F. No. 1/10/2025 - PIU
Government of India
Ministry of Finance
Department of Economic Affairs
Infrastructure Finance Secretariat
ISD Division
(PIU)
*****

4th Floor, STCs Building,
Janpath New Delhi
Dated: 13th November 2025

Record of Discussion

Subject: Record of Discussion of the 137th meeting of the PPPAC for considering two road project proposal of the Ministry of Road, Transport & Highways (MoRTH) on PPP mode.

Reference: 137th meeting of the PPPAC held on 06th November 2025.

Sir/Madam,

The undersigned is directed to forward the Record of Discussion of the 137th meeting of the PPPAC held on 06th November 2025 under the chairmanship of Secretary (EA) for information and necessary action.

2. This issues with the approval of the Competent Authority.

Rahul Singh

Rahul Singh
(Director)

To,

1. **Secretary, Department of Expenditure, New Delhi-01**
2. **CEO, NITI Aayog, Yojana Bhawan, New Delhi-01**
3. **Secretary, Ministry of Road, Transport & Highways, Transport Bhawan, New Delhi.**
4. **Secretary, Department of Legal Affairs, Shastri Bhawan, New Delhi.**

Copy to:

1. **Sr. PPS to Secretary (EA)**
2. **PPS to JS (IFS)**

Subject: Record of Discussion of the 137th meeting of the PPPAC for considering the following project proposals: -

(i) Construction of 4 Lane access control highway from Design chainage Km 0+000 near Shuklai/Palhari Village, Barabanki to Design chainage Km 101+515 near Biswariya village, Bahraich District (Existing Chainage Km 0+000 to Km 98.475) on the section of NH-927 in Uttar Pradesh on Hybrid Annuity Mode under NH(O) Scheme.

a. **Package-1:** Construction of 4 Lane highway from Barabanki Design chainage Km 0+000 to Mustafabad Design chainage Km 43+030 (Existing Chainage Km 0.000 to Chainage Km 43.700)

b. **Package-2:** Construction of 4 Lane highway from Mustafabad Design chainage Km 43+030 to Biswariya Design chainage Km 101+515 (Existing Chainage Km 43.700 to Chainage Km 98.475)

(ii) Construction of new coastal Highway from Rameshwar to Paradeep (Part of Coastal Highway having total length of 163.180 Km in 2 Packages) on Hybrid Annuity Mode in the State of Odisha.

a. **Package-1:** 4 Lane access Controlled Highway from km. 0+000 to km. 79+400 (Rameshwar- Kakatpur) Design length- 79.400 Km

b. **Package-2:** 2 Lane with paved shoulders from km. 79+400 to km. 160+180 (Kakatpur - Paradeep) Design length- 80.780 Km

1. The 137th meeting of the PPPAC was held on 06th November 2025 at 16:30 hours to consider the above-mentioned proposals of MoRTH.

2. List of attendees is placed at **Annexure-I.**

3. With the permission of Secretary (EA), Joint Secretary (IFS) welcomed all the attendees to the meeting. It was submitted that the PPPAC comprises CEO, NITI Aayog; Secretary, Department of Expenditure; and Secretary, Department of Legal Affairs. Accordingly, it was confirmed by the attendees that the comments/inputs received from the respective PPPAC members are duly approved at their level and that the interventions made in the meeting are on their behalf.

4. NHAI made a detailed presentation on the proposed road projects.

(i) **Construction of 4 Lane access control highway from Design chainage Km 0+000 near Shuklai/Palhari Village, Barabanki to Design chainage Km 101+515 near Biswariya village, Bahraich District (Existing Chainage Km 0+000 to Km 98.475) on the section of NH-927 in Uttar Pradesh on Hybrid Annuity Mode under NH(O) Scheme.**

1 The details of the project, as provided by the MoRTH, are given in the table below:

Table-1: Details of the project

<table>
<tr><td>Project Description</td><td colspan="7">Construction of 4 Lane access control highway from Design chainage Km 0+000 near Shuklai/Palhari Village, Barabanki to Design chainage Km 101+515 near Biswariya village, Bahraich District (Existing Chainage Km 0+000 to Km 98.475) on the section of NH-927 in Uttar Pradesh on Hybrid Annuity Mode under NH(O) Scheme.
Package-1: Construction of 4 Lane highway from Barabanki Design chainage Km 0+000 to Mustafabad Design chainage Km 43+030 (Existing Chainage Km 0.000 to Chainage Km 43.700)
Package-2: Construction of 4 Lane highway from Mustafabad Design chainage Km 43+030 to Biswariya Design chainage Km 101+515 (Existing Chainage Km 43.700 to Chainage Km 98.475)</td></tr>
<tr><td>PPP Model</td><td colspan="7">Hybrid Annuity Mode</td></tr>
<tr><td>Sponsoring Authority</td><td colspan="7">Ministry of Road Transport and Highways, Government of India</td></tr>
<tr><td>Implementing Agency</td><td colspan="7">National Highways Authority of India (NHAI)</td></tr>
<tr><td>Location</td><td colspan="7">State: Uttar Pradesh
District: Barabanki, Bahraich</td></tr>
<tr><td>Type of Pavement</td><td colspan="7">• Main Carriageway / Service Road / Access Road – Flexible Pavement
• Toll Plaza – Rigid Pavement</td></tr>
<tr><td>Lane configuration</td><td colspan="7">4 Lane access control highway with Paved Shoulder and continuous service/Slip Roads.</td></tr>
<tr><td rowspan="9">Details of Structures</td><td>S. No</td><td colspan="2">Description of Item</td><td>Unit</td><td>Quantity (Pkg-I)</td><td>Quantity (Pkg-II)</td><td>Total</td></tr>
<tr><td rowspan="3">1</td><td rowspan="3">Length</td><td>Length of Project Highway</td><td>Km</td><td>43.030</td><td>58.485</td><td>101.515</td></tr>
<tr><td>Length of Service Road (Both Sides)</td><td>Km</td><td>46.676</td><td>65.118</td><td>111.794</td></tr>
<tr><td>Length of Slip Road (Both Sides)</td><td>Km</td><td>31.028</td><td>51.212</td><td>82.24</td></tr>
<tr><td rowspan="5">2</td><td rowspan="5">Lane Configuration & RoW</td><td>Lane Configuration</td><td>2/4</td><td>4 Lane</td><td>4 Lane</td><td>4 Lane</td></tr>
<tr><td>Carriageway width</td><td>-</td><td>2x10.0 m</td><td>2x10.0 m</td><td>2x10.0 m</td></tr>
<tr><td>Length of Road – Green Field</td><td>Km</td><td>20.475</td><td>27.805</td><td>48.28</td></tr>
<tr><td>Length of Road – Brown Field</td><td>Km</td><td>22.555</td><td>30.68</td><td>53.235</td></tr>
<tr><td>Proposed RoW</td><td>m</td><td>45</td><td>45</td><td>45</td></tr>
</table>

	3	Grade Separated Structures	No. of Interchanges (At start point on NH-27)	Nos.	1	-	1
			VUPs- Pkg-1 (2 VUP of 2x30m, 5 VUP of 15+30+15m, 2 VUP of 1x30m and 1 VUP of 1x20m) with 5.5 m vertical clearance VUPs- Pkg-2 (11 VUP of 15+30+15m, 1 VUP of 1x30m and 5 VUP of 1x20m) with 5.5 m vertical clearance	Nos.	10	17	27
			LVUPs (1X12x4)	Nos.	11	10	21
			MNB cum LVUP	Nos.	1	-	1
			SVUPs (1X7x4)	Nos.	3	2	5
			MNB cum SVUP	Nos.	1	-	1
	4	ROB	6-Lane Configuration (Bow string/Steel composite Girder) 1x18+1x60+1x18m and 1x18+3x36+1x18m)	No.	2	-	2
	5	Bridges & Culverts	No. of Major Bridges Pkg-1 (1x102m, 2x31m, 2x32.40+1x13.4m, 1x75+7x140+1x75m, (140m is Extra dosed Cable Stayed bridge) No. of Major Bridges Pkg-2 2x30m, 2x40m, 4x25m, 4x25m)	Nos	4	4	8
			No. of Minor Bridges (MNB with varying spans)	Nos.	8	19	27
			No. of Box Culverts (with varying Sizes)	Nos.	43	75	118
			No. of Pipe Crossings (1x1.2m HPC at junction crossings)	Nos.	59	64	123
	6	Facilities	Extension of Toll Plaza with 1 addition lane both side	No	1	1	2
			Minor Junctions	Nos.	38	35	73
			Junctions below grade separators	Nos	21	29	50
			Bus Shelter (both side put together)	Nos	36	52	88

	7	Protection Works	Toe/Retaining Wall length (both side put together)	Km	24.140 (Toe wall) +18.950 (Retaining wall)	20.700 (Toe wall) + 35.600 (Retaining Wall)	44.84 (Toe wall) + 54.55 (Retaining Wall)
			Thrie Beam Crash Barrier (Median side) (both side put together)	Km	78.794	113.542	192.336
			Boundary wall (both side put together)	Km	64.79	82.716	147.506
Concession Period	17.0 years (including a construction period of 2.0 years)						

	Sr. No.	Particulars	Pkg-I Rs. in crore	Pkg-II Rs. in crore	Total Rs. in crore
Estimated Capital Cost with Break-up under major heads of expenditure	1	Base Civil Construction Cost, including Utility Shifting Cost	1602.28	1883.21	3485.49
	2	IC/Pre-operative expenses (1% of Civil Cost)	16.02	18.83	34.85
	3	Financial Cost	6.21	7.29	13.5
	4	Interest During Construction (IDC)	65.67	78.12	143.79
	5	**Estimated Project Cost (without GST) (1+2+3+4)**	**1690.18**	**1987.46**	**3677.64**
	6	Estimated Project Cost per km	38.68	34.38	36.23
	7	GST@18% on Civil Construction Cost	288.41	338.98	627.39
	8	Civil Construction cost with GST @18%	1890.69	2222.19	4112.88
	9	GST@18% on Sr. No. 2&3	4	4.7	8.7
	10	Pre-Construction Cost			
	(i)	Land Acquisition Cost	691.65	883.2	1574.85
	(ii)	R&R Cost	47.82	49.75	97.57
	(iii)	Environmental Cost	8.26	11.23	19.49
	(iv)	Total Cost of Pre-Construction Activities	747.73	944.18	1691.91
	11	Contingencies @1% on Civil Construction Cost	16.02	18.83	34.85
	12	Labour cess (1% of civil cost)	16.02	18.83	34.85
	13	O&M payment for 15 Year	279.85	329.37	609.22
	14	Escalation @5% per year for 2 years	130.68	153.80	284.48
	15	**Total Capital Cost (5+7+9+10(iv)+11+12+13+14)**	**3172.89**	**3796.15**	**6969.04**

<table>
<tr><td></td><td>16</td><td>Total Capital Cost per Km</td><td>73.74</td><td>64.91</td><td>68.65</td></tr>
<tr><td rowspan="7">Land Acquisition and other clearance</td><td colspan="2">Environmental Clearances</td><td colspan="3">Not Applicable.</td></tr>
<tr><td colspan="2">Forest Proposal</td><td colspan="3">Pkg-I (Ch. 0+000 to 43+030) – The PSC-II meeting is scheduled to be held on 17.10.2025. Minutes of the meeting will be received after the PSC-II. Stage-I clearance is to be obtained. C.A. land has been allotted.
Pkg-II (Ch. 43+030 to 101+515)- Under process.</td></tr>
<tr><td colspan="2">Shifting of utilities</td><td colspan="3">Estimates obtained from concerned Departments of amount 50.201 Cr for both the packages.</td></tr>
<tr><td colspan="2">GAD Approval of ROB from the Ministry of Railways</td><td colspan="3">Proposal uploaded on Railroad Crossing GAD Approval System.

Joint site inspection has been completed. The draft Conceptual Plan and General Arrangement Drawing (GAD) have been submitted to the Railways. Approval of the Conceptual Plan and GAD is currently awaited from the Railway authorities.</td></tr>
<tr><td colspan="2">IWAI Clearance</td><td colspan="3">Proposal submitted for getting NOC.</td></tr>
<tr><td colspan="2">NOC for Namami Gange program</td><td colspan="3">Proposal submitted for getting NOC.</td></tr>
<tr><td colspan="2">Wildlife clearance</td><td colspan="3">Not Applicable</td></tr>
<tr><td rowspan="3">Financial Viability</td><td>Particulars</td><td colspan="2">Package-I</td><td colspan="2">Package-II</td></tr>
<tr><td>PIRR</td><td colspan="2">10.24%</td><td colspan="2">10.25%</td></tr>
<tr><td>EIRR</td><td colspan="2">12.00%</td><td colspan="2">12.00%</td></tr>
<tr><td>Concession Agreement</td><td colspan="5">The DCA has been prepared as per Model Concession Agreement dated 09.12.2016 and subsequent Amendment and other circular issued by MoRTH/NHAI.</td></tr>
<tr><td>Bidding parameter</td><td colspan="5">Lowest Bid Project Cost</td></tr>
<tr><td>Bidding process</td><td colspan="5">Single Stage Two-part system of bidding</td></tr>
</table>

2 The primary purpose of proposed project is to provide a vital cross-border connectivity link between India and Nepal through the Nepalganj border, making it a key Indo–Nepal trade and transit corridor. It facilitates faster and more efficient access to the Rupaidiha Land Port and enhances connectivity to remote and backward districts such as Bahraich and Shravasti, thereby improving delivery of public services, promoting regional development, and attracting greater investment opportunities. With the development of this direct access-controlled corridor, the overall travel time along this stretch is expected to reduce to around one hour, thereby enabling safer, faster and uninterrupted movement of both passenger and freight traffic.

3 The instant project is upgrading of exiting 2 Lane + PS to access control 4 Lane + PS section of NH-927 from Barabanki to Bahraich in the state of Uttar Pradesh. The project is executed in two packages (i) Barabanki to Mustafabad: 43.030 km, and (ii) Mustafabad to Bahraich: 58.485 km

4 The existing 2-lane + PS section is carrying approximately 24,669 PCU per day on the Barabanki–Mustafabad stretch and more than 18,460 PCU per day on the Mustafabad–Bahraich section which is expected to cross 44,302 PCU per day by 2037.

5 The project will be executed under the NH(O) scheme. The total Capital Cost of the project is Rs. 6969.04 crore (Package-1: Rs. 3172.89 crore & Package-2: Rs. 3796.15 crore) with a total estimated project cost (excluding GST) of Rs. 3677.64 crore (Package-1: Rs. 1690.18 crore & Package-2: Rs. 1987.46 crore).

6 After the detailed presentation, the Chair asked the PPPAC members for their observations. DoLA supported the proposal and stated that no further comments to offer.

7 JS, Department of Expenditure raised the following observations:

a) The PPPAC memo indicates that Environmental Clearance (EC) is not required under the EIA Notification, 2006 on the grounds that the project length is less than 100 km. However, the current proposal exceeds 100 km in length, in which case EC would ordinarily be required as per the applicable provisions.

8 PD, NITI Aayog raised the following observations:

a) The proposal envisages construction of major bridges and structures in a 6-lane configuration, whereas the available Right of Way (RoW) is limited to 45 metres and no major upgradation to a full 6-lane carriageway along the corridor is presently envisaged. Accordingly, the necessity and justification for providing 6-lane capacity for such major bridges & structures may be clarified.

b) The traffic volume along the proposed project corridor is substantial, with around 24,669 PCU/day on the Barabanki–Mustafabad stretch and over 18,460 PCU/day on the Mustafabad–Bahraich section. Given high traffic figures, the financial viability of implementing the project under the BOT (Toll) model may be revisited.

9 JS(IFS) highlighted the following observations:

a) In earlier HAM proposals, the cost of equity and corresponding equity IRR were considered at 15%. In the current proposal, these parameters have been revised to 12%. Based on these revised assumptions, the instant proposals appear viable under BOT (Toll) mode with VGF support.

10 The Chair made the following observations:

a) As per the proposed scope of work, a total of 111.794 km of service roads and 82.24 km of slip roads are envisaged along the entire stretch. However, provision of service roads along the full length of the corridor is not standard practice and appears to be at variance with MoRTH guidelines. The inclusion of such extensive service and slip road components has resulted in a substantial increase in the overall project cost, which in turn impacts the financial viability of the project.

b) Whether a RoW of 45 metres is adequate to accommodate a 4-lane highway with service roads, considering requirements for drainage, utilities, and future expansion?

c) The per kilometre cost of the proposed project is notably higher than comparable 4-lane greenfield corridors. The rationale for the same may be provided?

d) What is the standard practice prescribed under MoRTH guidelines with respect to the location and inter-spacing of toll plazas along national highways?

e) What is the basis for estimating a one-hour travel time for a 101 km corridor?

f) What is the rationale for proposing 88 bus stops along the highway?

g) Considering the higher traffic volumes in Package-1, can Package-1 be taken up under BOT (Toll) mode and Package-2 under HAM?

11 MoRTH submitted the following to the queries raised by the PPPAC Members: -

a) **Environmental Clearances (EC):** As per the EIA Notification, 2006, EC is not required for highway projects where the project length is less than 100 km and the RoW does not exceed 45 metres. In the current proposal, although the project length exceeds 100 km, the RoW is restricted to 45 metres. Accordingly, EC is not applicable for the current proposal.

b) **Service/Slip Roads and Major Bridges/Structures:** In the highway project across Uttar Pradesh, service and slip roads have been planned along the entire stretch to divert non-tollable local traffic arising from continuous habitation. This arrangement is intended to facilitate safer and uninterrupted traffic flow on the access-controlled 4-lane highway. Service roads of 7.5 metres width have been provided on both sides and with this configuration, the overall cross-section effectively functions as a 6-lane facility, comprising 4 lanes for tollable traffic and 2 lanes for non-tollable traffic through the service roads. Accordingly, all major bridges and structures have been designed to accommodate both the main carriageway and the service roads.

c) **Financial Analysis**: MoRTH informed that the National Highways Authority of India (NHAI), vide circular dated 22.09.2025 (**Annexure-II**), has standardised financial parameters for PPP projects. As per the circular, the cost of equity is to be considered at 12% for HAM projects and 14% for BOT (Toll) projects, whereas earlier, a cost of equity of 15% was adopted for both models. Additionally, the debt-to-equity ratio has been revised to 75:25 for HAM projects, while for BOT (Toll) projects it continues to remain at 70:30, as against the earlier practice of 70:30 for both HAM and BOT (Toll). Further, MoRTH informed that based on the above parameters, a BOT (Toll) analysis of the project was undertaken, and the results indicated that the project would require more than 50% capital grant for a 25-year concession period. MoRTH stated that projects requiring capital grant up to 48% may be considered under the BOT (Toll) mode with some additional supporting mechanism. Since the capital grant requirement for the present project exceeds this threshold, the proposal has accordingly been considered under the HAM mode.

d) **Right of way (RoW):** The proposed RoW of 45 metres is adequate to accommodate the proposed cross-section. The highway passes through urban areas where land acquisition costs are significantly high; therefore, a RoW of 45 metres has been considered to optimise costs. This width is sufficient to provide 7.5-metre-wide service/slip roads on both sides, along with drainage and utility corridors. Although the highway is not designed for future upgradation to a 6-lane main carriageway, the current configuration of a 4-lane access-controlled main carriageway and 2 lanes via service roads functionally operates as a 6-lane facility, effectively segregating tollable and non-tollable traffic.

e) **Per Km Cost:** The higher Per Km cost in this project is primarily due to the provision of continuous 7.5-metre-wide service/slip roads, the requirement of 6-lane major bridges and structures, and the construction of a 1.3 km major bridge over the Ghaghra River, which are necessary to ensure uninterrupted traffic movement along the corridor.

f) **Toll Plaza:** As per standard guidelines, toll plazas should be provided at intervals of approximately 60 km. In the present proposal, the existing toll plazas are spaced at 58 km, which is within acceptable limits and have therefore been retained. An additional lane on each side of the existing toll plazas will be constructed to ensure operational efficiency for 4 lane access-controlled highway.

g) **Time saving:** The proposed highway has been designed for a speed of 100 kmph. However, for the purpose of calculating average time savings, a speed of 80 kmph has been considered for the 101 km stretch.

h) **Bus Stops:** The proposed highway passes through highly urbanised stretches where frequent local movement is anticipated. Therefore, bus stops at intervals of 1–2 km has been provided along the service roads to cater to local commuters. These bus stops will consist of small shelters, do not require high built-up area, and will not impact the main carriageway operations.

i) **BOT for Package-1:** While Package-1 may be financially viable under the BOT (Toll) mode, Package-2 is not viable under the same model and appropriately considered under HAM. However, since both packages form part of a single contiguous corridor, adopting two different implementation models may lead to operational challenges, interface issues, and potential disputes during operation. Accordingly, a combined BOT (Toll) analysis was undertaken for the entire corridor. The results indicated that the project would require more than 50% capital grant for a 25-year concession period. MoRTH stated that projects requiring capital grant up to 48% may be considered under BOT (Toll). Since the overall grant requirement exceeds this threshold, the project has been considered under HAM.

Recommendations

12 After detailed deliberations, the PPPAC unanimously recommended the proposal for "Construction of 4 Lane access control highway from Design chainage Km 0+000 near Shuklai/Palhari Village, Barabanki to Design chainage Km 101+515 near Biswariya village, Bahraich District (Existing Chainage Km 0+000 to Km 98.475) on the section of NH-927 in Uttar Pradesh on HAM under NH(O) Scheme." subject to following recommendations, for consideration of the Competent Authority for giving Administrative Approval.

a) The appraised Total Capital Cost of the Barabanki to Bahraich section is Rs. 6969.04 crore (Package-1: Rs. 3172.89 crore & Package-2: Rs. 3796.15 crore) with a total estimated project cost (excluding GST) of Rs. 3677.64 crore (Package-1: Rs. 1690.18 crore & Package-2: Rs. 1987.46 crore).

b) The project should be taken up on HAM under the NH(O) scheme.

c) The concession period of the project is 17 years including 2 years construction period.

d) Land acquisition and necessary clearances to be obtained in a time bound manner before the bid due date so as to avoid any delays in the project.

13 Revalidation of its recommendation by the PPPAC is not required for following post recommendation changes in the project costs/bid documents: -

a) Any change in the date/time period for any time-bound actions like appointed date, financial close, construction period etc. After appraisal by MoRTH in such a case of amendment, it may be placed clearly, before the Competent authority, along with the justification and rationale, while seeking approval.

b) Non-substantial change in risk-allocation.

c) Any other changes/modification in the project proposal with the overall objective of making project successful. After appraisal by MoRTH in such a case of amendment, it may be placed clearly, before the Competent authority, along with the justification and rationale, while seeking approval.

d) Further, MoRTH/NHAI may decide whether the changes proposed post recommendations of the project proposal by the PPPAC fall within the threshold criteria as stated above. All such changes falling within the threshold criteria shall be appraised at the level of Secretary (RTH)/BoD of NHAI as the case may be, without any further need of revalidation by the PPPAC and shall proceed with the approval process accordingly.

(ii) Construction of new coastal Highway from Rameshwar to Paradeep (Part of Coastal Highway having total length of 163.180 Km in 2 Packages) on Hybrid Annuity Mode in the State of Odisha.

1 The details of the project, as provided by the MoRTH, are given in the table below:

Table-2: Details of the project

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<tr><td>Project Description</td><td colspan="5">Construction of new coastal Highway from Rameshwar to Paradeep (Part of Coastal Highway having total length of 163.180 Km in 2 Packages) on Hybrid Annuity Mode in the State of Odisha.
Package-1: 4 Lane access Controlled Highway from km. 0+000 to km. 79+400 (Rameshwar- Kakatpur) Design length- 79.400 Km
Package-2: 2 Lane with paved shoulders from km. 79+400 to km. 160+180 (Kakatpur - Paradeep) Design length- 80.780 Km</td></tr>
<tr><td>PPP Model</td><td colspan="5">Hybrid Annuity Mode</td></tr>
<tr><td>Sponsoring Authority</td><td colspan="5">Ministry of Road Transport and Highways, Government of India</td></tr>
<tr><td>Implementing Agency</td><td colspan="5">National Highways Authority of India (NHAI)</td></tr>
<tr><td>Location</td><td colspan="5">State: Odisha
District: Khurda, Puri, Kendrapada & Jagatsinghpur</td></tr>
<tr><td>Type of Pavement</td><td colspan="5">• Main Carriageway / Service Road / Access Road – Flexible Pavement
• Toll Plaza – Rigid Pavement</td></tr>
<tr><td>Lane configuration</td><td colspan="5">Package-1: 4 Lane access control highway with Paved Shoulder
Package-2: 2 Lane with paved shoulders</td></tr>
<tr><td rowspan="14">Details of Structures</td><td>S.N</td><td>Description</td><td>Package-I</td><td>Package-II</td><td>Total</td></tr>
<tr><td>1</td><td>Length (Km)</td><td>79.4</td><td>80.780</td><td>160.18</td></tr>
<tr><td>3</td><td>Carriageway</td><td>4 Lane access-controlled + PS</td><td>2 lanes + PS</td><td></td></tr>
<tr><td>4</td><td>Base Civil Construction Cost (Cr.)</td><td>3067.70</td><td>1535.31</td><td>4603.02</td></tr>
<tr><td>5</td><td>Major Bridge (Nos)</td><td>22</td><td>14</td><td>36</td></tr>
<tr><td>6</td><td>Minor Bridge (Nos)</td><td>43</td><td>46</td><td>89</td></tr>
<tr><td>7</td><td>Culverts (Nos)</td><td>138</td><td>238</td><td>376</td></tr>
<tr><td>8</td><td>Flyover (Nos)</td><td>2</td><td>1</td><td>3</td></tr>
<tr><td>9</td><td>Interchange (Nos)</td><td>3</td><td>1</td><td>4</td></tr>
<tr><td>10</td><td>Viaduct (Nos)</td><td>4</td><td>2</td><td>6</td></tr>
<tr><td>11</td><td>ROB (Nos)</td><td>2</td><td>1</td><td>3</td></tr>
<tr><td>12</td><td>RUB (Nos)</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>13</td><td>VUP/LVUP/SVUP</td><td>39</td><td>6</td><td>45</td></tr>
<tr><td>14</td><td>Length of Service Road/Slip Road (Km) (Total length)</td><td>17.037</td><td>2.228</td><td>19.265</td></tr>
<tr><td>Concession Period</td><td colspan="5">17.5 years (including a construction period of 2.5 years)</td></tr>
</table>

Estimated Capital Cost with Break-up under major heads of expenditure

Sr. No.	Particulars	Pkg-I Rs. in crore	Pkg-II Rs. in crore	Total Rs. in crore
1	Base Civil Cost	3067.70	1535.31	4603.02
2	Utility Cost	61.35	30.71	92.06
2	Total Civil Construction Cost	3129.06	1566.02	4695.08
4	IC/Pre-operative expenses (1% of EPC)	31.29	15.66	46.95
5	Financing expenses (0.75% of Debt)	12.21	5.01	17.22
6	Interest during construction (IDC)	148.32	54.02	202.34
7	**Estimated Project Cost (Including Centages)**	**3320.89**	**1640.71**	**4961.60**
8	GST @ 18% on Total Civil Cost	563.23	281.88	845.11
9	Contingencies @1%	31.29	15.66	46.95
10	O&M Cost for 15 years as per Ministry OM dated 23.05.2022	379.08	270.26	649.34
11	Escalation during construction	290.87	135.01	425.88
12	Supervision Charges @ 2.5% on Utility Cost	1.53	0.77	2.30
13	Cost of Land Acquisition	691.46	624.79	1316.25
14	Environment and forest Mitigation Plan	26.45	26.91	53.36
15	**Total Capital Cost**	**5304.80**	**2995.99**	**8300.79**
16	Estimated Bid Project Cost	3645.00	1855.65	5500.65
17	Total Civil Cost per Km	39.40	19.38	29.31

Land Acquisition and other clearance

S. No.	Activity	Status	Target Completion
1	Land Acquisition	Total Land Required: 794.69 Ha 3A: 84 % | 3D: 74.57% 3G: Awards announced by CALA for 14.34% land.	90 days post sanction
2	Wildlife Clearance	NA	-
3	Environmental Clearance	Environment clearance obtained from MoEFCC on 20.06.2025.	-
4	CRZ Clearance	Obtained with Environment Clearance	-

	5	Forest Clearance	Online application for Stage-I clearance has been Uploaded on Parivesh Portal. NFL land to be provided by State Govt.	31.12.2025
	6	ROB	GADs of all 3 ROBs have been approved.	-
	7	Utility Shifting	All estimates of Khordha, Puri and Kendrapada districts received, and Estimates of Jagatsinghpur district under process.	31.12.2025

Financial Viability	**Particulars**	**Package-I**	**Package-II**
	PIRR	10%	9.98%
	EIRR	12%	12%
Concession Agreement	The DCA has been prepared as per Model Concession Agreement dated November 2020 and subsequent Amendment and other circular issued by MoRTH/NHAI.		
Bidding parameter	Lowest Bid Project Cost		
Bidding process	Single Stage Two-part system of bidding		

2 The current proposal pertains to the Rameshwar–Paradeep section, which constitutes Phase-I of the Coastal Highway from Rameshwar (Odisha) to Digha (West Bengal). This initiative is an integral part of development of 4-Lane roads along entire coastline of India as part of the Hon'ble Prime Minister announcement (74th Independence Day speech).

3 The Coastal Highway is an alternate route for NH-16 and NH-316 which will improve connectivity to Puri, Konark, Paradeep Port, Odisha and facilitate smooth transportation to developing ports like Astarang, Subarnarekha etc. The proposed connectivity will reduce the travel time between Rameshwar and Paradeep from existing 5.5 hrs to 3 hrs (45% reduction in travel time) and travel distance from 210 km to 160.18 km (24% reduction in travel distance)

4 The proposed Greenfield alignment shall be developed as 4-lane from Rameshwar to Konark (Package-1) and 2 lanes with Paved Shoulder from Konark to Paradeep (Package -2). The Projected Traffic on the Corridor is 8234 PCU in the year 2027–28, 14377 PCU by 2037–38 and 20833 PCU by 2047–48.

5 The project will be executed under the NH(O) scheme. The total Capital Cost of the project is Rs. 8300.79 crore (Package-1: Rs. 5304.80 crore & Package-2: Rs. 2995.99 crore) with a total estimated project cost (excluding GST) of Rs. 4961.60 crore (Package-1: Rs. 3320.89 crore & Package-2: Rs. 1640.71 crore).

6 After the detailed presentation, the Chair asked the PPPAC members for their observations. DoLA supported the proposal and stated that no further comments to offer.

7 JS, Department of Expenditure raised the following observations

a) As per the Detailed Project Report, the project was proposed to be executed in three packages. However, the current proposal comprises only two packages.

b) The Estimated Project Cost for Package I and II is Rs. 3,320.89 crore and Rs. 1,640.71 crores respectively, while the Estimated Bid Project Cost is Rs. 3,645 crore and Rs. 1855.65 crores respectively. What accounts for the difference between these two cost figures?

8 PD, NITI Aayog raised the following observations:

a) As per the current proposal, no ports fall within the present project stretch, and it is understood that port development is envisaged only in the Paradeep–Digha section. In this context, it may be clarified whether the traffic projections undertaken for the current proposal have factored in potential traffic from the upcoming ports in the subsequent section.

b) Details regarding lane capacity and traffic levels of parallel highways in the vicinity of the proposed Paradeep–Rameshwar corridor, including the sanctioned 8-lane Paradeep–Cuttack highway, the 6-lane Capital Region Ring Road, and existing routes such as SH-60, may be provided. Further it may be informed whether the traffic survey undertaken for the proposed project has accounted for traffic generated from existing and upcoming industrial zones as well as tourism activities.

9 JS(IFS) highlighted the following observations:

a) Package–1 was initially approved as a 2-lane configuration and is now proposed as a 4-lane facility. Whether this change in scope would require fresh approval from the PATSC Committee.

b) The current proposal includes a higher number of major bridges and culverts compared to similar projects of comparable scope, resulting in an increase in construction cost. What is the rationale for this higher provision?

c) The justification provided for the current proposal lacks specific details regarding its exclusive benefits, such as time savings, traffic diversion, and potential traffic leakage from the Capital Region Ring Road. The same to be provided.

10 The Chair made the following observations:

a) Package–1 has been proposed with access control, although the traffic volume in this section is not significantly high. What is the rationale for adopting access control in this stretch?

b) What is the tolling mechanism proposed for the project, and what is the rationale for adopting different tolling approaches for Package–1 and Package–2?

c) Considering the anticipated traffic growth from upcoming ports along the proposed corridor, can the project be considered for development under the BOT (Toll) mode?

11 MoRTH submitted the following to the queries raised by the PPPAC Members: -

a) **No of Packages:** During the DPR stage, the project was initially planned to be executed in multiple packages. However, based on the traffic analysis, the project has now been restructured into two packages. Package-1 primarily caters to tourism-related traffic, while Package-2 is aligned to serve the upcoming ports and logistics hubs.

b) **Cost Difference in BPC and EPC:** The Estimated Project Cost (EPC) includes components such as financing charges, pre-operative/incidental expenses, and Interest During Construction. In comparison, the Bid Project Cost (BPC) reflects the cost quoted by the bidder based on the assumed equity IRR of 12%. Accordingly, a difference between the Estimated Project Cost and the Bid Project Cost is expected, and a variance of up to around 25% is generally considered acceptable.

c) **Traffic from Ports:** The traffic survey conducted for the current proposal does not include projections from upcoming ports. The traffic estimation is primarily based on tourism-related movement and existing traffic from operational ports. However, once the new ports become operational, traffic volumes are expected to increase significantly. To accommodate this future demand, the two-lane stretch in Package-2 has been planned with an upgrade strategy. Initially, a two-lane road will be constructed on one side. Upon port development, the opposite side will be developed to complete a four-lane access-controlled corridor to cater to the long-term traffic demand.

d) **Traffic leakage from Parallel Roads**: NH–53, CRRR–Bhubaneswar and SH–60 do not function as parallel corridors to the proposed alignment, as their origin–destination differ from the Paradeep–Rameshwar stretches. The traffic survey undertaken for the present proposal has adequately captured diversion from existing and planned national highways, except from the upcoming ports. As per the traffic assessment, the estimated traffic volume for Package–1 (Rameshwar–Puri–Konark tourism belt) is 10,437 PCUs, whereas for Package–2, the estimated traffic volume is 7,249 PCUs. After Construction of Coastal Highway, traffic on NH-16 part of GQ (Kolkata – Chennai) section would be decongested and part traffic from this corridor shall be diverted to the Coastal Highway. On NH-16 the traffic in 2028 would be 1,10,000 PCU near Bhubaneswar, out of this about 10,500 PCU would be diverted to Coastal Highway. In addition to above the Coastal Highway would also act as feeder route to all the existing Ports (Paradeep & Dhamara Port) and upcoming Ports (Astaranga, Chudamani Port, Chandipur Port, Subernareka Port & Talsari Port), after operationalization of all Ports the traffic on Coastal Highway will increase substantially. As per the O-D study, after the construction the traffic on Capital Region Ring Road (Bhubaneswar Bypass) would be around 32,000 PCU and traffic on NH-16 would be around 67,500 PCU. The new alignment is expected to reduce travel time between Rameshwar and Paradeep from 5.5 hours to 3 hours (a 45% reduction) and travel distance from 210 km to 160.18 km (a 24% reduction).

e) **PATSC Approval:** The PATSC Committee had initially approved the corridor as a 4-lane highway with multiple packages. Following internal deliberations, Package-1 was revised to a 2-lane configuration. However, due to anticipated growth in tourism, it has now been proposed as a 4-lane. Since there are no significant changes in the design parameters, the previous approvals remain valid, and no fresh approval from the PATSAC Committee is required for the current proposal.

f) **Construction cost:** The number of bridges and culverts in the current proposal is relatively high due to the coastal terrain and site conditions. Further, the inclusion of a 3.3 km major bridge over the Mahanadi River has also contributed to the increase in overall project cost.

g) **Access controlled Highway:** Package-1 has been proposed as an access-controlled highway to ensure seamless connectivity to key destinations such as Puri, Konark, and Paradeep Port. Although current traffic volumes are moderate, access control has been considered keeping in view the anticipated traffic growth arising from tourism and future port-linked development. Once the remaining corridor is completed and port development progresses, Package–2 will also be upgraded to a 4-lane access-controlled facility to maintain uniform corridor standards.

h) **Tolling Mechanism:** Package–1 has been proposed with a closed tolling system, as it is an access-controlled facility with defined entry and exit points. Package–2, being a non-access-controlled stretch at present, will follow an open tolling mechanism.

i) **BOT Analysis:** Based on the estimated traffic and high construction costs due to the number of major bridges required in the coastal region, the VGF requirement under BOT (Toll) mode is assessed to be more than 60%. In view of this, the project is not suitable for BOT (Toll) mode and is therefore proposed to be taken up under HAM.

Recommendations

12 After detailed deliberations, the PPPAC unanimously recommended the proposal for "Construction of new coastal Highway from Rameshwar to Paradeep (Part of Coastal Highway having total length of 163.180 Km in 2 Packages) on Hybrid Annuity Mode in the State of Odisha." subject to following recommendations, for consideration of the Competent Authority for giving Administrative Approval.

a) The appraised Total Capital Cost of the project is Rs. 8300.79 crore (Package-1: Rs. 5304.80 crore & Package-2: Rs. 2995.99 crore) with a total estimated project cost (excluding GST) of Rs. 4961.60 crore (Package-1: Rs. 3320.89 crore & Package-2: Rs. 1640.71 crore)

b) The project should be taken up on HAM under the NH(O) scheme.

c) The concession period of the project is 17.5 years with including 2.5 years construction period.

d) Land acquisition and necessary clearances to be obtained in a time bound manner before the bid due date so as to avoid any delays in the project.

13 Revalidation of its recommendation by the PPPAC is not required for following post recommendation changes in the project costs/bid documents: -

a) Any change in the date/time period for any time-bound actions like appointed date, financial close, construction period etc. After appraisal by MoRTH in such a case of amendment, it may be placed clearly, before the Competent authority, along with the justification and rationale, while seeking approval.

b) Non-substantial change in risk-allocation.

c) Any other changes/modification in the project proposal with the overall objective of making project successful. After appraisal by MoRTH in such a case of amendment, it may be placed clearly, before the Competent authority, along with the justification and rationale, while seeking approval.

d) Further, MoRTH/NHAI may decide whether the changes proposed post recommendations of the project proposal by the PPPAC fall within the threshold criteria as stated above. All such changes falling within the threshold criteria shall be appraised at the level of Secretary (RTH)/BoD of NHAI as the case may be, without any further need of revalidation by the PPPAC and shall proceed with the approval process accordingly.

***

Annexure-I

List of the participants of the 137th meeting of the PPPAC

a) **Department of Economic Affairs, Ministry of Finance**
   1. Ms. Anuradha Thakur, Secretary (EA)
   2. Dr. Alok Tiwari, JS (IFS)
   3. Shri Rahul Singh, Director (ISD)
   4. Shri Rajender Singh, SO (PIU)

b) **Department of Expenditure**
   1. Shri Atya Nand, JS

c) **NITI Aayog**
   1. Shri. Partha Reddy, Programme Director

d) **Department of Legal Affairs**
   1. Shri Jagat Prakash, Assistant Legal Adviser

e) **Ministry of Road Transport and Highways**
   1. Shri V Umashankar, Secretary (RTH)
   2. Shri Vinay Kumar, Additional Secretary (H&LA)
   3. Shri Manoj Kumar, CE
   4. Shri Alok Deepankar, Member (Technical)
   5. Shri Vishal Chauhan- Member (Admin)

f) **National Highway Authority of India (NHAI)**
   1. Shri Santosh Kumar Yadav, Chairman
   2. Shri Vipnesh Sharma, Member (P), NHAI

Annexure-II

National Highways Authority of India circular dated 22.09.2025

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport and Highways, Government of India)
जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली - 110 075 • G-5 & 6, Sector-10, Dwarka, New Delhi-110075
दूरभाष/Phone : 91-11-25074100 / 25074200

सत्यमेव जयते

No. FINDIV-21016/30/2025-O/o.DGM (Fin-I)/e-288631 Dt 22.09.2025

CIRCULAR

As per directions of the Competent Authority, Standard Parameters for adoption by Financial Consultants to bring uniformity in Financial Analysis of PPP Projects have been issued vide Circular No. NHAI/11033/CGM(Fin)/2011 dated 29.04.2011. Certain parameters referred in the said circular have been updated and attached herewith in Annexure-I. All Financial Consultants are henceforth required to adopt these Standard Parameters without any exception for finalizing Project Analysis. Remaining contents will be as per Circular No. NHAI/11033/CGM(Fin)/2011, dt. 29.04.2011.

Mridul Dubey 22/9/25
(Mridul Dubey)
Chief General Manager (Fin)

Encl : as above.

To:

All Empaneled Financial Consultants

Copy to:

1) Chief General Manager (Fin) - AKS
2) Sr. PPS to Chairman
3) Sr. PPS / PPS to ALL Members/CVO

Annexure - I

[Circular No. No. FINDIV-21016/30/2025-O/o.DGM (Fin-I)/e-288631, dt.22.09.2025]

Sl No	Parameter	Existing provisions	REVISED PROVISIONS	
			HAM Projects	BOT Projects
01	Financing Charges	(i) 2% of the Debt Amount, if Civil cost up to ₹ 500 Crore; (ii) 1.5% of the Debt Amount, if Civil cost is between ₹ 500-1000 Crore; (iii) 1% of the Debt Amount, if Civil cost is more than ₹ 1000 Crore.	**0.75 % of Debt amount**	**0.75 % of Debt amount**
02	Loading of Financing Charges for consideration of TPC	---	(i) Upfront - 50% ; (ii) Balance 50% Upon First Disbursement of Debt.	(ii) Upfront - 50% ; (ii) Balance 50% Upon First Disbursement of Debt.
03	Rate of Interest during Construction period	(i) For BOT (Annuity) Projects and HAM projects : SBI's 3-year MCLR + 2% ; (ii) For BOT (Toll) Projects : SBI's 3-years MCLR + 2.50%.	Average of one-year MCLR of Top 5 Commercial Banks plus 1.25%	Average of one-year MCLR of Top 5 Commercial Banks plus 1.50%
04	Cost of Debt during Operation Period	---	Average of one-year MCLR of Top 5 Commercial Banks plus 0.75%	Average of one-year MCLR of Top 5 Commercial Banks plus 1.00 %
05	Cost of Equity	15%	12%	14%
06	Debt-Equity Ratio	70 : 30	75 : 25	70 : 30
07	Equity Drawdown	25% upfront equity contribution and balance in proportion to debt.	50% upfront and balance in proportion of Debt	In case of Project under VGF/Grant, 100% upfront; in other cases 50% upfront and balance in proportion of Debt
08	Repayment of Loan during Operation Period	13 Years	13 years	As per MCA Schedule-X in which the % of repayment of loan along with repayment period has been provided for different Concession Period of 20, 25 and 30 years)

Sl No	Parameter	Existing provisions	REVISED PROVISIONS	
			HAM Projects	BOT Projects
09	Insurance	0.15% of the TPC/year	0.15% of Estimated Project Cost / year	0.15% of the TPC (includi ng grant/ construction su pport) /year during Conc ession period
10	Discount rate for calculation of NPV of Project Cash Flows	12.00%	Average of one-year MCLR of Top 5 Commercial Banks + 2.00% by rounding of next multiple of 50 basis & WACC also	Average of one-year MC LR of Top 5 Commercia l Banks + 2.00% by round ing of next multiple of 5 0 bases. Also Weighted A verage Cost of Capital ta king the cost of Debt and Equity in the ratio of Deb t & Equity.
11	Escalation Cost / Inflation	5% per F Y	4 % per p.a.	4 % per p.a.
12	Treatment of GST on EPC / TPC *(Including or excluding)*	---	40% of the GST on the BPC is reimbursed by the Authority, while the remaining GST is funded through debt-equity. The Concessionaire is eligible to claim input GST credit, which can be set off against GST liabilities arising from future annuity payments, interest on annuities, and O&M payments. Accordingly, the financial model should incorporate this input credit mechanism to accurately reflect cash flows and tax adjustments.	In BOT projects, the financial model is recommended to be prepared inclusive of GST
13	Income Tax *[New regime or old Regime]*	---	As per New tax regime	As per New tax regime
14	Computation of Interest on Debt	---	Interest on Opening Balance + Average on Debt drawn during respective months.	Interest on Opening Balance + Average on Debt drawn during respective months.

Sl No	Parameter	Existing provisions	REVISED PROVISIONS	
			HAM Projects	BOT Projects
15	Receipts of Annuities & Loan Repayments	---	At the end of 6 months after COD.	Loan repayment on Quarterly basis as per MCA Schedule-X.
16	Amortisation	---	Amortisation over the operation period equally based on EPC (excluding GST) less Grant.	Amortisation over the operation period equally based on TPC less Grant / Construction support including GST.
17	Start of Construction	---	First day of the next month of the month of likely Appointed Date.	First day of the next month of the month of likely Appointed Date.
18	Expenditure for less than one year (partial Financial Year / less than 12 months)	---	All expenditure including insurance should be proportioned based on the actual number of months.	All expenditure including insurance should be proportioned based on the actual number of months.
19	WPI for Toll Rate increase	---	---	4%
20	Traffic Growth	---	---	Traffic Study should not be older than 1-year prior to the Bid Due Date. As per DPR Consultant, Prior to COD growth @4%p.a. and thereafter 5% p.a. for first-seven years of operation and further thereafter growth @4% p.a. for 5 years and beyond this period @3% p.a.