighbridges were yet to be installed. It was also seen that IR is largely dependent on private weighbridges (65 *per cent*).

The Railway Manuals prescribe a large number of checks to be performed by Railway Officials to ensure that the weighbridges are maintained properly and perform accurately. These checks were generally not being followed by the Railway Administration especially for private weighbridges. Performance of these checks were not being monitored. These checks assume importance in view of the Railways' dependence on private weighbridges and the fact that a significant proportion of bulk commodities are weighed at private weighbridges.

Railway Board had advised that all weighbridges installed be utilised for weighment of parcel vans and a Joint Procedure Order (JPO) embodying guidelines be issued by each zone. However, no JPO was issued by any Zonal Railway. At seven loading points over five Zonal Railways, only 18 *per cent* of parcel vans were weighed. Out of the parcel vans weighed, over weight was detected in 4.37 *per cent* of parcel vans and penalty of ` 2.60 crore was collected. This indicates violation of Railway Boards instructions for weighment of parcels on a substantial scale.

2.1.1 Introduction

Indian Railways (IR) having a vast network of 64,600 route kilometers are the principal mode of transportation for long haul freight movement in the country. IR carried around 1008 million tonnes of freight during the year 2012-13 and earned `

² Associated Weighbridges (WB): WB identified for loading points without a WB. Alternate WB: Alternate WB identified for loading points with WB.

85,262 crore. This comprised 67 *per cent* of the total revenues earned by the Railways.

Goods are transported either in bags or loose. Commodities transported in loose such as coal, iron ore etc. are to be weighed at the originating stations by wagon weighbridges wherever these exist. Where the weighbridges do not exist at the originating stations, the wagons are to be weighed en-route or at destination points before effecting delivery to the consignees³. The bagged consignments are loaded in uniform standard bags and were exempted from mandatory weighment. To avoid under weighment, Ministry of Railways decided (September 2011) that at least five *per cent* of rakes should be subjected to weighment. This is necessary not only to plug the leakage of revenue due to overloading of wagons/rakes, but also to discourage overloading of wagons/rakes to avoid damage to rolling stock as well as the track/path.

IR has two categories of weighbridges (WB) – static and In-motion. While weighment in static WB is done separately for each wagon in a static condition, the in-motion WB, as the name suggests, can weigh the entire fleet of wagons in a rake while it is in motion thereby avoiding detention of wagons. Introduction of Electronic In-Motion Weighbridges (EIMWB) on IR dates back to the 1990s. The development of the EIMWB was carried out by the Railway Board in consultation with Research Design and Standards Organization (RDSO).

2.1.2 Organizational set up

Railway Board is responsible for policy decisions in connection with weighbridges. The General Manager of the Zonal Railway is responsible for justification and deciding location for weighbridges. He is assisted by the Traffic Commercial Department headed by Chief Operations Manager and Chief Commercial Manager who are responsible for operations, manning and record keeping of the weighbridges. The Mechanical Department headed by Chief Mechanical Engineer of the Zonal Railway is responsible for technical specification, technical support for installation and maintenance of the weighbridges and the Stores Department headed by Controller of Stores of the Zonal Railway is responsible for procurement action.

2.1.3 Earlier Audit Report

Audit Para No. 5.3 on “Working of Weighbridges over Indian Railways” was included in the Audit Report No. 9 of 1998. The Report highlighted that a clear perspective plan of installation of weighbridges had not been drawn up. It further pointed out that non-weighment of wagons caused loss of revenue assessed on account of overloading of wagons. Only 27.28 *per cent* wagons passing through weighbridges were actually weighed and the Railways had no immediate plan to order any more weighbridges.

In their Action Taken Note (February 2008), the Ministry of Railways (Railway Board) stated that based on a report submitted by a Committee of Additional Members, the Railway Board had approved the need for ensuring better

³ Railway Board’s DO No. 2004/TT/-IV/65/134 dated 29-10-2004

availability of weighbridges with greater reliability. They also reiterated that new electronic weighbridges would be installed near the bulk loading points to get optimum benefit.

In the present audit, we examined the status relating to subsequent provision and maintenance of weighbridges in IR.

2.1.4 Audit Objectives

The main audit objectives were to assess whether:

- Provision, performance and reliability of weighbridges is adequate;
- Maintenance of weighbridges is carried out as per prescribed schedule;
- Impact of non-weighment of freight.

2.1.5 Audit Criteria, Scope and Methodology

The criteria for assessing the performance were instructions contained in the Indian Railway Commercial Manual Volume II⁴, the orders/instructions issued by the Railway Board from time to time and the Standards of Weights and Measures Act, 1976.

Audit covers a five year period from 2008-09 to 2012-13 for examining the weighment of loose commodities such as coal, iron ore etc. dispatched through rail. We also assessed the weighment procedure for container traffic, scrap material sold by IR and parcel vans leased to the private parties. Out of total 516 weighbridges (Table 2.1) in Indian Railways, 144 weighbridges listed in Appendix I were selected for scrutiny.

Audit also examined and analyzed the data at the Zonal Head Quarters, Divisional Head Quarters and at selected field locations.

2.1.6 Audit findings

2.1.6.1 Performance and reliability of weighbridges

2.1.6.1.1 Provision of Weighbridges at Loading Points

Railway Board vide their Rate Circular No. 86/2006 of October 2006 emphasized that all loading points⁵ should be covered by the weighbridges so that there is 100 *per cent* weighment of all rakes. According to these orders, the Zonal Railways were to notify associated weighbridges for each loading point without weighbridge. Further, alternate weighbridges were also required to be notified for loading points with weighbridge and for associated weighbridges in cases of breakdown of such weighbridges. One weighbridge can act as an associated weighbridge for a number of loading points without weighbridge and also as an alternative weighbridge for loading points with weighbridges.

During Audit, it was observed that out of 1176 loading points, only 417 loading points had their own weighbridges. In 614 loadings points, associated and

⁴ Paras 1426, 31,35,36&37

⁵ Railway/line siding owned by railway or private party (other than goods shed) where loading of goods including containers takes place with prior sanction of the Divisional Commercial Manager of Railway for dispatch of the same to destinations by rail.

alternative weighbridges were notified and in remaining 562 loading points notifications were yet to be issued (March 2013). Further analysis of data from table 2.1 revealed the following:

Table 2.1
Details of loading points and their associated and alternative weighbridges

| Name of Zonal Railway | No. of weighbridges in Indian Railways | | | Total no. of loading points | | | No. of Loading points with weighbridges | | | No. of WB notified by Rly. Admn. for Associated/ alternative WB | | | No. of loading points where Associated and alternative weighbridges not notified | | |
|-----------------------|--|------------|------------|-----------------------------|------------|-------------|---|------------|------------|---|------------|------------|--|------------|------------|
| | Pvt. | Rly | Total | Pvt. | Rly | Total | Pvt. | Rly | Total | Pvt. | Rly | Total | Pvt. | Rly | Total |
| <i>I</i> | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| SECR | 71 | 9 | 8 | 72 | 25 | 97 | 64 | 2 | 66 | 72 | 25 | 97 | - | - | - |
| NWR | 3 | 7 | 10 | 14 | 88 | 102 | 3 | 7 | 10 | 7 | 19 | 26 | 7 | 69 | 76 |
| ECR | 43 | 9 | 52 | 51 | 65 | 116 | 34 | 0 | 34 | 17 | 5 | 22 | 34 | 60 | 94 |
| NFR | 2 | 7 | 9 | 2 | 23 | 25 | 2 | 3 | 5 | 0 | 0 | 0 | 2 | 23 | 25 |
| NER | 0 | 2 | 2 | 3 | 58 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 58 | 61 |
| WCR | 8 | 12 | 20 | 49 | 60 | 109 | 8 | 12 | 20 | 49 | 60 | 109 | - | - | - |
| SER | 37 | 19 | 56 | 47 | 34 | 81 | 38 | 22 | 60 | 47 | 34 | 81 | - | - | - |
| WR | 17 | 24 | 41 | 51 | 98 | 149 | 17 | 24 | 41 | 18 | 38 | 56 | 33 | 60 | 93 |
| SWR | 9 | 8 | 17 | 9 | 15 | 24 | 4 | 1 | 5 | 9 | 15 | 24 | - | - | - |
| SCR | 32 | 22 | 54 | 55 | 20 | 75 | 30 | 20 | 50 | 55 | 20 | 75 | - | - | - |
| NCR | 0 | 6 | 6 | 5 | 37 | 42 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 32 | 37 |
| SR | 8 | 12 | 20 | 8 | 7 | 15 | 6 | 5 | 11 | 8 | 6 | 14 | 0 | 1 | 1 |
| CR | 42 | 5 | 47 | 42 | 5 | 47 | 42 | 5 | 47 | 0 | 0 | 0 | 42 | 5 | 47 |
| NR | 16 | 11 | 27 | 14 | 114 | 128 | 1 | 0 | 1 | 0 | 0 | 0 | 14 | 114 | 128 |
| ECoR | 22 | 9 | 31 | 20 | 18 | 38 | 20 | 3 | 23 | 20 | 18 | 38 | - | - | - |
| ER | 23 | 21 | 44 | 27 | 40 | 67 | 23 | 21 | 44 | 27 | 40 | 67 | - | - | - |
| Total | 333 | 183 | 516 | 469 | 707 | 1176 | 292 | 125 | 417 | 329 | 285 | 614 | 140 | 422 | 562 |

(Source: Records of Commercial department of Zonal Headquarters of concerned Railway)

- Seven Zonal Railways⁶ have notified associated /alternate weighbridges for all of their 491 loading points with weighbridges and without weighbridges.
- Four Zonal Railways⁷ have not notified any associated weighbridges for their 261 loading points.
- Four Zonal Railways have notified associated/alternate weighbridges for 101 loading points⁸ and 207 loading points⁹ were still to be notified.

In ECR it was noticed that they have notified associated weighbridges for their 22 loading points without weighbridges. However, notification for alternative weighbridges was not issued against 94 loading points with weighbridges.

⁶ SECR -97, WCR-109, SER-81, SWR-24, SCR-75, ECoR-38, ER-67

⁷ NFR-25, NER-61, NR-128, CR-47

⁸ NWR-26, WR-56, NCR-5, SR-14.

⁹ NWR-76, WR-93, NCR-37, SR-1.

Thus, even after a lapse of seven years from the date of issue of Railway Board's orders in October 2006 as mentioned in 2nd sub para above, IR has been unable to cover all loading points by weighbridges and did not notify associated and alternative weighbridges for 562 loading points (nearly 50 *per cent*).

2.1.6.1.2 Profile of Weighbridges

Efficient functioning of any plant and machinery depends upon proper upkeep, maintenance and timely replacement. The normal life of Mechanical Weighbridges has been fixed as 15 years and that of Electronic In-motion Weighbridges was fixed as 8 years by the Railway Board. A test check of records by Audit revealed the following:

- As on 1 April 2008 there were 393 weighbridges¹⁰ in IR. During the period 2008-13, 123 Electronic In-motion Weighbridges¹¹ were added. Out of 123 weighbridges added, five weighbridges¹² were on replacement account. Thus, as on 31 March 2013 there were 516 weighbridges (Private-333, Railways-183) in Indian Railways for weighment of bulk consignment. Bulk consignment like coal, iron ore etc. are generally sent loose by private parties. In fact bulk consignments form 63.41¹³ *per cent* of freight carried by IR (2012-13). Thus, IR is largely dependent on privately owned weighbridges (64.5 *per cent*).
- In-motion weighbridge is preferred to static weighbridge as it entails weighment of rakes in motion thereby reducing detention of the rolling stock. This in turn, increases the availability of rolling stock for more loading, which is beneficial to both the Railways as well as the customers. The Railway Board issued instructions (November 2009¹⁴) to replace the static weighbridges with Electronic In-motion Weighbridges (EIMWB) by March 2011. In cases of specific constraints where static weighbridge cannot be replaced, the Zonal Railway was to approach Railway Board and obtain specific exemption for their continuance. Audit observed that IR is still continuing with 76 static weighbridges (Private- 70¹⁵ and Railways- 6¹⁶) after getting specific approval of the Railway Board.
- The over-aged weighbridges are required to be replaced timely to ensure correct weighment. Scrutiny by Audit revealed that out of 516 weighbridges in IR, 164 weighbridges (31.78 *per cent*) are over-aged. In private sidings 133 weighbridges (48 static and 85 In-motion) out of 333 i.e. 40 *per cent* are over-aged. Thus private sidings had a larger proportion of over-aged weighbridges.
- The Status of over-aged weighbridges in the respective Zonal Railways was: SECR (43 Nos), ECR (40 Nos), SER (17 Nos), CR (16 Nos), NR (10 Nos) and

¹⁰ Private-268, Railways-125

¹¹ Private-65, Railways-58

¹² Private-3, Railways-2

¹³ Coal, Iron Ore, Limestone & Dolomite, Stones (including gypsum) other than Marble

¹⁴ Railway Board's No. TC-1/2005/108/3-pt. dated 11-11-2009

¹⁵ SECR – 15, ECR-12, NFR-1, SER-12, CR-19, NR-7, ECoR – 1, ER-3.

¹⁶ NR-4, ER-2.

ER (10 Nos). Out of 164 over-aged weighbridges, 57 weighbridges¹⁷ (Private – 55, Railways- 2) were over-aged by more than 10 years, 48 weighbridges¹⁸ (Private- 43, Railways- 5) were over-aged by more than 5 years. Audit observed that out of 105 over-aged weighbridges of more than 5 years, 98 weighbridges belong to private siding owners. Thus, it follows from the above that Indian Railways did not take any tangible action to ensure that private siding owners replace their over-aged weighbridges

2.1.6.1.3 Procurement and Installation of Weighbridges

Railway Board emphasized (October 2004) that all loading points should be covered by weighbridges to ensure 100 *per cent* weightment of all rakes¹⁹ carrying bulk commodities. No time frame for this was prescribed. Further, Railway Board advised Zonal Railways in September 2011²⁰ to work out a plan within one month for installation of weighbridges covering all loading points within a time frame of one year.

Review of records during the period from 2008-13 revealed that though 759 loading points were without their own weighbridges (Railways 582²¹, private 177²²) as on March 2013, only 84²³ weighbridges were proposed for procurement by the Zonal Railways. Out of these, 76 weighbridges were sanctioned by the General Managers²⁴ (68 nos.²⁵)/Railway Board (8 nos.²⁶) and 45²⁷ weighbridges were commissioned till March 2013. The remaining 31 weighbridges were yet to be installed as these were pending at various stages of procurement i.e. tendering (21 nos.²⁸) and awaiting supply/commissioning (10 nos.²⁹). As on 31st March 2013, delay in tendering ranged between 2 to 40 months. There were inordinate delays of 40 months in SER and SR, 33 months in NCR and 30 months in SWR, in tendering process. Delay in supply and commissioning ranged between 19 to 54 months. Exceptional delays were noticed in SR (54 months), ECR and SER (51 months) and NCR (43 months). Scrutiny of records by Audit revealed the following:

¹⁷ SECR 19 pvt, ECR 19 pvt, SER 1pvt, WR 1pvt, SCR 1 pvt, CR 12pvt NR 2 pvt, ER 2 Rly

¹⁸ SECR Pvt 13; Rly 1, ECR 5 pvt, NFR 1 Rly, SER 12 pvt, WR 4 pvt, NCR 1 Rly, CR 2 pvt, NR 2 pvt; 1 Rly, ECoR 1 pvt, ER 4 pvt; 1 Rly.

¹⁹ Board's letter No. 2004/TT- IV/65/134 dated 29/10/2004

²⁰ RC 32 of 2011 (No. TC-1/2010/108/4 dated 16/9/2011)

²¹ SECR-23, NWR-81, ECR-65, NFR-20, NER-58, WCR-48, SER-12, WR-74, SWR-14, NCR-37, SR-2, NR-114, ECoR-15 & ER-19.

²² SECR-8, NWR-11, ECR-17, NER-3, WCR-41, SER-9, WR-34, SWR-5, SCR-25, NCR-5, SR-2, NR-13 & ER-4.

²³ SECR-13, ECR-2, NFR-2, WCR-2, SER-11, WR-7, SWR-5, SCR-19, NCR-2, SR-9, CR-2, NR-3, ECoR-4 & ER-3.

²⁴ In October 2004, General Manager was delegated with power of procurement of weighbridges up Rs. 15 lakh

²⁵ SECR-8, ECR-1, WCR-2, SER-11, WR-7, SWR-2, SCR-14, NCR-2, SR-9, CR-2, NR-3, ECoR-4 & ER-3.

²⁶ SECR-4, NFR-2, SCR-2

²⁷ SECR-2, NFR-2, WCR-1, SER-8, WR-6, SWR-1, SCR-13, SR-7, CR-2, NR-2, ECoR-1

²⁸ SECR-10, SER-2, WR-1, SWR-1, SCR-2, NCR-1, SR-1 & ER-3.

²⁹ ECR-1, WCR-1, SER-1, SCR-1, NCR-1, SR-1, NR-1, ECoR-3

Table 2.2
Details of weighbridges proposed, sanctioned and installed during 2008-13

| Name of Zonal Railway | No of Loading points without own weighbridges | | | No. Of WB proposed | | | No. Of WB sanctioned | | | No. Of WB installed | | |
|-----------------------|---|------------|------------|--------------------|-----------|-----------|----------------------|-----------|-----------|---------------------|-----------|-----------|
| | Private | Railway | Total | Private | Railway | Total | Private | Railway | Total | Private | Railway | Total |
| SECR | 8 | 23 | 31 | NA | 13 | 13 | NA | 12 | 12 | NA | 2 | 2 |
| NWR | 11 | 81 | 92 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 |
| ECR | 17 | 65 | 82 | NA | 2 | 2 | NA | 1 | 1 | NA | 0 | 0 |
| NFR | 0 | 20 | 20 | NA | 2 | 2 | NA | 2 | 2 | NA | 2 | 2 |
| NER | 3 | 58 | 61 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 |
| WCR | 41 | 48 | 89 | NA | 2 | 2 | NA | 2 | 2 | NA | 1 | 1 |
| SER | 9 | 12 | 21 | NA | 11 | 11 | NA | 11 | 11 | NA | 8 | 8 |
| WR | 34 | 74 | 108 | NA | 7 | 7 | NA | 7 | 7 | NA | 6 | 6 |
| SWR | 5 | 14 | 19 | NA | 5 | 5 | NA | 2 | 2 | NA | 1 | 1 |
| SCR | 25 | 0 | 25 | NA | 19 | 19 | NA | 16 | 16 | NA | 13 | 13 |
| NCR | 5 | 37 | 42 | NA | 2 | 2 | NA | 2 | 2 | NA | 0 | 0 |
| SR | 2 | 2 | 4 | NA | 9 | 9 | NA | 9 | 9 | NA | 7 | 7 |
| CR | 0 | 0 | 0 | NA | 2 | 2 | NA | 2 | 2 | NA | 2 | 2 |
| NR | 13 | 114 | 127 | NA | 3 | 3 | NA | 3 | 3 | NA | 2 | 2 |
| ECoR | 0 | 15 | 15 | NA | 4 | 4 | NA | 4 | 4 | NA | 1 | 1 |
| ER | 4 | 19 | 23 | NA | 3 | 3 | NA | 3 | 3 | NA | 0 | 0 |
| Total | 177 | 582 | 759 | 0 | 84 | 84 | 0 | 76 | 76 | 0 | 45 | 45 |

(Source: Records of Commercial, Mechanical and Stores Department of concerned Zonal Railways)

- NWR and NER did not propose any weighbridge for installation during the period under review though they have 92 and 61 loading points without weighbridges respectively.
- ECR, NCR and ER sanctioned only six weighbridges³⁰ for procurement during the period under review against their 147 loading points without weighbridges (ECR-82, NCR-42 and ER-23). The six weighbridges are yet to be installed (March 2013).
- NR, WR and WCR could install only nine weighbridges³¹ against sanction of 12 weighbridges³² though they have 324 loading points without weighbridges³³.
- SECR having 31 loading points without weighbridges sanctioned 12 weighbridges during 2008-13 against which it could install only two³⁴

³⁰ ECR-1, NCR-2, and ER-3.

³¹ NR-2, WR-6, WCR-1

³² NR-3, WR-7, WCR-2

³³ NR-127, WR -108, WCR-89.

³⁴ December 2009 and January 2010 respectively

weighbridges. It was observed in Audit that 10 weighbridges could not be installed till March 2013 owing to non finalization of tenders. Delay in finalization in these weighbridges ranged between 2 and 14 months.

- On the other hand, NFR installed two weighbridges against 20 loading points without weighbridges and CR also installed two weighbridges though they have no loading point left without weighbridge.

Though Railway Board issued Action Plan in October 2004 to ensure 100 percent weightment of wagons and reiterated the same in September 2011, it is pertinent to note that there was hardly any progress made by the Zonal Railways in installation of weighbridges. Further, no record of follow up action by the Railway Board is available.

2.1.6.1.4 Supervision of Weightment by the Railway Staff in Private Weighbridge

As per Railway Board's Instruction of April 2010 read with Rate Circular No. 12/2007 of February 2007, at Private Sidings where Railway staff are posted exclusively as weighbridge clerk for supervising the weightment at private weighbridges, cost of staff is to be borne by the customer. In case it is not possible for existing railway staff posted at such siding to witness the weightment and the customer desires that Railway Receipt (RR) should be issued on actual weight basis then the customer will be required to pay for additional railway staff who will be deputed specially for witnessing the weightment. In case the weightment in private weighbridge is not supervised by Railway staff the weight of such weighbridge will not be accepted and the RR will be issued as per extant rules i.e. based on sender's weight accepted (SWA) or on the basis of Permissible Carrying Capacity (PCC) whichever is higher. In such cases, weightment should also be made in the next available weighbridge and the difference of freight, if any, should be collected.

Scrutiny of records of 89 loading points with private weighbridges out of total 293 loading points with weighbridges disclosed the following:

- Railway staff was not posted for supervision of weightment at 28 loading points involving eight Zonal Railways³⁵. It was noticed in SR that all the 8260 rakes from their four loading points³⁶ were sent on Sender's Weight Accepted during the period under review. In SECR, NFR, SER, WR, NR, ECoR and ER in three months test check (April, October and December), a total of 7856³⁷ rakes were sent on "sender's weight accepted" as weightment was not supervised by the Railway staff. Audit observed that these rakes were not re-weighed on other weighbridges in contravention to the Railway Board's order of February 2007. Therefore, chances of transportation of overweight rakes cannot be ruled out.

³⁵ SECR-4, NFR-1, SER-3, WR-1, SR-5, NR-7, ECoR-6, ER-1.

³⁶ ST-CMS Siding Vadalur – 4320, Karaikal Port Siding/Nagore – 2199, Udupi Power Corporation Siding/ Panamburu-890, Chettinadu International Coal Terminal Siding/ Attipattu - 851

³⁷ SECR-2053, NFR-8, SER-5255, NR-33-ECoR-366 & ER-141

- Railway staff was posted exclusively for supervision of weighment in 24 private loading points³⁸ (out of 61) where cost of staff was recoverable. Review of records revealed that an amount of `6.22 crore³⁹ was recoverable as on March 2013 from the siding owners in SECR, ECR, NFR and ER during the period under review.

2.1.6.1.5 Performance of Weighbridges - Loss of Machine days.

The weighbridges are available for utilization during 24 hours on all the 365 days of the year. The performance of weighbridges depends on utilization of available machine days. As major breakdowns adversely affect the weighment, they should be kept at bare minimum level by doing proper maintenance. Timely replacement of over-aged weighbridges is also essential. Review of records of 144 weighbridges by Audit (Pvt.-93, Rlys-51), revealed the following:

- Record for data on utilization of machine days was not maintained in respect of 35⁴⁰ private weighbridges. As a result, reliability of these weighbridges could not be verified in audit.
- In 56 weighbridges of all zonal Railways, except CR where breakdowns were negligible, there were losses of machine days ranging between 10 to 1230 days due to break down or major maintenance.
- In SECR, a Railway weighbridge at Champa which had exceeded its codal life in June 2008 was under break down for 107 days during 2009-10 and as a result 16 rakes were sent to their respective destinations without weighment
- Detailed scrutiny in ECR, NFR and NR revealed that 3 over-aged weighbridges⁴¹ were under major breakdowns for 409, 372 and 303 days respectively during 2008-13. Audit observed that the machines were over-aged by 121, 61 and 58 months respectively and thus, the breakdowns were mainly due to their over-ageing.
- In ER, 1230 days of break down (67.36 percent) was noticed against 1826 available machine days at the Salanpur weighbridge (private) during the period from 2008-13. The age of the weighbridge could not be ascertained in Audit due to non availability of records. In NR, Railway weighbridge at Vyasnagar was under breakdown for 809 days (44.30) against available machine days of 1826.

During scrutiny of records it was observed in Audit that loss of machine days of weighbridges was mainly attributable to their over-aging by 5 to 10 years. This increases the risk of loss of potential revenue and possible damage to the track and rolling stock. Therefore, Zonal Railways and Railway Board should take appropriate action for replacement of over-aged Weighbridges.

2.1.6.2 Maintenance of weighbridges

³⁸ SECR-10, ECR-9, NFR-1 and ER-4

³⁹ SECR-2.23, ECR-1.63, NFR-0.15, ER-2.21

⁴⁰ SECR-9, SCR-7, NR-6, ECoR-5 & SWR-8

⁴¹ ECR-NSD(Pvt), NFR-JPZ(Rly), NR-Chanehti(Rly).

2.1.6.2.1 Up-keep and Maintenance - Daily Testing by the Station Masters

Para 1435 of Indian Railway Commercial Manual Volume I stipulates that the Station Master should test daily the weighbridge and weighing machines on coming to duty and make a note of the test in the weighbridge register and tally book respectively. If as a result of the test, it transpired that the weighbridge or weighing machine is out of order, its repair should be arranged for immediately. Scrutiny of 144 selected weighbridges (93 private, 51 Railways) revealed the following:

- Only nine Railway weighbridges⁴² and one private weighbridge were being tested as per codal provisions.
- In NR and NCR daily testing was carried out by the on duty Chief Goods Supervisor instead of the Station Master.
- No daily tests were undertaken at all by the Station Masters in 10 Zonal Railways⁴³ involving 96 weighbridges (35 Railways and 61 private). Tests were exercised only by Station Masters of NER in their two Railway weighbridges selected in audit.
- Partial tests were conducted in the remaining four Zonal Railways (SECR, NFR, NER and CR) where only six weighbridges⁴⁴ were covered out of total 31 weighbridges.

Thus, Station Master's daily test of weighbridges was almost negligible. It is evident from the above that Railway Administration did not give importance for testing of weighbridges despite provision in the Commercial Manual. Had the daily testing being done by Station Masters regularly in all weighbridges as per codal provision, break down of weighbridges could have been noticed immediately and timely action initiated for rectification.

2.1.6.2.2 Bi-monthly Joint Inspection by the Railway Officers

Railway Board's instructions⁴⁵ provide for bi-monthly inspection of weighbridges by the Zonal Railways. A team of Sr. Scale/JA Grade Officers drawn from Operating, Mechanical, Civil and Finance Department should carry out joint inspections at least once in two months to ensure that all weighbridges are functioning properly and proper procedures are being followed and implemented. The responsibility for proper functioning of the weighbridges and ensuring observance of procedures should be at the level of Additional Divisional Railway Manager (ADRM). Review of 144 selected weighbridges (93 private, 51 Railways) in Indian Railways revealed the following:

Table 2.3

Details of bi-monthly inspection of weighbridges by the Zonal Railways.

| Railway | No. of Weighbridges selected | Partial check (not as per | Weighbridges not checked |
|---------|------------------------------|---------------------------|--------------------------|
|---------|------------------------------|---------------------------|--------------------------|

⁴² NFR-1 and NER,NCR,CR, NR – 2 each

⁴³ NWR-5, ECR-11, WCR-8, SER-11, WR-9, SWR-11, SCR-12, SR-8, ECoR-8, ER-13.

⁴⁴ SECR-1 pvt, NFR-1 Rly, NER and CR, – 2 Rly by each.

⁴⁵ Para 5.0 of Railway Board's letter 4/11/2004 (TCI/2004/109/4 dated 4/11/2004)

| | | | | prescribed schedule) | | | | | |
|--------------|-----------|-----------|------------|----------------------|-----------|-----------|-----------|-----------|------------|
| | Private | Railway | Total | Private | Railway | Total | Private | Railway | Total |
| SECR | 14 | 2 | 16 | 2 | 2 | 4 | 12 | 0 | 12 |
| NWR | 3 | 2 | 5 | 3 | 1 | 4 | 0 | 1 | 1 |
| ECR | 9 | 2 | 11 | 0 | 0 | 0 | 9 | 2 | 11 |
| NFR | 2 | 2 | 4 | 1 | 1 | 2 | 1 | 1 | 2 |
| NER | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 2 |
| WCR | 5 | 3 | 8 | 4 | 2 | 6 | 1 | 1 | 2 |
| SER | 7 | 4 | 11 | 0 | 0 | 0 | 7 | 4 | 11 |
| WR | 4 | 5 | 9 | 0 | 2 | 2 | 4 | 3 | 7 |
| SWR | 9 | 2 | 11 | 0 | 0 | 0 | 9 | 2 | 11 |
| SCR | 7 | 5 | 12 | 0 | 0 | 0 | 7 | 5 | 12 |
| NCR | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 6 | 6 |
| SR | 5 | 3 | 8 | 0 | 2 | 2 | 5 | 1 | 6 |
| CR | 9 | 2 | 11 | 0 | 2 | 2 | 9 | 0 | 9 |
| NR | 7 | 2 | 9 | 0 | 0 | 0 | 7 | 2 | 9 |
| ECoR | 7 | 1 | 8 | 0 | 1 | 1 | 7 | 0 | 7 |
| ER | 5 | 8 | 13 | 0 | 3 | 3 | 5 | 5 | 10 |
| Total | 93 | 51 | 144 | 10 | 16 | 26 | 83 | 35 | 118 |

(Source: Records of Mechanical Department of Divisions and selected weighbridge locations of concerned Railways)

From the above table the following observations are made:-

- Bi-monthly inspections by the team of Sr. Scale / JA Grade Officers were not conducted at all in seven Zonal Railways involving 62 weighbridges⁴⁶ (23 Railways, 39 private).
- Partial checks (not as per prescribed schedule) were conducted in the remaining 9 Zonal Railways on 26 weighbridges⁴⁷ (10 private, 16 Railways) out of total 82 weighbridges (54 private and 28 Railways). Further, 56 weighbridges⁴⁸ (44 private, 12 Railways) were not checked at all.
- Audit further observed that seven⁴⁹ Zonal Railways out of 9 Zonal Railways (where partial check was conducted), exercised the bi-monthly inspections one to three times in a year instead of six times as prescribed. In SECR such checks were exercised once in five years at three weighbridges (Dadhapara-Rly, Goberwahi-Pvt, Hind Energy, Gatora-Pvt) and thrice in five years on one weighbridge (Champa – Railway). SR made such checks once in five years at its two weighbridges (Cochin, Milavittan – both railways).
- Reasons for not conducting such checks as well as deficiencies in checks at private and railway weighbridges were not available on record either at the site or at zonal head quarters. This indicates ineffective monitoring of weighbridges.

⁴⁶ ECR-11, NER-2, SER-11, SWR-11, SCR-12, NCR-6, NR-9.

⁴⁷ SECR-4, NWR-4, NFR-2, WCR-6, WR-2, SR-2, CR-2, ECoR-1, ER-3.

⁴⁸ SECR-12, NWR-1, NFR-2, WCR-2, WR-7, SR-6, CR-9, ECoR-7, ER-10.

⁴⁹ NWR, NFR, WCR, WR, CR, ECoR, ER

From the above it is seen that the Railways to a large extent neglected the testing of weighbridges, both Railway and Private. This increased the risk of under assessment of weight and likely loss of revenue. Further, Audit did not notice any system or procedure put in place for monitoring of bi-monthly joint inspection by Railway officers/GM/Railway Board.

2.1.6.2.3 Half Yearly Test by the Inspector of Mechanical Department

Para 1431 of Indian Railway Commercial Manual Volume I stipulates that all weighbridges will be tested half yearly by an Inspector of Mechanical Department. After testing he should furnish a certificate for each weighbridge showing that it has been adjusted and tested. This certificate must be displayed in the weighbridge house, until the next inspection and issue of fresh certificate. The data of each testing should also be painted on the weighbridge.

Scrutiny of 144 selected weighbridges (Private 93, Railways- 51) revealed the following:

- Tests were conducted by the NER and NCR on their two and six Railway weighbridges respectively.
- However audit observed that half yearly test was not conducted at all in three Zonal Railways⁵⁰ by the Inspector of Mechanical Department involving 28 weighbridges (9 Railways, 19 private).
- Partial testing was conducted on the remaining 11 Zonal Railways. 52 weighbridges⁵¹(32 Railways, 20 private) were tested and, 56 weighbridges⁵² were not tested of which 54 were private weighbridges. The details are given below:

Table 2.4

Details of half yearly tests of weighbridges conducted by Mechanical Department

| | No test conducted | | Test conducted | |
|-------------|-------------------|---------|----------------|---------|
| | Railways | Private | Railways | Private |
| SECR | 0 | 13 | 2 | 1 |
| ECR | 0 | 1 | 2 | 8 |
| NFR | 1 | 2 | 1 | 0 |
| WCR | 1 | 5 | 2 | 0 |
| SER | 0 | 4 | 4 | 3 |
| WR | 0 | 1 | 5 | 3 |
| SR | 0 | 4 | 3 | 1 |
| CR | 0 | 9 | 2 | 0 |
| NR | 0 | 7 | 2 | 0 |
| ECoR | 0 | 7 | 1 | 0 |

⁵⁰ NWR-5 wb, SWR-11 wb, SCR-12 wb.

⁵¹ SECR-3, ECR-10, NFR-1, WCR-2, SER-7, WR-8, SR-4, CR-2, NR-2, ECoR-1, ER-12.

⁵² SECR-13, ECR-1, NFR-3, WCR-6, SER-4, WR-1, SR-4, CR-9, NR-7, ECoR-7, ER-1.

| | | | | |
|--------------------|----|----|----|----|
| ER | 0 | 1 | 8 | 4 |
| Total | 2 | 54 | 32 | 20 |
| Grand total | 56 | | 52 | |

(Source: Records of selected weighbridge locations of concerned Railways)

Thus, it is evident from the above that out of 93 private weighbridges, half yearly test by the railway officials (Mechanical Department) were not carried out on 73 weighbridges i.e. 78 per cent of the weighbridges. This points to a serious lacuna in the maintenance of weighbridges. Further, in SECR, Mechanical Department of Bilaspur and Raipur Division stated that they have no information on such test conducted on private weighbridges.

2.1.6.2.4 Up-keep and Maintenance - Annual Stamping

Railway Board's instructions regarding ensuring availability of at least one test wagon⁵³ for each site of installation of weighbridges for periodical as well as annual testing were issued vide Board's letter dated 13 October 2000. To ensure proper functioning of weighbridges under normal conditions the Railway Administration should ensure that calibration/inspections/verification/of weighbridges (Railway owned and private) is done by the Weights and Measures Department of State Government once in a year⁵⁴. Further, whenever any major breakdown is attended to and involves part(s) of weighbridge sealed by the Weights and Measures Department, the weighbridge should invariably be got rectified and re-stamped from the Weights and Measures Department⁵⁵. Here the definition of "stamp" as per Section 2(y) - part I of The standards of weights and measures Act 1976 is as under:

"Stamp" means a mark, which is made on, or in relation to, any weight or measure with a view to: -

- (i) Certifying that such weight or measure conforms to the standard specified by or under this Act, or
- (ii) Indicating that any mark which was previously made thereon certifying that such weight or measure conforms to the standards specified by or under this act, has been obliterated. (Explanation. -A stamp may be made by impressing, casting, engraving, etching, branding or any other process).

Scrutiny of records of 144 weighbridges (Pvt.-93, Rlys-51) in Indian Railways revealed the following:

- Annual stamping is done by the Inspector of Weights and Measures Department of the concerned State Government in presence of Railway officials. During joint inspection by audit with Railway Administration it was observed that in 63⁵⁶(Pvt.- 40 Rly.-23) weighbridges a piece of paper containing signature of the Railway as well as State Government officials was pasted on the machine instead of being embossed by a metal seal. In SWR,

⁵³ Test Wagon is a train comprising 4/5 wagons for testing weighbridges after any major maintenance and annual stamping by the department of Weights and Measures.

⁵⁴ Railway Board's clarification No. 2004/DEV. CELL/IDEI/3 dated 10.9.2012

⁵⁵ Railway Board's order No. 92/DEV. CELL/IDEI/2 Vol dated 16.11.2004

⁵⁶ SECR-8, NWR-4, NFR-2, NER-2, WCR-8, SER-11, SWR-11, SR-8, NR-2, ER-7.

during visit by audit team on 23 July 2013 at Bharat Mines and Minerals (BMM) private siding/Vyasanakeri (VYS), it was observed that the paper seal dated 29 December 2012 of the weighbridge after calibration was torn. A photograph in this regard is placed below:



Fig.2.1 (Weighbridge at BMM siding/VYS in SWR)

This practice is prone to tampering and may lead to incorrect weight being certified resulting in overweight in rakes causing loss of revenue and damage to track as well. Some cases are illustrated below:

- There was delay in annual stamping in 85 weighbridges during the period under review. In respect of 14 weighbridges⁵⁷ delays were 100 days and above in a particular year during the five year period. In three weighbridges⁵⁸ annual stamping was delayed every year for periods ranging between 30 to 252 days. Reasons for delay could not be ascertained in audit as the records were not maintained by the Zonal Railways. Further, in SECR, records for annual stamping in respect of two private weighbridges⁵⁹ were not maintained.
- In SR, the annual stamping certificates for Railway weighbridges at Cochin and Irumpanam for the year 2012-13 could not be obtained till date (August 2013)⁶⁰ from the Legal Metrology Department of the Government of Kerala as they insisted that the Railway test wagons produced for stamping purpose should have a Legal Metrology certification for stamping the weighbridges.

It is the responsibility of the Railway Administration to get the weighbridges stamped by the Weights and Measures Department annually and in cases of major break down also.

Thus, the weightment in weighbridges without valid stamping certificates from the Weights and Measures Department of concerned State Government have no legal sanctity and may attract provisions of Sections 50 and 51 of the Standards of Weights and Measures Act, 1976. The provisions include punishment with imprisonment for a term which may extend to six months, or with fine or both

⁵⁷ SECR-3, NFR-1, SER-4, SR-1, CR-1, ER-2, NCR-1 & SWR-1.

⁵⁸ Deepika Rejection – SECR, Padmapukur and Durgachak - SER

⁵⁹ Bhatgaon and Bhilai Steel Plant.

⁶⁰ Subsequently obtained on 15.5.2014 and 19.3.2014 respectively

2.1.6.2.5 Accuracy Check of Weighbridges by Test Wagons

Before annual stamping by Weights and Measures Department of State Government assuring correctness of the WB, it is to be checked by using the Railways Test Wagon. The correctness of weighbridges is required to be checked periodically (during annual stamping and major break down) by a train comprising 4/5 wagons which is called a “test wagon”. In October 2000, Railway Board instructed⁶¹ Zonal Railways for providing at least one test wagon for each weighbridge for periodic testing. This test wagon would be required particularly for testing weighbridges after any major maintenance and to demonstrate its accuracy at the time of annual stamping by the department of Weights and Measures. As the correctness of the weighbridges is being continuously challenged by the rail users, these orders were reiterated by the Railway Board in November 2004⁶².

Test check of records of both private and Railway weighbridges revealed the following:

Table 2.5 - Details of accuracy check of weighbridges by test wagons of Railways

| Name of Zonal Railway | Lapses of periodic check by test wagon during calibration/annual stamping at private weighbridges | | | Lapses of periodic check by test wagon during calibration/annual stamping at Railway weighbridges. | | |
|-----------------------|--|---|--|--|--|---|
| | No. of occasion annual stamping/ major maintenance/ calibration done during the period from 2008-09 to 2012-13 | No. of occasion not tested by test wagon out of col. 2 | No. of occasion tested by Test wagon out of col. 2 | No. of occasion annual stamping/ major maintenance/ calibration done during the period from 2008-09 to 2012-13 | No. of occasion tested by Test wagon out of col. 2 | No. of occasion not tested by test wagon out of col. 2 |
| <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| SECR | Record not maintained* | | 144 | 51 | 51 | 0 |
| NWR | 12 | 0 | 12 | 27 | 27 | 0 |
| ECR | 144 | 0 | 144 | 31 | 31 | 0 |
| NFR | 6 | 4 | 2 | 28 | 0 | 28 |
| NER | 0 | 0 | 0 | 10 | 10 | 0 |
| WCR | 18 | 2 | 16 | 50 | 50 | 0 |
| SER | 22 | 11 | 11 | 20 | 20 | 0 |
| WR | 61 | 5 | 56 | 102 | 102 | 0 |
| SWR | 67 | 21 | 46 | 141 | 141 | 0 |
| SCR | 25 | 0 | 25 | 24 | 3 | 21 |
| NCR | 0 | 0 | 0 | 20 | 0 | 20 |
| SR | 30 | 25 | 5 | 35 | 33 | 2 |
| CR | 42 | 36 | 6 | 9 | 9 | 0 |
| NR | Record not maintained | | | 47 | 30 | 17 |
| ECoR | 161 | 161 | 0 | 59 | 59 | 0 |
| ER | 129 | 41 | 88 | 68 | 68 | 0 |
| Total | 717 | 306 | 555 | 722 | 634 | 88 |

* Records in respect of col. 2 & 3 were not maintained by SECR whereas number of occasion tested by Test Wagon was available with SECR.

⁶¹ RB's letter No. 99/DEV.CELL/IDEI/1 dated 13/10/2000.

⁶² RB's No. 2004/Dev. Cell/IDEI/2 Pt. I dated 5/11/2004.

(Source: Records of Mechanical departments of Divisions and selected weighbridge locations of concerned Railways)

- Check of private weighbridges by test wagons was not conducted on 306 occasions out of 717 in which annual stamping/major maintenance/calibration were done during the period under review. Similarly, in Railway weighbridges, checks by test wagons were not conducted on 88 occasions out of 722 due for such test.
- In ECoR, all the weighbridges (9 Railways and 22 Private) were not tested by test wagons on any occasion during the period under review even though annual stamping by Weights and Measures Department / major maintenance / calibrations were done. Similarly, in NCR and NFR Railway weighbridges⁶³ were not tested by test wagons on any occasion during the period under review
- In SECR and NR, detailed records were not maintained in respect of regular testing of private weighbridges by test wagons during each major maintenance/calibration and annual stamping.

Thus, the accuracy of the weightment at these weighbridges was not ensured.

2.1.6.2.6 Short Realization of Test Wagon Charges from Private Siding Owners

The cost of test wagons used for testing private weighbridges should be borne by the private party. In this connection, Railway Board in their orders of May 2008⁶⁴ prescribed hire charges of ` 1180 per KM per train subject to a minimum of ` 1,18,000 per train or actual KM run effective from 15 May 2008. These charges were revised to ` 1235 with effect from 1 January 2009⁶⁵ and again to ` 1708 with effect from 1 February 2012⁶⁶. Review of records by audit revealed that due to non implementation or belated implementation of revised rates towards test wagon charges, there was short realization of ` 5.65 crore from the private weighbridge owners in 14 Zonal Railways⁶⁷ as detailed below:

Table 2.6 - Details of short realisation of test wagon charges from private siding owners

| Railway | Lapses of periodic check by test wagon during calibration/annual stamping at private weighbridges and short realization of test wagon charges thereof | | | | | |
|-------------|---|---|--|---|---|----------------------------|
| | No. of occasion annual stamping/ major maintenance/ calibration done during the period from 2008-09 to 2012-13 | No. of occasion not tested by test wagon out of col. 2 | No. of occasion tested by Test wagon out of col. 2 | Short realization of test wagon charges | | |
| | | | | Test wagon charges actually collected (₹) | Test wagon charges should have been collected (₹) | Difference recoverable (₹) |
| SECR | Records not maintained | | 144 | 22137333 | 26551685 | 4414352 |

⁶³ NCR – 6, NFR-7 Rly weighbridges

⁶⁴ No. TCR/2205/96/1 dated 2/5/2008

⁶⁵ No. TCR/2205/96 /1 dated 15/12/2008

⁶⁶ No. TCR/2205/96 /1 dated 17/1/2012

⁶⁷ SECR, NWR, ECR, NFR, WCR, SER, WR, SWR, SCR, SR, CR, NR, ECoR, ER.

| | | | | | | |
|--------------------|-----------------------|------------|------------|------------------|------------------|-----------------|
| NWR | 12 | 0 | 12 | 1231920 | 4515140 | 3283220 |
| ECR | 144 | 0 | 144 | 27103760 | 32755265 | 5651505 |
| NFR | 6 | 4 | 2 | 0 | 3057860 | 3057860 |
| NER | 0 | 0 | 0 | 0 | 0 | 0 |
| WCR | 18 | 2 | 16 | 4126823 | 5357270 | 1230447 |
| SER | 22 | 11 | 11 | 12279166 | 12672876 | 393710 |
| WR | 61 | 5 | 56 | 11776052 | 24988004 | 13211952 |
| SWR | 67 | 21 | 46 | 7244626 | 10487484 | 3242858 |
| SCR | 25 | 0 | 25 | 6136420 | 16027804 | 9891384 |
| NCR | 0 | 0 | 0 | 0 | 0 | 0 |
| SR | 30 | 25 | 5 | 3753995 | 4696935 | 942940 |
| CR | 42 | 36 | 6 | 2683760 | 3174492 | 490732 |
| NR | Record not maintained | | | 7048536 | 8017655 | 969119 |
| ECoR | 161 | 161 | 0 | 20996900 | 30352382 | 9355482 |
| ER | 129 | 41 | 88 | 11575300 | 11926200 | 350900 |
| Total | 717 | 306 | 555 | 138094591 | 194581052 | 56486461 |
| ` in crores | | | | 13.81 | 19.46 | 5.65 |

(Source: Records of Divisional Commercial and Mechanical Departments of concerned Railways)

2.1.6.3 Impact of Non-weighment of Freight

2.1.6.3.1 Loss due to Non Replacement of Static Weighbridges

IR is mostly doing bulk transportation of goods in rake formations rather than piecemeal loading of wagons and hence the utility of static weighbridges has been reduced substantially. In November 2009,⁶⁸ Railway Board stated that In-motion weighbridge was preferred to static weighbridges as it reduces detention to rolling stock and instructed Zonal Railways that from 01 April 2011, the weighment on such static weighbridge shall not be accepted by the Railways and Railway Receipt (RR) would not be issued on the basis of weighment on static weighbridge. It further stated that in case of specific constraints where static weighbridge cannot be replaced by in-motion weighbridge or weight cannot be done at associated/alternative weighbridges of a particular siding, the concerned Zonal Railway should obtain specific exemption from Railway Board.

Review of records revealed that eight Zonal Railways⁶⁹ have only electronic in-motion weighbridges (EIMWB) while remaining eight Zonal Railways⁷⁰ continued with 76 static weighbridges (private –70, Railways –6). However, SER stopped using 12 private static weighbridges with effect from July 2011 in terms of above Board's order of November 2009; none of these were replaced by EIMWB. Scrutiny of records of 15 private static weighbridges in these eight Zonal Railways disclosed the following:

⁶⁸ Railway Board's letter dated 11-11-2009)

⁶⁹ NWR, NER, WCR, WR, SWR, SCR, NCR, SR.

⁷⁰ SECR, ECR, NFR, SER, CR, NR, ECoR, ER

- In five Zonal Railways⁷¹ weighment of 3567 rakes in static weighbridges were not accepted by Railway in terms of Railway Board's instructions of November 2009 as mentioned in sub para (1) above and Railway Receipts were issued on "sender's weight accepted" basis. However, the subsequent weighment was made as per rule only for 220 rakes where total penal freight and punitive charges of `5.45 crore were collected. Had all the 3567 rakes weighed on subsequent points Indian Railways could have earned Rs. ` 93.65 crore towards penal freight and punitive charges.
- Similarly, in SECR and NR, 7743 rakes were booked on sender's weight accepted (SWA) from two static weighbridge locations⁷² and the same were not re-weighed either en- route or at destinations. Therefore, chances of overloading on these rakes could not be ruled out. Loss of revenue could not be estimated as no rakes were checked subsequently.

2.1.6.3.2 Loss of Freight due to Non Weighment

Test check of records for three months (April, October and December) of each year during the period 2008-13 at selected loading points (without weighbridges) revealed that 318 rakes⁷³ were booked and sent on SWA basis from nine loading points of five Zonal Railways.⁷⁴

It was further observed that in cases of SECR, SER and SWR the above mentioned rakes were booked on SWA despite notification for associated and alternate weighbridges for each loading point. As there was no re-weighment subsequently, loss of revenue could not be calculated in Audit.

2.1.6.3.3 Weighment of Parcel Van

Parcel vans are loaded at Railway station and attached to certain mail/express passenger trains. Bookings etc. in this regard are done by the concerned Zonal Railway. However, some of the Parcel vans of different capacities have been leased to private parties for arranging parcel traffic, loading and unloading thereof by their own staff. Railway Board in July 2009⁷⁵ advised Zonal Railways that all weighbridges installed/commissioned under the Indian Railways can be utilized for weighment of parcel van duly executing some software modification in their system. It was further instructed that the Joint Procedure Order (JPO) in this connection needs to be issued from CME, CCM & COM of each zone by 01 August 2009 so as to implement the procedure early.

Review by Audit of 29 parcel loading points out of 142 involving all Zonal Railways except ECR revealed the following:

⁷¹ SECR-1, ECR-1, SER-2, CR-1, ECoR-1.

⁷² Bhilai Steel Plant-7683 rakes, Adani siding-60 rakes

⁷³ SECR-2, NWR-29, SER-56, SWR-5, SR-226

⁷⁴ SECR-1, NWR-1, SER-3, SWR-2, SR-2

⁷⁵ letter no. 2009/TC/(FM)/11/12 dated 06-07-2009

- No JPO embodying guidelines for weighment of leased parcel vans were issued by any Zonal Railway. Further, Railway Board did not monitor the issue of JPO.
- At 19 parcel loading points over ten Zonal Railways,⁷⁶ it was noticed that 76,669 leased parcel vans were passed without weighment during the period under review.
- At eight parcel loading points over five Zonal Railways,⁷⁷ a total of 2,08,031 parcel vans were booked during the period under review. Of this only 37,366 parcel vans (i.e.18 *per cent*) were weighed in subsequent weighbridges. Overweight was detected in case of 1632 parcel vans where penalty of ` 2.60 crore was collected. Remaining 170665 parcel vans were passed without weighment.
- In CR out of 1,48,825 parcel vans booked during 2008-13, 613 were test checked by the Railway authorities on the Mechanical Weighing machine and all 613 were found overloaded and penalty charge was levied and collected. Had remaining 1,48,212 parcel vans (99.59 percent) been weighed, similar cases of overloading could have been detected. Thus, non weighment of 99.59 *per cent* parcel vans booked in CR might have led to substantial loss of potential revenue.
- In WCR, on re-checking the leased parcel van by vigilance teams on two occasions overload was detected and punitive charges of ` 0.02 crore were levied.

It is therefore, recommended that Zonal Railways should take appropriate action for weighment of all parcel vans to avoid leakage of revenue on excess load.

2.1.6.3.4 Weighment of Non-Ferrous Scrap Materials in the Scrap Yard.

Weighment of non ferrous scrap⁷⁸ involves high risk of loss to the Indian Railways as the same are costlier than ferrous scrap. Railway Board in February 2007⁷⁹ directed that the existing mechanical type of weighbridges at scrap yards/scrap depots be converted into/replaced by electronic weighing scales for weighment of non-ferrous scrap within a period of 12 months. Scrutiny of records of 17 selected scrap yards revealed the following;

- Electronic weighing scales for weighment of non-ferrous scraps were installed in all Zonal Railways except ECR. These were installed within the prescribed period except SECR and WR.
- SECR installed electronic weighing machine in September 2009 i.e. after a lapse of 18 months from the targeted month of February 2008. As a result 106.07 MT of non-ferrous scrap was weighed at mechanical weighing scale

⁷⁶ SECR-1, NWR-1, NFR-2, NER-1, WCR-1, WR-2, NCR-2, SR-3, NR-2, ECoR-4.

⁷⁷ SER-1, SWR-1, CR-3, NR-1, ER-2.

⁷⁸ Non-ferrous metals are aluminium, copper, lead zinc, cobalt, chromium and precious metals.

⁷⁹ No. 98/RS(G)/779/10/CS dated 13-02-2007

and delivered to the auctioneer. In WR there was a delay of 21 months in the installation of electronic weighing machine.

- Despite provision of electronic weighing machines in NFR, NCR and ER, 174.53 MT, 13.25 MT and 38.15 MT of non-ferrous scraps respectively were weighed at mechanical weighing scale and delivered to the auctioneer.
- One static weighbridge of 30 MT capacity at Shakurbasti (NR) was due for replacement in November 2004. For replacement of the bridge, an Electronic static weighbridge (100 MT capacity) was procured in April 2011 at a cost of `0.26 crore, but the same was lying un-commissioned (March 2013) due to non availability of power connection, non finalization of drawings of weighbridge room and non availability of funds for ancillary works for weighbridge.

Thus, despite orders of the Railway Board, non-ferrous scrap continued to be weighed by mechanical weighbridges in NFR, NCR and ER.

2.1.6.3.5 Weighment of Container Train

All rakes loaded at each loading point for each stream of traffic are required to be weighed at their respective associated/alternative weighbridges⁸⁰. Railway Board further clarified in December 2009⁸¹ that container trains should also be weighed in weighbridges to detect overloading. It was further emphasized that in cases of container traffic there were not only chances of overloading but also there was scope of mis-declaration of weight to derive benefit of lower weight slab⁸².

Verification at 27 container loading points out of 100 (except ECR where no container depot exists) revealed the following:

- At six container loading points over five Zonal Railways,⁸³ 11,178 container rakes were booked during the period under review out of which 6139 rakes were weighed. Over-weight was detected in 447 container rakes and penalty of `0.54 crore was collected. However, 5039 rakes were passed without weighment.
- At four container loading points in four Railways⁸⁴, 1647 container rakes were booked from these points and weighment made in cent *per cent* rakes. Over load was detected in 192 cases (SECR-35, SWR-46 and SCR-111) and penalty of `0.62 crore was collected. No overloading was detected in SR.
- At 17 container loading points, 47602 container rakes were passed without any weighment during the period 2008-13 over 12 Zonal Railways.⁸⁵ However, in ER 18 rakes out of 1441 rakes were weighted in subsequent

⁸⁰ RC-86/2006

⁸¹ Board's No. TC-1/2006/108/4-pt dated 10-12-2009

⁸² Railway collects haulage charges from the container operator in four slab (i) upto 10 ton (ii) between 10 ton to 20 ton (iii) between 20 ton to 26 ton (iv) above 26 ton.

⁸³ SER-1, WR-2, SWR-1, SCR-1, ECoR-1

⁸⁴ SECR-1, SWR-1, SCR-1, SR-1

⁸⁵ NWR-2, NFR-1, NER-1, WCR-1, WR-2, SWR-1, NCR-1, SR-1, CR-2, NR-3, ECoR-1, ER-1.

weighbridges and overload was detected in all cases where penalty of ` 0.10 crore was collected.

Therefore, overload could have been detected in 47602 and 5039 container rakes mentioned above which were passed without weighment. Had these container rakes been weighed Railway could have collected substantial revenue towards freight and penalty and avoided possible damage to track .

2.1.6.3.6 Instances of Large Scale Overloading of Wagons in SER

In SER it was noticed that 38,138 rakes passed through 38 weighbridges (Railways 19, private 19) during the period from October 2011 to December 2012. However, 7791 rakes (20 *per cent*) were sent without weighment and freight collected on the basis of SWA or PCC whichever is higher. Of these 9455 rakes (31 *per cent*) were found overloaded and warranted load adjustment. SER Administration was not able to ensure cent *per cent* weighment of all rakes despite notification of associated/alternative weighbridges.

It was further noticed that load adjustments were made by the Railway Administration in 9094 rakes and in case of the remaining 361 rakes, the overloaded wagons were either detached or the train allowed to run with restricted speed.

Thus lack of coordination and ineffective monitoring resulted in recurring incidents of overloading of wagons on a large scale. It is also not possible to assess the loss of revenue for rakes which have not been weighed. Overloading in turn has adverse implication for track safety. Moreover, running of trains at restricted speed also adversely affected the wagon turn round ratio.

2.1.6.4 Connectivity of Weighbridges with Freight Operations Information System (FOIS)

Freight trains do not run to a fixed schedule thus making Freight Operations a highly Information Intensive activity. Optimum utilization of resources like wagons, locomotives, crew and paths on the network is only possible when managers make allocation decisions dynamically. Real time information allows good decision making and thus ensures high levels of mobility within the system. This realization has led to the development of FOIS. Railway Board in October 2006⁸⁶ instructed development of an interface between the weighbridge and Train Management System (TMS) of FOIS so that the weighment information is directly transmitted from weighbridge to the FOIS. In case of private weighbridges, cost of linking with FOIS was to be borne by the private party (February 2007). In September 2008, the Railway Board advised that all in motion weighbridges may be linked to FOIS.

Review of records revealed that out of 516 weighbridges over the Indian Railways, only 173 Nos. (33.53 *per cent*) of weighbridges were planned for connectivity with FOIS during 2008- 13. However, scrutiny of records revealed that connectivity was actually provided in only 136 weighbridges i.e. 79 *per cent* as on March 2013.

⁸⁶ No. TC-1/2006/108/4 dated 13/10/2006 – RC 86/2006,

2.1.6.4.1 Speed Restrictions on Overloaded Rakes/Rakes not Weighed

Movement of overloaded trains is likely to damage the track and rolling stock. On the other hand, movement of goods trains with speed restrictions adversely affect the wagon turn round ratio. Normally no rakes should move without weighment. In case a rake is not weighed after loading due to defective weighbridges or any other reason it should be weighed at the next available weighbridge. Till such time it should move to the next available weighbridge location at a restricted speed of 40 kmph or less as decided by the Railway concerned (September 2008)⁸⁷. However, in January 2010⁸⁸ it was clarified by the Board that where there was no weighbridge at the loading point, the rake will move with normal speed up to the location of first available weighbridge for weighment. In case rake is not weighed on the 1st available weighbridge due to defective weighbridge or any other reasons and it is weighed at next available weighbridge, then speed restriction of 40 KMPH or less as decided by railway concerned is to be followed from 1st weighbridge point to next available weighbridge where weighment is done.

However, test check of three months (April, October and December) records for the period 2008-13 at 200 selected loading points with and without weighbridges revealed the following:

- Loading points with weighbridges: In SECR, ECR, NFR and SER 9849 rakes were booked and weighed at loading points themselves. Out of the above, 3890 rakes were overloaded where speed restrictions were required. But speed restrictions were imposed only on 3151 overloaded rakes and remaining 739 over loaded rakes were allowed to run without speed restrictions.
- Loading points without weighbridges: In SECR, NFR, SER, WR, SWR, NCR and SR, 2600 rakes were booked from the loading points out of which 1066 rakes were not weighed at the first available weighbridges and therefore speed restrictions of 40 Kmph or less as decided by Railway were required to be imposed from first available weighbridges up-to the next available weighbridges. But speed restrictions were imposed only on three rakes and remaining 1063 rakes were allowed to run without speed restrictions.

Thus, Indian Railways need to be more vigilant in monitoring speed of wagons which have not been weighed as this has an adverse impact on safety.

2.1.6.4.2 Load Adjustment

Load adjustment is done by the consignor as per advice of Zonal Railway in rakes found overloaded during weighment. In addition, a penalty of `5000 as detention charges per overloaded wagon is also to be collected for detention of rake for load adjustment. In this connection, Railway Board in December 2012⁸⁹ decided that w.e.f 17 December 2012 wagons that had undergone load adjustment by the consignor either directly or through their designated handling agencies should

⁸⁷ No. TC-1/2008/108/3 dated 30/9/2008

⁸⁸ No TC-1/2008/108/3 dated 5/1/2010

⁸⁹ RC-39 / 2012 dated 26/12/2012 read with gazette notification dated 17/12/2012.

randomly be re-weighed. The identification of rakes for random re-weight should be done by CCM in consultation with COM of the Zonal Railway. It was further stated in the Board's order that if overloading is detected in the wagons that had undergone load adjustment by the consignor, a punitive charge of `one lakh per wagon shall be levied.

In this context, scrutiny of records of 131 loading points during the period from January to March 2013 revealed that load adjustments were made at loading point on detection of overload during weighment in 342 rakes at 15 loading points involving eight Railways⁹⁰. However, subsequent surprise check was made only in one rake at SER where further overload was detected in 17 wagons and penalty of `1,61,578 was raised and recovered from the consignee instead of `17 lakh as prescribed in the Board's above order of December 2012. In the remaining cases of 341 rakes no surprise check was made.

2.1.7 Conclusion

The Railway Board failed to ensure weightment of all freight traffic. A majority of loading points were not covered by weighbridges. Further, they were largely dependent on privately owned weighbridges (65 *per cent*) for weighment especially for bulk consignments such as coal, iron-ore etc. Static weighbridges (15 *per cent*) are still used for weightment particularly in private sidings. There were deficiencies in the proper up-keep and maintenance of the weighbridges. These deficiencies were especially pronounced in private weighbridges. There is thus a high risk of revenue loss in carrying of bulk consignments. It is imperative to monitor overloading of wagons and installation of weighbridges at suitable locations/bulk loading points.

Despite Railway Board's repeated instructions, the Zonal Railways failed to ensure 100 *per cent* weighment of loose traffic. Further, in view of the high percentage of overloading noticed in the test checked cases of parcel vans it is advisable that their weighment is also made compulsory so as to avoid leakage of revenue.

⁹⁰ SECR – 2, NFR-1, WCR-3, SER-1, WR-2, SWR-1, SR-3, ER-2.

Appendix-I
Statement showing basis of selection of weighbridges for audit sampling

| Srl No | Category | Percentage selected (Railway wise) | Total population in Indian Railways (Nos) | Nos Selected in Audit for review | |
|--------|---|--|---|----------------------------------|--|
| | | | | Total Nos | Railway wise nos |
| 1 | Railway weighbridge (In-motion) | 20% subject to a minimum of two locations in each zone | 177 | 50 | SECR - 2, NWR-2, ECR-2, NFR-2, NER-2, WCR-3, SER-4, WR-5, SWR-2, SCR-5, NCR-6, SR-3, CR-2, NR-2, ECoR-1, ER-7. |
| 2 | Railway weighbridge (Static) | 20% subject to a minimum of two locations in each zone | 6 | 1 | ER-1. |
| 3 | Private weighbridge (static) | 20% subject to a minimum of two locations in each zone | 70 | 16 | SECR - 3, ECR-2, NFR-1, SER-3, CR-2, NR-2, ECoR-1, ER-2. |
| 4 | Private weighbridge (In-motion) | 20% subject to a minimum of five locations in each zone | 263 | 77 | SECR - 11, NWR-3, ECR-7, NFR-1, WCR-5, SER-4, WR-4, SWR-9, SCR-7, SR-5, CR-7, NR-5, ECoR-6, ER-3. |
| 5 | Loading point without weighbridge (private) | 20% subject to a minimum of two locations | 177 | 40 | SECR - 2, NWR-2, ECR-2, NER-2, WCR-8, SER-5, WR-7, SWR-2, SCR-2, NCR-2, SR-2, NR-3, ER-1. |
| 6 | Loading point without weighbridge (Railway) | 20% subject to a minimum of two locations | 528 | 85 | SECR - 5, NWR-2, ECR-2, NFR-4, NER-2, WCR-10, SER-2, WR-15, SWR-3, NCR-8, SR-2, NR-23, ECoR-3, ER-4. |
| 7 | Parcel loading point | 20% subject to a minimum of one loading point in each zone | 142 | 29 | SECR - 1, NWR-1, NFR-2, NER-1, WCR-1, SER-1, WR-2, SWR-1, SCR-2, NCR-2, SR-3, CR-3, NR-3, ECoR-4, ER-2. |
| 8 | Scrap yard | 20% subject to a minimum of one yard in each zone | 38 | 17 | SECR - 1, NWR-1, ECR-1, NFR-1, NER-1, WCR-1, SER-1, WR-1, SWR-2, SCR-1, NCR-1, SR-1, CR-1, NR-1, ECoR-1, ER-1. |
| 9 | Container loading point | 20% subject to a minimum of one loading point in each zone | 100 | 27 | SECR - 1, NWR-2, NFR-1, NER-1, WCR-1, SER-1, WR-4, SWR-3, SCR-2, NCR-1, SR-2, CR-2, NR-3, ECoR-2, ER-1. |
| | Total | | 1555 | 342 | |

2.2 North Central (NCR), Northern (NR): Maha Kumbh Mela, 2013 and North Eastern Railways (NER)

2.2.1 Introduction

The Kumbh Mela is a major Hindu religious festival that is held every three years at four different locations (Nasik, Ujjain, Haridwar and Allahabad) by rotation. The Kumbh Mela of 2013 was considered a Maha Kumbh Mela, which comes only once every 144 years. The Maha Kumbh Mela 2013 (Mela) was celebrated from 14th January, 2013 to 10th March, 2013 at Allahabad. Around 12 crore pilgrims and visitors from all over India participated in the Mela.

For every Kumbh Mela, the Indian Railways makes special arrangements to handle the additional rush to the Mela site. Arrangements for the Kumbh Mela include making arrangements for running of special trains and providing additional amenities for the pilgrims coming by trains. The State Government of Uttar Pradesh had estimated that around 8.83 crore pilgrims would participate in the Mela. NCR Administration assessed (December 2012) that about 34 lakh pilgrims would utilize services of trains during the Mela period. This was about 14 lakh higher (70 per cent) than their normal passenger traffic (20 lakh)⁹¹.

Fig.2.3



Mauni Amavasya falling on 10th February 2013 was considered the most auspicious bathing day (Shahi Snan) of the Mela. State Government expected that about 3.05 crore pilgrims would visit the Mela on this day and Railway projected that about 4.10 lakh passengers would utilize the train services on this day. A major stampede took place on this day at Allahabad Station at Platform no. 6 and on Foot Over Bridge (FOB) No.1 of Allahabad



⁹¹ (Source: Minutes of meeting held on 13-12-2012 between state/district authorities and railway Mela officer)

station. The Railway Administration stated (May 2013) that they announced the occurrence of stampede through the Public Address System at about 18:54 hours.

As per the list furnished (February 2013) by the Railway Administration, a total of 38 Passengers were killed in the stampede and 48 were injured and taken to State run hospitals. NCR Administration further stated (March 2014) that as per final count 37 passengers died and 45 were injured.

2.2.2 Audit Objectives

Audit examined the arrangements made by Railways to ascertain whether the plan made by the Railways for handling the pilgrims rush was adequate and whether it was implemented effectively and efficiently.

2.2.3 Audit Scope and Methodology

A review was carried out during March to October 2013 by Audit to examine the performance of the Railways regarding the handling of pilgrims during the Maha Kumbh Mela. Audit examined the related records of Zonal and Divisional Headquarters and Mela locations. Minutes of meetings between Railway Administrations and State Authorities for preparedness of arrangements on part of Railways were also examined.

2.2.4 Coordination and Planning

2.2.4.1 General Planning

In view of the expectation of huge pilgrim rush during the Mela period, the State Government requested (May 2012) the Chairman Railway Board to appoint a nodal officer and a nodal division for coordination with the State and Police Administration to ensure effective and sufficient preparation for the pilgrims. They also requested the Railways to give special attention to the planning of special trains and their notification.

In response, the Railways appointed (June 2012) an SAG level officer of Allahabad division (NCR) as Nodal/Mela Officer. As Allahabad station would be handling the bulk of the pilgrims, NCR zone was designated as the nodal zone for coordination with the state government and other zones. The Mela officer/NCR was also expected to coordinate the activities relating to passenger amenities and running of special trains amongst various Zones/ departments of Railways. Additional Divisional Railway Manager (ADRM) of Lucknow and Varanasi divisions were appointed as Nodal Officer by NR and NER respectively.

An important focus area of the arrangements for the Mela is Crowd Management. This issue takes on huge importance in view of the large crowds of pilgrims expected at stations especially Allahabad station, and that too on important bathing days.

Security of passengers in and around the Railway premises is the joint responsibility of the Railway Protection Force (RPF)/ Railway Protection Special

Force (RPSF)⁹² and the Government Railway Police (GRP)⁹³. Security of passengers beyond the Railway premises is the responsibility of the State Police, which deals with law and order problems beyond the outer signal of the Railway Stations.

2.2.4.2 Responsibilities of Railways

During the Mela period, Mela office/ NCR expected a huge rush of pilgrims (about 34 lakh), utilizing its services. During the meetings with the officials of State Government, Railways were assigned the duties of running special trains, provision of safety and security of passengers at and around stations, provision of additional basic facilities such as booking counters, display information of incoming and outgoing trains, drinking water, catering stalls, medical posts etc.

The role of the Railway during the Mela largely related to-

- Arrangements for temporary holding and dispersal of pilgrims, their booking, comfort, safety etc.;
- Running of Special Trains for dispersal of rush of pilgrims;
- Facilitation arrangements in Sangam area comprising Booking and Passenger information.

Review of minutes of meetings held, in regard to the preparation of Maha Kumbh Mela, between the Nodal Officer and State authorities revealed that a number of steps were taken to handle the huge influx of pilgrims expected at Allahabad. Detailed plans were drawn up in consultation with Northern Railway and North Eastern Railway – the other zones impacted by the Mela. These issues are discussed below:

- Since the Mela was being held at Allahabad, the bulk of the pressure of movement of pilgrims would be borne by Allahabad station. To reduce the crowds at Allahabad station, the Mela Officer declared eight (including Allahabad junction) additional adjoining stations as Mela stations. These stations were-

Table 2.7

| Name of Zonal Railway | Name of station |
|-----------------------|--------------------|
| North Central Railway | Allahabad Junction |
| | Naini Junction |
| Northern Railway | Prayag |
| | Prayag Ghat |
| | Phaphamau |
| North Eastern Railway | Allahabad City |
| | Jhansi |
| | Daraganj |

(Source: Action Plan of NCR Administration for Maha Kumbh Mela 2013 communicated to State Government)

- Special Trains were planned to run from all the designated Mela stations for

⁹² The RPF/ RPSF are under the control of Railway Administration and primarily deal with protection of Railway property and the security of passengers

⁹³ The GRP is under the administrative control of the State Government and deals exclusively with maintenance of law and order on station premises/ passenger areas and trains

- dispersal of rush of pilgrims including Allahabad station;
- Provision was planned for additional passenger amenities such as drinking water, sanitation etc. at all Mela stations, temporary arrangement for booking of tickets and passenger information system in the Sangam area, temporary enclosures were planned near the stations to hold the pilgrim rush heading towards the stations
 - Control towers were planned to be established at Allahabad and Naini stations for centralized monitoring, control and coordination for security arrangements, crowd management and train movement;
 - To ensure the safety and security of passengers, additional security personnel were planned to be deployed at and around the nominated stations for controlling the pilgrims rush. Installation of CCTVs at stations was also planned to help in controlling the movement of pilgrims towards the stations.
 - Provision of medical posts with doctors, para medical staff, ambulances etc. was also planned at the nominated stations;

2.2.5 Experience of earlier Melas

After the Kumbh Mela of 2001, Divisional Railway Manager (DRM) of the erstwhile Northern Railway issued (September 2001) some recommendations for future guidance specifically for Allahabad station. These recommendations included inter-alia the following:

- At Allahabad station⁹⁴, platform no. 1 should be used exclusively for Mela Specials so as to ease the moving of Mela passengers from the enclosures to the train.
- Local administration should be insisted upon to prevent pilgrims returning from Mela area to arrive on the Civil Lines side only.
- Platform No.9/10 should be islanded. These platforms should have direct road access from the Civil Lines side so that passengers do not have to use the Foot Over Bridge (FOB) at all.

The records relating to the implementation of the above plan were examined by Audit and the related findings are discussed below:

2.2.6 Audit findings

2.2.6.1 Co-ordination

Audit scrutiny revealed that the Mela Officer/ NCR attended various meetings with the officials of State Government including Chief Minister, Chief Secretary of UP and other security officials of the State Government i.e. Commissioner for traffic, IG/Police, SSP/Kumbh Mela etc. Review of records of minutes of these meetings revealed that the issues such as running of special trains, smooth movement of pilgrims, provision of passenger amenities/ facilities and safety and security issues were deliberated upon by the Mela Officer/NCR during these meetings.

⁹⁴ Allahabad station has 10 platforms with entry to the station from both the City side and Civil Lines side.

Audit noticed that meetings were held by Chairman Railway Board/ Member Engineering/ Member Traffic with Commissioner/ IG Allahabad to review the arrangements being made by the Railways. Minutes of these meetings were not made available to Audit.

The Mela officer/ NCR was required to coordinate with the nodal officers of the other two zones (NR and NER) for the running of special Mela trains and to divert pilgrim traffic from Allahabad to the other Mela stations. No evidence was found on record by Audit regarding meetings amongst the nodal officers of the three Railways.

The NCR Administration in this regard stated (March 2014) that there was proper coordination between the nodal officers as coordinated train running was planned from all the stations in Allahabad area. The reply could not be verified as minutes of meetings held between the nodal officers were not made available to Audit. Further, the dates on which any meetings were held have also not been given by NCR Administration. In the absence of any records on the issue, it is not possible to assess the extent of planning and coordination carried out to assess the requirement of special trains so that the pressure of Pilgrims at Allahabad station is reduced.

2.2.6.2 Passengers Travelled

Records of Railway Administrations (NCR, NR, NER) regarding booking of tickets (PRS and UTS) revealed that about 41.04 lakh passengers travelled by trains during the Mela period. The details are tabulated below:

Table 2.8

| Railway | | No. of passengers travelled (in lakh) |
|--------------|----------------|---------------------------------------|
| NCR | Allahabad | 24.64 |
| | Naini | 4.62 |
| NR | Prayag | 3.95 |
| | Prayag Ghat | 0.62 |
| | Phaphamau | 0.53 |
| NER | Allahabad City | 3.00 |
| | Jhansi | 1.99 |
| | Daraganj | 1.69 |
| Total | | 41.04 |

(Source: Records of Divisional Commercial department of NCR/Allahabad, NR/ Lucknow and NER/ Varanasi)

From the above table, it may be seen that against the expectation of 34 lakh passengers, 41.04 lakh passengers actually travelled by train i.e. 21 per cent more than anticipated. It may also be seen that bulk of the pilgrims (71 per cent) were handled by NCR with 60 per cent being handled at Allahabad station itself.

The NCR Administration reported (June 2013) that 192 additional Unreserved Ticketing System (UTS) booking counters (Allahabad-67, Naini-32, Chitrakut Dham-4, Allahabad City-24, Prayag-21, Daraganj-20, Jhansi-24) were provided by the three Railways to handle the additional rush of pilgrims. Audit scrutiny revealed that out of these 192 UTS booking counters, 13 were lying idle,

(Allahabad-01, Naini-04, Prayag Ghat-02, Prayag-06).

Further, in response to an audit query whether there is any system in place to identify the number of UTS tickets booked direction-wise at a particular time, no response has yet been received from the Railway Administrations.

The NCR Administration in reply also stated (March 2014) that booking counters at VIP gate of Allahabad were not made operational due to crowd constraints and six booking counters could not be set up at Naini due to paucity of space.

Above position clearly indicates that there were deficiencies in the implementation of the planning made by the Railway Administration itself. Idling of UTS counters at other stations may lead to accumulation of crowd at Allahabad station and higher risk of ticketless travel.

2.2.6.3 Passenger Amenities

Audit scrutiny of records revealed that 13 enclosures were established by the Railways at important Mela stations with basic facilities like booking counters, toilets, urinals, drinking water facility, vending stalls, lighting arrangements etc.

Audit scrutiny of records of various departments of the three Railways revealed that a total of 70 additional works were planned especially for the Mela. These included provision of additional booking counters, drinking water, sanitation, ambulances, temporary lighting at Mela area, CCTVs etc.

Examination by Audit revealed that out of the above 70 works, four works (extension of existing building at Civil Line side, provision of hydrant pipe line for coach watering facilities, provision of temporary dog kennel and fire fighting etc., Provision of computer rooms at Mela area) of NCR could be completed only after the commencement of the Mela. Three works of NR relating to heavy repair to Mela booking office, drains, booking office, drinking water taps etc. at Prayag station commenced in September/ October 2012, but could not be completed before the commencement of the Mela. The actual progress of the work at that time was 74 to 89 *per cent*. Railway Administration (NR), however, stated that civil services/passenger amenities works required for the Mela were completed.

Review of records of Commercial department of Allahabad division revealed that at Allahabad station, six main entrance gates along with the enclosures were constructed with colour coding for segregation of pilgrims based on the direction in which they would be travelling. In addition, signages and banners were installed in enclosures, entrance gates of Allahabad station and its approach roads.

Review of records of commercial department of NCR revealed that six direction wise enclosures at both sides of Allahabad station with basic amenities had been set up. These enclosures had the capacity to accommodate 1200 to 8000 passengers depending upon the size of the enclosures.

Physical verification by Audit at Allahabad station revealed that four enclosures were set up at City side and two at Civil Line side. Provision of medical first-aid posts was available at both sides of the station.

2.2.6.4 Crowd Management

Crowd Management is a major area of attention during any event where large gathering is expected. For effective crowd management the Railways needed to plan for the deployment of adequate number of security personnel, provision of proper barricading, closure of unauthorized entry/ exit points at stations, provision of adequate number of exit points to ease the rush from the station. As per letter of Superintendent of Police (SP), Allahabad⁹⁵, the Railways needed to plan for the deployment of adequate number of security personnel, provision of proper barricading, closure of unauthorized entry/exit point at stations, provision of adequate number of exit points to ease the rush from the stations.

Review of records of Commercial department (Allahabad) revealed control towers were established at Allahabad and Naini stations. Railway Administration (NCR) stated that the control towers were established for centralized monitoring of train movement and assessment of crowds at the Railway station. Control and coordination of security arrangements were also handled from here.

To ensure the above, officials of various departments were stationed at the control towers. They coordinated the arrangement of Mela trains, their placement (direction-wise) on different allotted platforms etc. Information regarding flow of pilgrims towards Allahabad station was regularly received in the control tower and transmitted to various levels.

Audit also observed that in its letter (May/October 2012) SP/Rly Allahabad emphasized the need of proper coordination between State Police/ GRP and Railways to ease the rush at the Allahabad station, especially on key bathing days by diverting pilgrims to other designated Mela stations. Coordination meetings were held between the State government and the Mela Officer of the Railways which included arrangements with GRP for crowd management.

Allahabad Station

Railway Administration (NCR) stated (May 2013) that GRP had prepared a traffic plan to manage the flow of pilgrims at Allahabad station. This plan included movement of passengers one way on specified areas, management of passengers to the designated enclosures and movement to the concerned platforms. They also stated that control and regulation of traffic and crowd management was the subject of State Government and the traffic was regulated as per the GRP plan.

Audit observed that the NCR Administration failed to establish proper coordination with the state authorities to block the influx of pilgrims towards Allahabad station and to divert them to other designated Mela stations.

Railway Administration (NCR) accepted (May 2013) that though entry of pilgrims was restricted from Civil Lines side on main bathing days, in spite of all efforts, the Mela passengers arrived from Civil Lines side as no check was exercised by the Civil management. Thus Railways had to face difficulty in controlling traffic due to unprecedented entry of pilgrims from this side.

Railway Administration (NCR) further stated (March 2014) that crowd

⁹⁵ Source: Superintendent of Police, Railway/Allahabad's letter to Railway Administration dated May 2012 and October 2012

monitoring and regulation is basically related to law and order which is a state subject. Therefore, regulation of crowd at Allahabad station during Kumbh Mela was done according to traffic planning prepared by the GRP. It was also stated that state authorities were requested repeatedly through telephones as well as messages when crowd influx was increasing at Allahabad station and thus there was no lack of coordination with state security agencies.

The reply cannot be accepted as crowd management inside the station and at peripherals of the stations cannot be stated to be a state subject. Also, as per RPF Act, duties of RPF relating to security of passengers include providing access control, regulation and general security on the platforms, in passenger areas and circulating areas.

Records further revealed that on the basis of experience of Kumbh Mela 2001, the then DRM/Allahabad had advised (September 2001) that platform No.9/10 of Allahabad station should be islanded to enable the pilgrims direct access to this platform from the Civil Lines side. They would not need to use the FOB on Civil Lines side. In reply, NCR Administration stated that direct approach to platform No.9/10 was not feasible and thus not planned. The contention of the NCR Administration cannot be accepted as this reply was not supported by any feasibility study.

To control the entry of pilgrims into the station area, the Superintendent of Police (SP), Allahabad had also requested (May 2012) NCR Administration for closure of all unauthorized entry/exit points. Audit, however, observed (SP's letter dated 11th February 2012 to DRM/NCR) that a number of unauthorized entry points continued on Civil Line side of the Allahabad station. This may have resulted in entry of passengers from different points to the station.

2.2.6.4.1 Passengers' Safety and Security

To ensure safety and security of passengers, adequate number of security personnel need to be allotted. Audit examined the arrangements of deployment of RPF/RPSF at and around the designated Mela stations. Review of records revealed that total 1541 RPF/RPSF were deployed during the Mela period by the three Railways. Details of deployment of these security personnel by the three Railways is given below:

Table 2.9

| Railway | Security personnel assessed (RPF/ RPSF) | Actually deployed | Shortfall in numbers | Shortfall as a percentage |
|--------------|---|-------------------|----------------------|---------------------------|
| NCR | 1564 | 869* | 695 | 44.44 |
| NR | 279 | 254 | 25 | 8.96 |
| NER | 791 | 418 | 373 | 47.15 |
| Total | 2634 | 1541 | 1093 | 33.52 |

*Out of 1564 RPF/RPSF assessed/demanded by the NCR, only 869 were available with the Railway for the deployment

(Source: Records of office of Security Commissioner/ RPF of the NCR, NR and NER)

From the above Table, it is seen that the three Railway Administrations could not

deploy the security personnel at and around the designated Mela stations as per their assessment. There was a shortfall of 33.52 *per cent* in deployment of security staff over the three Railways (NCR, NR and NER).

Audit further noticed⁹⁶ that 716 GRP personnel and three companies of Para Military Force/ Provisional Armed Constabulary were also deployed during the Mela period for the management of passengers at the railway stations. These forces were under the control of the State Government.

Review of records by Audit revealed that on none of the auspicious bathing days were security personnel deployed at Allahabad station as per assessed requirement. Audit review further revealed that on the most auspicious bathing date (Mauni Amawasya – 10th February 2013), only 513 RPF/RPSF personnel were actually deployed against the assessment of 995 RPF/RPSF security personnel for deployment at Allahabad station i.e. **a shortfall of 48 per cent was noticed**. Of these 513, only 268 security personnel were deployed inside Allahabad station including the FOBs. This massive shortfall of security personnel was one of the reasons why the Railway Administration was unable to control entry of pilgrims into the station on that day.

However, no comments were made by the NCR Administration with regard to deployment of less number of security staff which clearly indicates failure on the part of Railway to deploy the required number of security personnel. Audit further noticed that after the stampede occurred on 10th February 2013, 329 additional security personnel were deployed. Subsequently, even after the stampede, though the security personnel were increased, they were still less than that assessed by the three Railway Administrations themselves.

2.2.6.5 Running of Special Trains

Railways had expected 34 lakh passengers to attend the Mela. They had planned special Mela trains to handle the large crowd. In fact, as per ticket bookings, about 20 *per cent* more passengers i.e. 41.04 lakh travelled by trains during the Mela period. This would have needed more special trains.

Review of records revealed that, to cater to the additional rush of pilgrims during the Mela period, a total of 1100 Mela special trains (Inward and Outward) were run by the three Railways (NCR-878, NR-81, NER-141). With regard to the Outward Mela special trains from the designated Mela stations including Allahabad, the three Railways had planned to run 471 Mela Special Trains (NCR-328, NR-43, NER-100). Against this projection, a total of 576 outward special trains (NCR-462, NR-46, NER-68) were actually run during the whole Mela period.

However, review of records by Audit revealed shortfall in the Special Trains run by the three Railways on the three important bathing days (Makar Sakranti, Mauni Amawasya, Basant Panchami) and immediately thereafter when larger crowds were anticipated at Allahabad area. The shortfall is given in the Table below:

⁹⁶ Source: SP/Railway, Allahabad's letter dated 12 July 2013

Table 2.10 - Special Mela Trains run by the three Railways on Important bathing days

| Bathing Days | Dates | Projected | | | Actually run | | | Shortfall (-)/Excess | | |
|------------------------|---------------|------------|-----------|-----------|--------------|-----------|-----------|----------------------|-------------|-------------|
| | | NCR | NER | NR | NCR | NER | NR | NCR | NER | NR |
| Makar Sankranti | 14.1.13 | 14 | 2 | 2 | 18 | 1 | 1 | 4 | (-1) | (-1) |
| | 15.1.13 | 19 | 3 | 0 | 9 | 0 | 0 | (-10) | (-3) | 0 |
| | 16.1.13 | 7 | 0 | 0 | 0 | 0 | 0 | (-7) | - | 0 |
| Total | 3 Days | 40 | 5 | 2 | 27 | 1 | 1 | (-13) | (-4) | (-1) |
| Mauni Amawasya | 10.2.13 | 45 | 14 | 15 | 45 | 11 | 12 | 0 | (-3) | (-3) |
| | 11.2.13 | 45 | 10 | 9 | 43 | 13 | 10 | (-2) | 3 | 1 |
| | 12.2.13 | 30 | 4 | 4 | 26 | 6 | 6 | (-4) | 2 | 2 |
| Total | 3 Days | 120 | 28 | 28 | 114 | 30 | 28 | (-6) | 2 | 0 |
| Basant Panchami | 15.2.13 | 31 | 3 | 4 | 33 | 2 | 4 | 2 | (-1) | 0 |
| | 16.2.13 | 27 | 3 | 1 | 23 | 3 | 1 | (-4) | 0 | 0 |
| | 17.2.13 | 14 | 1 | 0 | 12 | 3 | 1 | (-2) | 2 | 1 |
| Total | 3 Days | 72 | 7 | 5 | 68 | 8 | 6 | (-4) | 1 | 1 |

(Source: Records of Divisional Operating department of NCR/Allahabad, NR/Lucknow, NER/Varanasi)

Though there was no shortfall in the running of Mela Special trains on 10th February 2013, it was seen that the Mela officer/ NCR had assured (09-10-2012) SSP, Allahabad that NCR would run 50 special trains on the occasion of Mauni Amavasya. However, only 45 special trains were projected and run⁹⁷ by NCR on that day. It was also observed that out of the 45 special trains run by NCR on that day, 31 (69 per cent) were run from Allahabad station and only 14 trains were run from Naini station.

Audit further noticed that over NCR, initially 417 special trains were actually run against the projection of 328 trains. It was reported by Railway Administration (NCR) that additional 45 special trains were run in quick succession after the stampede on 10th February 2013.

Audit also observed that during the meeting with the State officials, Mela Officer/ NCR stated (December 2012) that the Railways had planned to stagger the return of pilgrims coming on the most auspicious occasion of Mauni Amawasya (10.02.2013) over three days (10th, 11th and 12th of February 2013) by running 68 special trains.

Railway Administration (NCR) in reply to the draft paragraph stated (March 2014) that the number of Mela special trains to be run was assessed based on projection of crowd given by the state government, available line capacity as well as availability of designated Mela stations of NR, NER and NCR. The plan arrangements were reviewed by Railway Board, Parliamentary Standing Committee and State Government (Commissioner/ Allahabad) and were

⁹⁷ (Source: Operation Department (NCR) letter of March 2013)

considered to be adequate. They stated that the running of additional special trains can only be justified on the basis of sale of tickets direction-wise.

The contention of NCR Administration cannot be accepted as the arrangements regarding deployment of security personnel, setting up of additional UTS counters and running of Mela special trains were not as per the plan made by the NCR Railway Administration itself. Moreover, no evidence has been found on record that suitable steps were taken by the Railway Administration to divert the rush to other Mela stations except for announcements regarding the trains being run from all stations.

2.2.6.5.1 Movement of Special Trains at Allahabad Station

Review of records of Allahabad station revealed that this station handles more than 200 trains (Mail/Express, Ordinary passenger and freight trains) per day. Further, Allahabad lies on the Delhi-Howrah main line, where line capacity is already over-saturated. In Audit Report (No.PA26 of 2008-09 'Signalling and Telecommunication in IR), it was reported that line capacity utilization in sections around Allahabad exceeds 130 *per cent*. Keeping in view the over-saturation on the section, Railways needed to at least partly divert freight trains to ensure smooth running of Mela Special trains. This was imperative for auspicious bathing days as rush of Special trains was expected to be more.

Review of records by Audit of movement of trains at Allahabad station during 1st February to 20th February 2013 revealed that Allahabad station handled 1272 freight trains in addition to the Mela special trains (inward and outward) and 2169 regular mail/express trains. It is evident that no alternate arrangements were planned by the NCR Administration for the movement of freight trains to ease the path for Mela Special Trains. This in fact adversely impacted the smooth running of Mela Special trains as these were an addition on an already over-burdened system.

However, NCR Administration in reply stated (March 2014) that freight trains were run as per Railway Board's directives for carrying essential commodities like coal. It was also contended that only 24 freight trains were run instead of 42 to 45 run on normal days and most of the freight trains were dealt with via Main Line or yard lines and no platform was utilized for their movement.

This contention cannot be accepted as from scrutiny of records of operating department of Allahabad division, audit noticed that total 1272 freight trains i.e. on an average 64 trains were run per day during 1st February to 20th February 2013. Moreover, running of freight trains via main line/ yard lines would not ease the path for smooth movement of Mela special trains, especially during the main bathing days when a much larger number of special trains was to be run.

Audit observed that after the stampede incident on 10.02.2013, there was nil movement of freight trains on 11.02.2013 and also decline in the movement of freight trains was noticed on subsequent days at Allahabad station. Thus, scope existed for diversion of traffic avoiding Allahabad station. Lack of foresight in diverting freight trains resulted in over burdening the already over saturated sections and reduced the outward movement of special trains from Allahabad

station.

Audit reviewed the placement/departure of Mela special trains at Allahabad station. It was noticed that, out of 249 special trains run during 9th February to 11th March 2013, 137 special trains were detained at the platforms for more than an hour. Particularly, on the 10th February 2013 (day of the untoward incident of stampede), 10 special trains occupied four out of ten platforms of the Allahabad station. This in turn further delayed trains which were awaiting entry to the station. Thus, the movement of trains was very slow at Allahabad station allowing a massive build up of crowd at each platform.

In reply, Railway Administration (NCR) stated that special trains were placed on the platform on the demand of the commercial department as per the strength of the crowd in the respective enclosures. After the placement of special trains on the platform, the trains were only dispatched after the assurance given by the commercial and security departments that passengers had safely boarded the trains. Passenger safety was the primary concern. It was also stated that the train started when Commercial Inspection Traffic/ Kumbh Mela available on platform informed that the train was full (approx. 3000 passengers). In this process, sometimes the time consumed took more than half an hour.

It was a fact that there was a large influx of crowd at Allahabad station during the Mela period. Placement and departure of Mela special trains in such circumstances could have been quicker. The detention of special trains on the platforms for more than an hour indicated improper time management due to slow pace of coordination between commercial, security and operating departments resulting in ineffective crowd management.

2.2.6.6 Medical Facilities

During scrutiny of records Audit noticed that a total number of 32 doctors were posted at and around the designated Mela stations during the whole Mela period. The plan also included provision of nine ambulances at Mela stations. The details are given below:

Table 2.11

| Railway | No. of doctors | No. of Medical Staff | No. of Ambulances |
|---------|----------------|----------------------|-----------------------|
| NCR | 13 | 47 | 5 |
| NER | 9 | 68 | 3 |
| NR | 10 | 90 | 1 (at Prayag station) |

(Source: Records of Divisional Medical department of NCR/Allahabad, NR/Lucknow, NER/Varanasi)

Audit also observed that Medical department of NCR planned to establish six first-aid posts at Allahabad. These posts were to be manned by doctors and para medical staff for the pilgrims and Mela staff at both sides of the Allahabad station, DSA ground near Allahabad station, Naini station and at Sangam area.

During physical verification, Audit revealed that one doctor along with other

medical staff was deployed round the clock on shift basis at each of the six first-aid posts. Audit however, noticed that doctors and medical staff were not posted at the enclosures established near the Allahabad station.

2.2.6.7 Disaster Management

Disaster in Railways is defined as a serious train accident or an untoward event of grave nature, either on railway premises or arising out of railway activity, due to natural or man-made causes, that may lead to loss of many lives and/or grievous injuries to a large number of people, and/or severe disruption of traffic etc., necessitating large scale help from other Government/ Non-government and Private Organizations.

In Railways, disaster includes –

- (a) Natural disaster e.g. Earthquakes, Floods, Cyclone etc.;
- (b) Train accidents, caused by human/ equipment failure, affecting train movements with loss of human life or property or both;
- (c) Manmade disasters e.g. Acts of Terrorism and sabotage, causing deliberate loss of life and/or damage to property.

It is evident from the above definition that in the Railways, the definition of disaster does not include occurrence of a stampede. Thus, their disaster management plan does not cover the risks involved in the management of huge crowds at Railway stations.

In reply, NCR Administration also accepted (March 2014) that there was no 'Railway Disaster Management Plan' for Kumbh Mela. Division-wise as well as Zone-wise disaster management plan was prepared in terms of the recommendations of the High Level Committee on Disaster Management over Indian Railways. The Kumbh Mela Administration had held discussions and meetings with National Disaster Management Agency for the Kumbh Mela.

2.2.7 Conclusion

The Mela Office/ NCR had made elaborate plans to handle the large number of pilgrims expected to attend the Maha Kumbh Mela 2013 at Allahabad. This included additional RPF/RPSF personnel to handle the huge pilgrim influx and running of Special Mela trains were planned to handle the large influx of pilgrims. The number of Mela trains to be run from Allahabad station was based on the premise that a large number of pilgrims would be diverted from Allahabad to other designated Mela stations. For the special bathing days, when a larger than normal crowd was expected, the Railways had planned to stagger the outflow of pilgrims from Allahabad by running extra Mela Special trains on three consecutive days after the bathing date.

The NCR Administration was, however, unable to ensure that pilgrims were diverted away from the Allahabad station. They failed to establish proper coordination with the State authorities to block the influx of pilgrims towards Allahabad station and to divert them to the other seven designated Mela stations or to stagger their return as per their plan. No evidence has been found that any proper steps were taken by the Railway Administration to divert the rush to other Mela stations/'night shelters'. Only announcements regarding the trains being run

from all stations were regularly made.

The stampede that occurred at the station highlights the lack of close coordination and cooperation with the State Government. Further, effective crowd management required close cooperation and coordination between both the security wings of the Railways i.e. the RPF and GRP. On the day of Mauni Amawasya, this problem was further accentuated by the presence of substantially less security personnel than that assessed by the Railway Administration itself. It also focuses on the absence of a specific disaster management plan. In fact, Railways' definition of disaster does not cover a manmade disaster like a stampede.

Recommendations

The disaster management plan of Railways does not cover the risks involved in the management of huge crowds at Railway stations. In fact, the Railways require to formulate a well-thought out Disaster Management Plan for immediate response to any unexpected incident which can occur due to the pressure of large crowds. This plan would need to include provision of quick medical treatment; and adequate and effective deployment of security personnel to ensure timely action for crowd management.

2.3 Southern Railway (SR): *Loss due to under-utilization of Parcel Cargo Express Trains*

Failure of SR Administration to ensure the availability of satisfactory operational arrangements for running of Parcel Cargo Express Trains (PCET), adversely impacted the revenue earnings to the tune of `314.64 crore besides loss of parcel charges to the tune of `15.44 crore

Railway Board decided (February 2007) to attract piecemeal parcel traffic by providing value added door to door services⁹⁸ through private operators and evolved a policy for leasing of Parcel Cargo Express Trains (PCET). The scheme was to be made customer friendly through provision of value added assured services with guaranteed transit time at competitive rates. As per the policy⁹⁹, in order to provide customer friendly single window service to lease holders, Deputy Chief Commercial manager/ Freight Marketing or a commercial officer may be nominated to coordinate with other departments to solve/ redress their problems/ grievances. In case of any dispute, the matter may be brought to the notice of higher Authorities.

Southern Railway Administration initiated efforts for leasing PCET in March 2007 and also floated several tenders during May 2007 to September 2010. A suitable response could be received in September 2010 only. SR Administration entered into four contracts (November/ December 2010) for a period of three years¹⁰⁰ for leasing PCET over four routes¹⁰¹ over Southern Railway and other Zonal Railways.

Audit reviewed the records connected with these four lease contracts and noticed that-

- (a) The lease service for one route from Erode to Vapi remained operative during 5th February 2011 to 18th January 2012 only against the approved period from 5th February 2011 to 4th February 2014. Audit observed that-
 - (i) Although loading/unloading of parcels by lessee at one intermediate station on each Zonal Railway on the route was permitted¹⁰², Central Railway Administration did not permit (except for three months) the lessee to utilise Kalyan station as an intermediate station. Further, the intermediate station permitted by the Western Railway Administration (Jogeswari) could not be utilised as it did not fall on the route.
 - (ii) A fixed path with a scheduled time table was required for operating PCET service. Although the PCET service commenced on 5th February 2011, the

⁹⁸ In door to door service the contractor collects the parcel from the door of sender, loads/ unloads it in train at sending/destination stations and delivers the parcel at the door of the recipient.

⁹⁹ Paragraph No.21.1 of policy circular

¹⁰⁰ From the date of commencement of lease services

¹⁰¹ Milavittan- Kankaria Fort, Erode—Kalyan, Ernakulam Marshalling yard—New Guwahati Central and Erode -Vapi

¹⁰² Paragraph No. 16.1 Of policy circular

time table was prepared and implemented by the Chief Operating Manager, Southern Railway belatedly in May 2011.

(b) The lease services could not be commenced in respect of three other routes¹⁰³ due to administrative reasons such as-

- (i) Inability to get no objection certificates (NOC) from other Zonal Railways involved in the routes,
- (ii) Inability to sort out problems of hold up of rakes and congestion in Northeast Frontier Railway and
- (iii) Non-availability of adequate infrastructure facilities at Erode to run PCET on Erode –Kalyan route. SR Administration decided to wait till stabilisation of lease services on Erode-Vapi route.

(c) Average transit time for operation of PCET from Erode to Vapi was more than six days as against the road transit time of 72 hours. The actual time per trip for operating PCET on Erode – Vapi – Erode route ranged between 235 hours and 444 hours as against the 170 hours prescribed by Railway's Commercial Authority¹⁰⁴. The average detention of PCET at Salt Cotaurs station and Erode station was 15 hours per trip and 48 hours per trip respectively against the allowed time of seven hours and 24 hours per trip respectively. In view of delay in framing of/adherence to a time table and excess transit time which was not profitable to the lessee, the lease contract was terminated (March 2012) after operation of only 75 trips against the admissible 168 trips.

It is evident that SR Administration could not coordinate with other Zonal Railways for removal of operational constraints encountered in running of PCETs and thus failed to solve the issues either through coordination with Zonal Railways or through intervention of higher Authorities.

Review of records at Railway Board revealed that the operational constraints encountered by Southern were also not communicated to Railway Board for their solution. This resulted in failure of the scheme in Southern Railway.

In respect of the only PCET service introduced between Erode and Vapi, where the contract was terminated¹⁰⁵ after 14 months, early termination of the contract due to administrative problems¹⁰⁶ resulted in SR Administration being deprived of revenue (₹43.61 crore) for the remaining months (22) on account of non-operation of PCET. In addition, operation of PCET on Erode-Vapi route for 75 trips during the period of operation instead of the admissible 168 trips resulted in loss of lease charges¹⁰⁷ to the extent of ₹ 15.44 crore¹⁰⁸. Further, non-operation of PCET

¹⁰³ Milavittan – Kankaria Fort-, Erode –Kalyan and Eranakulam Marshalling yard –New Guwahati Central

¹⁰⁴ Deputy Chief Commercial Manager/Rates & Freight Management

¹⁰⁵ As per terms of contract- item No. 13, the contract could be terminated on receipt of two months prior notice from the lessee.

¹⁰⁶ As mentioned in sub-paragraph (a) above

¹⁰⁷ Lease charges are payable to Railway on round trip basis

services on three routes due to administrative reasons¹⁰⁹ deprived SR Administration of a potential earning of `271.03 crore¹¹⁰.

When the matter was taken up (July 2013) with SR Administration, they stated (April 2014) that-

- Parcel Vehicles (VPs) are always on demand and hence are operated without any idling.
- There were various reasons for early termination of contract/ under-utilisation in respect of PCET operated on Erpode - Vapi route.
- Since no exclusive rakes were procured /allotted for movement on three routes, loss of earnings is hypothetical.

Railway Administration (SR) reply is, however, not acceptable as-

- Although Parcel Vehicles (VPs) are operated without idling, the scheme for leasing PCET was implemented by Railway Board to augment the earning potential.
- The lessee got the contract terminated for the PCET on Erode-Vapi route on account of administrative problems not resolved by SR Administration. The utilisation of rake for lesser trips was also on account of excessive transit time.
- The award of contracts for operation of PCETs on four routes clearly establishes the fact that there was substantial patronage from the trade which should have been encashed.

Thus, non-commencement of PCET services on three routes and early termination of lease contract in respect of PCET on one route resulted in loss of revenue of ` 314.64 crore¹¹¹ besides loss of earning capacity to the tune of `15.44 crore towards under-utilization of rakes of PCET operated. Due to lack of coordination amongst the Zonal Railways and non-enforcement by the Railway Board the intended objective of the Railway Board for providing value added service through private operators remained unfulfilled in Southern Railway.

The matter was brought to the notice of Railway Board in May 2014; their reply has not been received (July 2014).

¹⁰⁸ As per lease contract for PEET on ED-VAPI route, 168 trips were to be performed in 14 months against which 75 trips were performed. Loss of lease earning for 93 trips not performed was ` 15.44 crore (93x `0.166 crore)

¹⁰⁹ As mentioned in sub-paragraph (b) above

¹¹⁰ This is total value of three contracts for PCETs on three routes (`68.04 crore+ `142.34 crore+ `60.65 crore) that were not operated.

¹¹¹ Loss of earnings in respect of PCETs on three routes which could not be operated due to Administrative problems (` 271.03) plus loss of earnings (`43.61 crore) due to termination of lease contract of PCET on ED-VAPI route 22 months before the scheduled date.

2.4 Western Railway (WR): *Loss due to incorrect apportionment of revenue between Railways and Pipavav Railway Corporation Ltd.*

Apportionment of freight share on the basis of booked route instead of actual carried route resulted in extra sharing of revenue of ` 39.88 crore

Pipavav Railway Corporation Ltd (PRCL) (Project Railway) an SPV¹¹² of Indian Railways with the Gujarat Pipavav Port Ltd (GPPL) was set up to construct, maintain and operate 265 kilometer long Broad Gauge Railway line connecting the Port of Pipavav to Surendranagar Junction of Western Railway.

PRCL signed a Concession Agreement with the Ministry of Railways in June 2001. Clause 4.2(h) of the Concession Agreement stipulates that PRCL has the right to receive its share, in accordance with the rules of inter-railway apportionment of earnings of the traffic from freight traffic originating, terminating and moving on the Project Railway including haulage charges collected from container operations.

Para 868 (B) (ii) of IRFC¹¹³ specifies the criteria for apportionment of inter-Railways traffic in case of rakes that are diverted and carried by longer route. It stipulates that earnings should be apportioned between respective Zonal Railways on the basis of actual kilometres run by the Goods Train. Accordingly, in case of traffic booked via route falling on the Project Railway and a Zonal Railway that is carried via longer route, the percentage of revenue apportionment to Project Railway will depend on the actual distance, it is carried on the Project Railway.

Scrutiny of records of traffic booked by Project Railway to various destinations revealed that:

- The traffic booked and charged by the shortest route (via Viramgam-Palanpur –Marwar Junction) was carried via longer route (via Viramgam-Geratpur – Godhara-Nagda) covering extra distance of 245 Kms on Zonal Railway.
- In contravention of Para 868(B) (ii) of IRFC, apportionment was being done on the basis of distance of the booked route. This resulted in higher apportionment to the Project Railway amounting to `72,55,854 for 173 rakes during the period January 2012 to March 2012.

¹¹² Special Purpose Vehicle

¹¹³ Indian Railways Finance Code Vol. I

The total excess apportionment to the Project Railway for 9509 rakes diverted during the period April 2009 to March 2013 amounted to `39.88 crore¹¹⁴.

When the issue was taken up with WR Administration in April 2013, they stated (October 2013) that traffic had been diverted due to Railways' operational requirement. Hence, the issue of higher apportionment payment to the SPV needs to be worked out in consultation with all the stake holders due to diversion of traffic through longer route.

The contention of the WR Administration is not sustainable as the Concession Agreement entered into by Ministry of Railways with PRCL clearly states that PRCL will receive its share of freight earnings in accordance with the rules of inter-railway apportionment of earnings. These rules clearly stipulate that earnings be apportioned between respective Railways on the basis of actual kilometre run by the Goods Trains.

The matter was brought to the notice of Railway Board in June 2014; their reply has not been received (July 2014).

2.5 South East Central: Improper planning of traffic facility Railway (SECR) works

Inadequate/ poor planning of traffic facility works at a cost of `16.22 crore to minimize the detention of rakes at Kirodimalnagar station of SECR resulted in excess detention to the extent of 1.11 lakh wagon days in respect of detained rakes during 2009-10 to 2012-13

The operational effectiveness of Railways depends on the optimum use of its rolling stock. It is, therefore, imperative to ensure that the wagons are placed for loading/ unloading immediately on arrival at a station and removed/ dispatched to their destination as soon as the loading/unloading is completed.

Kirodimalnagar (KDTR) station is situated on the Mumbai-Howrah trunk route at a distance of 125 Km from Bilaspur (BSP). The private siding of M/s Jindal Steel and Power Ltd (JSPL) is served by this station.

The gradual increase of traffic at the JSPL siding and establishment of other industries in the area led to detention of rakes at KDTR station as the existing infrastructure in KDTR station could not handle the increased traffic. To overcome the problem of detention at KDTR station, the SECR Administration had undertaken (2006-07 and 2008-09) two traffic works viz., 'Additional loop line of KDTR station' and 'remodelling of the station for dealing with additional traffic of JSPL siding'. The works were completed by December 2010 and March 2011 respectively at a total cost of `16.22 crore.

Audit scrutiny of records of KDTR station revealed the following:

¹¹⁴ No. of rakes diverted during the period x Average excess share of freight per rake as per actual calculation for 3 months i.e. Jan 2012 to March 2013(9509 X41941 = ` 398816975)

- After completion of the above traffic facility works, detention of rakes could not be reduced and instead increased. The detention of rakes had increased to 16 to 52 hours during April 2011 to March 2013 after commissioning from 12 to 26 hours during the period of April 2009 to March 2011 i.e. before the commissioning of the traffic works. The traffic facility works constructed could not handle the increased traffic, even though the works were designed to handle a much larger volume (inward – 7.5 rakes/day, outward – 2.8 rakes/day) of traffic than the actual traffic being handled (inward – 5.67 to 6.54 rakes/day, outward – 2.03 to 2.22 rakes/day).
- At the time of execution of the above traffic works, JSPL had proposed (April 2007) modification work in their in-plant yard to minimize detention. The modification works were required to be undertaken by JSPL siding only after the approval of Railway Administration (SECR). After a lapse of five years of the proposal, Railway Administration opined (September 2012) that on completion of the modification works, detention to both inward and outward traffic of JSPL siding would be reduced substantially. However, the proposal is yet to be approved (May 2013).

Thus, incurring an expenditure of `16.22 crore on the two traffic works to minimize the detention did not serve the purpose. Poor planning of these traffic works failed to mitigate the problem of detention of rakes. Rakes were detained for 1.11 lakh wagon days¹¹⁵ (from 2009-10 to 2012-13). Audit has assessed a loss of earning capacity of `35.07 crore due to detention of these rakes based on the Statement Nos. 15 and 24 of the Annual Statistical Statement of Indian Railways.

The matter was brought to the notice of SECR Administration in August 2013. While accepting (October 2013) the fact of increased detention at KDTR station, Railway Administration contended that the detention was the result of overall growth of passenger and goods traffic in the section. The inward and outward rakes dealt with at JSPL siding has substantially increased during the last four years (2009-10 to 2012-13).

The above contention of SECR Administration is not tenable. The traffic facility works were constructed with a view to handle 7.5 rakes per day in inward direction and 2.8 rakes per day in the outward direction. However, though the actual traffic (inward – 5.67 to 6.54 rakes per day and outward – 2.03 to 2.22 rakes per day) during the last four years (2009-10 to 2012-13) was less than that of the assessed traffic while proposing the traffic facility works, the detention of the rakes had increased.

Moreover, SECR Administration in November 2011 admitted that the additional loop created could not be used for outward rakes due to non-provision of cross-over at Bilaspur end connecting Up and Down main lines. Audit, however, observed that the provision of cross over at Bilaspur end was not included at the planning stage of the work. Thus, detention of rakes at Kirodimalnagar station could not be reduced due to inadequate/ poor planning of works implemented to

¹¹⁵ Detention of wagon days for loaded wagons was calculated on the basis of time gap between actual release and departure after allowing 3 hours on operational ground.

mitigate the problem of detention in spite of incurring a capital investment of `16.22 crore. Further, JSPL's proposal for modification works in their in-plant yard to minimize detention was pending for over six years with Railway Administration. The proposal was moving from one department to another for their consent and finally after a lapse of five years Railway Administration opined (September 2012) that the modification works would reduce the detention. This shows the casual approach of SECR Administration in taking decision for a work which could reduce the detention of traffic at no cost to them.

The matter was brought to the notice of Railway Board in June 2014; their reply has not been received (July 2014).

2.6 Southern Railway (SR): *Under utilization of coaching assets due to lack of maintenance facilities*

Non-provision of a pit line at Kozhikode (CLT), SR Administration to carry out maintenance of Janshatabdi rakes at Thiruvananthapuram central (TVC) station resulted in under-utilization of coaching assets and consequential loss of potential earnings of ` 15.81 crore

The Railway Board vide their letter dated 31 January 2007 revised maintenance pattern of coaching trains (2007)¹¹⁶. These norms stipulate that Passenger trains may be permitted to run up to 3500 Km in a round trip with terminal attention at the other end. Mandatory under-gear examination and brake system maintenance at pit line¹¹⁷ are required to be done only at primary end¹¹⁸ after completing 3500 Km journey or 96 hours after the issue of original Brake Power Certificate (BPC), whichever is earlier.

Jan Shatabdi Express train, with both AC and non-AC sitting accommodations is an affordable variety of the Shatabdi Express train. The train rake is run point to point to provide convenient day time intercity travel.

The distance between Kozhikode (CLT) and Thiruvananthapuram (TVC) is 413 Km. In view of increasing demand of passengers, one pair of Jan Shatabdi Express train was proposed in the Railway Budget (2010-11) to run five days a week from CLT to TVC and back to CLT. SR Administration introduced (January 2011) one pair of Jan Shatabdi trains (No. 12081/12082). The same rake completed the circuit from CLT to TVC and back to CLT on the same day (except Wednesday and Sunday). However, pit line facility for the mandatory examination of rake and maintenance of under-gear and brake system once in 96 hours was not available at CLT, the primary end. Instead it was available at TVC, the secondary

¹¹⁶ Railway Board letter No. 95/M(C)/141/1 dated 31.01.2007

¹¹⁷ Pit line is a Rail line on Railway station which has sufficient space below the track for workers/equipments for carrying out mandatory primary examination and maintenance of under-bogie parts of the coaches including brake power system.

¹¹⁸ The station from where outward journey originates.

end¹¹⁹. As a result, the rakes had to be despatched from CLT to TVC on Tuesdays and Saturdays and detained there for 24 hours. As a consequence, there was curtailment of the trip for two days in both directions.

In this connection, Audit observed that another pair of Jan Shatabdi Express train (No.12075/12076) runs daily from TVC to CLT and back to TVC. Daily running of this pair of Jan Shatabdi train between the same stations has been possible due to availability of pit line facility for the mandatory examination of rake and maintenance of under-gear and brake system once in 96 hours at TVC, the primary end. If SR Administration had considered the need of a pit line at CLT before the introduction of Jan Shatabdi Express train service (12081/12082) and constructed a pit line there, recurring loss and travelling public inconvenience on account of non-running of trains for two days a week could have been avoided. Audit observed that non-construction of pit line at CLT resulted in under-utilization of available coaching assets for two days a week and loss of potential earnings of `15.81 crore¹²⁰ during the period January 2011 to June 2013.

On this being pointed out (July 2013), SR Administration stated (December 2013) that availability of pit line facility could not have provided train service on all the seven days of a week as-

- in view of consistently high speeds, Shatabdi/ Jan Shatabdi Express trains undergo examination during day time;
- provision of a pit line is a highly complex matter having financial and operational implications. Further, pit lines are created only on natural and logical terminals and mindless proliferation of pit line in intermediate stations leads to sub-optimal utilisation of investments and resources.

Railway Administration's (SR) contention is not acceptable as-

- rake of another Jan Shatabdi service (No 12075/12076) originating from TVC and running in TVC-CLT-TVC circuit is being maintained at night;
- Financial and operational implications involved in the provision of an asset are the subjects to be dealt with by SRA during assessment for financial and technical viability. This was not done in the instant case. Further, the contention that pit lines are created only on natural and logical terminals is not in order as SR Administration has provided a pit line at Erode, an intermediate station handling very low traffic.

Thus, the failure to provide a pit line facility at CLT before the introduction of Jan Shatabdi train service resulted in under utilization of coaching assets, inconvenience to travelling public and consequential loss of potential earnings of `15.81 crore for the period from January 2011 to June 2013.

¹¹⁹ The destination station

¹²⁰ Loss of earnings due to non-running of train for two days a week between 21 January 2011 to 30 June 2013.-508 trips x per trip earning (@ ` 3.06 lakh up to 31 March 2013 and @ @ ` 3.61 lakh from 1 April 2013 to 30 June 2013)

With effect from 2nd August, 2013, the train service was extended from Kozhikode (CLT) to Kannur (CAN)¹²¹ and now runs ex-Kannur to Thiruvananthapuram (TVC) and back to Kannur via Kozhikode. With this extension, the problem of maintenance¹²² still persists as no pit line is available at Kannur also and the train runs only for five days a week. The under utilization of coaching assets and loss of earnings would continue till the provision of required pit line facility at Kozhikode.

The matter was brought to the notice of Railway Board in May 2014; their reply has not been received (July 2014).

2.7 South East Central: Short collection of fares on booking of Railway (SECR) special trains

Incorrect application of Rules led to loss of Railway Revenue to the tune of `3.40 crore on account of short collection of fare on 'Special trains' booked by the private parties

As per Indian Railway Conference Association (IRCA) Coaching Tariff, the fare for 'Special trains' shall be computed on 'Point to Point' basis¹²³ with full adult Mail/Express fare of the concerned class for the actual number of passengers travelling or carrying capacity of the coaches whichever is more. The Tariff also stipulates that two halts of maximum duration of 20 minutes in each block of 1000 KM or part thereof will be exempted for the purpose of calculating point to point charges and detention charges.

Audit scrutiny of the records of five stations (Korba, Ambikapur, Champa, Raigarh and Raipur) of SECR revealed (December 2012) that the fare for the booking of 15 Special trains, booked during the period January 2008 to April 2011, was not being calculated on a 'point to point' basis. Instead, the fare was calculated by dividing the whole distance of the journey in two parts i.e. origination to destination station and back, which is in violation of the IRCA Coaching Tariff. This resulted in a loss of `3.20 crore towards short collection of fare on Special trains. Audit also noticed that out of these 15 cases, only in two cases, short collection was detected (September 2010) by SECR Administration when the parties claimed refund of security deposit. SECR Administration raised

¹²¹ Kannur(CAN) is 89 Kms away from Kozhikode (CLT) on Palakkad- Mangalore Central route

¹²² Under-gear examination and brake power maintenance at pit line

¹²³ Calculation on Point to Point basis means fare should be charged considering the distance of each section where halt is made instead of taking the whole distance travelled. For example, if a passenger travels from A to D with halting at B and C, then fare on point to point basis will be for A to B, B to C and C to D instead of considering total distance from A to D.

(March 2011) debit (₹0.76 crore) against these two parties. However, the debit raised is yet to be realized (July 2013).

Further scrutiny (January and March 2013) of records of three stations (Gondia, Korba, Durg) of SECR revealed incorrect application of rules in charging different components of fares such as base fare, pantry car charges, empty haulage charges, detention charges etc. in booking of three special trains booked during October 2008 to December 2012. This resulted in short collection of fare of ₹0.09 crore.

The above cases of incorrect application of rules in charging fares on booking of Special trains point to weak internal control mechanism of SECR Administration in checking collection and account of fares as per rules.

The matter was referred to SECR Administration in August 2013. In reply they accepted (February 2014) the audit contention and stated that responsibility will be fixed on the concerned staff. They also stated that to recover the differences of fare as assessed by Audit, civil suits against the parties will be filed and divisions were advised (September/ October 2013) to initiate necessary action. The SECR Administration further appreciated the suggestion of Audit regarding strengthening of the existing internal control mechanism and stated that divisions are closely watching the calculation of fare for booking of special trains.

In spite of the above reply, no action regarding filing of civil suits has been taken (as of March 2014) by the SECR Administration. Further, test-check by audit (January 2014) revealed one more case of wrong charging of fare in booking of 'special train' (booked in November 2013) involving loss of ₹0.11 crore which increased the revenue loss to ₹3.40 crore. This shows that internal control mechanism has yet to be strengthened.

Thus, incorrect application of rules and failure of internal control mechanism by SECR Administration led to a revenue loss of ₹3.40 crore towards short collection of fares on 'special trains'.

The matter was brought to the notice of Railway Board in June 2014; their reply has not been received (July 2014).