

**PRESS RELEASE**

**OFFICE OF THE COMPTROLLER AND AUDITOR GENERAL OF  
INDIA**

New Delhi

23<sup>rd</sup> September, 2020

**CAG's Performance Audit Report on Railways presented in  
Parliament**

Audit Report No. 2 of 2020 - Union Government (Railways) - Performance Audit on 'Assessment and Utilization of Locomotives & Production and Maintenance of LHB Coaches in Indian Railways' was laid on the table of both Houses of Parliament here today.

This Audit Report consists of two Chapters. Chapter 1 contains performance audit findings relating to production planning *vis-à-vis* assessed requirement of locomotives (locos) and their utilization. Chapter 2 deals with production and maintenance of LHB (Linke Hoffman Busch) coaches.

**Major Audit Findings:**

**Performance audit on 'Assessment, procurement and utilization of Locos in Indian Railways'**

In the Mission Electrification and De-carbonization, Minister of Railways issued directives (September 2017) for 100 *per cent* electrification in Indian Railways by 2022. Railway Board, while assessing the loco requirements for the period 2012-19, did not properly review the increasing rate of electrification in the Railways. Increase in the requirement of electric locos and the

simultaneous reduction in utilization of diesel locos was not adequately considered while assessing loco requirements.

The main criteria adopted by Railway Board for the assessment of requirement of locos were based on previous year's actual production. Requirement of locos was not decided on the basis of actual need and there was no structured methodology for assessing the requirement of locos based on specifically laid down parameters. This led to more number of diesel locos in the system than required. In fact, the diesel loco holdings in Indian Railways increased by 20 *per cent* (947) during 2012-18.

Railways was holding and maintaining locos much more than the homing capacity<sup>1</sup>. Excess holding adversely impacted the quality of loco maintenance.

Lack of quality control, use of inferior material, poor supervision and inadequate internal control occurred during scheduled maintenance of locos in loco sheds. Audit noticed unscheduled repairs of 17,530 diesel and 22,078 electric locos during 2012-17.

On account of defective material in manufacturing *etc.* 46 *per cent* new locos failed within 100 days of their commissioning. Audit also noticed that almost half of diesel and electric locos failed after their scheduled maintenance by loco sheds.

**(Chapter 1)**

## **Performance audit on 'Production and maintenance of LHB coaches in Indian Railways'**

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<sup>1</sup> Installed capacity to repair a specified number of locos allotted to a loco shed during a financial year

In 2002, Indian Railways entered into Transfer of Technology contract with M/s ALSTOM LHB/Germany for production of LHB design stainless steel coaches. LHB design coaches are far superior with respect to passenger comfort, safety, speed, corrosion, maintenance and aesthetics than Integral Coach Factory (ICF) design coaches (conventional coaches).

High Level Safety Review Committee had recommended (February 2012) complete switching over to the manufacture of LHB design coaches and immediate stopping of manufacture of ICF design coaches for safety norms.

The safety aspect of LHB coaches can be well understood by a comparison of the fatalities caused in the accidents between trains with ICF and LHB design coaches. During 2014-15 to 2017-18, 17 accidents involving ICF coaches claimed 371 lives and resulted in 1,142 injuries. However, in case of LHB coaches in 3 accidents 6 lives were lost and 115 people injured. Even after allowing for a lower proportion of LHB coaches, fewer casualties in accidents involving LHB coaches proved their superiority over ICF coaches. Thus, there is an urgent need to switch over to LHB rakes to ensure safety of the railway passengers, especially in trains with higher speeds.

Indian Railways, however, stopped production of ICF coaches only with effect from April 2018. As of March 2018, 903 rakes of ICF conventional coaches were still being run for trains with 18 or more coaches.

During 2013-14 to 2017-18, only 30 *per cent* of the total 19,327 coaches produced were of LHB type. Modern Coach Factory, Raebareli (MCF) was set up only for production of LHB coaches.

However, against a combined installed capacity of 5,000 LHB coaches for 2013-18, only 1,842 LHB coaches (shortfall of 63 *per cent*) were actually produced.

During 2015-16 to 2017-18, only 108 ICF conventional rakes out of 195 planned (55 *per cent*) could be converted into LHB rakes. Meanwhile, out of 49,033 ICF design coaches, 609 coaches have already attained their codal life of 25 years as on 31 March 2018. This has implication on passenger safety. About 13 *per cent* (6,259 coaches) were between the age of 20 and 25 years and would need to be replaced in the next five years. Indian Railways need to replace at least 6,868 coaches (14 *per cent*) over a period of next five years. However, the present production programme was not able to meet the requirement of coach production.

Audit also noticed that Indian Railways did not have adequate facilities in their workshops for Periodical Overhauling (POH)/Intermediate Overhauling (IOH) of LHB coaches.

***(Chapter 2)***

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