GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

LOK SABHA UNSTARRED QUESTION NO. 1772 TO BE ANSWERED ON 30.07.2025

AUTOMATIC WHEEL PROFILE MEASUREMENT SYSTEMS

1772. SHRI VISHNU DAYAL RAM:

Will the Minister of RAILWAYS be pleased to state:

- (a) the details of the objectives and key features of the recent MoU signed with the Delhi Metro Rail Corporation (DMRC) for the installation of Automatic Wheel Profile Measurement System(AWPMS);
- (b) the details of the technological advancements introduced through AWPMS especially non-contact measurements and their impact on safety and operational efficiency;
- (c) the details of the number of AWPMS units planned under the initiative and the role of DMRC in their procurement, installation and commissioning; and
- (d) the manner in which the integration of AWPMS supports Indian Railways' broader goals of modernization and technological upgradation?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY (SHRI ASHWINI VAISHNAW)

(a) to (d) Delhi Metro Rail Corporation (DMRC) is nominated to undertake the work of Procurement, Supply, Installation, Testing and

Commissioning of four (04) nos. of Automatic Wheel Profile Measurement System (AWPMS). DMRC shall be responsible for implementing the Project till commissioning of the AWPMS at respective 04 sites of IR.

AWPMS is a way-side inspection system for Accurate and real-time monitoring of Wheel profile. The advantages of AWPMS are as below:

- 1. The system is fully automatic.
- 2. The system is installed on the normal train movement path, so wheel measurement takes place as the train moves, resulting in saving of time.
- 3. Alarms/ maintenance alerts get generated automatically and informed to users through SMS and email. Hence early action on rectifications of faults can be taken.
- 4. The status of wheel profile parameters can be seen by multiple authorized users from anywhere, through the web portal. So, dissemination of information to all concerned is swift.
- 5. Wheel profile data created by the system will help in knowing wear trend to plan in advance wheel turning and analysing wear patterns of different wheels.

Introduction of AWPMS supports Indian Railways broader goals of modernization and technological upgradation as it is a step towards automation of maintenance activities related to rolling stock.
