

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

**LOK SABHA
UNSTARRED QUESTION NO. 868
ANSWERED ON 24TH JULY, 2025**

ENSURING QUALITY IN NHs CONSTRUCTION/MAINTENANCE

868. SHRI NARESH GANPAT MHASKE:

SMT. SHAMBHAVI:

SHRI RAVINDRA DATTARAM WAIKAR:

DR. SHRIKANT EKNATH SHINDE:

SHRI RAJESH VERMA:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

(a) the specific measures being undertaken to enhance the quality of National Highways (NHs) construction and maintenance by July 2025;

(b) the new benchmarks being set for construction and the focus areas for corridor-based infrastructure development;

(c) the manner in which performance ratings and transparent toll collection bids would be implemented to ensure high standards of construction and maintenance;

(d) the timeline for shifting the focus from quantity to quality in National Highway development; and

(e) the anticipated impact of these changes on road safety, traffic efficiency and the overall highway infrastructure in the country?

ANSWER

**THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS
(SHRI NITIN JAIRAM GADKARI)**

(a) to (e) All efforts are made to ensure that the National Highways (NHs) are constructed as per stipulated quality standards specified in the Indian Roads Congress (IRC) specifications and codes. To ensure that highway construction adheres to stipulated quality standards, Consultants (Authority's Engineer/ Independent Engineers- AE/IE) are appointed by the executing agencies for day-to-day supervision of works at site. Officials of executing agencies undertake inspections from time to time and ensure adherence of conformity of quality of the work done by the Concessionaire/ Contractors with stipulated requirements. Deficiencies, if any, observed during such examination/ supervision are brought to the notice of the Concessionaires/ Contractors for taking up necessary corrective measures. Actions against defaulting agencies are taken as per the provisions of the Contract agreement in case of any defaults.

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

- i. Mandatory assessments of road conditions through Network Survey Vehicle (NSV) before and after completion of work and every six months post completion; 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;**
- ii. 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;**
- iii. 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;

- iv. Operationalization of a centralized system called NHAI One App for Monitoring and rectification of highway defects which enables geo-tagging of defects along with photographs;**
- v. Deployment of Third Party Quality Auditors for independent quality audits of NH works on a case-to-case basis.**

The development and maintenance of NHs is a continuous process and the works on NHs are taken up from time to time based on the traffic density, inter-se priority and availability of funds. Government has inter-alia decided to focus on development of Access controlled National High Speed Corridors / Expressways, besides taking up development of ring roads, bypasses & elevated corridors in major cities/ urban centers and State capitals, in consultation with State Governments, to decongest traffic and alleviate choke / congestion points on NHs and for segregation of local traffic from thorough traffic on NHs. Focus areas concerning initiatives taken for corridor-based infrastructure development include smart highways, climate resilience, multi-modal connectivity, and data-driven management with due emphasis on quality, safety, and sustainability.

The Government in the Ministry of Road Transport and Highways has taken initiatives for developing performance rating systems for various stakeholders such as Detailed Project Report (DPR) Consultants, AE/IE and Concessionaires. The guidelines for performance rating for DPR Consultants and AE/IE have been recently uploaded in the Official Website for inviting public comments. National Highways Authority of India (NHAI) has developed a policy in December, 2024 for initiating Concessionaire Rating for performance assessment.

All efforts are made by NHAI to ensure efficient toll collection operations by adopting a transparent, competitive, and technology-enabled bidding process. All bids for toll plaza operations are invited through e-tendering system, ensuring equal opportunity for participation and promoting fair competition. The process is governed

by well-defined criteria and oversight mechanisms to ensure integrity, accountability, and optimal revenue realization for the exchequer.

The Government focuses on adhering to quality standards as stipulated in IRC specifications and codes and emphasizes on road safety measures in all stages of project development, i.e, during design, construction, operation and maintenance stages. Guidelines have been issued for regular safety audit of all NHs at design, construction, pre-opening stage of NH projects as well as on existing NHs for ensuring road safety. In addition to National High Speed Corridors, Expressways, ring roads and bypasses, the Government has also adopted a policy to improve all NHs as per the traffic requirement but minimum Two Lane with paved shoulders standards except for ecologically sensitive Himalayan region where development plan is finalized considering the geological, environmental factors, etc. The above developments have been undertaken for increasing logistics efficiency as well as for improvement of regional connectivity and overall accessibility to the NHs across the country.
