

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO.2840
TO BE ANSWERED ON 20.12.2023**

ENHANCE FREIGHT CAPACITY

**2840. SHRI UNMESH BHAIYYASAHEB PATIL:
DR. HEENA VIJAYKUMAR GAVIT:
DR. SUJAY RADHAKRISHNA VIKHE PATIL:
DR. KRISHNA PAL SINGH YADAV:
SHRI CHANDRA PRAKASH JOSHI:
PROF. RITA BAHUGUNA JOSHI:
DR. SHRIKANT EKNATH SHINDE:
DR. UMESH G. JADHAV:**

Will the Minister of RAILWAYS be pleased to state:

- (a) the steps being taken to modernize and upgrade the Indian Railways' infrastructure, rolling stock and signalling systems;**
- (b) the manner in which the Indian Railways is utilizing Dedicated Freight Corridors (DFCs) to enhance freight capacity and improve overall network efficiency;**
- (c) the manner in which Gati Shakti Freight Terminals contribute to increasing the modal share of Railways in the freight segment; and**
- (d) the key statistics regarding freight loading and revenue during the last three years?**

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (d): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2840 BY SHRI UNMESH BHAIYYASAHEB PATIL, DR. HEENA VIJAYKUMAR GAVIT, DR. SUJAY RADHAKRISHNA VIKHE PATIL, DR. KRISHNA PAL SINGH YADAV, SHRI CHANDRA PRAKASH JOSHI, PROF. RITA BAHUGUNA JOSHI, DR. SHRIKANT EKNATH SHINDE AND DR. UMESH G. JADHAV TO BE ANSWERED IN LOK SABHA ON 20.12.2023 REGARDING ENHANCE FREIGHT CAPACITY

(a): Modernisation and upgradation of railway infrastructure is a need based and ongoing process subject to operational requirement, technical feasibility, commercial viability, resource availability, etc. A number of works have been taken up to modernize and upgrade railway infrastructure including rolling stock and signaling system.

Some of them are as under:

- 1. Rashtriya Rail Sanraksha Kosh (RRSK) has been introduced in 2017-18 for replacement/renewal/upgradation of critical safety assets, with a corpus of ₹1 lakh crore for five years. From 2017-18 till 2021-22 a gross expenditure of ₹ 1.08 lakh crore was incurred on RRSK works.**
- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,498 stations upto 31.10.2023 to eliminate accident due to human failure.**
- 3. Interlocking of Level Crossing (LC) Gates has been provided at 11,137 level Crossing Gates up to 31.10.2023 for enhancing safety at LC gates.**
- 4. Block Proving Axle Counters (BPACs) for automatic clearance of Block Section, are provided to ensure complete arrival of train**

without manual intervention before granting line clear to receive next train and to reduce human element. These systems have been provided on 6450 Block Sections up to 31.10.2023.

- 5. Automatic block Signalling (ABS) has been provided at 4,111 Route Kms upto 31.10.2023.**
- 6. Indian Railway has also gone for implementation of advance technology system 'Kavach' as an Automatic Train Protection (ATP) system. Kavach is indigenously developed Automatic Train Protection (ATP) system which required safety certification of highest order. Kavach has also been adopted as a National ATP system in July 2020.**
- 7. Real time Train information system (RTIS) have been provided for automatic acquisition of train movement timings.**
- 8. Crew Video and Voice Recording System (CVVRS) has been provided in Locomotives for post event analysis.**
- 9. Head on Generation (HOG) scheme has been implemented in passenger locomotives for feeding electric supply to LHB coaches for train lighting and air conditioning thereby reducing carbon emission, noise level and consumption of fossil fuels.**
- 10. For manufacturing new technology based 9000 High Horse Power Electric Freight Locomotives, a manufacturing unit, having modern World class manufacturing facilities, sanctioned at Dahod.**
- 11. A factory has been set up at Madhepura under joint venture for manufacturing 800 Nos. of 12000 High Horse Power Electric Freight Locomotives. This unit has state of the art World class**

manufacturing facilities to manufacture these high horse power high speed locomotives. Till November 2023, 376 locomotives have been supplied which are in operation.

12. With a view to increase throughput, RDSO has issued technical specification for modern wagons (Modern Open Wagon & Modern Brake Van). In the recent past, multi-purpose and higher carrying capacity wagons have been designed by RDSO. These wagons will help in better utilization of rolling assets and increased throughput per rake.

13. To capture traffic of automobile movement, Indian Railways have introduced New Modified Goods (NMG) coaches which have been converted from ICF type Non-AC coaches at the end of their codal life for passenger service.

14. Introduction of IGBT based 3-phase propulsion system with regenerative braking in Electrical Multiple Unit (EMU) trains, Mainline Electrical Multiple Unit (MEMU) trains, Kolkata Metro rakes and Electric Train Sets.

15. Provision of energy efficient LED lights in coaches for better illumination.

16. Provision of 750V external power supply at washing/sick lines for maintenance and testing of LHB coaches resulting in significant saving of diesel..

17. Laying of track structure consisting of 60 kg/90 Ultimate Tensile Strength (UTS) rails on Pre-stressed Reinforced concrete (PSC) sleepers with 1660 sleepers per km at the time of renewals, laying

of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e. Flash Butt Welding, use of thick web switches and weldable Cast Manganese Steel (CMS) crossings, using improved fittings, maintenance of track with the help of track machines, Ultrasonic testing of rails to detect flaws, etc.

(b): Dedicated Freight Corridors offer higher transport output and carrying capacity due to faster transit of freight trains, running of double stack container trains and heavy haul trains leading to reduction in overall Logistics cost. This improves the supply chain for the industries/logistics players located in the catchment areas leading to growth of Export-Import traffic as well.

(c): Gati Shakti Cargo Terminals (GCTs) are playing a pivotal role in increasing the modal share of Railways in the freight segment through following ways -

- Construction of new GCTs significantly increases the overall cargo handling capacity of Indian Railways as it enables the railways to handle large volumes of freight, leading to increased market share.**
- GCTs terminals are strategically taken up nationwide, connecting major production and consumption centres and these are developed in proximity to ports and highways to enable seamless integration with sea and road traffic.**
- GCTs are equipped with modern infrastructure like automated handling system, dedicated rail sidings etc.,**

which leads to faster loading and unloading of cargo reducing turnaround time and optimizing resource utilization.

(d): The key statistics regarding freight loading and revenue during the last three years, are as under:-

Year	Freight Loading (In million Tonnes)	Revenue Earning From Goods (₹ in Crore)
2020-2021	1,230.94	1,15,738.38
2021-2022	1,415.87	1,39,287.30
2022-2023	1,509.10	1,60,158.48
