

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

**LOK SABHA
STARRED QUESTION NO. 392
ANSWERED ON 27TH MARCH, 2025**

QUALITY MAINTENANCE OF HIGHWAYS

***392. SHRI ANURAG SINGH THAKUR:
SHRI SUNIL KUMAR:**

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

(a) whether the Government has made provision for five year tenured maintenance of National Highways (NHs) by the contractors post-construction;

(b) if so, the manner in which the Government would enforce the newly introduced requirement for contractors to maintain National Highways for up to five years post-construction;

(c) the mechanisms in place to ensure that maintenance obligations are fulfilled without contractors cutting costs at the expense of road quality; and

(d) the manner in which the Government would ensure that maintenance records and quality assessments are transparent and accessible to the public?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) to (d) OF LOK SABHA STARRED QUESTION NO. 392 ANSWERED ON 27.03.2025 ASKED BY SHRI ANURAG SINGH THAKUR AND SHRI SUNIL KUMAR REGARDING QUALITY MAINTENANCE OF HIGHWAYS

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

NHs 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 for projects including maintenance 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 projects, concession period including maintenance is for 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 period 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. During the current Financial Year 2024-25, Government has approved STMC works in 17,884 km length costing Rs.2,842 Crore and PBMC works in 6,118 km length costing Rs.6,757 Crore.

(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.

Government encourages the adoption of innovative technologies or methods to enhance the durability and reduce the maintenance requirements of NHs (depending upon factors like rainfall, terrain type, soil category etc.). Such technologies or methods include stabilization of subgrade, geosynthetic reinforced layer(s) in sub-base / base, concrete roads / whitetopping, perpetual pavement, High performance bituminous mixes, modified bitumen / bituminous mixes, Fiber Reinforced Concrete, Cement Grouted Bituminous Mixes, etc. Automated and Intelligent Machine-Aided Construction has been adopted which ensures cloud based maintenance records and quality work.

(d) Road condition assessment is carried out through Network Survey Vehicle (NSV) for the NHs stretches before start of work, before issue of completion certificate and thereafter at regular intervals of six months after completion of the work, thereby enabling quality assessment of NHs at regular intervals for (i) ensuring the maintenance during Concession period / DLP and (ii) prioritizing maintenance requirements to maintain NHs in traffic worthy condition.

Further, app based monitoring through National Highways Authority of India (NHAI) One / Tatpar App facilitates, highway project management 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.
