

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
LOK SABHA
UNSTARRED QUESTION NO. 1651
TO BE ANSWERED ON 29.07.2026**

**ELECTRICAL FITTINGS IN TRAINS ORIGINATING/PASSING THROUGH FROM
TAMIL NADU**

**1651. DR. RANI SRIKUMAR:
SHRI C N ANNADURAI:
SHRI SELVAM G:**

Will the Minister of RAILWAYS be pleased to state:

- (a) whether the Government has undertaken any assessment of the maintenance and reliability of electrical fittings and on board electrical systems in trains originating from and passing through Tamil Nadu and if so, the details thereof;**
- (b) the details of complaints received during the last three years regarding lighting, charging points, air-conditioning, fans and other electrical fittings in such trains, along with the action taken thereon, year-wise;**
- (c) the measures taken/being taken by the Government to strengthen preventive maintenance, periodic inspection and timely replacement of electrical equipment in coaches to enhance passenger comfort and safety;**
- (d) whether modern technologies and upgraded maintenance facilities are being introduced to improve the quality and reliability of railway coaches serving Tamil Nadu and if so, the details thereof; and**
- (e) the details of further steps proposed to modernise coach infrastructure and ensure safe, comfortable and uninterrupted travel for passengers travelling to and from Tamil Nadu?**

ANSWER

**MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND
ELECTRONICS & INFORMATION TECHNOLOGY**

(SHRI ASHWINI VAISHNAW)

(a) to (e): Inspection and periodical maintenance of coaches including electrical fittings and on board electrical systems are carried out as per

prescribed maintenance manuals. Specifications for electrical fittings and onboard electrical systems are developed by Research Designs & Standards Organisation (RDSO)/ Integral Coach Factory (ICF)/ Rail Coach Factory (RCF) in consultation with all stakeholders. Maintenance Manuals are prepared and updated from time to time based on feedback and the performance of electrical equipment. These Specifications and Manuals are followed across Indian Railways including Southern Railway in State of Tamil Nadu.

Replacement of electrical fittings/ equipments is carried out based on completion of their codal life/ condition basis.

Safety Audits are also conducted by RDSO and Zonal Railways from time to time to further improve the reliability and safety.

In addition, special safety drives are carried out by Zonal Railways to improve the reliability of the electrical equipment. These drives are regularly monitored at Railway Board level.

Detailed analysis of complaints is undertaken to improve the passenger satisfaction level. The corrective measures implemented have reduced the complaints to only 1.20 complaints per 100 coaches per day during 2025–26.

Indian Railways have been continuously upgrading the technology in line with other worldwide available technologies. Following modern technologies and upgraded maintenance facilities have been introduced across Indian Railways including Southern Railway in the State of Tamil Nadu:

- (i) Conventional Electrical Multiple Units (EMU) / Mainline Multiple Electrical Units (MEMU) rakes are replaced with latest 3-phase**

EMU/MEMU, which are equipped with latest 3-phase propulsion system, regenerative braking, Train Control and Management System (TCMS), Public Address and Passenger Information System (PAPIS), Emergency talk back unit (ETB) and modern passenger amenities.

- (ii) Vande Bharat Express and Amrit Bharat Express, introduced over Indian Railways including in State of Tamil Nadu, are equipped with modern technologies and passenger amenities like LED lights, CCTVs, smoke detector and ETB.**
- (iii) Specification of LED lights of coaches has been revised to make Hazard Level-3 (HL) compliant as per EN45545. Further, fire prevention standard (Hazard Level) of electrical items in SBC panel upgraded from HL-2 to HL-3.**
- (iv) Thermal scanning of electrical switchgears fitted onboard is carried out with latest gadgets.**
- (v) Specification of RMPU (Roof Mounted Air Conditioner Package Unit) has been revised to incorporate feature of VVVF (Variable Voltage Variable Frequency) drive control for compressors, reverse cycle for heating, which improves efficiency.**

To provide comfortable travel to passengers, an AC EMU rake has also been recently introduced in the Chennai suburban section.
