

GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

**RAJYA SABHA**  
**UNSTARRED QUESTION NO - 3136**  
ANSWERED ON – 20/08/2025

**ACCOUNTABILITY IN POST-CONSTRUCTION MAINTENANCE OF NATIONAL HIGHWAYS**

**3136. SHRI SADANAND MHALU SHET TANAVADE:**

Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) whether Government has made it mandatory for contractors to undertake post-construction maintenance of national highways for a specified period, if so, the details thereof;
- (b) the total number of highway contracts awarded with maintenance clauses, State-wise/ UT-wise details thereof;
- (c) the institutional mechanisms in place to monitor compliance during the maintenance period;
- (d) whether the Ministry proposes to use technology-based tools to ensure transparency and third-party verification of highway upkeep; and
- (e) whether Government will make contractor-wise maintenance records and quality assessments publicly accessible and if so, the digital platforms proposed for this purpose?

**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) State / Union Territory (UT) – wise details of NHs development projects awarded with above DLP / Concession Period clause during the last three years and current year are at Annexure.

(c) to (e) 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 NHA 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.

## ANNEXURE

**ANNEXURE REFERRED TO IN REPLY TO PART (b) OF RAJYA SABHA UNSTARRED QUESTION NO. 3136 ANSWERED ON 20.08.2025 ASKED BY SHRI SADANAND MHALU SHET TANAVADE REGARDING ACCOUNTABILITY IN POST-CONSTRUCTION MAINTENANCE OF NATIONAL HIGHWAYS**

State / UT – wise details of NHs development projects awarded with DLP / Concession  
Period clause during the last three years and current year: -

Sr. No.	State/UTs Name	No.	Length (Km)	Cost (₹ Cr)
1	Andhra Pradesh	544	1,798	33,478
2	Arunachal Pradesh	14	140	1,759
3	Assam	529	933	29,351
4	Bihar	2,372	938	35,816
5	Chhattisgarh	490	520	6,437
6	Dadra & Nagar Haveli & Daman & Diu	3	37	421
7	Goa	818	53	2,320
8	Gujarat	1,205	944	14,535
9	Haryana	181	523	8,859
10	Himachal Pradesh	915	388	10,162
11	Jammu and Kashmir	253	377	9,230
12	Jharkhand	774	951	17,919
13	Karnataka	1,642	1,487	24,580
14	Kerala	49	229	3,304
15	Madhya Pradesh	1,798	1,937	23,824
16	Maharashtra	1,825	2,292	25,830
17	Manipur	87	266	3,130
18	Meghalaya	582	257	5,897
19	Mizoram	15	97	3,283
20	Nagaland	24	323	4,459
21	Odisha	315	673	10,354
22	Punjab	90	398	5,927
23	Rajasthan	191	1,603	9,189
24	Sikkim	2	27	82
25	Tamil Nadu	372	928	14,888
26	Telangana	56	1,292	17,048
27	Tripura	9	220	5,973
28	Uttar Pradesh	7,005	2,148	52,142
29	Uttarakhand	1,216	545	10,723
30	West Bengal	349	153	5,903
31	Andaman & Nicobar Islands	3	57	510
32	Ladakh	30	11	29

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