

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 4786
ANSWERED ON 21ST AUGUST, 2025**

NORMS FOR MAINTENANCE OF NHS

†4786. SHRI ASHISH DUBEY:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) whether the Government is taking any steps to implement the mandatory five-year maintenance period for National Highways (NHs), if so, the details thereof;**
- (b) the mechanisms that would be established to ensure that maintenance responsibilities are fulfilled without compromising in quality and to prevent contractors from cutting costs therein; and**
- (c) the measures that would be taken to make maintenance records and quality assessments transparent and accessible to the public?**

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

- (a) The Government has prioritized the maintenance of existing National Highways (NH) network and inter-alia evolved a mechanism to ensure Maintenance and Repair (M&R) of all NHs sections through accountable maintenance agency.**

NHs development projects are executed on mainly three modes i.e. (i) Build Operate and Transfer (BOT), (ii) Hybrid Annuity Model (HAM) and (iii) Engineering Procurement and Construction

(EPC). Concession period including maintenance for projects on Build Operate and Transfer (BOT) is 15 to 20 years and on Hybrid Annuity Model (HAM) is generally 15 years. Concessionaire is responsible for maintenance of the respective NHs stretches within the concession period of the project. Only in case of EPC projects, Defect Liability Period (DLP) is 5 years for the bituminous pavement works and 10 years for concrete pavement works.

For Toll-Operate-Transfer (TOT) and InvIT (Infrastructure Investment Trust) projects, concession period including maintenance is 20 to 30 years. Concession period for Projects on Operate, Maintain and Transfer (OMT) is generally 9 years.

For all remaining sections of NHs stretches, where DLP has ended or is not under any concession period of BOT/HAM/TOT/InvIT project, Government has taken a policy decision to undertake maintenance works through Performance Based Maintenance Contract (PBMC) or Short Term Maintenance Contract (STMC). While STMC works are generally undertaken for a contract period of 1-2 year, PBMC works are undertaken for a contract period of about 5-7 years.

(b) and (c) Repair of identified defects / issues in the road condition as well as other maintenance / repair works are completed by the Contractor / Concessionaire within the stipulated timeline as per provisions of the Contract. Compliance is ensured through regular field reports and penalty provisions incorporated in the Contract documents for action against defaulting Contractor / Concessionaire.

The Government has initiated monitoring of the quality including defect rectification in NHs projects through mobile based application named as NHA1 One / Tatpar. This app is used by Field officers / Engineers / Contractors / Concessionaires directly from onsite, through digital reporting of daily and monthly defects, submission of geo-tagged and time-stamped photos for inspections and digital uploading of test results.

The Government has taken the initiatives for improvement of quality control systems in implementation of NHs works, some of which are as stated below: -

- i. Adoption of Automated & Intelligent / Machine-aided Construction (AI-MC) in NH projects;**
- ii. Mandatory assessments of road conditions through Network Survey Vehicle (NSV) before start of work, before issue of completion certificate and thereafter at regular intervals of six months after completion of the work; Further revamping of NSV system for road condition assessment using analytics and enforcement of contractual provisions during Operation and Maintenance (O&M) through dedicated central cell;**
- iii. Analysis of High-Resolution Imagery collected from Drone Surveys in Drone Analytics Monitoring System (DAMS) integrated with Artificial Intelligence / Machine Learning algorithms for periodic evaluation of progress and quality of ongoing NHs works from time to time;**
- iv. Deployment of Mobile Quality Control Vans (MQCVs) equipped with Non-Destructive Testing Equipment on pilot basis in four States, namely in Gujarat, Rajasthan, Odisha and Karnataka, for diagnostic assessments of overall health and quality of works from time to time during project implementation phases;**
- v. Deployment of Third Party Quality Auditors for independent quality audits of NH works on a case-to-case basis.**
