

**IMPLEMENTATION OF PHASE – I OF BHARATMALA  
PARIYOJANA**

**MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**

**PUBLIC ACCOUNTS COMMITTEE  
(2023-24)**

**ONE HUNDRED AND FORTY-FOURTH REPORT**

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**SEVENTEENTH LOK SABHA**



**LOK SABHA SECRETARIAT  
NEW DELHI**

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**MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**



*Presented to Hon'ble Speaker, Lok Sabha on 29.04.2024*

*Presented to Lok Sabha on:*

*Laid in Rajya Sabha on:*

**LOK SABHA SECRETARIAT  
NEW DELHI**

**April 2024/ Chaitra 1946 (Saka)**

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\*Not appended in the report

**COMPOSITION OF THE PUBLIC ACCOUNTS COMMITTEE  
(2023-24)**

**Shri Adhir Ranjan Chowdhury** - **Chairperson**

**MEMBERS**

**LOK SABHA**

2. Shri Thalikkottai Rajuthevar Baalu
3. Shri Subhash Chandra Baheria
4. Shri Bhartruhari Mahtab
5. Shri Jagdambika Pal
6. Shri Pratap Chandra Sarangi
7. Shri Vishnu Dayal Ram
8. Shri Rahul Ramesh Shewale
9. Shri Gowdar Mallikarjunappa Siddeshwara
10. Dr. Satya Pal Singh
11. Shri Rajiv Ranjan Singh alias Lalan Singh
12. Shri Jayant Sinha
13. Shri Balashowry Vallabhaneni
14. Shri Ram Kripal Yadav
15. Vacant<sup>1</sup>

**RAJYA SABHA**

16. Shri Shaktisinh Gohil
17. Dr. K Laxman
18. Shri Derek O'Brien
19. Shri Tiruchi Siva
20. Dr. M. Thambidurai
21. Shri Ghanshyam Tiwari
22. Vacant<sup>2</sup>

**SECRETARIAT**

Shri Sanjeev Sharma	- Joint Secretary
Smt. Bharti S. Tuteja	- Director
Shri Alok Mani Tripathi	- Deputy Secretary
Smt. Rinku Awasthi	- Committee Officer
Shri Charanjeet Singh	- Committee Officer

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<sup>1</sup> Shri Brijendra Singh resigned w.e.f 12 March 2024

<sup>2</sup> Dr. Sudhanshu Trivedi retired from Rajya Sabha w.e.f. 2 April 2024

## **INTRODUCTION**

I, the Chairperson, Public Accounts Committee (2023-24) having been authorized by the Committee, do present this One Hundred and Forty-First Report (Seventeenth Lok Sabha) on “**IMPLEMENTATION OF PHASE – I OF BHARATMALA PARIYOJANA**” based on Comptroller and Auditor General's Report No. 19 of 2023.

2. The Report of Comptroller and Auditor General of India was laid on the Table of the House on 10.8.2023.

3. The Public Accounts Committee took oral evidence of the representatives of Ministry of Home Affairs on 19.2.2024. The Committee considered and adopted this Report *vide* digital circulation on 20.4.2024.

4. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in bold and form Part-II of the Report.

5. The Committee would like to express their thanks to the representatives of the Ministry of Road Transport and Highways for tendering evidence before them and furnishing the requisite information to the Committee in connection with the examination of the subject.

6. The Committee also place on record their appreciation of the assistance rendered to them in the matter by the Committee Secretariat and the Office of the Comptroller and Auditor General of India.

**NEW DELHI**  
**20 April, 2024**  
**31 Chaitra, 1946 (Saka)**

**ADHIR RANJAN CHOWDHURY**  
**Chairperson,**  
**Public Accounts Committee**

## PART-I

### REPORT

The Committee have found that the Ministry of Road Transport and Highways (MoRTH) formulates policies for road transport, national highways, and transport research to improve the efficiency of India's road transport system. In September 2017, MoRTH proposed the Bharatmala Pariyojana program to optimize national highway development and movement across India by improving existing infrastructure, enabling multi-modal integration, addressing infrastructure gaps, and integrating corridors.

2. The Committee also found that the proposed Bharatmala Pariyojana included developing 74,942 km of highways, with 34,800 km to be developed in Phase I (BPP-I) by September 2022 at an estimated cost of Rs 5.35 lakh crore. Additional funds of Rs 1.57 lakh crore were also committed for other ongoing highway projects not included under Bharatmala.

3. Further, the Committee have learnt that the Cabinet approved BPP-I in October 2017 after recommendations from the Public Investment Board on aspects like program scope, project approval, corridor selection criteria, and monitoring. BPP-I is to be executed by NHAI, NHIDCL, MoRTH, and State PWDs.

BPP-I had 7 components with a total length of 34,800 km to be developed at an estimated cost of Rs 5,35,000 crore:

- Economic Corridors (9,000 km) - Rs 1,20,000 crore
- Inter-Corridor & Feeder Roads (6,000 km) - Rs 80,000 crore
- National Corridors Efficiency Improvements (5,000 km) - Rs 1,00,000 crore
- Border & International Connectivity Roads (2,000 km) - Rs 25,000 crore
- Coastal & Port Connectivity Roads (2,000 km) - Rs 20,000 crore
- Greenfield Expressways (800 km) - Rs 40,000 crore
- Residual NHDP (10,000 km) - Rs 1,50,000 crore

4. The Committee have been given to understand that a National Highway network of 64,942 km of NH network was initially identified in Bharatmala Pariyojana. Out of this, the Cabinet Committee on Economic Affairs (CCEA) had approved the development of 24,800 km as a part of Bharatmala Pariyojana Phase I (BPP-I) on 24th October 2017. Further, CCEA had also approved development of 10,000 km of residual NHDP project. The Public Accounts Committee decided to take up for detailed examination and Report C&AG Report No. 19 of 2023 on the subject "Implementation of Phase-I of Bharatmala Pariyojana".

(Ref: Page 1 of Background Note received from Ministry for Sitting on 19.2.24)

5. The Performance Audit of BPP-I was carried out by CAG to assess achievement of defined objectives and the execution of NH development under the program. This audit aimed to examine several key aspects, including project selection and prioritization, financial oversight, contract award processes, project execution and contract management, as well as the effectiveness of the monitoring system in place to ensure the Pariyojana's objectives were met. For this purpose, an Entry Conference was held on 27 October 2020 by CAG with MoRT&H, NHAI and NHIDCL, wherein the scope & coverage of audit, audit objectives and criteria etc., were explained. After the review by CAG, the Draft Performance Audit Report was issued to MoRT&H on 13 January 2022 for the confirmation of facts and figures contained therein and to seek MoRT&H's reply. Draft Audit Report was followed by issuance of two supplementary Audit observations to MoRT&H on 22 February 2022 and 17 May 2022. MoRT&H furnished its replies on 26 April 2022, 28 April 2022 and 02 May 2022. An Exit Conference was held on 19 May 2022, wherein major Audit findings and recommendations were discussed with MoRT&H and NHAI Management. However, reply couldn't be furnished by MoRT&H on the draft report of the CAG. CAG published final report "CAG Report No. 19 of 2023" on 10 August 2023. The report has made observations on the selected sample projects as well as on the overall planning and implementation of the Phase-I of the Bharatmala Pariyojana. The key topics covered by the CAG in the final report include the following:

- i. Conceptualization and Planning of Bharatmala Pariyojana Phase – I (Chapter 3)
- ii. Fund Management (Chapter 4)
- iii. Award of Projects (Chapter 5)
- iv. Execution of Projects (Chapter 6)
- v. Monitoring and Information Technology (Chapter 7)

(Ref: Page 2 of Background Note received from Ministry for Sitting on 19.2.24)

The total length under Bharatmala Pariyojana across all 7 components is 64,942 km, out of which 24,800 km is to be developed under BPP-I. Different project implementation modes were prescribed for BPP-I with proper balancing of risk and financing between the

government and private sector. The data on progress of the various components of Bharatmala Pariyojana Phase I (BPP-I) shows that out of the total CCEA approved length of 34,800 km, 26,316 km (75.62%) has been awarded as of 31 March 2023. Audit had found that the completion rate is slower, with only 13,499 km (38.79%) completed till the presentation of the Audit Report.

6. Up to 31 March 2023, national highways length of 26,316 km has been awarded under BPP-I, which was 75.62 per cent of the CCEA approved length for BPP-I. The sanctioned cost of 26,316 km of project length was Rs.8,46,588 crore (Rs. 32.17 crore/km) as against CCEA approved length of 34,800 km at cost of Rs. 5,35,000 crore (Rs.15.37 crore/km). Out of this, 13,499 km of national highways length has been completed till 31 March 2023 i.e. 38.79 per cent of CCEA approved length, which included the construction undertaken during the challenging CoVID pandemic period.

7. Audit found that the total sanctioned cost of Rs 8,46,588 crore for BPP-I projects is already 158.24% of the original CCEA approved estimate of Rs 5,35,000 crore, indicating significant cost overruns. Among the different components, Economic Corridors has seen the highest award activity at 94.74% but the completion rate is only 42.30% - the lowest amongst all categories. In contrast, 302.75% of the approved length has been awarded under Greenfield Expressways, but completion is still behind at 119.75%.

8. Coastal & Port Connectivity roads present cause for concern, with just 20.75% of approved length awarded and 5.20% completed. While Border and International Connectivity roads has relatively better performance in terms of awards (80%) and completion (62.80%). The Cabinet Committee on Economic Affairs (CCEA) approved the implementation of Bharatmala Pariyojana (BPP-I) with the aim of optimizing the efficiency of the movement of goods and people in India. 8. Audit noted the objectives of BPP which included bridging infrastructure gaps, allocating resources for holistic highways development, and adopting a corridor approach over a package-based one. The Logistics Performance Index (LPI) was a crucial benchmark tool, and despite improvements in India's overall LPI score from 2007 to 2023, specific challenges remained in infrastructure quality.

9. The audit also revealed that while BPP-I aimed to positively impact the LPI, the Ministry of Road Transport and Highways (MoRTH) did not set specific targets for improving LPI during the implementation of Bharatmala Pariyojana. The LPI ranking of India did improve, but concerns were raised about the lack of measurable outcome parameters, such as accident reduction and user satisfaction, being set at the project selection stage. Delays and challenges were observed in the development of certain projects under BPP-I, particularly those inherited from the National Highways Development



Program (NHDP). Significant delays and issues related to right of way, environmental clearances, and forest land disputes were highlighted in specific cases. The audit pointed out that these challenges were not adequately addressed before planning projects under BPP-I, leading to skewed development and unproductive use of funds.

10. In response to the audit observations, MoRTH acknowledged certain bottlenecks but did not provide satisfactory responses for all the identified issues. The audit raised concerns about the planning and execution of projects under BPP-I, emphasizing the need for addressing bottlenecks to ensure seamless connectivity and effective utilization of funds. The Central Cabinet Committee on Economic Affairs (CCEA) approved the implementation of Bharatmala Pariyojana (BPP-I) with the aim of enhancing the efficiency of goods and people movement across India and improving the Logistics Performance Index (LPI). The objectives included bridging infrastructure gaps, optimal resource allocation for highways development, and adopting a corridor approach. The Logistics Performance Index (LPI) is a World Bank benchmark tool, based on ground surveys, to identify trade logistics challenges. The audit observed improvements in India's LPI score from 3.07 in 2007 to 3.40 in 2023. However, concerns were raised about the lack of specific targets for LPI improvement under Bharatmala Pariyojana. Audit findings highlighted delays in projects under BPP-I, especially those merged from the National Highways Development Program (NHDP). Some projects faced challenges like right of way issues, environmental clearances, and delays in fixation of appointed dates. Optimization exercises were conducted for NHAI projects, leading to a 160.79% increase in the targeted length for BPP-I, with varying increases across components. However, optimization exercises for NHIDCL and the Road wing of MoRTH were not conducted. Concerns were raised about the lack of clarity in the criteria for project substitution, leading to the inclusion of additional lengths beyond the approved limits. The estimation of the target length for BPP-I included lengths already developed or awarded before the approval. The audit observed an overestimation of the target and achievement lengths for residual NHDP projects, and there were concerns about the unauthorised use of BPP-I funds for ongoing NHDP projects. NHIDCL's achievements under BPP-I were scrutinized, revealing that projects awarded under other schemes were included in BPP-I, leading to an overstatement of BPP-I achievements.

Audit noted that the Ministry of Road Transport and Highways (MoRTH) did not provide responses to the audit observations, raising concerns about the adherence to approved guidelines and the effectiveness of project implementation.

11. The Audit identified several noteworthy observations in its review of the implementation of Phase-I of Bharatmala Pariyojana (BPP-I), a major road development initiative in India. Notable concerns were raised regarding the optimization exercise

conducted by the Ministry of Road Transport and Highways (MoRTH). While an optimization exercise was carried out for the National Highways Authority of India (NHAI), no such exercise was conducted for NHIDCL and the Road wing of MoRTH.

12. One of the key findings as the Committee have learnt was the significant increase in the targeted length for BPP-I post-optimization, raising questions about the alignment of the project with the approved targets by the Cabinet Committee on Economic Affairs (CCEA). The Audit observed disparities in the substitution criteria, with instances of fresh alignments being introduced during optimization, including those not initially approved by the CCEA.

13. Concerns were also raised about the estimation of target lengths, with discrepancies noted in the inclusion of already completed or awarded highway lengths in the overall targets. The achievements of NHIDCL were scrutinized, revealing that some projects included under BPP-I had administrative approvals and financial sanctions under other schemes, potentially leading to an overstatement of accomplishments.

14. Inconsistencies between the Cabinet Note and the optimization exercise were highlighted, specifically regarding inaccuracies in traffic projections and lengths of roads in certain economic corridors. Additionally, the prioritization criteria approved by the CCEA were not uniformly applied, as no prioritization exercise was conducted for NHIDCL and the Road wing of MoRTH.

15. The Committee have learnt that the prioritization of NHAI projects was found to lack transparency, with no clear method such as ABC analysis or ranking system evident in the decision-making process. Moreover, the absence of prescribed timelines for project awards or completion raised concerns about the meaningfulness of the priorities assigned. Test checks revealed discrepancies in the prioritization outcomes, with instances where high-priority projects had not been awarded or construction had not commenced, while medium and low-priority projects were progressing. The non-prioritization of projects under the Border & International Connectivity Roads and Coastal & Port Connectivity Roads components for NHAI was flagged as an issue that could impact port-led development and freight movement.

16. Finally, the Audit noted that NHAI had awarded projects totaling 5,594 km before the prioritization exercise, indicating a deviation from the established process. Despite these observations, MoRTH did not provide responses to the concerns raised by the Audit, leaving several critical aspects unaddressed. The prioritization of the Alandi-Mohol section within the Pune-Solapur-Vijaywada Economic Corridor was a subject of scrutiny in the audit. MoRTH prioritized this section in November 2018, dividing it into five projects for construction, with NHAI approving these projects between February 2019 and November 2021. The civil cost for these projects amounted to ₹4,913.76 crore, and their scheduled completion dates ranged from January 2022 to May 2024. As of March 31, 2023, these projects had achieved physical progress ranging between 21.02% and 98%.

17. However, the audit raised concerns about the Alandi-Mohol section, highlighting that it was initially planned under the National Highways (Original) scheme and was not part of the approved highways length for Bharatmala Pariyojana. Moreover, the annual average daily traffic on the existing Pune-Solapur stretch was approximately 29,000 passenger car units from November 2017 to February 2020, indicating underutilization. This underutilization raised the possibility of a competing road causing financial implications for the existing BOT (Toll) section, either through claims for losses or extension of the concession period. The audit also pointed out that, at the time of prioritization, there was no authentic data available with MoRTH regarding traffic. Additionally, the development of the Alandi-Mohol section as a four-lane highway would result in the underutilization of both the existing and the proposed stretches, as the Alandi-Mohol section would have a combined lane configuration of eight lanes. The traffic projections indicated that the traffic, which was 29,000 passenger car units in 2020, would only rise to 60,000 passenger car units by the year 2035. MoRTH's response in April 2022 did not directly address the core audit observation but acknowledged that the Alandi-Mohol section was not originally part of the Bharatmala Pariyojana alignments proposed to the Cabinet Committee on Economic Affairs (CCEA).

18. Notably the Committee have found that the audit of the Dwarka Expressway construction and prioritization revealed several key observations. The decision to construct an elevated eight-lane main carriageway and a six-lane road at grade over a 29.06 km stretch in Haryana raised concerns, especially considering that the available 90-meter right of way could have accommodated a 14-lane at-grade national highway. The discrepancy in the lane configuration prompted questions about the justification for such a design, given the projected average daily traffic and the associated high construction cost of ₹250.77

crore per km. The tolling strategy, with a rate of ₹290 per car single trip, was deemed disproportionate, and MoRTH's decision to toll Dwarka Expressway and NH-48 as a combined loop raised concerns about potential traffic diversion and toll revenue loss. Additionally, the audit pointed out that the alignment of the Regional Rapid Transit System (RRTS) Shahjahanpur-Neemrana-Behror intersected with Dwarka Expressway, emphasizing the need for a composite analysis, which was lacking. MoRTH's responses in April 2022 did not fully address the audit's suggestions, raising questions about the project's planning, execution, and alignment with broader transportation infrastructure considerations.

19. The audit of the pavement designs for the at-grade road of Dwarka Expressway identified critical issues in the planning and execution. The discrepancy in Million Standard Axles considered for the at-grade road, equivalent to a less-trafficked route, raised concerns about the pavement's sub-optimal thickness, especially given the heavy construction traffic expected in the Delhi-NCR region. Additionally, the contractor's deviation in pavement design based on a higher California Bearing Ratio value, resulting in cost savings, highlighted the importance of accurate site conditions assessment in project planning. Despite these observations, MoRTH did not provide a response to the audit findings.

20. Further, the absence of a detailed project report for Dwarka Expressway, a major infrastructure project, was flagged as a critical oversight. The projects were appraised and approved without a comprehensive report, leading to various manifestations of the lack of detailed planning. The decision to construct an elevated eight-lane road and a six-lane at-grade road without sufficient justification and the potential impact on tolling mechanisms underscored the significance of detailed project reports in guiding project decisions. MoRTH's response, citing the feasibility report with good-for-tender drawings as sufficient, contradicted its own Standard Operating Procedure and highlighted the need for comprehensive guidance documents for detailed project report consultants, which were not provided by NHAI. The audit findings emphasized the importance of meticulous project planning and the need for adherence to standard procedures to ensure the quality and success of major infrastructure projects.

21. **Merger of incomplete stretches into Bharatmala Pariyojana**

The Committee have gauged from the Audit findings which have revealed that languishing projects of NHDP were taken up in Bharatmala Pariyojana Phase-I (BPP-I) without resolving the existing impediments/ bottlenecks viz., availability of right of way or pending disputes regarding forest land including wildlife sanctuaries, as a consequence of which these projects again got stuck in BPP-I.

**22. When the Committee asked about the details of the urgency to take up the languishing projects of NHDP in BPP-I without first resolving their existing impediments and the current status of resolution of those languishing projects, the Ministry of Road Transport and Highways replied as under:**

“A scientific and data-based Logistics Efficiency Enhancement Program (LEEP) study was conducted to identify the arterial National Highway network to be developed in the country as part of the Bharatmala Pariyojana, based on an Origin-Destination survey. The study mapped the overall freight movement in the country and the arterial National Highway network was identified to enable efficient logistics between the key Origin-Destination pairs. The network included the following components:

- a. Already developed stretches requiring no further augmentation in BPP-I
- b. Already developed stretches requiring further capacity augmentation to cater to the traffic growth (considering existing capacity and design life). For e.g., capacity augmentation of already developed National Corridors (GQ and NS-EW) under National Corridor Efficiency Improvement component of BPP-I
- c. New stretches that need to be developed under BPP-I

Based on the aforementioned LEEP study, a network of 64,942 km was identified under the Bharatmala Pariyojana. It may be noted that a total length of 10,000 km of residual NHDP projects were also approved by the Cabinet Committee on Economic Affairs (CCEA) as a part of the program. All of these NHDP projects formed part of key high-traffic density corridors and hence were critical for efficient freight and passenger movement. They were included as part of the BPP-I to enable faster resolution of bottlenecks and hence speed up their implementation. Hence, the expectation that all issues on NHDP projects should have been resolved before their inclusion in BPP-I, needs to be reconsidered.

Furthermore, through the evidence of the actual on-ground progress of implementation of these Residual NHDP projects, it can be ascertained that these projects are not

languishing as compared to the other projects taken up under BPP-I. Below tables show the status of the length awarded and constructed for the Residual NHDP projects vis-à-vis the other BPP-I projects:

Component	Awarded till 30 <sup>th</sup> Nov	Total	% length Awarded
Bharatmala Pariyojana	19,667	24,800	79%
Residual NHDP	6,751	10,000	67%
<b>Total</b>	<b>26,418</b>	<b>34,800</b>	<b>76%</b>

Component	Constructed till 30 <sup>th</sup> Nov	Awarded 30 <sup>th</sup> November	Constructed length as % of Awarded Length
Bharatmala Pariyojana	10,793	19,667	55%
Residual NHDP	4,251	6,751	63%
<b>Total</b>	<b>15,045</b>	<b>26,418</b>	<b>57%</b>

We can see from the tables above that the award of projects under NHDP has only been slightly slower than the remaining BPP-I projects, while the pace of construction has been higher in Residual NHDP as compared to the remaining BPP-I projects.

It should be noted that all the directions issued by CCEA are being enforced during the award of projects. Projects are awarded only after ensuring:

1. Availability of Right of Way:
  - Availability of 80% of required ROW in case of HAM projects and
  - Availability of 90% of required ROW in case of EPC and BOT (Toll) projects
2. Availability of Clearances:
  - Environment Clearance (wherever applicable)
  - Clearances for ROB, Utility Shifting, etc.
  - Forest Clearance before start of construction

Projects are mandated not to be awarded without meeting the aforementioned conditions to prevent any delays at the time of execution. The policy for ensuring project readiness before award and appointment is summarized in the table below –

Project Stage	Land Acquisition	Environmental Clearance	Forest Clearance
Pre-Appraisal	<ul style="list-style-type: none"> <li>– EPC &amp; BOT (T): 90% 3(A)</li> <li>– HAM: 80% 3(A)</li> </ul>		
Appraisal & Approval	<ul style="list-style-type: none"> <li>– EPC &amp; BOT (T): 90% 3(D)</li> <li>– HAM: 80% 3(D)</li> </ul>	Approval of terms of reference by MoEF&CC	
Award	<ul style="list-style-type: none"> <li>– EPC &amp; BOT (T): 90% 3(G)</li> <li>– HAM: 80% 3(G)</li> </ul>	Environmental Clearance	
Appointed Date	<ul style="list-style-type: none"> <li>– EPC &amp; BOT (T): 90% Possession</li> <li>– HAM: 80% Possession</li> </ul>		Stage I clearance (working permission)

However, in case of some projects, they were awarded considering the greater good in the country’s infrastructure and at the behest of public interest”.

### **23. Optimization of projects to be implemented by NHAI, Achievement of NHIDCL under Phase-I of Bharatmala Pariyojana & Inconsistencies in CCEA Note and optimization exercise**

The Committee found that for identification of national highways length, under BPP-I, based on principles of optimal traffic and freight movement etc., MoRTH carried out an optimisation exercise for NHAI. However, no such optimisation exercised was carried out for NHIDCL and Road wing of MoRTH. While optimising NHAI projects, the targets for development of national highways length under BPP-I increased substantially by around 160 per cent to 64,675 km (excluding Residual NHDP length). The target length for

Residual NHDP component was increased to 12,324 km post optimisation against 10,000 km approved by CCEA, while the lengths actually planned (4,607 km) to be constructed under BPP-I, under this component, were much lower than what was approved by CCEA and optimised later on.

Further, the Committee also found Post optimisation exercise, new national highways length, beyond the lengths approved by CCEA, were included in lengths to be developed by NHA under BPP-I. Further, already awarded/constructed length formed a major part of the CCEA approved length and the length optimised. In NHIDCL, national highways length approved/awarded for other schemes were being merged in targeted/constructed lengths of BPP-I i.e., out of total 97 projects (2,244 km) awarded by NHIDCL, under BPP-I, upto 31 March 2023 a total of 78 projects (1,752 km) were approved in schemes other than BPP-I. The claim of MoRTH that such lengths were arrived at after origin-destination study, freight flow projections and verification of identified infrastructure gaps through geo-mapping was, therefore, not verifiable in audit.

24. On being asked whether any detailed study of length of highways, bottlenecks, proposed resolution of impediments carried out before proceeding on a project of such a huge magnitude, if not the reasons therefore, [the Ministry of Road Transport and Highways](#) replied as under:

“CCEA had indicated an overall network of 64,942 km with an approval to develop 24,800 km in BPP-I without specifying the exact list of 24,800 km to be developed under BPP-I. In this context, it is to be understood that projects outside the list of 64,942 km could be added to the network through substitution, provided the length for development under BPP-I is restricted to 24,800 km. CCEA had authorized the MoRT&H to substitute/replace up to 15% length of 24,800 kms for Phase I of the proposed program by other suitable projects, if development of certain identified stretches under the proposed program cannot be taken up on account of issues pertaining to alignment finalization, land availability and other unforeseen factors.

MoRT&H undertook a scientific Logistics Efficiency Enhancement Program (LEEP) study to identify high traffic corridors to be developed to enable efficient freight and passenger movement between key Origin - Destination pairs in the country. Details of the same have also been provided in the preceding section.



However, it is worth noting that the following points were beyond the scope of LEEP study -

1. Optimal alignments to be developed for the corridor
2. Nature of development (greenfield development vs brownfield expansion, lane configuration etc.) to be undertaken.

Hence an optimization exercise was conducted by MoRT&H for these stretches, in discussion with stakeholders and inputs from Detailed Project Reports (DPR), for efficient infrastructure development. The optimization exercise included addressal of challenges in Brownfield augmentation through the development of Greenfield corridors, development of spurs from these Greenfield alignments for providing connectivity to places of regional importance (e.g., spur to Amritsar from the Delhi-Amritsar-Katra Expressway) as well as the enhancement of connectivity to ports / airports (e.g., JNPT spur, Jewar spur).

Furthermore, optimization exercise was undertaken in consultation with all state governments, factoring in the upgradation projects being undertaken by the State Governments, assessment of the latest traffic flow, to enhance connectivity to upcoming industrial / economic nodes and multimodal logistics terminals planned under various government initiatives. It also factored parameters such as reduction in time of travel and fuel efficiency while optimizing the network. These shorter, straighter greenfield alignments will lead to reduction in distance and hence the travel time between important economic centers, thus, resulting in reduction in fuel consumption. The outcome of the optimization exercise was factored in the relevant DPRs.

Through the above optimization exercise, the overall network of 64,942 kms length approved by the CCEA was optimized to 64,675 kms. However, overall length to be developed under BPP-I was maintained at 34,800 km.

It must also be noted that the optimization exercise was carried out for entire Bharatmala network including all agencies - NHAI, NHIDCL and Road Wing of MoRT&H, contrary to what has been stated in the question. For e.g., the corridors Amritsar-Jamnagar (under NHAI) and Bongaigaon – Guwahati – Nagaon – Tezpur – Dibrugarh – Margherita (under NHIDCL) etc. were optimized during this exercise”.

## **Project Prioritization**

25. Audit has noted that prioritization of projects, after identification of length as per optimisation, was not done for NHIDCL and Road wing of MoRTH. No rational, systematic and codified methodology was adopted in prioritisation of projects for NHAI. Further, timelines were not decided for awarding and constructing the projects falling under different priorities. There were instances where projects were developed based on deficient cost-benefit study or without getting detailed project reports prepared.

26. On being asked about the details of the reasons for no rational, systematic and codified methodology was adopted in prioritization of projects for NHAI, along with their comment, the Ministry of Road Transport and Highways in a written reply stated as under:

“The identified network of 34,800 km to be developed as part of BPP-I, was bifurcated among 3 agencies, as per PIB appraisal in 2022, in the following manner –

<b>Agency</b>	<b>Length (km)</b>
NHAI	30,257 (87%)
Roads Wing	2,356 (7%)
NHIDCL	2,187 (6%)

As described in the table above only 2,187 km (104 projects) was being developed by NHIDCL and 2,356 km length (36 projects) was being developed by Roads Wing. The entire network entrusted to NHIDCL and Roads Wing had to be developed as these stretches were important from perspective of strategic importance and connectivity. Hence, the network entrusted to NHIDCL and Roads Wing was prioritized.

It may be noted that a methodical approach was followed for prioritization of projects of NHAI. As part of this exercise, projects were categorized as High, Medium, and Low priority based on the following parameters:

- a. Corridor completion (Missing links of largely completed corridors prioritized irrespective of traffic)

- b. Average expected traffic in the corridor
  - Expected traffic > 15,000 PCUs → High Priority
  - 15,000 PCUs > Expected traffic > 10,000 PCUs → Medium Priority
  - Expected traffic < 10,000 PCUs → Low Priority
- c. New corridors in National Corridors Efficiency Improvement Program (NEIP) & Expressways prioritized due to high traffic volume
- d. Standalone Projects of NHDP prioritized based on average traffic”

27. They have further stated as under:

“As per the extant guidelines of MoRT&H, all projects are to be appraised and approved based on Detailed Project Reports (DPR) and no projects have been appraised or approved without any detailed DPR till date. Although, there have been cases of delay in DPR preparation of some projects due to involvement of multiple stakeholders (state govt., environmental clearance departments, Railways, etc.), even in those cases, MoRT&H has tried to expedite the matters to the highest levels for quick resolution. The same will continue to be ensured for all projects to be taken up in the future by MoRT&H.

It may also be noted that MoRT&H follows multiple best practices for ensuring quality of DPR, which are detailed below:

DPRs are being prepared as per site conditions/ technical requirements while following the IRC manual for DPR Preparation (IRC SP:19-2020) and supplementary guidelines issued by NHA for preparation of DPR for BPP-I. Standard RFP and TOR of MoRT&H are adopted for the appointment of DPR consultants. Subsequently, use of latest technologies including LiDAR, project specific requirements and lessons learnt are suitably incorporated in TOR. The scope of work of the DPR Consultant has also been modified to include Mathematical Modelling of bridges, for all contracts of DPR Consultants.

It must also be noted that all stakeholders including local people/ Administrative Agencies/ concerned Technical Departments are consulted while the finalization of DPR. The output of the DPR consultants is also peer reviewed by independent technical experts. MoRT&H also takes suitable punitive action against DPR consultants, ranging from monetary penalty to debarment, in the case of lapses in the services provided.

Furthermore, it may be noted that based on the recommendation of the CAG, MoRT&H has set up DPR Cells in NHAI, NHIDCL and Roads Wing to

- a. Ensure usage of latest technologies for conducting DPR studies
- b. Improve bridge and tunnel designs
- c. Monitor the quality of DPR, recommend appropriate action for deficiency of DPR and monitor implementation of the penal action”

### **Planning for Phase-I of Bharatmala Pariyojana**

28. The Committee have learnt that the Development of 35 Multi Modal Logistics Parks (MMLPs) was made part of BPP-I to facilitate efficient and seamless freight movement in the country. However, no MMLP was developed up to March 2023.

29. On being asked about the details of the reasons for the failure to develop any Multi Modal Logistics Parks (MMLPs) under BPP-I, along with the details this affect the overall objective of facilitating efficient and seamless freight movement in the country and for providing the comprehensive details of the measures did MoRTH take to address this lack of development of MMLPs under BPP-I, [the Ministry of Road Transport and Highways](#) replied as under:

“There were delays in the finalization of the action plan for the development of MMLPs because of the following reasons:

- Initial lack of clarity regarding the implementation agency arising due to multiple Government Ministries and Departments (NICDIC, CONCOR) planning development of Logistics Parks.
- Attempts to ensure there was no duplication in efforts and deployment of Government resources in development of MMLPs.
- Issues in identification of suitable land parcels for development, in coordination with State Government agencies

Finally, it was decided in a Sectoral Group of Secretaries (SGOS) meeting in 2020, that MoRT&H will be responsible for development of 35 MMLPs, approved under BPP-I. In the meanwhile, based on discussions with DPIIT and after ensuring that no other Government department is taking up development of

MMLP in Jogighopa, MoRT&H decided to develop the same. Subsequent to the decision regarding responsibility of development of 35 MMLPs by MoRT&H, National Highways Logistics Management Limited (NHLML) was setup in September 2020 as a wholly owned subsidiary of NHAI to implement MMLPs and other assets to improve efficiency of freight and passenger movement in the country.

Subsequently, 15 MMLPs were prioritized for development under Bharatmala Pariyojana Phase I. This was also examined and recommended by the Public Investment Board (PIB) in minutes dated 19th July 2022. The funding required for development of external trunk infrastructure for 15 MMLPs was included in the revised cost estimate for BPP-I and the same was appraised by PIB. As of date, 5 MMLPs at Jogighopa, Chennai, Indore, Bangalore, and Nagpur have been awarded and are in various stages of development. Furthermore, bids have been invited for the MMLP at Anantapur”.

30. The Ministry in their reply further added as under:

“It is to be noted that MMLPs to be developed by MoRT&H are being taken up under the Public Private Partnership (PPP) model. MoRT&H has formed a project specific SPV for each MMLP, with relevant stakeholders with clearly defined roles and responsibilities. Model Concession Agreement for development of MMLP in DBFOT mode has been approved with extensive inter-ministerial consultations. The State Government through the SPV will provide the land and develop external trunk infrastructure connectivity to the MMLP. The private developer (concessionaire) will be responsible for developing and operating the MMLP in DBFOT mode for a period of 45 years. The equity contribution of the parties is determined in line with their investment. Furthermore, active consultations with potential developers are organized to ensure identification and timely resolution of issues faced by private developers and the State. So far, there has been a good response from private developers for the development of MMLPs.

For instance, in the case of MMLP in Chennai, a SPV has been formed between NHLML, Chennai Port Trust, TIDCO and RVNL, wherein NHLML is responsible for overall coordination of the project, procuring relevant approvals, and providing the external road connectivity, rail connectivity (part), LA Cost (part) etc., RVNL will be responsible for providing the rail connectivity, Chennai Port Authority for providing land and TIDCO for providing upfront capital as its equity contribution”.

## **Compliance to approved funding pattern, Achievement of Modal Mix & Cost Variations**

31. Committee were informed that upto 31 March 2023, when only 75.62 per cent of CCEA approved length was awarded, 158.24 per cent of CCEA approved financial outlay was sanctioned. Significant changes made in the scope of projects and cost estimates as well as richer project specifications adopted have pushed up the sanctioned cost of projects awarded under BPP-I. This has resulted in sanctioned civil cost being Rs. 23.89 crore per km as against the CCEA approved cost of Rs.13.98 crore per km and sanctioned pre-construction cost being Rs. 8.28 crore per km as against the CCEA approved cost of Rs. 1.39 crore per km.

There was variation from the approved modal mix of NHAI, as out of total national highways length of 23,268 km awarded, a meagre national highways length of 1.75 per cent was being developed under BOT (Toll) mode (as against 10 per cent approved for this mode of construction) whereas 48.35 per cent and 49.90 per cent of national highways length were being constructed under EPC and HAM mode respectively (as against 30 per cent and 60 per cent approved respectively for these mode of construction). Besides increase in requirement of BPP-I funds, the funds approved for other schemes (i.e., Rs. 1,57,324 crore) were being utilised to report BPP-I achievement, as observed in NHIDCL whereby 78 such projects (1,752 km) approved in other schemes, were being reported as achievements of BPP-I as on 31 March 2023.

NHAI alone projected, in May 2019, financial outlay of Rs. 10,55,268 crore for meeting its BPP-I targets against CCEA approved financial outlay of Rs. 5,35,000 crore for BPP-I as a whole. The total borrowings realised by NHAI for BPP-I, upto 2021-22, was Rs. 3,00,349 crore as against the borrowing approved by CCEA of Rs. 2,09,279 crore as source of funding for BPP-I as a whole. The excess borrowing of Rs. 91,070 crore was being utilised for meeting the higher fund requirements due to time and cost overrun in development of BPP-I projects. Thus, there was disconnect among the financial outlay approved by CCEA, financial plans for BPP-I approved by MoRTH & its implementing agencies and realisation of the plans thereof.

32. When asked whether the comprehensive measures have been taken to address the disconnect between the financial outlay approved by CCEA, financial plans for BPP-I approved by MoRTH & its implementing agencies and realisation of the plans thereof, the Ministry of Road Transport and Highways replied as under:

“As highlighted by MoRT&H in the Action Taken Notes on the CAG observations it may be noted that cost estimation at the time of CCEA approval was done based on normative cost prevailing in 2016 and before the preparation of project specific DPRs. However, with higher cost of pre-construction activities and civil cost, higher quantum of high-speed corridors as compared to originally planned as well as a change in GST regulations, the overall expenditure on development of NH length of 34,800 km will be higher than estimated. As it stands today, the cost estimate for BPP-I stands at Rs. 10.95 Lakh Cr.

It is also worth noting that the network prioritization principles were approved by the CCEA and the responsibility of the detailed design of the project lies with the Ministry. Individual projects are appraised and approved in line with the powers delegated to the Ministry and its implementing agencies by the CCEA.

The issue of increase in cost has been examined in detail and appraised by PIB vide minutes dated 19th July 2022 and 17th March 2023. Draft note for revised approval of CCEA of BPP-I has been submitted as per the recommendation of the PIB.

The reasons for the increased financial outlay by NHA for the execution of BPP-I are mentioned below

- a. Increase in Cost of Raw material
- b. Enhancement in Specifications / IRC codes
- c. Increase in Cost and Quantum of Land Acquisition
- d. Higher quantum of highspeed corridors
- e. Higher Lane Configuration
- f. GST change

The following table details the reasons for the revised investment numbers of BPP-I along with the financial impact due to each:

S.No	Item	Civil cost (Rs. Cr.)	LA cost (Rs. Cr.)	Total (Rs. Cr.)	Remarks
A	CCEA approval 2017	4,90,000	45,000	5,35,000	
B	Increase in Cost of Raw Material	73,711	-	-	Escalation was not factored
C	Enhancement in Specs / IRC Codes	38,598	-	-	For road safety and rider quality
D	Increase in Cost & Quantum of Land Acquisition	-	2,50,328	-	RoW was assumed to be available
E	Impact of GST change	22,945			12% to 18% on balance expenditure
F	<b>Revised Cost : Implementation as per CCEA Approval (A+B+C+D+E)</b>	<b>6,25,254</b>	<b>2,95,328</b>	<b>9,20,582</b>	
G	Higher Quantum of High-speed Corridors	76,862	(21,828)	-	



S.No	Item	Civil cost (Rs. Cr.)	LA cost (Rs. Cr.)	Total (Rs. Cr.)	Remarks
H	Higher Configuration Lane	1,13,077		-	
I	Impact of GST change	8,984			
J	Savings due to Commercial & Technical Levers	(2,080)	-	-	
K	<b>Revised Cost : Extant Proposal (F+G+H+I+J)</b>	<b>8,22,097</b>	<b>2,73,500</b>	<b>10,95,597</b>	

33. When enquired about the reasons for changes in the scope of projects? Whether approval of the competent authority was sought to modify/ alter the scope of works which has pushed up the sanctioned cost of the project and whether there was a significant variation in taking up developmental work of national highways under BOT (Toll), if so, the details thereof, the Ministry of Road Transport and Highways replied as under:

“As described in the preceding section, the investment in Bharatmala Pariyojana as approved by CCEA is Rs. 5.35 lakh Cr. (Civil cost- Rs. 4.90 lakh Cr.; Land acquisition cost- Rs. 45,000 Cr.). The cost of the Phase I, if implemented as approved by CCEA in 2017, is estimated as Rs. 9.20 lakh Cr. (72% higher) on account of the following reasons:

- Quantum and cost of land to be acquired was underestimated in the original approval of CCEA. If the CCEA Approval was implemented as-is (i.e., 34,000 km of

brownfield expansion and 800 km of greenfield development), ~85,000 ha land would have been required at a cost of Rs. 2.95 lakh Cr. compared to 18,000 ha of land acquisition approved by CCEA in 2017 at a cost of Rs. 45,000 Cr.

- The civil construction cost of the Phase I, if implemented as approved, would have been Rs. 6.25 lakh Cr (against Rs. 4.9 lakh Cr approved originally) on account of increase in raw material (Rs. 73,711 Cr.), annual cost escalation not factored in the original approval, enhancement in IRC specifications (to improve road safety and rider comfort) during the course of implementation of Bharatmala Pariyojana (Rs. 38,598 Cr.) and impact of change in GST from 12% to 18% (Rs. 22,945 Cr.).

NHAI Board had initially approved the Base Scenario of modal mix for BPP-I projects as 60%, 30% and 10% for HAM, EPC and BoT (Toll) respectively and initially a target was also set for private participation in the cabinet which was later revised basis increase in the overall financial outlay. Details are shared in the table below –

#	Source of Fund	CCEA Approval 2017 (Rs Cr.)	Proposal Appraised by PIB (Rs Cr.)
A	Budgetary Support	1,39,673 (26%)	5,09,383 (47%)
B	Market Borrowings	2,09,279 (39%)	1,38,214 (13%)
C	Subtotal (A+B)	<b>3,48,952</b> <b>(65%)</b>	<b>6,47,597</b> <b>(60%)</b>
D	Resource Mobilization	80,048 (15%)	1,61,684 (15%)
E	Total Public Investment (C+D)	<b>4,29,000</b> <b>(80%)</b>	<b>8,09,281</b> <b>(75%)</b>
F	Private Investment	1,06,000 (20%)	2,86,317 (25%)

<b>G</b>	<b>Total (E+F)</b>	<b>5,35,000</b> <b>(100%)</b>	<b>10,95,598</b> <b>(100%)</b>
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However, BOT(T) projects witnessed muted investor participation in recent years. Furthermore, the issue of muted investor participation was also discussed in detail in the PIB meeting for appraisal of revised cost estimate of Bharatmala Pariyojana on 19th April and 22nd April 2022. This necessitated revision in contractual framework, which were undertaken after wider consultation with stakeholders (including Financial Institutions and NITI Aayog) to boost investor interest. Moreover, there have been a number of arbitration cases pending with BoT concessionaire for recovery, reducing the popularity of BoT as a mode of execution. In light of the above, challenges with respect to BOT(T) mode, effort has been made to focus on awarding projects on HAM mode. Further, projects constructed under EPC and HAM modes are also monetized after established tolling history, through TOT and InvIT mechanisms, wherein revenue risk is passed on to the investors without construction risk.

Because of the aforementioned reasons, the targeted modal mix of BPP-I has been revised as 42% : 57% : 1% for EPC, HAM and BOT respectively. A comparison of this target modal mix with the current modal mix of all Awarded and Approved projects of BPP-1 is provided below:

<b>Mode</b>	<b>17 - 18</b>	<b>18 - 19</b>	<b>19 - 20</b>	<b>20 - 21</b>	<b>21 - 22</b>	<b>22 - 23</b>	<b>23-24</b> <b>(Till Nov)</b>	<b>Till Nov</b> <b>23-24</b>	<b>Overall</b> <b>Target for</b> <b>BPP-I</b>
BOT Toll	3%	0%	0%	3%	1%	0%	0%	1%	1%
HAM	53%	35%	27%	56%	58%	59%	31%	52%	57%
EPC	44%	65%	73%	42%	41%	41%	69%	47%	42%

As can be seen from the above table, the achievement on the modal mix of projects till date is quite close to the revised target for BPP-I and MoRT&H has stepped up efforts for the achievement of the same.

35. The Ministry in their reply added as under:

"It is worth highlighting that there has been no diversion of funds from other schemes in the execution of BPP-I. Some of the BPP-I projects of NHIDCL were earlier planned under other schemes of MoRT&H viz., EAP, NH(O), and SARDP scheme. However, subsequently they were prioritized under BPP-I. The sanction letters for the same are being suitably amended by MoRT&H".

### **Maintenance of project-based expenditure and revenue**

36. As learnt by the Committee according to Audit, there was no system for project-based accounting to identify profit centres to gauge the long-term viability of a project resulting which it could not be worked out whether a stretch could be put to reduced tolling of 40 per cent after recovery of capital expenditure. It also resulted in non-mapping of sources of revenue such as diesel/petrol cess, toll plough back from the Ministry, borrowings, other government support etc., for project to work out cost of capital to make effective investment decisions

**37. On being asked why was there no system for project-based accounting to identify profit centers to gauge the long-term viability of a project and whether this would not affect the ability to make effective investment decisions and reduce tolling of 40% after recovery of capital expenditure along with the comprehensive measures did MoRTH take to address the non-mapping of sources of revenue for the project to work out the cost of capital, the Ministry of Road Transport and Highways replied as under:**

"MoRT&H has different accounting policies depending on the mode of implementation of the project. In the case of projects being implemented in the Special Purpose Vehicle (SPV) route, project-based accounting mechanism is implemented. It is ensured that the funds in the SPV are used specifically for the development of that project. On the other hand, in the case of projects of MoRT&H which are implemented using budget provided by the Govt. of India, all toll receipts are deposited directly in the Consolidated Fund of India (CFI). Hence, the

implementation of project-based accounting has limitations in case of such projects.

Nevertheless, it must be noted that in order to implement project-based accounting relating to both the revenue and expenditure of projects, around 80% of the cost / expenditure components of project-based accounting have already been mapped under the unique identifiers of the projects i.e., the Unique Project Code (UPC). The remaining components are available in the system and are planned to be accounted for under the same UPC, post the issuance of standard policy/guidelines on the same. For capturing of project-wise revenue and indirect costs like finance cost and administrative costs, etc. the current accounting system used in NHAI will be modified to that extent. Policy for allocation of financing cost, administrative cost, overheads and mapping of project wise revenue is also being worked upon. It is expected that such a system will be in place in the next 3 months.

Specifically for the case of NHIDCL, for maintaining a record of project expenditures, a robust ERP system has already been implemented. However, it may be noted that toll collection on roads built by NHIDCL is done by NHAI and the same is deposited directly in CFI. As such, the establishment of profit centres in NHIDCL is not feasible”.

### **Delegation of powers for project appraisal and approval**

**38.** The Committee have learnt that according to Audit, there were deficiencies in the appraisal and approval mechanism proposed to CCEA as many of the high cost EPC projects viz., Delhi-Vadodara Expressway and Dwarka Expressway etc., could not be assessed by either CCEA or MoRTH to have the advantage of the scrutiny at that level. Further, even the appraisal and approval mechanism decided by CCEA was also not strictly followed.

**39.** On being asked about the type of the deficiencies there were in the appraisal and approval mechanism proposed to CCEA and the details of the means by which it would affect the assessment of high-cost EPC projects such as Delhi-Vadodara

**Expressway and Dwarka Expressway, the Ministry of Road Transport and Highways replied as under:**

“The appraisal and approval mechanism for BPP-I was prescribed by CCEA considering the Rakesh Mohan committee report and the appraisal and approval mechanism followed by MoRT&H in the earlier phases of NHDP viz. NHDP Phase 1(GQ) and NHDP Phase II (NS-EW). The CCEA approval for Phase-I of Bharatmala Pariyojana gave detailed delegation of powers to NHAI and MoRT&H for approval of projects. These are detailed as follows:

<b>Mode</b>	<b>Implementing Agency</b>	<b>Cost</b>	<b>Appraisal Stages</b>
<b>BOT (Toll) - VGF</b>	NHAI, MoRT&H, NHIDCL	Up to Rs. 1,000 Cr. EPCC	1. Appraisal by PATSC & SFC chaired by Secy, RT&H 2. Approval by Minister, RT&H
		Above Rs. 1,000 Cr. EPCC	1. Appraisal by PATSC followed by PPPAC chaired by Secy, DEA 2. Approval by CCEA
<b>BOT (Toll) - No VGF</b>	NHAI, MoRT&H, NHIDCL	Any	1. Approval by NHAI Board
<b>BOT (Annuity)/ HAM</b>	NHAI, MoRT&H, NHIDCL	Up to Rs. 2,000 Cr. EPCC	1. Appraisal by PATSC & SFC chaired by Secy, RT&H 2. Approval by Minister, RT&H
		Above Rs. 2,000 Cr. EPCC	1. Appraisal by PATSC followed by PPPAC chaired by Secy, DEA 2. Approval by CCEA
<b>EPC</b>	NHAI	Any	1. Appraisal by PATSC 2. Approval by NHAI Board/ EC/ Chairman

Mode	Implementing Agency	Cost	Appraisal Stages
	MoRT&H	Up to Rs. 1,000 Cr. EPCC	1. SFC/ EFC by Secy, RT&H 2. Approval by Minister, RT&H
		Above Rs. 1,000 Cr. EPCC	1. SFC/ EFC by PIB 2. Approval by CCEA
	NHIDCL	Up to Rs. 1,000 Cr. EPCC	1. Appraisal by PATSC followed by SFC/ EFC by Secy, RT&H 2. Approval by Minister, RT&H
		Above Rs. 1,000 Cr. EPCC	1. Appraisal by PATSC followed by SFC/ EFC by PIB 2. Approval by CCEA

**PATSC** – Project Appraisal and Technical Scrutiny Committee

**SFC** – Standing Finance Committee

**PPPAC** – Public Private Partnership Appraisal Committee

**EPCC** – Estimated Project Civil Cost

Further, to strengthen the appraisal and approval mechanism of projects following steps were taken:

1. The NHAI Board was restructured to include officers from outside the MoRT&H with Secretary, D/o Expenditure, Secretary, M/o RT&H, CEO, NITI Aayog and, DG (RD&SS) as its members.
2. The Project Appraisal and Technical Scrutiny Committee (PATSC) and the Internal Appraisal Committee (IAC) were re-constituted by NHAI vide policy circular dated 07.10.2020.
3. To cover all the projects, 4 PATSCs were constituted under the Chairmanship of each Member of NHAI. Besides CGM (Fin), CGM (Tech) and Advisor (Tech) of NHAI, one representative of NITI Aayog (Director and Above) are the members of

each PATSC. The constitution of PATSC with NHAJ with representation of NITI Aayog has ensured proper appraisal of projects before approval of competent authority.

4. The Internal Appraisal Committee (IAC) for appraisal of EPC projects of up to Rs. 500 Cr. is headed by the Member concerned with CGM (Fin), CGM (Tech) and Advisor (Tech) of NHAJ as its members.
5. The Duties of Standing Cost Committee (SCC) are performed by the respective PATSC.

Therefore, guidelines for the appraisal and approval mechanism of Bharatmala Pariyojana including the delegation of powers were suitably discussed with CCEA. The process for appraisal and approval of projects is as per the broad principles of the Government of India for the approval of projects.

Further, it is also submitted that due process of appraisal and approval has been strictly followed in all the projects of Bharatmala Pariyojana. All projects including Dwarka Expressway and Delhi-Mumbai Expressway have been appraised and approved as per the appraisal and approval mechanism laid down by the CCEA”.

**40. When asked whether the decisions on mode of construction taken by NHAJ had sufficient justification and about furnishing the details in this regard and at what level were these decisions taken, the Ministry of Road Transport and Highways replied as under:**

“EPC, being cash contracts, have clearly defined financial risk/out-go whereas in PPP projects, which are long term concessions, higher level of due diligence is prescribed. Powers for approval of EPC projects have been delegated to NHAJ Board by CCEA, with recommendation of strengthening of NHAJ Board and constitution of PATSC by CCEA in BPP-I. The same have been adhered to in BPP-I.

- The NHAJ Board was restructured to include officers from outside the MoRT&H with Secretary, D/o Expenditure, Secretary, M/o RT&H, CEO, NITI Aayog and, DG (RD&SS) as its members.



- 4 PATSCs were constituted under the Chairmanship of each Member of NHAI. Besides CGM (Fin), CGM (Tech) and Advisor (Tech) of NHAI, one representative of NITI Aayog (Director and Above) are the members of each PATSC.

Mode of execution of projects depends upon market conditions in terms of risk appetite, interest rates, overall economic growth and availability of equity. Therefore, it is decided based on the following factors – cost of capital, corridor status, fund availability, market capacity, tolling history and traffic risk.

NHAI Board delegated the powers of selection of mode to the NHAI Executive Committee for the implementation of Phase I of Bharatmala Pariyojana. Further, as per para 7 (b) (X) of CCEA Note for Bharatmala Pariyojana, which is laid down as under,:

“All decision of change of mode of execution will be taken by Board of NHAI or MoRT&H, for their respective rolls, subject to availability of funds and other required conditions.”

Therefore, it can be concluded that NHAI has a robust mechanism in place for deciding the mode of a project, which is in-line with the guidelines prescribed by CCEA”.

**41. When enquired whether the Audit in their report have highlighted that the approval mechanism prescribed by the CCEA was not adhered to by the Ministry and whether the Ministry have furnish the details about the extant mechanism in this regard and whether the same was adhered to in the case of Bharatmala Pariyojana, the Ministry of Road Transport and Highways replied as under:**

“Prior to the CCEA approval of BPP-I on 21.09.2017, recommendation of the Public Investment Board (PIB) vide memo dated June 2017. The recommendation of the PIB was for the development of a total of 34,800 km of National Highway corridors under BPP-I, which included 10,000 km of projects under Residual NHDP”.

**42. When the Committee desired to know about the details of the approvals required prior to CCEA approval for BPP-I and whether the details of important meetings where decisions were taken without the presence of member from NITI Aayog were furnished, the Ministry of Road Transport and Highways replied as under:**

“It may be noted, representatives of NITI Aayog are invariably present in the appraisal of all PATSC meetings for the appraisal of projects. However, due to unforeseen reasons, the representatives could not be present on a few occasions viz., appraisal of Delhi-Vadodara Expressway (Package 17-25) and Shamli-Muzaffarnagar (Pkg.-II) by NHAI. Nevertheless, it is worth mentioning that on both the occasions, the PATSC circulated all the requisite documents for appraisal as per standard practice to all members of PATSC, including NITI Aayog and NITI Aayog supported the project proposal and provided written observations on the proposals. The observation of NITI Aayog regarding the project proposal were suitably addressed and discussed in the PATSC meeting”.

### **Detailed Project Reports**

43. The Committee have learnt that the detailed project reports prepared by consultants were not appraised with due diligence by the Competent Authority before approval of projects. Instances of adoption of different specifications by contractors/concessionaires at the time of execution of projects than what were prescribed by detailed project report consultants, highlighted the fact that specifications of detailed project reports were not found suitable as per site conditions. Further, detailed guidance document for detailed project report consultant was not prepared by NHAI in non-compliance to MoRTH directions.

**44. On being asked whether the detailed project reports prepared by consultants were not appraised with due diligence by the Competent Authority before approval of projects along with furnishing of the details and r the reasons for the lack of due diligence in the appraisal of detailed project reports by the Competent Authority before approval of projects were furnished, the Ministry of Road Transport and Highways replied as under:**

“MoRT&H follows multiple best practices in the preparation of Detailed Project Reports:

- a. DPRs are being prepared as per site conditions/ technical requirements while following the IRC manual for DPR Preparation (IRC SP:19-2020) and supplementary guidelines issued by NHAJ for preparation of DPR for BPP-I
- b. Standard RFP and TOR of MoRT&H have been followed for the appointment of DPR consultants, which includes the detailed scope of work, data sources and technologies to use in the preparation of DPR, etc.
- c. Use of latest technologies including LiDAR, project specific requirements and lessons learnt are suitably incorporated in TOR
- d. Scope of work of the DPR Consultant has also been modified to include Mathematical Modelling of bridges, for all contracts of DPR Consultants

There has been no lack of due diligence in the appraisal of Detailed Project Reports by the competent authority before approval of projects. Following mechanisms are put in place to ensure diligent review of DPR output by NHAJ:

- a. All stakeholders including local people/ Administrative Agencies/ concerned Technical Departments are consulted during the finalization of DPR, and prior to the appraisal of the project.
- b. The output of the DPR consultants is peer reviewed by independent technical experts.
- c. Furthermore, during the PATSC of the highway projects, the Detailed Project Reports are scrutinized in detail and any gaps contained therewith are then corrected through the DPR Consultants.

It may also be noted that MoRT&H takes suitable punitive action against DPR consultants, ranging from monetary penalty to debarment, in the case of lapses in the services provided.

Apart from the above-mentioned practices MoRT&H has also set up DPR Cells in NHAJ, NHIDCL and Roads Wing to

- a. Ensure usage of latest technologies for conducting DPR studies
- b. Improve bridge and tunnel designs
- c. Monitor the quality of DPR, recommend appropriate action for deficiency of DPR and monitor implementation of the penal action”

45. Asked whether any responsibility has been fixed regarding non-compliance of NHA with MoRTH directions to prepare a detailed guidance document for detailed project report consultants and for furnishing the details along with the comprehensive measures did MoRTH take to address the instances of adoption of different specifications by contractors/concessionaires at the time of execution of projects than what were prescribed by detailed project report consultants, **the Ministry of Road Transport and Highways replied as under:**

“It must be noted that detailed design of the project is in the scope of contractor / concessionaire across both EPC and PPP modes of project execution. The designs by the DPR consultant are only indicative in nature and the contractor / concessionaire has the flexibility to optimize the design by adopting latest materials and construction practices in line with the relevant IRC codes indicated in the contract. Further, a portion of cost savings from design optimization is passed on to the authority in the form of tender discounts (as arrived at during the competitive bidding process)”.

#### **Tendering and selection of contractors/ concessionaires**

Instances of irregularities in award of projects by implementing agencies were observed in clear violation of the prescribed processes of tendering, viz., successful bidder not fulfilling tender condition or bidder selected on the basis of falsified documents, award of works without there being approved detailed project reports or based on faulty detailed project report.

46. Asked whether the comments regarding the above Audit observation were furnished along with the details and the reasons for awarding the projects to bidders who did not fulfill tender conditions or who submit falsified documents and whether the Ministry has identified such bidders along with the details about the action taken against such bidders, **the Ministry of**

**Road Transport and Highways replied as under:**

“MoRT&H has robust bid evaluation mechanism. The bids are evaluated by the bid evaluation committee in line with the provisions of the RFP and approved by the Competent

Authority. The conditions of the RFP were strictly followed during the evaluation of the bidders and no violations have taken place in the award of tenders”.

**47. On being asked whether any enquiry has been conducted to find out the officials in NHAI, NHIDCL and MoRTH who colluded in award of such projects and what action is being taken against those officials, the Ministry of Road Transport and Highways replied as under:**

“As part of the Audit of BPP-I, CAG had made certain observations regarding the fulfillment of bid conditions in the award of projects. MoRT&H has already submitted all responses and clarifications as part of the detailed ATN submitted to the CAG. It may be noted that all due processes have been adhered to by MoRT&H in the award of contracts for projects. A few project-specific examples are provided below for illustration of the same.

**Audit has noted below case studies**

**(a) Case Study: Suryapet Khammam**

CAG had made an observation during the Audit of BPP-I that for the project, MoRT&H awarded the work despite the winning bidder not fulfilling tender conditions. The factual positions on the same have been provided below:

- Winning bidder was a JV of Adani Transport (ATL) & Prakash Asphaltting’s & Toll Highways (PATH), with ATL having 74% stake as lead partner and PATH having 26% stake as JV partner.
- RFP required Technical Capacity in the form of revenue of Rs.1217.32 Cr. over the past 5 years and a Financial Capacity in the form of minimum Net Worth of Rs. 304.33 Cr. at the close of the preceding financial year.
- As per the RFP, bidders/ consortia were allowed to represent the technical capacity of their Associates in the bid.
- In the instant case, the technical capacity of the parent company of the lead partner (ATL), viz., Adani Enterprises Limited (AEL), which holds 100% share in ATL, had

the requisite experience in a core sector (power). As such, their experience was eligible for inclusion in the bid and was evaluated as Rs. 1,362.12 Cr.

- Additionally, bidder was required to have minimum experience in highway sector of 25% of TTC i.e., Rs.304.33 Cr. This criterion was fulfilled by the Consortium partner, PATH, which had an eligible experience of Rs.655.04 Cr.
- With regard to the financial evaluation, as per the RFP, bidders/ consortia were allowed to represent the financial capacity of their Associates in the bid. The consortium claimed the net worth of the Associate, as allowed, which was evaluated as Rs. 2,971.41 Cr.

As such, it may be noted that all due processes were followed in evaluation and award of contract for the project Suryapet-Khammam.

#### **(b) Case Study: Dwarka Expressway**

CAG had made an observation during the Audit of BPP-I that for Dwarka Expressway Pkg – I, MoRT&H did not adhere to the tender conditions while awarding work to the winning bidder. The instant case was regarding awarding of the work including the construction of shallow tunnel of 3.6 Km length. The factual positions on the same have been provided below:

- The RFP for the project had a condition that “the bidder shall have completed construction of at- least one (01) deep/ shallow tunnel consisting of single or twin tubes (including tunnel for Roads/ Railways/Metro Rail Irrigation, Hydroelectric Projects etc.) having at-least a cross sectional area of 126 sqm and 0.9 km length.” The condition mentioned in the RFP stated the requirement of cross-sectional area as one of the mandatory evaluation parameters for the bidders, without specifying whether it referred to the gross or the clear cross-sectional area.

- It may be noted that the successful bidder had executed tunnel project with cross sectional area (gross) of 126 sqm and cross section area (clear) of 105 sqm. Initially the Evaluation Committee disqualified the bidder considering that RFP mandated a requirement of cross section area (clear) of 126 sqm.
- Subsequently, the bidder represented against disqualification citing lack of clarity of requirement of cross section (gross/clear) in the RFP.
- Subsequently, the decision to review the evaluation parameters was taken, and after due consideration, an administrative decision based on technical inputs was taken to consider the experience of bidder.
- It must be noted that the decision was also taken to promote the domestic contractor / concessionaire ecosystem in development of tunnels / specialized bridges, wherein the works were predominantly executed by overseas players in the past. Moreover, this representation from the bidder was accepted before opening of financial bids.
- It is also worth mentioning that at the time of award of the project, there was limited understanding among officers as well as contracting industry on the interpretation of the clauses in the RFP which led to the initial disqualification of the bidder.
- In order to have clarity in bidding parameters and to avoid repetition of such situations in future, it has been decided to modify RFP clearly mentioning qualification criteria as Gross Sectional Area.

**(c) Case Study: Lucknow Ring Road (Pkg IIIB)**

In the case of awarding the project work of Lucknow Ring Road (Pkg.-IIIB), CAG had made an observation regarding the submission of falsified documents by the bidder. The factual positions on the same are elaborated below:

- In this case, bids were invited on 18.10.2016 and received on 15.12.2016. The project of Lucknow Ring Road was awarded on 03.01.2017 to L1 bidder and agreement was signed on 3.1.2017.
- Post the award of the project, a complaint (dated 18.03.2017) was received in NHAI regarding the credentials of one of the projects of the bidder. In order to ensure transparency in bidding process, it was decided that qualification to be re-examined for already awarded projects and accordingly, re-evaluation of technical bid of L1 bidder was carried out.
- During this re-evaluation, the work of 1 project previously executed by the bidder viz., “Four laning of HisarDabwali” was removed from the experience of the bidder. The non-consideration of this project would have reduced the technical capacity of the M/s GCL to Rs.1,030.53 Cr, which would have fallen below the minimum required technical capacity of Rs. 1,126.70 Cr.
- However, during the same re-evaluation process, it was also noticed that another work previously executed by the bidder viz., “Construction of master road sector 75 to 89 Faridabad”, which was initially considered in Category 4 was applicable for qualification under Category 3.
- Based on the above developments, a clarification was also sought from the bidder vide letter 22.09.2017. Clarification from the bidder was received on 26.09.2017, post which a decision was taken to consider the experience of the second project in Category 3. This resulted in revised Technical Capacity of Rs. 1,151.08 Cr. which was higher than requirement of Rs 1126 Cr.
- The Authority also issued a stern warning to the contractor, for the initial misrepresentation of the technical capacity. It may be brought out that the entire exercise of re-evaluation was done to ensure sanctity and transparency of bidding process.

**(d) Case Study: Churachandpur Tuivai (Pkg 2B)**

In the case of awarding the project work of Churachandpur Tuivai (Pkg.-2B), CAG had made an observation that the project was awarded despite the assessed bid capacity of the



bidder being less than the required bid capacity. The factual positions on the same are elaborated below:

- As per RFP for the project, Bid Capacity is to be calculated as per formula given in RFP which is  $(A \times N \times 2.5 - B + C)$ , where,
  - N = Number of years prescribed for completion of work for which Bid is invited.
  - A = Maximum value of civil engineering works excluding the amount of bonus received, if any, in respect of EPC Projects executed in any one year during the last five years (updated to the price level of the year indicated in table at Note-3 below) taking into account the completed as well as works in progress. The EPC projects include turnkey project/ Item rate contract/ Construction works.
  - B = Value (updated to the price level of the year indicated in table at Note-3 below) of existing commitments, works for which Appointed Date/Commencement Date has been declared or on-going works to be completed during the period of completion of the works for which BID is invited. For the sake of clarification, it is mentioned that works for which LOA has been issued but Appointed Date/ Commencement Date not declared as on Bid Due Date shall not be considered while calculating value of B.
  - C = The amount of bonus received, if any, in EPC Projects during the last 5 years (updated to the price level of the year indicated in table at Note-3 below).
- The Bidder submitted the details of 08 projects. Out of which, bidder relied upon 05 projects for the purpose of calculation of technical threshold capacity as well as the value of A (Rs. 186.75 Crores) in the Bid Capacity and 03 projects for the purpose of calculation of value of B (Rs. 416 Crores) in the Bid Capacity.
- Based on the above, the Bid Capacity has been calculated as Rs.526.03 Crores  $(186.75 \times 2 \times 2.5 - 416 + 8.28)$ .

Therefore, it may be seen that the bid capacity has been calculated as specified in RFP and bidder fulfills qualification criteria laid down in RFP”.

### **Execution of Projects**

Acknowledging the fact that projects were stuck due to land not being handed over to contractors/concessionaires, MoRTH apprised CCEA that projects would be awarded under BPP-I only after ensuring availability of requisite land. However, Audit observed that implementing agencies were still awarding projects without ensuring availability of requisite land resulting in delayed commencement of projects construction and their completion.

46. Enquired whether the Ministry was aware of awarding projects without ensuring the availability of requisite land along the action which has been taken against the implementing agencies for such irregularities, [the Ministry of Road Transport and Highways replied as under:](#)

“The requirements for Land Acquisition to be completed before award and appointment of projects is as per the Model Concession Agreements (MCA) for all the modes of implementation. These MCAs are approved by competent authority on recommendation of inter-Ministerial Committee (IMC) which has representation from key Ministries/Department. In the case of HAM projects, the Authority must grant access to 80% of the RoW to the concessionaire and to 90% of the RoW in case of EPC and BOT (Toll) projects. Additionally, the earlier criteria of ensuring 3(D) for 80%/ 90% of land at the time of Award has been made more stringent, and changed to 3(G) for 80%/ 90% of land at the time of Award

A summary of the Land Acquisition and Clearances policies for ensuring project readiness is shown in table below:

<b>Project Stage</b>	<b>Land Acquisition</b>	<b>Environment Clearance</b>	<b>Forest Clearance</b>
<b>Pre Appraisal</b>	EPC: 90% 3(A) PPP: 80% 3(A)		
<b>Appraisal &amp; Approval</b>	EPC: 90% 3(D) PPP: 80% 3(D)	Approval of Terms of Reference by MoEFCC	
<b>Award</b>	EPC: 90% 3(G) PPP: 80% 3(G)	Environment Clearance	
<b>Appointed Date</b>	EPC: 90% Possession		Stage I clearance (working

	PPP: Possession	80%		permission)
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In view of the above stated policy, MoRT&H ensures all the requirements are met before awarding the projects under BPP-I. MoRT&H admits that there were instances where the requirements for Land Acquisition could not be met prior to the awarding of the projects due to on-ground challenges like disputes and arbitration. As a result in such exceptional cases, keeping a view of expediting the project, award of works was done prior to obtainment of the requisite amount of land as per policy. Project specific responses on the same have also been furnished by MoRT&H as part of the ATN submitted to the CAG”.

### **Monitoring mechanism for BPP projects**

47. C & AG in their Audit Report stated that MoRTH should consider setting of outcome parameters for the corridors/projects selected under BPP-I and establish a monitoring mechanism for the same as directed by CCEA. The Ministry replied as follows-

“Recommendation has been noted for compliance. It is submitted that MoRT&H already sets outcome parameters for the reduction in travel time and savings on fuel consumption from the development of National Highways. The same are assessed during the DPR of the project. The riding quality and user experience on NH are also monitored through NSV surveys which are conducted every 6 months post completion of the project. As recommended by the CAG, MoRT&H has already commissioned a study at IIM Bangalore in order to study the impact of the BPP-I. Based on the outputs and findings of the study, suitable outcome parameters will be considered and tracked to verify the impact of BPP-I. Furthermore, in line with the recommendations of the CAG, a decision has been taken up to set-up the monitoring mechanism by MoRT&H. The mechanism will become functional within 6 months.”

(Ref: Page 5 of Background Note received from Ministry for Sitting on 19.2.24)

### **48. Optimal and efficient management of resources**

C & AG in their Audit Report stated that MoRTH may carry out an in-depth analysis, based on accurate ground level data, while proposing a scheme of this magnitude in future so as to ensure efficient management of resources and optimal project outcomes. The Ministry replied as follows-

"Recommendation has been noted for compliance in formulation of future programmes. The analysis done for the network planning of BPP-I have been detailed in the detailed response to CAG observations.

As a matter fact, the entire network of Bharatmala Pariyojana was identified by MoRT&H through a detailed scientific study.

Furthermore, on the CCEA approved network of 64,942 km, MoRT&H carried out a detailed optimization exercise which resulted in the decrease of length of the network to 64,675 km.

Thereafter, a methodical exercise was followed for the prioritization of NHAI projects where they were prioritized into categories of high, medium and low priority. This was done based on the factors of corridor completion as well as average expected traffic in the corridor. Furthermore, new corridors under the categories of NEIP and Expressways were also prioritized due to their high traffic volumes.

However, MoRT&H concedes that there have been challenges on the ground in the award and execution of projects due to factors such as land acquisition, clearances as well as arbitrations in LA.

Currently MoRT&H is drawing up plans for the next phase of highway development beyond the BPP-I. The observations of the CAG are duly noted and the learning from BPP-I will be incorporated in order to ensure the efficient resource utilization as well as on-ground execution for such future programmes."

(Ref: Page 6 of Background Note received from Ministry for Sitting on 19.2.24)

#### **49. Acquisition of land in excess of the requirement**

While reviewing 66 projects, Audit observed that in the following cases, implementing agencies acquired excess land either due to oversight or deficient scrutiny of faulty detailed project reports: 6.1.2.1 Dwarka Expressway (Pkg.-I) NHAI acquired excess land of 2.29

hectares (5.65 acres) from Airports Authority of India (AAI), at 50 per cent of the market value, as against the condition of AAI transferring necessary land meant for project construction to NHAI. This parcel of land being adjacent to the other land acquired, was of no use to AAI. In fact, NHAI also did not have any plan to use such land for the project or otherwise at the time of acquiring it, but still NHAI acquired it and for this land parcel AAI has raised claim of Rs. 105.61 crore. MoRT&H admitted (April 2022) acquisition of excess AAI land because the same was not usable for AAI. It further admitted the fact of possibilities being explored to make use of said land for development of tunnel command centre/amenities etc., for Dwarka Expressway. Thus, land for which AAI was claiming Rs. 105.61 crore was acquired by NHAI without planning its usage at the time of project appraisal and approval and now possible ways to justify such acquisition were being explored.

(Ref: Page 42 of Action Taken Notes as provided by the Ministry)

**50.** The Ministry in their Action Taken Notes stated as follows-

”A response to this observation in the draft audit report dated 13.01.2022 was provided by MoRT&H vide letter dated 26.04.2022 (Para 5.1.2(i) of the MoRT&H response). An updated response to the same is mentioned below. 2. The issue of excess land acquirement on certain projects is mainly due to the following reasons: Inaccuracy of revenue/ land records and maps available with the State Revenue Department, Deficiencies in DPR reports regarding accuracy of the land to be acquired along the RoW , Need to improve usability/ viability of land 3. With regard to the acquisition of excess land from the Airports Authority of India (AAI) at a discounted rate, MoRT&H had already accepted the observation in its response sent to the CAG in April 2022. The detailed response is mentioned below: 4. During the meeting between the Secretary, MoRT&H & the Secretary, Civil Aviation, in January 2018, it was decided that the excess land of Airport Authority of India (approx. of 5.65 acres) was not usable from AAI’s perspective as it was getting landlocked due to the development of Dwarka Expressway tunnels, by NHAI. It is worth mentioning that no access could have been provided to the said land parcel of 5.65 acres without compromising road safety for the users. Accordingly, it was decided in the same meeting that the excess land of 5.65 acres would be transferred by AAI to NHAI at 50% of the market value of the land. MoRT&H is exploring different possibilities to

make use of said parcel of land including the development of tunnel command center as well as amenities as part of Project Technical requirement.”

(Ref: Page 42 of Action Taken Notes as provided by the Ministry)

51. Also the Committee found through C &AG that in the matter of the Dwarka Expressway, MoRTH has accepted the Audit observation that the land measuring 5.65 acres was acquired as it was of no use to AAI and MoRTH was still exploring the options to use it.

(Ref: Page 42 of Action Taken Notes as provided by the Ministry)

## **52. Monitoring and Information Technology**

To achieve the objectives of Bharatmala Pariyojana, it is imperative that proper monitoring of the project is undertaken by deploying suitable information technology tools.

### **53. Monitoring of Bharatmala Pariyojana by Public Investment Board and CCEA**

The Audit noticed that CCEA directed the MORTH, in consultation with NHAI and NHIDCL, to bring out a consolidated progress report of all the sub-projects of BPP-I for review of Public Investment Board in December/June every year with a view to avoid cost and time overruns, and the same, along with Public Investment Board review report, was to be placed before CCEA and its guidance was to be obtained. However, no institutionalised system of half yearly review of Bharatmala Pariyojana has been observed resulting in time and cost overruns.

54. Enquired as to how the Ministry will justify its failure to establish a system of half-yearly review of Bharatmala Pariyojana by Public Investment Board and CCEA, and the consequences of such irregularities, the Ministry in their written reply stated as under:

“The progress of Bharatmala Pariyojana is communicated and reviewed frequently through multiple channels and presented in every board meeting of NHAI. Furthermore, there have been multiple reviews and discussions with the PIB and CCEA. The process of examination of a revised investment for Bharatmala Pariyojana by PIB was initiated in December 2021.

This was evaluated in PIB meetings dated 19.04.2022, 22.04.2022 and 31.05.2022 and subsequently recommended by PIB in minutes dated 19.05.2022. A CCEA note for revised investment was also circulated for consultation on 06.10.2022. Hence, there have been no irregularities in timely review of projects of BPP-I with PIB and CCEA.”

The audit also recommended that MoRTH should ensure compliance with the framework stipulated by CCEA for effective monitoring and audit of physical and technical parameters of BPP-I. Responsibility needs to be fixed for non-compliance of CCEA directions till date.

55. The Ministry in their status note stated as under:

“MoRTH had submitted the progress report for BPP-I, as mandated in CCEA approval, on 17<sup>th</sup> May 2019. The process of examination of a revised investment for Bharatmala Pariyojana by PIB was initiated in December 2021. This was evaluated in PIB meetings in April and May 2022 and subsequently recommended by PIB in minutes dated 19<sup>th</sup> July 2022. A CCEA note for revised investment was also circulated for consultation on 6<sup>th</sup> October 2022.

The 6-monthly progress report post the PIB recommendation has been submitted for March 2023. The progress report will be submitted subsequently as per the approved guideline.

Additionally, MoRTH has ensured compliance to the framework stipulated by CCEA for the effective monitoring and audit of physical and technical parameters of BPP-I through multiple monitoring mechanisms including,

- Regular updates to NHAI Board which has representation from multiple agencies similar to PIB
- Periodic reviews with stakeholders (internal and external)
- Internal Audit Committees in line with the specified guidelines and
- Appointments of a third-party Audit agency

4. All observations from the aforementioned reviews/audits are noted and necessary action is taken to comply with the same.

5. Similar action will be taken on the recommendations of the third-party audit of BPP-I by MDI, Gurgaon.

6. In addition, MoRTH has also commissioned a study at IIM Bangalore to measure the achievements and outcome parameters of the BPP-I. The same will be also be used as a framework for evaluating the impact of the programme.”

#### 56. **Audit of Physical and Technical Parameters**

The audit revealed that the technical and physical parameters of BPP-I appeared to have been neither reviewed by an independent agency nor the same was provisioned in the internal audit.

On being asked why the Ministry did not adopt independent audit of physical and technical parameters of BPP-1 and its projects, the Ministry in their written reply stated as under:

“MoRTH has awarded the Third-Party Audit of Bharatmala Pariyojana to the Management Development Institute (MDI), Gurgaon and Indian Institute of Management Bangalore (IIMB). Observations from both the audits are highlighted below:

- The Audit conducted by MDI is in progress and reports will be submitted by MDI to MoRTH.
- Preliminary findings of the study conducted by IIM Bangalore highlighted following benefits of Bharatmala Pariyojana
  - Economic Impact: 9% increase in household income, 6% increase in household expenditure, 10.4% increase in car sales etc.
  - Logistics Impact: 2.94% and 1.33% decrease in cost of transportation between the factory and the supplier and between factory and the customer respectively etc.
  - Business Impact: 9% increase in Mandis accessed by farmers, 19% increase in accessibility to factories etc.
  - Social Impact: 16.6% decrease in time to access schools, 8.9% decrease in time to access health services etc.

Apart from the independent audits, there are internal audits as well to keep regular check and balances on the progress of the projects. The factual positions and Internal Audit mechanism of NHAI is submitted as follows:



- All the Internal Audit Reports for the period from 2017-18 to 2020-21 had already been provided to the Audit team including Critical Analysis Report (CAR) for the period 2017-18 to 2019-20
- CAR comprising significant audit observations of the Internal audit reports are furnished by the concerned PIUs which are reviewed and consolidated by the HQ auditors to prepare the CAR of the NHAI as a whole.

This is a continuous process, and all the Audit paras are pursued till settlement. The highlights of the CARs are eventually submitted to the Board Level Audit Committee of NHAI.”

57. On being enquired whether the Ministry has fixed responsibility for non-compliance of CCEA directions till date, the Ministry in their written reply stated as under:

“The progress of Bharatmala Pariyojana is communicated and reviewed frequently through multiple channels and presented in every board meeting of NHAI. Furthermore, there have been multiple reviews and discussions with the PIB and CCEA. The process of examination of a revised investment for Bharatmala Pariyojana by PIB was initiated in December 2021. This was evaluated in PIB meetings dated 19.04.2022, 22.04.2022 and 31.05.2022 and subsequently recommended by PIB in minutes dated 19.05.2022. A CCEA note for revised investment was also circulated for consultation on 06.10.2022. Hence, there have been no irregularities in timely review of projects of BPP-I with PIB and CCEA.”

58. On being asked whether it is a fact that additional information and facts were provided to Audit by MoRTH only after the Report was laid in Parliament, the Ministry in their written reply stated as under:

“The performance audit of Phase I of Bharatmala Pariyojana was initiated by the CAG in October 2020. Based on the Audit, CAG issued the Draft Performance Audit Report to MoRTH in January 2022. It may be noted that MoRTH had responded to the draft audit report of CAG in April and May 2022. However, MoRTH could not furnish the response to the final draft report circulated by CAG in July 2022, before the final report was tabled in the Parliament in August 2023. But within 1 month of the report being tabled in the Parliament, MoRTH submitted detailed ATNs for all observations and recommendations mentioned in the Audit report.

59. **Project Monitoring Information System:-**

The Audit observed that the Project Monitoring Information System was developed for MoRTH, NHAI and NHIDCL to monitor and track the progress of all projects but due to usage of two different applications by three organisations (Data Lake by NHAI and PMIS by MoRTH and NHIDCL), there was no data integration on a single IT platform resulting in no centralised monitoring and analysis of data for better project management. Besides, there was mismatch in data available on PMIS and data being maintained by MoRTH/NHIDCL.

The audit recommended that the Project Monitoring Information System should be integrated with Data Lake and enhanced with requisite functionalities in order to present a holistic position of status of projects of all implementing agencies on a single platform to enable adequate monitoring and input/ data validation.

The Ministry in their status note stated as under:

“An integrated MoRTH Dashboard is being used for centralised monitoring of projects across all implementing agencies. It is already integrated with PMIS and Data Lake. Integrated MoRTH Dashboard is used for analysis of data for better project management and this presents a holistic position of status of projects of all implementing agencies on a single platform. Further, MoRTH is assessing the feasibility of setting up a single platform for project monitoring across all its agencies.”

#### 60. **Bhoomi Rashi Portal**

The Audit found that in case of NHAI and NHIDCL, the compensation to the beneficiaries was being made in offline mode without using Bhoomi Rashi portal in NHAI/ NHIDCL and the details related to surplus land was not available on the portal.

The audit also recommended that MoRTH should ensure early integration of Public Fund Management System with NHAI and NHIDCL for seamless financial transactions so that timely payment to beneficiaries could be ensured.

The Ministry in their status note stated as under:

“Bhoomi Rashi portal is already integrated with the Public Fund Management System (PFMS) for processing LA compensation on real time basis so as to avoid parking of funds w.e.f. 15.10.2018.

MoRTH has already mandated that the payments to land owners need to be done in the digital domain by leveraging the functionalities of the Bhoomi Rashi portal.

The online payment of compensation for land acquisition for the projects under NHAI is already enabled through Bhoomi Rashi portal. Further, work is under process for payment through Bhoomi Rashi for projects coming under NHIDCL and the same would be operational within next 3 months after detailed testing.”

### **61. Comprehensive ERP System (eDISHA)**

The Audit observed that there was substantial delay in completion of various phases of Comprehensive ERP System (eDISHA) and the implementation of the project was not being adequately monitored.

The audit also recommended that MoRTH should ensure timely completion of all pending phases of eDISHA so that centralised data and information is available in a single platform for all the three implementing agencies.

The Ministry in their status note stated as under:

“Implementation of required functionalities has been completed and now the eDISHA project is in O&M phase. All the data of eDISHA is stored in a centralised database. Adoption of key ERP eDISHA applications is gradually increasing and accordingly support requests are continuously coming from the various Stakeholders.”

**62.** The Public Accounts Committee (2023-24) took oral evidence of the representatives of Ministry of Road Transport on the Report no. 19 of 2023 at their Sitting held on 20th February, 2024. On the basis of oral evidence and the written information obtained on various aspects of the Report under consideration, the Committee made in depth examination of the subject, the recommendations of which are brought out in the succeeding paragraphs in Part II of the Report.

## PART-II

### OBSERVATIONS/ RECOMMENDATIONS

The Committee note that a National Highway network of 64,942 km of NH network was initially identified in Bharatmala Pariyojana. Out of this, the Cabinet Committee on Economic Affairs (CCEA) had approved the development of 24,800 km as a part of Bharatmala Pariyojana Phase I (BPP-I) on 24th October 2017. Further, CCEA had also approved development of 10,000 km of residual NHDP projects. The CCEA approval for the implementation of BPP-I was for a period of 5 years (2017-18 to 2021-22) at an outlay of Rs. 5,35,000 Crore. Of the total outlay, Rs. 3,85,000 Cr. was allocated for new projects to be awarded under Bharatmala Pariyojana (24,800 km) and Rs. 1,50,000 Cr. for residual NHDP projects (10,000 km). Subsequently, a process for the PIB appraisal of the revised cost estimate for BPP-I was initiated in January 2022. Further, as of 23rd November 2023, out of 34,800 km of network under BPP-I, 26,418 km has been awarded at a cost of Rs. 8.45 lakh Cr. Furthermore, MoRT&H has also completed the construction of 15,959 km of NH under BPP-I as of 31st January 2024. The Performance Audit of BPP-I was carried out by CAG to assess achievement of defined objectives and the execution of NH development under the program. Audit pointed out shortcomings in several key areas, including project selection and prioritization, financial oversight, contract award processes, project execution and contract management, as well as the effectiveness of the monitoring system in place to ensure the Pariyojana's objectives on the basis of sample projects as well as on the overall planning and implementation of the Phase-I of the Bharatmala Pariyojana. The Committee arrived at certain recommendations and observations on the basis of the written material

available before them, the record of evidence tendered by the representatives of the Ministry etc., which are brought out in the succeeding paragraphs of the Report.

2. The Committee note that for undertaking the Audit of Bharatmala Scheme, an Entry Conference was held on 27 October 2020 by CAG with MoRT&H, NHA and NHIDCL, wherein the scope & coverage of audit, audit objectives and criteria etc., were explained. Consequent to the review by CAG, the Draft Performance Audit Report was issued to MoRT&H on 13 January 2022 for the confirmation of facts and figures contained therein and to seek MoRT&H's reply. Draft Audit Report was followed by issuance of two supplementary Audit observations to MoRT&H on 22 February 2022 and 17 May 2022. MoRT&H furnished its replies on 26 April 2022, 28 April 2022 and 02 May 2022. An Exit Conference was held on 19 May 2022, wherein major Audit findings and recommendations were discussed with MoRT&H and NHA Management. The Committee further note that the MoRTH did not furnish replies to the revised Audit Report issued in June 2022, inspite of two reminders issued in September 2022 and May 2023. CAG presented the final report "CAG Report No. 19 of 2023" on 10 August 2023. The Committee take strong exception to the non submission of replies by MoRTH on the audit observations and recommend that some kind of responsibility be fixed for this sheer ignorance of the importance of constitutional authority and further desire that a timeframe be prescribed by the CAG for submission of replies by the Ministries concerned and any delay/ non-submission may be escalated to the highest level.

3. The Committee observe that the CCEA approved the implementation of BPP-I with the objective of optimising the efficiency of the movement of goods and people across the country and improving Logistics Performance

Index of India *inter-alia* by bridging critical infrastructure gaps and optimal resource allocation for holistic highways development/improvement initiative. However, though the national highways contributed to carrying 40 per cent of the total road traffic of India, MoRT&H did not set any target/milestone/action plan, in furtherance to Bharatmala Pariyojana including BPP -I, to improve LPI by developing quality infrastructure in the form of national highways network. Further, the CCEA directed for laying down of outcome parameters like reduction in time of travel, fuel efficiency, accident reduction, comfort in riding and user satisfaction for every selected corridor and monitoring thereof. However, the MoRT&H did not set any target for achievement of measurable outcome parameters such as accident reduction, comfort in riding and user satisfaction etc. and no mechanism was established to monitor achievement of reduction in time of travel and fuel efficiency that were laid at the time of selection of corridors/projects. The Committee observe that the Logistics Performance Index (LPI) is an interactive benchmark tool developed by World Bank to help countries identify challenges and opportunities faced by them in their trade logistics. It also suggests ways to overcome the challenges. Such benchmark is based on ground surveys, whereby feedback is taken from operators (global freight forwarders and express carriers) worldwide. As per the reply of the MoRT&H's that LPI is a multifaceted index influenced by various factors and improvement in National Highway infrastructure is only one aspect contributing to LPI enhancement and that setting specific targets for LPI improvement based on subjective perception surveys pose challenges. The Committee while noting that DPIIT is the nodal Ministry for monitoring LPI and that the LPI rank of India was 44 in 2018 (3.18/5.00), at the time of initiation of BPP -I, which improved to rank 38 in 2023 would like to be

apprised of the challenges faced by the operators, in regard to the National Highway Infrastructure in India, as identified in the LPI Report 2023 and the measures taken by the DPIIT/ MoRTH to mitigate them. The Committee further note that MoRTH has commissioned a study through IIM Bangalore in order to assess the impact of the BPP –I and based on the outputs and findings of the final study, suitable outcome parameters will be defined and targets will be set to measure the improvement of Logistics Efficiency through the infrastructure being developed under BPP-I. The Committee also note that MoRT&H will set up monitoring mechanisms in next 6 months for all the outcome parameters adopted to evaluate the achievements of the BPP-I. The Committee wish to be apprised of the final findings of the IIMB study and also desire that the monitoring mechanisms be put in place within the next six months, as proposed. The Committee while noting that the ride quality on highways is mandated through contractual provisions and monitored through Network Survey Vehicle (NSV), surveys done every 6 months post completion of the project would like to be apprised of the major findings of such surveys conducted on the completed projects and the average time taken vis-à-vis the stipulated timelines to initiate corrective action thereon. The Committee also desire that an annual highway user survey may be undertaken by the MoRT&H to serve as a key performance indicator for overall highway user satisfaction that may include parameters such as journey time, road safety, works management, availability of information, facilities and surface quality.

4. The Committee take note of the fact that there were significant delays in projects of NHDP, that were merged into BPP-I without resolving the impediments viz., availability of RoW and requisite clearances and that their inclusion vitiated the objective of ensuring seamless connectivity and resulted in

the blockage of funds which could have been utilized in development of other stretches. The Committee note from the reply of the Ministry that the Audit observation on taking up of NHDP projects without resolving impediments was based on only a sample of projects whereas Residual NHDP projects taken up in BPP-I were key high-traffic density corridors and critical for efficient freight and passenger movement. The progress of award and construction for these projects was comparable to the remaining projects under BPP-I and out of the 10,000 km under Residual NHDP, 6,648 km length was awarded, and 4,037 km was already constructed as of July'23 and maximum efforts were being made by MoRT&H on the ground to ensure the availability of requisite RoW as well as clearances before the award of projects and future projects under BPP-I as well as other programmes, would be taken up by MoRT&H only after ensuring the availability of land and requisite clearances as per contract provisions. Further, the Committee have been apprised that a Committee is being set-up in the Ministry to further strengthen the mechanism. The Committee while opining that the crucial factors such as RoW and mandatory clearances should have been taken care of before committing funds towards these languishing projects, recommend that the projects that have been awarded be completed within the stipulated timelines and the issues may be resolved on priority for the remaining 3,352 km. The Committee desire that the Ministerial Committee proposed to be set up for strengthening the mechanism may be constituted urgently with a time bound mandate. The Committee desire to be apprised of the progress made in this regard.

5 The Committee learn that as per CCEA approval, development of MMLPs at strategic locations (including connectivity of logistic parks) was made part of National Corridors/National Corridors Efficiency Improvement component of BPP -



I so as to enhance logistics efficiency. The SOP, issued by MoRT&H, on BPP -I further elaborated the role of NHA in development of MMLPs by stating that NHA would be responsible for development of MMLPs, for improving efficiency of corridors, in line with the policy issued by Ministry of Commerce and Industry. NHA was also made responsible for approving concession agreement for MMLPs. As on 31 March 2023, based on pre- feasibility studies and feasibility studies, idea of three MMLPs and two MMLPS respectively were dropped whereas in 15 MMLPs only pre -feasibility study was completed. Work for feasibility study in respect of one MMLP was awarded whereas for another, MMLP contractor had been appointed and SPV formulation work was in progress. Responsibility of development of the MMLP at Guwahati was transferred from NHA to NHIDCL. The Committee observe that the development of Multi Modal Logistics Parks (MMLPs) under Bharatmala Pariyojana Phase-I (BPP-I) faced significant delays and none were accomplished by March 2023. The Committee note from the reply of the Ministry that subsequent to CCEA approval, there were discussions with DPIIT and other stakeholders on the implementation mechanism for these MMLPs. There was a lack of initial clarity regarding the responsibility of different Ministries / Departments in execution of Multimodal Logistics Parks (MMLP), as multiple Government Ministries / Departments (NICDIC, CONCOR) were planning development of Multimodal Logistics Parks. Further, identification of suitable land parcel in coordination with State Government agencies resulted in delays in implementation. Finally, it was decided that MoRT&H will be responsible for development of 35 MMLPs, as approved by the CCEA as a part of BPP-I. To expedite the process, MoRT&H did set up the National Highways Logistics Management Limited (NHLML) as a wholly-owned subsidiary of NHA in September 2020. The Ministry prioritized 15 MMLPs for development under BPP-I, and funding for their external trunk infrastructure was included in the revised cost

estimate for BPP-I, approved by the Public Investment Board (PIB). Out of these the Committee learn that 4 MMLPs have been awarded and are in various stages of development. Furthermore, bids have been invited for 3 more MMLPs and a project specific SPV is being formed for each MMLP with the relevant stakeholders with clearly defined roles and responsibilities and with equity contribution in line with their investment. The Committee while noting that delays in developing MMLPs are *inter-alia* attributable to initial confusion arising due to involvement of multiple ministries and departments without clearly defined roles and responsibilities and issues in identification of suitable land parcel in coordination with State Government agencies, are of the considered opinion that these eventualities were not unforeseeable and, therefore, while visualizing such parks appropriate mechanisms should have been provided for to achieve the desired objective of facilitation of efficient and seamless freight movement in the country. The Committee here can only recommend that the 4 MMLPs where work has been awarded may be completed within specified timelines and for the 8 MMLPs where bids are yet to be invited, prioritization may be done after reviewing their project preparation status and the Committee be apprised of the status of 3 MMLPs where bids have been received.

6. The Committee note that to construct the length of 34,877 Km the NHAI Board approved (16 November 2017) funding requirement of Rs. 7,15,523 crore to be spent up to 2022-23 under BPP-I on the ground that proposal to CCEA did not include debt servicing cost and operation & maintenance cost. The funding requirement of BPP-I was further enhanced to Rs. 10,40,526 crore and then to Rs. 10,55,268 crore by NHAI on the grounds that proposal made to CCEA differed from ground situations. The Committee also note that as against

average CCEA approved civil cost of Rs. 13.98 crore per km, the actual sanctioned cost was Rs. 23.89 crore per km i.e., 170.89 per cent of the average approved cost and as against average CCEA approved pre -construction cost of Rs. 1.39 crore per km, the actual sanctioned pre -construction civil cost was Rs. 8.28 crore per km i.e., 595.68 per cent of the approved cost. While enhancing the funding requirement, NHAI justified the same by stating that land acquisition cost was 2.4 times to three times (both in extent and cost), and civil construction cost was 1.2 times of what was proposed to CCEA besides higher quantum of high-speed corridors, increased finance cost on costly projects and short receipts from Government of India than approved by NHAI Board. The Committee note that NHAI Board also approved BPP-I financing plan higher than that was approved by CCEA for Government financial support and market borrowings. The Committee note from the Audit observation that the sources of funds required over and above the approved financial outlay of Rs. 5,35,000 crore and for the remaining national highway length was not approved by CCEA. The Committee observe from the reply of the MoRTH that the issue of increase in cost has been appraised by PIB and a proposal for revised cost estimates has already been submitted and the CCEA has not yet approved the increased cost sanctioned/committed. The Committee further note from the submission of the Secretary that the reasons for cost escalation inter-alia were, wrong estimation of land required in terms of area required for acquisition resulting in increase of more than Rs. 2,50,000 crore in the cost estimates, implementation of new Land acquisition Act and that the earlier estimation was a preliminary estimation done on the basis of projects which had been approved earlier. The Committee while noting that after awarding only 75.62 per cent of CCEA approved length, 158.24 per cent of CCEA approved financial outlay had been sanctioned by the NHAI Board are of

the considered opinion that grossly inadequate physical and financial planning by NHAI/ MoRTH for a significant project resulted in cost and time overruns and thereby resulting in higher funding requirements. The Committee also observe that no new projects will be awarded till the approval is given by the CCEA and recommend that henceforth comprehensive planning at the Schematic level may be done by involving technical and financial experts and other stakeholders for better understanding of the existing and expected/probable scenarios and for a long term futuristic approach to enable adequate provisioning so as to ensure that implementation of projects under the Scheme is not held up for want of approvals.

7. Audit observed that there was variation from the NHAI Board approved modal mix as a meagre national highways length of 1.75 per cent was being developed under BOT (Toll) mode as against 10 per cent approved for this mode of construction whereas 48.35 per cent and 49.90 per cent of national highways length were being constructed under EPC and HAM mode respectively as against 30 per cent and 60 per cent approved respectively for these modes. The Committee note that projects constructed under EPC and HAM modes are also monetized after 2 years of project completion and established tolling history, through TOT and InvIT mechanisms, wherein revenue risk is passed on to the investors without construction risk. The Committee while noting that in spite of governmental push for BOT(T) as a mode, there has been muted participation in recent years and in light of the challenges with respect the same, effort has been made to focus on awarding projects on HAM mode, recommend that all decisions on mode of execution may only be taken after considering availability of funds, RoW and statutory clearances, risk profile of the investors and prevailing market conditions so that the concessionaires complete the projects within prescribed timelines, for

guaranteed price while meeting specified standards. The Committee also desire to be apprised of the concrete steps taken to harmonise maintenance clause of HAM projects with EPC/BOT agreements to maintain roads in traffic worthy and safe conditions during construction period.

8. As per Audit, various deficiencies/ discrepancies were observed during review of escrow account statements of Public Private Partnership projects due to poor monitoring of escrow account by NHAI in violation of contractual clauses resulting in diversion of funds to the tune of Rs. 3,598.52 crore by concessionaires and short infusion of concessionaire's share of equity by Rs. 32.34 crore. The Committee note that NHAI had an option to appoint, during construction period, concurrent auditors to undertake concurrent audit of the concessionaire's accounts, however, no such concurrent audit was conducted by NHAI. The Committee further note from the reply of the Ministry that as per the Forensic Audit Report there are no fault findings in terms of TOR except the non-payment of premium for which Concessionaire has raised issue of not achieving Actual COD. Further, the MoRT&H acknowledged that there were no definite processes in place for the review of fund movements from escrow accounts and evaluations were done on a case-by-case basis. The Committee while noting that MoRT&H will set up concurrent audits for all escrow accounts over the next 6 months and that concurrent auditors would be appointed within 3 months of appointed date in all future projects and programmes of MoRT&H recommend that timelines may be specified for taking remedial action on the observations made by the concurrent auditors and any delay in the appointment of the concurrent auditors may be condoned only at the highest level. Further, the Committee desire to be apprised of the action taken on the observation of the Forensic Audit regarding non-payment of premium by the Concessionaire.

9. The Committee note that MoRTH had in the SoPs instructed that given the scale of investment and consequent asset base creation, prudence in accounting and financial planning/management was essential to meet fund requirements of current and future projects. However, NHAI did not maintain any records in respect of BPP-I specific funds being received/ raised during the period from 2017-18 to September 2022. The Committee further note from the reply of the NHAI that as per NHAI Act, all the receipts of NHAI are accounted for in the NHAI fund to cater to all expenditure. There is no Bharatmala Pariyojana specific fund separately maintained by NHAI and further, the borrowings made by NHAI are also credited in a common pool and spent on projects on 'as and where required' basis. Subsequent to series of meetings with CAG, Annual Accounts for the Financial Year 2019-20 were prepared based on project accounting, however, it was advised to carry out the reversal of project accounting and prepare a revised format. A comprehensive proposal for revision of format of accounts prescribed by CAG was submitted in June 2022 and CAG accepted some of the proposals during April 2023. The Committee note from the Audit comments that the proposal for revision of format of accounts was examined by the CAG and some of the major changes, proposed by MoRTH, were forwarded for reconsideration of MoRTH viz., treatment of asset held on behalf of Government of India during capitalization of establishment expenditure, non-preparation of project-wise accounting etc. Further, suggestions have also been given for consideration of the Ministry so as to make the format more consistent with the Accounting Standard and General Accepted Accounting Principles. The Committee note that it was also requested to forward the proposed accounting policy to be adopted by NHAI for concurrence and that response from MoRTH was awaited. The Committee

observe that MoRTH has not accepted the Audit recommendation regarding mapping of the scheme wise funds released, citing challenges in its implementation and that the same would be submitted in next six-monthly compliance report to PIB. In this regard, the Committee opine that the absence of project based accounting hampers the identification of profit centers, thereby impacting the evaluation of the long-term viability of projects and hindering accurate calculation of the cost of capital for effective investment decision-making. The Committee, accordingly, recommend that the revision of the format of the accounts may be prioritized and completed in a time bound manner and implemented urgently to enable physical and financial monitoring of the Scheme/ projects. The Committee also desire to be apprised of the decision of the PIB on the mapping of the scheme wise release of funds. The Committee hope that the project-wise revenue and indirect costs like finance cost and administrative costs, etc. will be expeditiously captured in organized accounting system used in NHAI and the policy for allocation of financing cost, administrative cost, overheads and mapping of project wise revenue will be in place in the next 3 months, as envisaged. The Committee while noting the challenges in establishing profit centers in the National Highways and Infrastructure Development Corporation Limited (NHIDCL) due to toll collection being done by NHAI, in no uncertain words recommend that appropriate accounting method for project expenditures and revenues may be decided in coordination with CAG, for roads built by NHIDCL.

10. During the course of examination of the subject, the Committee, noted several deficiencies in the delegation of powers for project appraisal and approval in BPP-I including lack of separation of appraising, approving and executing authority; negative correlation between commercial risk of a project and the level of approving authority prescribed by the CCEA; no financial

capping for approval of EPC projects by NHAI; decisions on mode of construction taken by NHAI without any valid justification; lack of adherence to the approval mechanism prescribed by the CCEA such as non-appraisal by PATSC, absence of member from NITI Aayog and project approval prior to CCEA approval. The Committee further note that deficiencies in appraisal and approval mechanism prescribed by CCEA, accompanied with its inadequate implementation, resulted not only in BPP-I projects not getting scrutinized at desired level but also in deficiencies in appraisal of projects being approved under BPP-I. The Committee note from the reply of the Ministry that the guidelines for the appraisal and approval of projects are in line with findings of Rakesh Mohan committee and the powers delegated to MoRTH / NHAI in NHDP Phase I; powers for approval of EPC projects have been delegated to NHAI Board by CCEA, similar to earlier phases of NHDP, with recommendation of strengthening of NHAI Board and constitution of PATSC by CCEA in BPP-I and that mode of execution of projects is decided by NHAI considering various factors within the overall umbrella prescribed by CCEA and strengthened by NHAI board. The Committee while emphasizing the importance of strict adherence to the CCEA-approved mechanism for high-cost projects, ensuring transparency and thorough scrutiny recommend that project appraisal and approval mechanism be adequately strengthened for ensuring in- depth scrutiny and approval of project in all modes of construction at competent levels. The Committee also recommend establishing a system for regular internal audits and simultaneous monitoring to ensure adherence to approved mechanisms and promptly addressing deviations, if any. MoRTH should also ensure effective monitoring and regular audit of physical and technical parameters of BPP-I, and responsibility should be fixed for noncompliance of CCEA directions till date.



11. The Committee note that the targeted lengths of BPP -I as a whole as well as the targeted lengths for each component of BPP -I were substantially changed during optimisation in spite of the claims of CCEA approved components and lengths being proposed after due diligence based on origin-destination studies, freight flow projections and identification of infrastructure gaps. The Committee note from the reply of the Ministry that the CCEA approved 64,942 km of NH network to be taken up in Bharatmala Pariyojana in 2017. Out of this, 24,800 km was approved for Phase I. In addition, 10,000 km of residual NHDP projects were approved for development as part of Phase I. Subsequently, alignments were optimized in consultation with stakeholders for efficient infra development. The optimization included addressing challenges in Brownfield development through Greenfield development as well as the enhancement of connectivity to ports / airports. The entire network under all implementing agencies of MoRT&H including NHAI, NHIDCL and Roads Wing of MoRT&H was covered in the optimization exercise. Post the optimization exercise, the overall network length reduced from 64,942 km to 64,675 km. However, the overall length to be developed under Bharatmala Pariyojana Phase I was maintained at 34,800 km. The Committee are surprised to note that MoRTH in its draft ATN has stated that optimisation for NHIDCL and Road wing of MoRTH was carried out, whereas in the exit conference held in May 2022 it had admitted that there was no scope for optimization of projects to be developed by NHIDCL and MoRTH as major length, i.e., around 31,000 km. was to be developed by NHAI and exhort the senior officers in MoRTH to look into the reasons for such divergent views given by the officials at different points of time and apprise the Committee of the correct status within one month of the presentation of this Report.

12. The Committee note that NHAI acquired excess land of 2.29 hectares (5.65 acres) from Airports Authority of India (AAI), at 50 per cent of the market value, as against the condition of AAI transferring necessary land meant for project construction to NHAI. This parcel of land being adjacent to the other land acquired, was of no use to AAI and NHAI also did not have any plan to use such land for the project or otherwise at the time of acquiring it, but still NHAI acquired it and for this land parcel AAI has raised claim of Rs. 105.61 crore. The Committee further note that during the meeting between the Secretary, MoRT&H & the Secretary, Civil Aviation, in January 2018, it was decided that the excess land of Airports Authority of India (approx. of 5.65 acres) was not usable from AAI's perspective as it was getting landlocked due to the development of Dwarka Expressway tunnels, by NHAI. It is worth mentioning here that no access could have been provided to the said land parcel of 5.65 acres without compromising road safety for the users. Accordingly, it was decided in the same meeting that the excess land of 5.65 acres would be transferred by AAI to NHAI at 50% of the market value of the land and MoRT&H is exploring different possibilities to make use of said parcel of land including the development of tunnel command centre/amenities etc., for Dwarka Expressway. The Committee hope that the Ministry would be able to utilize the land parcel and exhort the Ministry to avoid such recurrences in future. The Committee while noting from the reply of the Ministry that the issue of excess land acquirement on certain projects is mainly due to inaccuracy of revenue/land records and maps available with the State Revenue Department; Deficiencies in DPRs regarding accuracy of the land to be acquired along the RoW and Need to improve usability/viability of land desire that appropriate mechanism may be put in place to address the above issues to ensure that infructuous expenditure on land and other resources is completely avoided.

13. The Committee also note that implementation of required functionalities in eDISHA project has been completed and the project is currently in O&M phase. The Committee while noting that adoption of key ERP eDISHA applications is gradually increasing and accordingly support requests are continuously coming from the various stakeholders, recommend that MoRTH should ensure that all the implementing agencies are on boarded in a time bound manner to eliminate data duplication and provide data integrity. The Committee note that work is under process for payment through Bhoomi Rashi Portal for projects coming under NHIDCL and the same would be operational within next 3 months after detailed testing and desire to be apprised of the progress in this regard. In this regard, the Committee desire that in order to present a holistic position of status of projects of all implementing agencies a single platform may be developed to enable adequate monitoring and input/data validation.
14. The Committee learn that excess price adjustment in 5 projects was made by making computation on the basis of All India CPI (IW) index rather than indices published for respective regions. The Committee also note that recovery of Rs. 19.52 Crore has been made in 2 projects and MoRT&H is examining other two projects. The Committee take note of the fact that excess price adjustment of Rs. 2.13 Crore in case of Kohima-Jessami (Pkg II and Pkg III), the issue was due to a typographical error and the issue is being examined by the Ministry. The Committee also note that a few projects of MoRT&H and NHIDCL were incorrectly reported under BPP-I due to clerical mistake. The Committee desire that corrective action may be undertaken expeditiously and recoveries made urgently and robust internal controls and checks may be put in place to check and avoid recurrence of such lapses .

15. The Committee note that the engagement of Independent Road Safety Auditor at all stages of project has been made mandatory by NHAI at DPR stage and the guidelines for appointment of authority's engineers/ independent engineers and safety experts will be ensured in next 6 months, across all implementing agencies. The Committee desire that the safety auditors/ experts / engineers may be timely appointed and their observations may also be followed up in a time bound manner to have a fool-proof supervision of project execution and safety aspects.

16. The Committee note that a policy guideline has been issued by NHAI on action to be taken on DPR consultants for deficiencies in services provided vis-à-vis the Terms of References in the agreement and in case of willful lapse on part of officers, action would also be taken against them. The Committee desire that responsibility may be fixed, after detailed investigation, for preparing and approving faulty detailed project reports with sub-optimal parameters/specifications for the projects already approved and they may be apprised thereof. Further, MoRT&H will standardize the Terms of Reference (ToR) of DPR consultants, which can be leveraged as a basis for the preparation of DPRs across the country. To standardize the ToR and improve adoption of latest technologies in DPR processes, MoRT&H will set-up DPR cells in MoRT&H for overall policy formulation and NHAI & NHIDCL for monitoring of DPRs, recommending appropriate action for deficiency in services of DPR and monitoring the implementation of the penal action. The Committee while opining that all projects should only be appraised and approved based on detailed project reports and a cost benefit analysis, recommend that the ToR of the DPR consultants may be standardized and circulated and DPR cells may be set up for all the projects in a time bound

manner for reviewing the detailed project reports and road designs against the extant standards/guidelines and detailed SoPs for monitoring by NHA and NHIDCL may also be issued by MoRTH simultaneously.

17. The Committee learn that MoRTH has put in place guidelines for the land availability to be provided to the concessionaires on the Appointed Date as part of the standard Model Concession Agreements (MCA) for the different modes of construction depending on the expected time of financial closure. However, the process will be re-examined by coordinating with all the relevant stakeholders (Inter Ministerial Consultation (IMC), Capacity building of revenue officials, NHA officials, and DPR consultants) and an SOP will be created aligned with all the stakeholders. The Committee desire that the SoPs may be created within a period of one year and the learning from BPP-I may be incorporated in order to ensure efficient resource utilization as well as on-ground execution for such programmes.
18. The Committee note that entire bidding process of MoRTH and its agencies is online and w.r.t. tendering process viz., (i) In case of tunnel projects, Model RFP document is being modified to ensure that all future bid documents clearly mention that qualification requirement is for gross cross-sectional area of the tunnel. (ii) The practice of updating cost estimates just before opening of bids is being made mandatory for all projects in line with CPWD works manual. (iii) It is now mandated that major maintenance estimates prepared by State PWDs/ other agencies would be physically verified by NHA before sanction of estimates. (iv) All projects will be awarded only after finalization of DPR (as per extant guidelines). In order to bring more transparency in bidding process, the Committee at this stage recommend that all out efforts should be undertaken to ensure evaluation of bids in an online evaluation system by embedding all the steps involved so as to have a trail of transactions and fair evaluation and

additional investigation of low value bids/ unbalanced bids and front loaded bids to ensure technical or commercial competence and quality transactions. Further, anomalies in tendering and selection process of contractors/concessionaires should be investigated to fix responsibility on erring officials who failed to ensure due adherence to prescribed rules and guidelines.

19. The Committee note that currently MoRT&H is drawing up plans for the next phase of highway development beyond the BPP-I and desire that MoRTH may, learning from BPP-I, carry out an in-depth analysis, based on accurate ground level data, while proposing a scheme of this magnitude in future so as to ensure efficient management of resources and optimal project outcomes and also ensure that the execution of projects is done as per their defined priority and within the approved framework.

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**NEW DELHI**  
**20 April, 2024**  
**31 Chaitra, 1946 (Saka)**

**ADHIR RANJAN CHOWDHURY**  
**Chairperson,**  
**Public Accounts Committee**