

Chapter 1 Introduction

1.1 Audited Entity profile

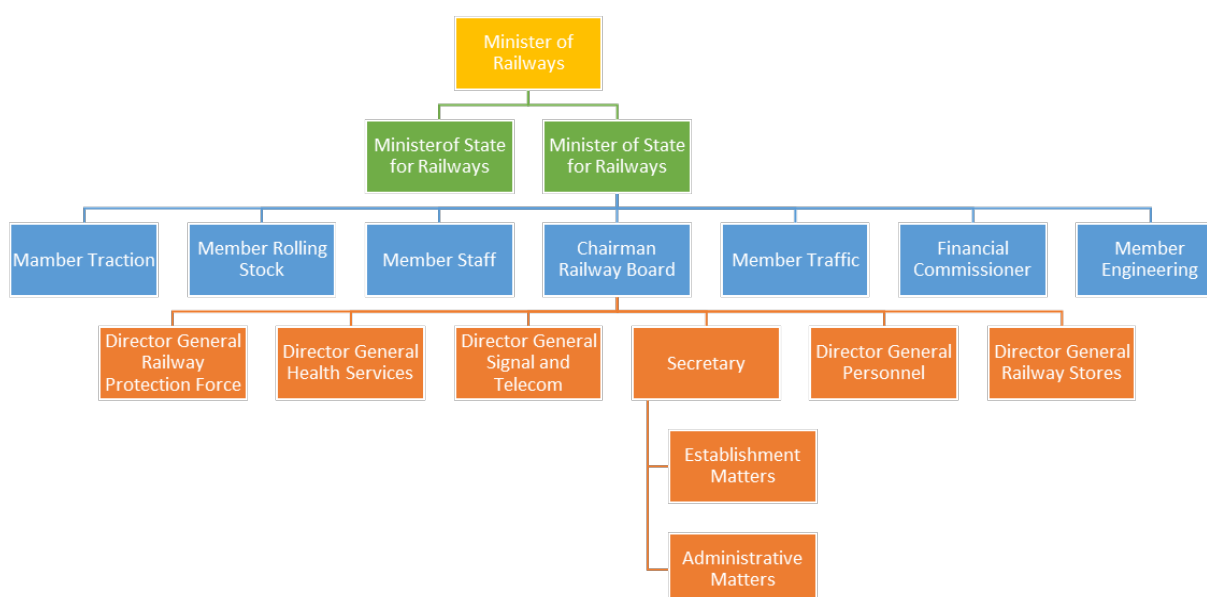
Indian Railways is a multi-gauge, multi-traction system with a total route length of 67,368 kms (as on 31 March 2017). Some important statistics¹ regarding route/track length in Indian Railways is given below:

	Broad Gauge (1,676 mm)	Meter Gauge (1,000 mm)	Narrow Gauge (762/610 mm)	Total
Route Kilometers	61,680	3,479	2,209	67,368
Running Track Kilometers	87,962	3,731	2,209	93,902
Total Track kms (TKM)	1,14,912	4,099	2,396	1,21,407
Electrified Route kms (RKM)				25,367

IR runs 13,329 passenger trains and 9,221 goods trains every day. During 2016-17, it carried 22.24 million passengers and 3.04 million tonnes freight each day. As on 31 March 2017, Indian Railways had 1.31 million work force and maintained the following infrastructural assets and rolling stock:

Rolling stock	Numbers
Locomotives	11,461
Coaching Vehicles	70,937
Freight Wagons	2,77,987
Stations	7,349

The Ministry of Railways, is headed by a Union Minister of Railways (a Cabinet Minister) and has two Ministers of State for Railways.



¹ Source – Indian Railways Year Book 2016-17 and Indian Railways' Website

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

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

The details of Zonal Railways with their Headquarters and total route kilometers (RKMs) as on 31 March 2017 are given below:

Zonal Railways	Headquarters	RKMs
<i>Central</i>	Mumbai	4101.63
<i>Eastern</i>	Kolkata	2711.61
<i>East Central</i>	Hajipur	3986.06
<i>East Coast</i>	Bhubaneswar	2745.45
<i>Northern</i>	New Delhi	7301.30
<i>North Central</i>	Allahabad	3523.30
<i>North Eastern</i>	Gorakhpur	3881.44
<i>Northeast Frontier</i>	Maligaon (Guwahati)	4097.91
<i>North Western</i>	Jaipur	5550.64
<i>Southern</i>	Chennai	5079.51
<i>South Central</i>	Secunderabad	6168.35
<i>South Eastern</i>	Kolkata	2712.45
<i>South East Central</i>	Bilaspur	2512.14
<i>South Western</i>	Hubli	3522.23
<i>Western</i>	Mumbai	6448.64
<i>West Central</i>	Jabalpur	2997.88
<i>Metro Railway</i>	Kolkata	27.28
Total		67,367.82

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

Besides the above, there are 37 PSUs and two Autonomous Bodies (RLDA and CRIS) under control of Ministry of Railways. These PSUs/ABs have been set up by the Ministry with varied and specific objectives of raising finance for its rolling stock, manufacture of wagons, executing infrastructure projects, managing containerization of rail traffic, catering and tourism, station development, utilise railway telecommunication network etc.

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

1.2 Authority for audit

The authority for our audit is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) (DPC) Act, 1971. Audit of expenditure and receipts of Ministry of Railways, its Public Sector Undertakings and Autonomous Bodies is conducted under Section 13, Section 16, Section 19 (1) and Section 20 (1) of the CAG's (DPC) Act respectively. Principles and methodology of compliance audit are prescribed in the 'Regulations of Audit and Accounts, 2007'.

1.3 Audit Planning

Broadly, the selection of the units for audit of the Railways is planned on the basis of a risk assessment with regard to the level of budgets planned, resources allocated and deployed, extent of compliance with internal controls, scope of delegation of powers, sensitivity and criticality of function/activity, external environment factors, etc. Previous audit findings, Public Accounts Committee (PAC)'s recommendations, media reports, where relevant, are also considered. Based on such risk assessment, test audit of 4,543 entities/units of the Railways was conducted during 2016-17.

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

1.4 Reporting

Audits of selected topics were conducted across the Zonal Railways reviewing relevant records and documents of the field units as well as that of Railway Board. Appropriate samples from the population were selected so as to adequately cover the issues under study. The audit findings were issued to the respective Zonal Managements for their response. Similarly, Audit Notes/Inspection Reports (IRs)/Special Letters arising out of regular audit of vouchers and tenders were

issued to the Associated Finance and Head of the unit for obtaining their replies. Audit findings were either settled or further action for compliance was advised depending upon action taken. Important audit observations, not having been complied with, were followed up through Draft Paragraphs addressed to the General Managers of Zonal Railways with copies endorsed to the FA&CAOs and Heads of the Departments for reply within the prescribed period. Selected issues raised in these Draft Paragraphs were taken up as Provisional Paragraphs with the Ministry of Railways (Railway Board) for furnishing their reply within a period of six weeks (as prescribed by the PAC) before their inclusion in the Audit Report.

1.5 Structure of the Report

The Audit Report for the year ending March 2017 comprises results of scrutiny of transactions relating to expenditure, receipts, assets and liabilities of the audited entities under the control of Ministry of Railways (Railway Board including Zonal Railways, Railway Public Sector Undertakings (PSUs) and Autonomous Bodies under the Ministry of Railways all over India). This includes an examination of the adequacy, legality, transparency, etc. of the relevant rules to maintain and operate effective control mechanism over public expenditure and safeguard against misuse, waste and loss.

The Report contains eight Chapters. Chapter 1 is introductory in nature and covers issues of cross-cutting nature. The other seven Chapters contain audit findings related to important areas of functioning and operations of Indian Railways viz., Traffic, Engineering, Traction, Signalling & Telecommunication, Rolling Stock, Autonomous Bodies and Railway Public Sector Units. The Report presents audit findings of significant materiality which are intended to aid the executive in taking corrective actions to bring about improved performance and better financial management. Detailed findings on the following four issues, over Indian Railways, are presented in this Report:

1. Flexi Fare system in Rajdhani, Shatabdi and Duronto trains
2. Management of commercial plots and parking spaces near stations by Commercial department in Indian Railways
3. Implementation of Mobile Train Radio Communication system in Indian Railways
4. Development of railway land for commercial use by Rail Land Development Authority

In addition, 33 individual paragraphs covering audit findings of respective Zonal Railways/ Public Sector Units/ Autonomous Bodies are presented in Chapters 2 to 8 of this Report.

1.6 Response of the Ministry/Department to Provisional Paragraphs

A total of 112 Draft Paragraphs were issued to the General Managers of the concerned Zonal Railways up to September 2017. 42 Provisional paragraphs were forwarded to the Chairman Railway Board, Members concerned and the Financial

Commissioner, Railway Board between 28 August 2017 and 2 February 2018. As on 28 February 2018, Railway Board's replies have been received in respect of ten Provisional Paragraphs. After considering the replies of Railway Administrations wherever received, 36 Paragraphs (which include two thematic audits and two long paragraphs) have been included in the Audit Report.

1.7 Recoveries at the instance of Audit

Audit has pointed out the cases of undercharges in realization of freight and other earnings, over payments to staff and other agencies, non-recovery of dues of the Railways etc. amounting to ₹ 229.27 crore in the various Zonal Railways during the year 2016-17. During the past six years, ₹ 688.79 crore has been recovered by the Railways at the instance of Audit, as detailed below:

Year	Amount Recovered (₹ in crore)
2011-12	138.51
2012-13	98.14
2013-14	107.70
2014-15	101.26
2015-16	80.27
2016-17	162.91
Total	688.79

During 2016-17, an amount of ₹ 186.47 crore was accepted for recovery by various Zonal Railways and other field units. Of this, ₹ 162.91 crore was recovered and ₹ 23.25 crore was agreed to be recovered by the railways. Seven Zonal Railways accounted for recoveries exceeding ₹ 10 crore each viz. North Central Railway (₹ 46.78 crore), Western (₹ 18.78 crore), Northeast Frontier Railway (₹ 16.64 crore), West Central Railway (₹ 12.24 crore), Northern Railway (₹ 12.24 crore), South Central Railway (₹ 12.07 crore) and South East Central Railway (₹ 11.97 crore). Out of the total amount of ₹ 186.47 crore recovery accepted, an amount of ₹ 74.31 crore pertained to transactions that were already checked by Accounts Department of concerned Railways and ₹ 106.19 crore were other than those checked by Accounts Department. As a result, of further review carried out by Accounts Department, another ₹ 5.97 crore were recovered/agreed to be recovered by the Railways.

1.8 Remedial action on Audit Paragraphs streamlining internal process

Railway Board initiated remedial action in response to audit observations issued in previous years by making appropriate changes and issue of instructions during 2016-17 for streamlining their internal process. Some of the important cases are illustrated below:

Table 1.5		
Para No./ Report No.	Audit observations/ Recommendations	Action Taken by Railways
2.3 of Report no. 24 of 2015	The procedure adopted by station authorities for dealing with the Fake Indian Currency Notes was not as per the prescribed rules/instructions. Debits were realized by cash officers over Zonal Railways for remitting FICNs. Further, FICNs were being returned to the concerned booking staff rather than to impounding them, which led to possibility of recirculation of FICNs in open market.	Railway Board instructed (September 2017) Zonal Railways to install note counting cum fake currency detecting machines at booking/PRS offices. They stated that instructions will be reiterated for strictly following the guidelines as regards handling of fake currency. Training will also be imparted for the booking staff on detection and handling of fake currency.
5.2.4 of Report no.8 of 2005	ECR Administration failed to execute agreement from collieries in the standard format and recover railway dues on account of cost of damaged wagons.	Cost of damaged wagons has been recovered and action has been taken (March 2017) to execute agreement in the standard format for smooth recovery of cost of damaged wagons.
Ch-1 of Report no.11 of 2013	For generating revenue from commercial publicity, Railways failed to conduct assessment on revenue potential, to exploit various media. Deficiencies in contract management was observed in terms of deficient record maintenance led to non-execution of agreement in respect of contracts awarded with high risk of recoverability of outstanding licence fee and unauthorized displays beyond expiry of the contract period.	In order to facilitate effective monitoring of contractual receipt and ensure timely payment and prompt renewal of contracts, a Sundry Earnings Management System is being developed. Instructions have been issued for maintaining the register with full particulars of conducting regular inspections at stations, trains in car shed/wagons depots etc. The Non Fare Revenue directorate has been formed (2016-17) in the Railway Board to realize full potential of advertising revenue.
Report no. 22 of 2017	In the this Audit Report (Electrification Projects in Indian Railways), Audit recommended that	
(a)	Para No. 4.10 - Irregular creation of Gazetted posts for Zonal Railways and Railway Board in RE Estimates	General Manager/CORE vide letter No. CORE/G/1 dated 1 December 2017 has issued instructions that RE work charged posts will not be operated in the Zonal Railways. Zonal Railways may make suitable alternative arrangement so that they are not dependent of RE posts.
(b)	Recommendation no.2 - All new line projects should be assessed simultaneously with and without electrified routes instead of current practice where new lines are assessed without electrification and electrification is added as a	Railway Board vide its letter No.2017/W-1/General/Policy dated 05 July 2017 has issued instructions that all the Doubling Works and New Line/Gauge Conversion sections connected to adjoining electrified sections shall be assessed with electrification. Such works shall invariably

Table 1.5

Para No./ Report No.	Audit observations/ Recommendations	Action Taken by Railways
	supplementary and subsequent activity. This way if viable, the line project can be taken up with electrification from the beginning.	be executed together with electrification through a single agency.
(c)	Recommendation no.6 - The projects should be prioritized on the basis of expected financial and operational benefits and project execution methodology such as engineering procurement and commissioning (EPC) or turnkey may be used as far as feasible as this would enhance accountability of the contractor, minimize coordination issues and make monitoring of the projects easier.	Railway Board vide letter No. 2016/RE/711/44 dated 30 October 2017 has directed General Manager/CORE to preferably adopt EPC (turnkey) based contacting system or large composite item rate contract in big package size for timely completion of project. In exceptional and unavoidable circumstances CORE may go for smaller item rate contract for smaller sections with personal approval of GM/CORE and prior consultation of Railway Board.
(d)	Recommendation no.8 - E-tendering should be implemented and various activities of tender evaluation should be done in parallel.	E-tendering has been started in CORE since March 2017. For works contracts, Railway Board vide Para Nos. 3.1 and 3.2 of letter No. 2017/Trans/01/Policy dated 8 February 2018, has decided to adopt the affidavit system of credential verification. The practice of verification of tenderers documents by the Railways will be dispensed with, making the process simpler and faster.
(e)	Recommendation no.9 - Large number of tenders require closer monitoring and handling of coordination issues on account of multiplicity of tenders. Therefore, a project should be executed in a way that the number of tenders are minimized.	Railway Board vide letter no. 2017/RE/161/20 Part I dated 9 October 2017, has issued directions to CORE, to form packages of 300/500/1000/1500 RKMs depending upon availability of contractors and ease of execution to get economy of scale while ensuring faster execution of projects.
(f)	Recommendation no.10 - Timelines for various activities in tender processing may be prescribed so as to complete tender evaluation process within a reasonable time. Last Accepted Rates (LAR) should be up dated by maintaining appropriate database.	Railway Board vide letter No. 2017/Trans/01/Policy dated 8 February 2018 has issued directions to CORE and GMs of all ZRs, fixing the validating periods of tenders as 30 days (in cases where short notice period is 21 days) and 20 days (in cases where short notice period is 14 days). Also in cases of urgency, instructions have been given to call for open tenders before sanction of Detailed Estimate with the approval of DRM/PHOD/CHOD. This will

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		expedite decision making and execution of works. Further, CORE vide letter No.G-6/14 dated 17 November 2017 has prescribed timeliness of 30 days and 25 days from the Tender Opening Date for finalization of Works and Stores Tenders respectively and issue of Letter of Acceptance (LOA).
(g)	Recommendation no.12 - General Conditions of Contract/Special Conditions of Contract terms should be practical and balanced and their strict implementation should be ensured. Conflicting Provisions in GCC for execution of binding agreement should be reconciled. Delays in execution of agreement with the contractors should be minimized and agreements should be executed within the prescribed period.	Railway Board vide Para 8.0 of letter No. 2017/Trans/01/Policy dated 8 February 2018 has decided to remove the PVC clause in all the Works Contract Tenders value less than ₹ 5 crore.
(h)	Recommendation no.15 - The execution of the project requires significant involvement of the contractor, the implementing agency for Railway Electrification and the concerned Zonal Railways. Thus, a tripartite agreement should be considered between the three to delineate responsibilities and streamline coordination issues between the three parties.	Railway Board vide Para No. 9.0 of letter No. 2017/Trans/01/Policy dated 8 February 2018 has extended the Project Management Consultancy (PMC) services for all Works Contracts costing more than ₹ 10 crore in Open Line, Construction and RE organization subject to certain conditions laid down. Further, tripartite system is already part of EPC mode of contracting system, which will be implemented in future tenders by the railways after gaining experience.
(i)	Recommendation no.16 - Delays in execution of works may be controlled through better project monitoring. To eliminate delays, project teams should be adequately empowered for various activities during project implementation like approval of variations, approval of layout, drawing, etc. Reasonable time limits may be prescribed for higher hierarchical formations for taking decisions.	Railway Board vide Para No. 1.0 of letter No. 2017/Trans/01/Policy dated 8 February 2018, in order to expedite decision making and execution of works, has modified the instructions on 'vitiating'. A contract shall be considered 'vitiating' only when the percentage variation in contract value between tenderers are noticed to have been exceeded by 10 per cent for Tender value less than ₹ 50 lakh and 5 per cent for Tender value equal to or more than ₹ 50 lakh. Tender Accepting Authority will be empowered to decide the quantity variations.

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(j)	Recommendation no.19 - Making available a block for any project involves foregoing of potential earning from block utilization. Therefore, Railway Board should prescribe suitable benchmark for block utilization and use it for incentivizing/penalizing the contractors.	GM/CORE vide letter no.LR/T/OHE/EPC/GR/182,184 and 185 dated 13 February 2017 has been issued prescribing format for Request For Proposal (RFP) for Engineering, Procurement and Construction (EPC) agreement. In the Schedule-O of the RFP for EPC contract, the maximum aggregate duration of Blocks for the Railway Projects is required to given. The contractor is entitled to execute the work within the specified period and if the total duration exceeds 20 per cent of the period specified in the schedule, the contractor shall pay damages at the rate of ₹10,000 per hour or part thereof for exceeded block periods. On the other hand, if the block required is not provided in accordance with the confirmed programme, the contractor shall be compensated by the providing an additional block of equal time subsequently. In the event of any default in providing such additional blocks for compensating contractor, he shall be paid damages at the rate of ₹1,000 per day for each hour.
(k)	Recommendation no.21 - Missing links should be identified and accorded highest priority as missing links adversely impact the utilization of electric traction on electrified routes.	The issue of missing links between two electrified territories has been taken in account while preparing Action Plan for 100 per cent electrification prepared by the railways in October 2017.
(l)	Recommendation no.24 - The utilization of the electrified section for using electric traction is the real objective of RE projects and should be monitored by the Railway Board to ensure that diesel traction on the electrified sections is not used except for unavoidable reasons.	A Committee has been constituted by Railway Board vide letter No.ERB-1/2016/23/25 dated 19 May 2017 with respect to deployment of diesel/electric locomotives in electrified territories, in order to cut down the running of diesel locomotives under wire.

1.9 Status of Action Taken Notes

To ensure accountability of the Executive on all issues dealt with in the Report of the Comptroller and Auditor General of India, the PAC had decided (1982) that the concerned Ministries/Departments of the Government of India should furnish corrective/remedial Action Taken Note (ATNs) on all Paragraphs contained therein

and had further desired in their Ninth Report (Eleventh Lok Sabha) presented to the Parliament on 22 April 1997 that henceforth corrective/remedial ATNs, duly vetted by Audit, on all Paragraphs included in the Reports be furnished within four months after the Report is laid on the Table of the Parliament.

The position of ATNs furnished by the Railway Board (as on 28 February 2018) on the Paragraphs included in the Reports of the Comptroller and Auditor General of India-Union Government (Railways) up to the year ended 31 March 2017 is given below:

Year	Total Paragraphs included in the Reports	No. of Paragraphs on which ATNs finalized	No. of Paragraphs on which ATNs are pending				Total
			ATNs not received	ATNs on which comments sent to Railway Board	ATNs finally vetted but yet to be loaded in the portal	ATNs under verification by Audit	
2010-11	34	33	0	1	0	0	1
2011-12	29	27	0	0	2	0	2
2012-13	30	27	0	2	1	0	3
2013-14	47	36	0	7	3	1	11
2014-15	44	32	0	11	1	0	12
2015-16	45	11	8	19	4	3	34
Total	229	166	8	40	11	4	63

ATNs in respect of eight Paragraphs relating to the Reports for the year 2015-16 were not received within the prescribed period of four months. 40 ATNs received for vetting by Audit were returned with observations for further action. 11 ATNs, vetted by Audit, are yet to be finalized by Ministry of Railways. In four cases, the action stated to have been taken by the railways is under verification by Audit.