

PREFACE

Over the years, the Railways have been developing computerised applications for various functions. The Passenger Reservation System, Unreserved Ticketing System and Freight Operations Information System are three standardised applications that have been implemented over all zonal railways. In addition, considering that the framework of rules and regulations is common for the entire Railway network, Railway Board in 1997 had constituted System Development Teams at select zonal railways for developing major applications as pilot projects for subsequent adoption in other zonal railways, so that uniform standardised systems become available for all zonal railways. Some of such applications are Material Management Information System, Pay Roll and Independent Modules and Advanced Financial and Railway Expenditure Management System. Zonal railways were also allowed to develop and implement applications locally to manage different functions. Some of these applications have been reviewed in this report.

Data analysis was carried out using audit software tools-Interactive Data Extraction Analysis (IDEA) and Structured Query Language (SQL).

This report is divided into two chapters:

- **Chapter 1:** Contains the findings of the Information Technology audit of the Computerised Passenger Reservation System, a computerised application for facilitating booking and cancellation of tickets from any terminal across the country for journeys in trains commencing from and terminating at any part of the country. The application was audited at ten zonal railways viz., Eastern Railway, Northern Railway, Southern Railway, Central Railway, Western Railway, South Central Railway, North Eastern Railway, South Eastern Railway, North East Frontier Railway and East Central Railway.
- **Chapter 2:** For the purpose of Information Technology audit of systems across the Railways, a sample comprising both applications developed by System Development Teams and those developed locally by zonal railways was selected. The chapter contains the results of the Information Technology audits of Inventory and Material Management Information Systems at Southern Railway and Diesel Locomotive Works Varanasi, Pay Roll and Provident Fund Accounting System at Varanasi and Lucknow Divisions of North Eastern Railway, Financial Accounting System of Rail Coach Factory, Kapurthala, Freight and Passenger Accounting System of Western Railway and Hospital Information Management System of South Eastern Railway.