

CHAPTER I → INTRODUCTION

1.1 Introduction

Indian Railways (IR) is one of the largest railway networks in the world with 64600 route kilometers and 1.4 million employees under a single management. IR is the largest rail passenger carrier and fourth largest rail freight carrier in the world. IR inherited 53,996 of route km of rail network in the year 1947 and today the network stands at 64,600 km – an increase of only 10,604 km in 64 years since independence. Freight movement is one of the core activities of Indian Railways, in terms of earning revenue as well as transport effort. IR carries more than 35 per cent of the total freight traffic (tonnes/kilometers) of the country and about two-third of its revenue comes from transportation of goods traffic.

At the end of the 10th Five Year Plan period (March 2007), originating tonnage stood at 728.4 million tonnes (MT). The target for the terminal year of the 11th Five Year Plan period (2007-2012) was 1020 MT against which the IR achieved 970 MT at the end of 2011-12. The trend of freight loading and earnings during the period 2008-13 is given below.

Table 1-
Position of loading and earnings of Indian Railways during 2008-13

Particulars	2008-09	2009-10	2010-11	2011-12	2012-13
1	2	3	4	5	6
Loading (in Million Tonnes)	833.39	887.79	921.73	969.05	1,008.09
Freight earning (₹ in crore)	53,433.42	58,501.68	62,844.72	69,547.59	85,262.58

Source:-Indian Railway year Book for respective years

The freight basket of Indian Railways is dominated by nine major commodity groups, namely coal, iron and steel, iron ore (both for export and domestic steel plants), other raw materials for steel plants cement, food grain, fertilizer and petroleum products.

Indian Railways owns over 244731 Freight Wagons, 63870 Passenger Coaches and 9956 Locomotives as on March 2013. Indian Railways acts as a predominant public carrier and is considered as the life line of the nation. Despite encouraging growth of freight, the market share of IR in freight sector has declined substantially from 53 to about 35 *per cent* during the last two decades.

The operation of goods train depends largely on following aspects.

- Adequate availability of desired railway locos, wagons, crews and appropriate paths for movement of goods trains
- Upkeep of the locos and wagons in good condition by facilitating timely repair and maintenance,
- Ensuring optimum utilization of locos/wagons by achieving reduction in turn-around time,

Efficient management of goods train operations depend on the above factors and Railway Administration's inclination and ability to regulate these issues efficiently. This Performance Audit was conducted to study and analyse as to how far IR has performed in managing the freight trains operations during 2008-13.

1.2 Organization Set up

At the Railway Board, Traffic Commercial Directorate headed by Member Traffic formulates policies on tariff and marketing strategies while the Traffic Transportation directorate monitors the movement of traffic of different commodities. Mechanical Engineering Directorate headed by Member Mechanical is the overall authority for procurement of rolling stock and formulating policy concerning maintenance of rolling stock. The two directorates are within an over-all control of Chairman Railway Board.

At Zonal Railway level, the freight business operations including collection of revenue are vested with Commercial Department. The Operating Department is responsible for allotment of goods stock and running of Goods Trains. Freight business operations are vested with the Chief Commercial Manager (Freight Marketing), Chief Operations Manager and Chief Freight Transport Manager. In divisions the Sr. Divisional Commercial Manager is responsible for implementation of policies and Senior Divisional Operations Manager is responsible for freight operations.

Chief Mechanical Engineer (CME) at the Zonal Headquarters level and Senior Divisional Mechanical Engineering at the Divisional level look after repairs and maintenance of locos and Wagons. General Manager is the over-all in charge for the activities at Zonal Railway level.

An organization chart of Railway officials responsible for Freight Operation is shown in Appendix I.

1.3 Audit Objectives

The Performance Audit on Management of Goods Trains was aimed at obtaining reasonable assurance that the:

- Procurement of wagons and locos was commensurate with the requirement assessed, Adequate funding was ensured and intended benefit of the technological development planned in the wagons was achieved;
- Adequate wagons and locos were available for meeting the demand for freight loading and the wagons were utilized optimally;
- Wagon maintenance was ensured in an effective manner and wagons/locos were condemned as planned;
- Monitoring mechanism existed to oversee the smooth and efficient freight trains operations.

1.4 Audit Criteria

The Performance Audit conducted on the basis of the following criteria:-

- Provisions prescribed under Codes and Manuals of the Mechanical, operating and Commercial Departments of IR
- Guidelines/instructions issued from Railway Board/Zonal Railways on assessment, procurement, utilization, maintenance of wagons,
- Records maintained by Railway Board, Production units, Zonal Railways, Divisions, stations, good sheds/sidings, Workshops and sheds on assessment procurement, utilization, maintenance of wagons,
- Reports on Freight operations generated from Freight Operation Information System (FOIS) from Zonal Railway/Divisions. Analysis of FOIS data pertaining to registration of demand, allotment of wagons and Brake Power Certificates etc.

1.5. Audit Scope, Methodology and Sample selection

Audit reviewed major aspects that impact the operations of goods trains such as planning for adequate availability of locos and wagon stock, its optimum utilization, proper maintenance and monitoring the goods trains operations for the five year period from 2008-13.

The audit methodology included the examination of records in Railway Board, Zonal Railway Headquarters and field locations and analysis of the relevant quantitative data.

The Performance Audit on Management of Goods Trains in Indian Railway was conducted across all the 16 zones. Data was collected for the entire zone (for macro level analysis-for the period 2008-13 and for the period 2011-13 for micro analysis) on a judgmental selection of a representative sample as indicated below:-

Table 2 –Details of the sample size

S. No.	Name of the activity centre	Selection criteria/sample size	Units selected
1.	Division	Two Divisions with highest volume of Goods Traffic	32
2.	Loading Points (Sidings/Goods Sheds)	Two loading points involving highest volume of goods traffic in each division (including one private siding) Thus total four loading points selected in each zone	64
3.	Unloading Points(Sidings/Goods Sheds)	Two points involving highest volume of goods traffic in each division (should include one private siding) Thus, total four unloading points selected in each zone.	64
4.	Terminal Yard including sick Line	Two from each zone	32
5.	Wagon Depot	One from each zone	16
6.	Wagon Workshop	One from each zone (five Zones do not have wagon workshop)	11

Details of units selected in sample size are given in Appendix II

1.6 Audit Findings

The results of the Performance Audit of Management of Goods Trains in IR are given in the following sections.

- Planning as well as funding arrangements for procurement of wagons and locomotives. This also included the technological upgradation in wagons;
- Allocation of Wagons amongst Zonal Railways and their utilization including the use of Freight Operations and Information System (FOIS) in running the freight trains;
- Maintenance of Wagons to keep them in good condition and Condemnation of wagons/locos;
- Monitoring the movements of Goods trains

1.7 Acknowledgement

Audit acknowledges the co-operation and assistance extended by all Zonal Railways. However, Railway Board did not accede to the request for a suitable date for Exit Conference. Reply on the Provisional Report issued to Railway Board on 14-7-2014 was received in Audit belatedly on 30-9-2014.