

**Overview**

The Audit Report consists of audit findings relating to compliance issues in respect of the Ministry of Railways and its various field units. The Audit Report includes three thematic audit and 23 individual paragraphs. A brief overview of the important audit findings and conclusions is given below:

**Para 2.1 Provision of Elephant Passages in Indian Railways**

In order to prevent collision of trains with wild elephants, Ministry of Railways and Ministry of Environment & Forests (MoEF) had jointly issued general advisories (March 2010). Parliamentary Standing Committee on Railways constituted (January 2013), a Committee of senior officials of Ministry of Railways and MoEF (of Government of India, Government of West Bengal and Government of Odisha) to evolve an action plan for eliminating instances of elephant mortalities due to train hits. In their Report, the Committee recommended certain short-term and long-term measures to prevent train-elephant collisions. Ministry of Railways also circulated (June 2015) the recommendations of World Wildlife Fund-India (WWF) to stop elephant deaths on Railway tracks to six Zonal Railways (Northeast Frontier, Southern, South Eastern, East Coast, Northern and East Central Railways). WWF recommended imposition of speed restriction in sections of elephant passages, fencing of sections, regular co-ordination meetings and joint patrolling etc. Out of 194 notified elephant passages in eight Zonal Railways, 77 elephant passages were selected for joint inspection.

Although steps were taken by both the Railways and the Forest Department, elephants continue to die on track. Audit observed that:

- a) In eight Zonal Railways covered in the audit, total number of elephants' death due to collision with trains were 23, 20 and 18 during the year 2016-17, 2017-18 and 2018-19 respectively.
- b) More number of elephant casualties were reported in those locations which were identified as elephant passages.
- c) Underpasses/overpasses were constructed for the safe passages of elephant only in respect of two Zonal Railways (East Central and Northeast Frontier Railways). After completion of those underpasses/overpasses, no elephant death was reported.
- d) The advisories of Ministry of Railways for imposition of 50 kmph speed restriction in identified elephant passages were not being scrupulously followed by the Zonal Railways. The partial implementation of speed restrictions was causing death of elephants.

- e) Periodical review of vegetation clearance was not being conducted by Railways and the Forest officials jointly.
- f) Due to non-standardization of elephant signage boards by Railways, signage boards of different dimensions and colours having various contents were observed during joint inspection of the elephant passages which may lead to confusion among train crew.
- g) Training and awareness campaigns were not being conducted frequently in many Zonal Railways where vulnerable sections of elephant passages exist.
- h) Deployment of elephant trackers by Forest Departments in elephant passages and their communication with Railway Authorities was not found effective. Works of barricading/fencing along the Railway tracks to safeguard the wild elephants from collision with trains were not adequately executed in the Zonal Railways.

#### **Audit recommendations**

- ***Identification and notification of elephant passages should be reviewed periodically in consultation with the Forest Department. This will help in identifying changes in migration patterns.***
- ***Sensitising programme/ awareness workshops should be conducted for Station Masters/Train drivers/Guards to sensitise them about elephant conservation.***
- ***The signage boards to warn the drivers should be standardized w.r.t. colour, shape, height, placement, position etc.***
- ***Modern devices such as Radio-Frequency Identification (RFID) tag, Animal Detection System (transmitter collars) etc. that signal elephant presence from a safe distance could be used, as signage boards are not visible in fog/ rainy season/night time.***
- ***Honey Bee Sound Devices should be provided near all the identified elephant passages as advised by the Ministry of Railways.***

#### **Para 2.2 Security risk due to inordinate delay in installation of “Integrated Security System”**

For better security to passengers and to guard the Railway Installations, Ministry of Railways issued instructions to all Zonal Railways to implement Integrated Security System (ISS). All ISS equipment were not installed at once and the System Integration with control room as envisaged in the

contract was not achieved in East Coast Railway. Railway Administration neither took any action against the defaulting firm nor reported the progress/difficulties in installation of ISS equipment to Ministry of Railways. This resulted in security risk in East Coast Railway.

***Para 2.3 Avoidable expenditure due to non-withdrawal of uneconomic/experimental stoppages***

Ministry of Railways issued guidelines for provision and withdrawal of stoppages of Mail/Express trains on experimental basis from time to time. There were 171 experimental stoppages as on 31 March 2019 in North Eastern Railway. Audit analyzed data relating to details of trains, experimental stoppages, number of passengers travelled, earnings and other relevant information in respect of all 171 experimental stoppages. It was found that in 141 cases, earning was far less than the cost of stoppages. This led to an avoidable expenditure of ₹ 201.40 crore due to non-initiation of action by Ministry of Railways to review the withdrawal of uneconomic/experimental stoppages despite recommendations/requests of North Eastern Railway.

***Para 2.7 Loss of revenue due to failure in fixing the reserve price according to the last accepted rate***

Ministry of Railways issued (April 2014) modified policy guidelines on “Comprehensive Parcel Leasing Policy” for leasing out of parcel space of the Assistant Guard’s cabin (AGC), Brake Vans (SLRs) and Parcel Vans (VPHs/VPs/VPU) in supersession of all previous instructions issued on the subject. Failure of the Eastern Railway Administration to fix the reserve price as per the available trend resulted in delayed award of contract and loss of opportunity to earn the required revenue. This led to loss of opportunity to earn revenue to the tune of ₹ 8.84 crore during the period August 2018 to June 2019. The loss would have worked out to ₹ 9.80 crore had the Railway Administration fixed the reserve price based on the existing contract awarded in North Western Railway in March 2018 for the same train.

***Para 2.9 Non-levy of Service Tax on renting of space to vending contractors***

Railway Administration was responsible to collect Service Tax from the licensees for installing vendor stalls at railway stations and its remittance to Government’s exchequer. Audit observed that in four Zonal Railways (Northern, South Eastern, North Eastern and East Central), Railway Administration failed to comply with the provisions of Finance Act as well as Ministry of Railways instructions on Service Tax. This resulted in loss

of ₹ 7.88 crore to Government exchequer due to non-levy and non-recovery of Service Tax from the vendors.

### **Para 3.1 Price Variation in Works Contracts in Indian Railways**

Price Variation Clause (PVC) was incorporated in General Conditions of Contract (GCC) to safeguard against change in prices of labour, material, fuel and other components. Ministry of Railways issued various instructions from time to time in this regard. In violation of Ministry of Railways periodic instructions on price variation, irregularities such as the incorrect adoption of base month and quarter, incorrect application of percentages of components in Price Variation formula *etc.* were noticed in the Zonal Railways. Extensions on railway's account were granted in a routine manner. Due to non-fulfillment of pre-requisites such as availability of clear sites, approved drawings and design *etc.*, Railways paid significant amount towards price variation during the extended period of contract.

Certain provisions of General Financial Rules (GFR) on application of Price Variation Clause (PVC) were not adopted/incorporated in the General Conditions of Contracts (GCC) by Ministry of Railways. Cases of fraudulent payment of price variation to contractors in Northeast Frontier Railway were noticed. Monitoring mechanism for checking of price variation bills by the Executive and the Accounts Department was weak. This resulted in avoidable/excess payment of ₹ 1,172.04 crore and short payment of ₹ 8.76 crore towards price variation to the contractors in the works contracts test checked in audit.

#### **Audit recommendations**

- **Ministry of Railways needs to revisit GCC w.r.t Works Contracts and incorporate the provisions of GFR relating to applicability of PVC in long term contracts (more than 18 months) and a ceiling on PVC amount payable to contractors.**
- **Ministry of Railways should issue clear instructions relating to contract matters such as adoption of the Base month in case of negotiation and 'two packets system of tendering', percentage of labour to be reckoned for machine crushed ballast *etc.***
- **Ministry of Railways may direct the Zonal Railways to maintain computerized database of all the works contracts (with PVC and without PVC) to avoid incorrect inclusion of PVC in the contracts below the stipulated contract agreement value.**

**Para 3.2 Unproductive expenditure on construction of Limited Height Subways**

Level Crossings (LCs) facilitate smooth running of traffic in a regulated manner. Limited Height Subways (LHSs), in lieu of Unmanned Level Crossings (UMLCs), constructed on Rohtak - Panipat section of Delhi Division of Northern Railway were submerged in water and remained unutilized rendering whole expenditure of ₹ 16.19 crore unproductive. The main objectives for elimination of Level Crossings *i.e.* to prevent loss of human lives and road accidents apart from better traffic movement could not be achieved due to LHS remaining unusable.

**Para 3.3 Loss due to indecision of Railway Administration in the matter of land acquisition**

Ministry of Railways sanctioned the work of Hajipur - Sagauli New Line in 2003-04 with Abstract Estimate of ₹ 324.66 crore. In October 2007, Ministry of Railways sanctioned the Detailed Estimate of ₹ 528.65 crore. The Detailed Estimate contained a provision of ₹ 115.16 crore for land acquisition of 2,043.96 acre. In the meanwhile, Bihar Land Acquisition, Resettlement and Rehabilitation Act, 2007 was enacted and accordingly the State Authority/Champaran revised (March 2007) the cost of land to ₹ 98.72 crore (962.59 acre) for 49 villages. Railway Administration deposited ₹ 17 crore (31 March 2007) for land acquisition of 28 villages. District Magistrate/East Champaran submitted (January 2012) again a Revised Estimate of ₹ 350.84 crore for 49 villages. A demand of ₹ 333.84 crore (₹ 350.84 crore minus ₹ 17 crore) which included the remaining amount of ₹ 3.20 crore for 28 villages was made. In the Revised Estimate, the estimated cost of 28 villages was still ₹ 20.20 crore. The possession of these land had already been provided to Railways as per sub section 3 (a) of section 17 of Land Acquisition Act, 1894. However, despite demand of the District Magistrate/East Champaran for ₹ 3.20 crore for 28 villages which was already acquired by Railway Administration, no payment was made.

In January 2016, District Magistrate/East Champaran revised the cost of entire 49 villages w.e.f. 1 January 2014. Resultantly, the estimated cost of all 49 villages escalated to ₹ 796.28 crore (₹ 154.41 crore for 28 villages for which land acquisition was already made and ₹ 641.87 crore for remaining 21 villages). Railway Administration paid the entire amount of ₹ 796.28 crore (including ₹ 134.21 crore for the land of 28 villages). Thus, Railway Administration had to incur an avoidable additional expenditure of ₹ 134.21 crore.

**Para 3.5 Avoidable extra expenditure due to faulty planning in embankment work**

South Eastern Railway took up the work of embankment as part of doubling in Andul-Baltikuri section without proper planning and did not follow codal provisions as well as guidelines of Research, Designs and Standards Organisation (RDSO). This resulted in embankment failure as well as bulging /slippage at different locations with consequential extra expenditure of ₹ 14.08 crore on rehabilitation work.

**Para 3.8 Change in design and location of a bridge resulted in its abandonment and consequent infructuous expenditure**

Ministry of Railways instructed that all plans, drawing and estimates should be duly approved/sanctioned by the competent authority. The entire prerequisites may be completed in time before awarding of contracts.

Change in design from well foundation to pile foundation as well as location of the Bridge No. 182 between IB and Brajrajnagar station over South East Central Railway led to wasteful expenditure amounting to ₹ 6.73 crore after termination of first contract. This also resulted in abandonment of the incomplete Bridge No.182 constructed with well foundation.

**Para 3.9 Non-implementation of Ministry of Railways directives resulted in non-realization of penalty from the contractors**

Ministry of Railways issued a Joint Procedure Order (JPO) in December 2004 for execution of works in the vicinity of working signal and telecommunication cables. In order to minimize and control cable cuts while carrying out digging works near existing S&T and electrical cables, Ministry of Railways issued (June 2013) revised JPO. Review of records of S&T Department of South Central Railway and East Coast Railway for the period April 2013 to 2019 revealed non-implementation of Ministry of Railways directives. This resulted in non-realization of penalties from the various departments/agencies in South Central and East Coast Railways. An amount of ₹ 12.59 crore was still outstanding in 1,084 cases.

**Para 4.1 Audit of Selected Stations in Indian Railways**

Audit of eight selected stations in selected seven Zonal Railways (Northern, North Central, North Eastern, East Central, Eastern, Western and Central Railways) covered the aspects of Cleanliness, Sanitation, Environment Management, Safety, Security and Encroachment at Railway Stations

It was observed that 77 Platforms (PFs) were available in the eight selected stations, but Cement Concrete (CC) Washable Apron had not been

provided at 26 Platforms. Despite having facilities of mechanized cleaning in the contract at all selected stations, the facility was underutilized due to non-availability of washable apron at these 26 Platforms in seven stations. Non-availability of CC aprons also resulted in blockage of drains with ballast on the track which ultimately resulted in creating unhygienic surroundings. Indian Railway Water Policy, 2017, stipulate that recycled water was to be used for non-potable purposes. Audit, however, observed that Zonal Railway Administration were yet to install water recycling plants in these stations and groundwater is being used for all purposes.

Water taps (1316) were to be made available in the eight stations as per prescribed norms, however, the availability of water taps was 1022 only. Similarly, against the requirement of 154 water coolers as per the prescribed norm (Minimum Essential Amenities -MEA) only 63 water coolers were available.

The cleaning contracts of five stations did not have the clause for segregation of waste as bio-degradable and non-bio-degradable. This resulted in mixed waste being transported and dumped at landfills. System to monitor the noise level as required under rules 3(1) and 4 (1) of the Noise Pollution (Regulation and Controls) Rules 2000 did not exist at any of the selected stations. System for measurement of noise when passing/movement of trains did not exist at any of the selected stations. Closed Circuit Television (CCTV) footage was not integrated to the command centre at five stations and Bomb Detection and Disposal System was not available at five stations. Provision of boundary walls was not made in the circulating area at five stations. Security arrangement was also ineffective to maintain an encroachment free station premises. A total of 532 encroachments existed around the six stations premises. Audit observed that no norms were prescribed for handling the footfalls in the Foot Over Bridges (FOB).

#### ***Audit recommendations***

- ***Ministry of Railways needs to frame a separate Waste Management Policy and comply to Board/NGT's instructions to overcome the shortcomings of Waste Management at the Stations.***
- ***Ministry of Railways needs to take adequate measures for planning and implementation of water management which includes availability of sufficient water, water treatment plant, water recycling plant etc.***
- ***Ministry of Railways needs to take appropriate measures to remove encroachments.***

- *Ministry of Railways needs to provide adequate Integrated Security System as per recommendations of the High Level Committee.*

**Para 4.5** *Loss due to premature condemnation and replacement of Spherical Roller Bearings and non-enforcement of warranty clause thereon*

Spherical Roller Bearings is a vital anti-frictional element which improves service life of rolling stock by reducing the heat produced. In terms of RDSO specification, the contractor shall replace the roller bearings failing or proving unsatisfactory within a period of 36 month or 4,00,000 km from the date of commissioning into service whichever is later. Period of warranty shall stand extended by the duration for which the roller bearings remain inoperative under exercise of this Clause. The codal life of the bearings as prescribed by RDSO is 20 years.

Wheel Shop of Carriage Repair Workshop at Mancheswar (CRW/MCS) of ECoR replaces the defective Roller Bearings during overhauling of coaches. Audit noticed that during overhauling of coaches at MCS, 71 percent (4,481 out of 6,332) bearings were scrapped within half of the codal life. Warranty claim was to be raised against the bearings which had failed within 36 months from the date of induction into service. Due to non-maintenance of records on date of procurement and date of commissioning of bearings, Railways forfeited the right of proper warranty claim. Thus, due to premature condemnation and replacement of Spherical Roller Bearings and non-enforcement of warranty clause thereon, Railway sustained a loss of ₹ 5.30 crore.

**Para 4.6** *Procurement of complete Rotor and Stator of Traction Motor at higher rates resulted in avoidable extra payment*

CVC guidelines (2002) stipulate that estimates for contracts should be worked out after due consideration to prevailing market rates, last purchase prices, economic indices for raw material etc.

Chittaranjan Locomotive Works (CLW) purchased 769 Rotors and 450 Stators for assembling Traction Motor from trade during 2018-19.

At the time of evaluation, the Tender Committees (TCs) observed that there was a decreasing trend in basic price of Rotors and Stators from 2013-14 to 2016-17. However, in spite of decreasing trend of prices, the TCs finalized the procurement of Rotors at higher rates.

The procurement was made in contravention of the CVC guidelines resulting in avoidable extra payment of ₹ 15.88 crore.