

F.No.2/9/2024-PIU
Government of India
Ministry of Finance
Department of Economic Affairs
Infrastructure Finance Secretariat
ISD Division
(PIU)

4th floor, STC Building,
Janpath, New Delhi-01
Dated: 01st July 2025

Record of Discussion

Subject: Record of Discussion of the 130th meeting of the PPPAC for considering two road project proposal of the Ministry of Roath, Transport & Highways (MoRTH) om PPP mode.

Reference: 130th meeting of the PPPAC held on 30th June 2025.

Sir/Madam,

The undersigned is directed to forward the Record of Discussion of the 130th meeting of the PPPAC held on 30th June 2025 under the chairmanship of Finance Secretary and Secretary (EA) for information and necessary action.

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



(Arya Balan Kumari)
Joint Director (PIU)
011-2370 1219

To,

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

Copy to:

1. Sr. PPS to Finance Secretary & Secretary (EA)
2. Sr. PPS to OSD (DEA)
3. Sr. PPS to JS (ISD)

Subject: Record of Discussion of the 130th meeting of the PPPAC for considering the following project proposals: -

(i) Construction of 4 Lane Greenfield section from Mokama to Munger of NH-33 in the State of Bihar on Hybrid Annuity Mode.

(ii) Development of Six-lane Greenfield Access controlled Corridor (Nashik – Ahmednagar – Solapur –Akkalkot)

1. The 130th meeting of the PPPAC was held on 30th June 2025 at 09:45 hours to consider the above proposals of MoRTH.
2. List of attendees is placed at **Annexure-I**.
3. With the permission of Finance Secretary cum Secretary (EA), Joint Secretary (ISD) welcomed all the attendees to the meeting. NHAI made a detailed presentation on the proposed road project.

(i) Construction of 4 Lane of Greenfield section from Mokama to Munger of NH-33 in the State of Bihar on Hybrid Annuity Mode.

1. The details of the project are given in the table below:

Table 1: Details of the project

Project Description	“Construction of 4 lane Access Controlled Mokama-Munger section of NH-33 as part of Buxar Bhagalpur High Speed Corridor Route in the state of Bihar under NH(O) on Hybrid Annuity Mode”.		
PPP Model	Hybrid Annuity Mode		
Sponsoring Authority	Ministry of Road Transport and Highways, Government of India		
Implementing Agency	National Highways Authority of India (NHAI)		
Location	State: Bihar District: Patna, Lakhisarai, Munger		
Type of Pavement	Flexible		
Lane configuration	Access Controlled 4-lanes		
Details of Structures	S.N	Description	Details
	1	Length (km)	82.400
	2	Pavement Type	Flexible
	3	Major Bridge	2 Nos. (11x40m;2x40m)

	4	Minor bridge	26 Nos.
	5	ROB	4 Nos.
	6	Flyover	7 Nos. (2nos: - 2x30m; 5nos: - 20+30+20m)
	7	Trumpet	02 Nos.
	8	VUP/LVUP/SVUP	04-VUP (20x5.5), 48-SVUP (7x4)
	9	Major/ Minor Junctions improvement of crossroads	59 Nos.
	10	Culverts (No.)	<ul style="list-style-type: none"> 92 + 10 Nos. on MCW 8 no. on Interchange (Box Culvert) 48 +10 Cross road culverts (Pipe culvert)
	11	Connecting/ Slip/ Service Road (Km)	<ul style="list-style-type: none"> Slip Roads: 19.00 Kms (including both sides) Service road: 10.85 Km (including both sides) Connecting link road: 6. 705 Kms (including both sides)
	12	Rest Area	02
	13	Tolling	Close tolling with Exit entry toll booth at Ramps
	14	Construction Period	30 months
Concession Period		17.5 years (Including 2.5 years of Construction Period)	
Estimated Capital Cost with Break-up under major heads of expenditure	S.N	Description of work	Details (Rs. in crore)
	1	Civil Construction Cost including Utility Shifting labour cess & Seigniorage charges (Excl. GST) (Rs. in crore)	2120.61
	2	Estimated Project Cost (Rs.in crore) (without GST)	2243.16
	3	Estimated land and other preconstruction cost (Rs. in crore)	1228
	4	Estimated Total Capital Cost (including GST) (Rs. in crore)	4447.38
	5	Estimated BPC without GST (Rs.in crore)	2744.75
Land Acquisition Status	Particulars	Land to be Acquired	Published
	3A Status	509 Ha	<p>Patna and Munger CALA verification completed 100% and Lakhisarai CALA is in Progress.</p> <ul style="list-style-type: none"> 3A of 50.32 HA out of 63 HA of Patna under publication. 3A of 105 Ha of Munger verification completed 100%

			• 3A of 280 HA of Lakhisarai district verification completed 100%
	3D Status		3D will be initiated after appraisal from PPPAC
	3G Status		Yet to start
Financial Viability	Particulars		Mokama to Munger
	Equity IRR		15%
	Project IRR		13.49 %
	NPV (Rs. in crore)		1212.14
	NPV/Cost (Ratio)		0.540
Concession Agreement	The project is proposed to be implemented as per Model Concession Agreement dated 09.12.2016 uploaded on MoRTH website.		
Bidding parameter	Lowest Bid Project Cost.		
Bidding process	Single Stage Two-part system of bidding		

- The primary purpose of the proposed access controlled four-lane greenfield project corridor is to improve travel efficiency between the districts of Patna, Lakhisarai, and Munger in the state of Bihar. It is designed to facilitate efficient transportation and logistics by linking major cities and towns of Bihar and expected to enhance regional mobility, reduce travel time, and promote socio-economic development. The proposed four lane NH-33 will offer a direct 82.4 km access-controlled corridor with close tolling, supporting average vehicular speeds of 80 km/h with design speed of 100 km/h. This will reduce the overall travel time by approximately one hour, while offering safer, faster, and uninterrupted connectivity for both passenger and freight vehicles. Further, the instant project is a common part of Buxar Bhagalpur Highspeed Corridor declared in Budget 2024 . Other sections of this corridor are either functional or in different stages of development.
- Based on current traffic survey of existing 2 lane section i.e. around more than 21000 PCU AADT, instant project is proposed as four lane divided carriageway with 1.5 m paved shoulder with provision of six lane structure by keeping the view of future expansion of Buxar Bhagalpur Highspeed corridor.
- The project will be executed under the HAM model with a Total Capital Cost of Rs. 4447.38 crore. The project is included under the NH(O) for the FY 2025-26. The financial assessment indicates the project IRR is higher than 12% and the equity IRR is 15%.
- 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.
- Director, DoE raised the following observations:

- a) The cost of debt considered for the project is 11.60 which seems to be on the higher side. It is suggested that the rate should be based on market rates.

7. PD, NITI Aayog raised the following observations:

- a) The total traffic level of the corridor is 18,866 vehicles, out of which 72% (13,622 vehicles) are two wheelers, three wheelers and tractors. With this traffic level, the proposed highway is triggering 6-laning by 2038. The Authority may consider diverting two wheelers, three wheelers, etc., to service road potentially delaying the need for a 6-lane by 2038.
- b) 4-lane highway is generally designed for 90 MSA, NHAI shall provide the basis and impact on the design specification for highway proposed with 150 MSA.
- c) Is there any median opening on main carriageway?
- d) The list of utilities to be shifted by the concessionaire needs to be properly identified and listed out in the Schedule of the DCA. Further, the approved plan for relocation from the concerning utility authorities needs to be made part of the DCA.

8. JS(ISD) highlighted the following observations:

- a) MoRTH may clarify the status of the existing National Highway 33 upon completion of the proposed National Highway.
- b) The cost of debt considered in the financial model is 11.60% which is on a high side which may be revised as per current market trend.
- c) It is observed that road projects proposed by MoRTH are not viable on BOT (Toll) with 20/ 30 years concession period and 40% VGF support but are viable on HAM with 15 years concession period and 40% construction support. Therefore, MoRTH shall examine this issue with in-depth financial analysis in future projects.

9. The Chair made the following observations:

- a) Expressways and greenfield projects should normally be with straighter alignment. What is the rationale for adopting a 'U'-shaped alignment for this greenfield project?
- b) What is the rationale for proposing an alternate greenfield NH south of river Ganga when there is already a four-lane NH-31 north of river Ganga providing connectivity from Mokama to Munger. Moreover, the proposed alignment and the existing NH-31 are of almost same length?

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

- a) The cost of debt shall be revised as per the prevalent market rate.
- b) The traffic on the existing section of NH-33 comprises substantial number of two and three-wheelers which are primarily short-distance local trips and are unlikely to use the proposed access controlled greenfield corridor with a closed tolling system.
- c) MSA of 150 has been adopted considering commercial vehicle volume of ~6,000 PCUs/day in base year (2025) with a growth rate of 6.6%, and a Vehicle Damage Factor (VDF) of 3.5, which comes to a cumulative MSA of 163.77 over the 20-year design period. The adopted value of 150 MSA is thus conservatively kept. The pavement crust has been designed accordingly, following IRC:37-2018 guidelines.
- d) There is no median opening on the main carriageway.
- e) Utility shifting including the existing utilities to be shifted are included under Schedule A of the Concession Agreement.
- f) Upon completion of the proposed highway, the existing section of NH-33 will be de-notified and shall be entrusted to the State Government after commencement of traffic on the greenfield corridor.
- g) The difference arises from the distinct revenue calculation approaches considered in BOT and HAM models. The viability of BOT(Toll) is based on toll revenue collections while under HAM the same is based on pre-defined annuities. However, MoRTH will do some in-depth financial modelling of this issue.
- h) The proposed alignment was finalized based on meandering course of river and low-lying land south of Ganga and north of existing NH 33. Straighter alignment in north of existing NH 33 would result in higher embankment, long major bridge structures & other cross drainage structures which will result into higher costs of the project.
- i) The section of NH-31 is already a four-lane road catering to the traffic going towards Purnia. While the proposed corridor caters to the traffic heading towards Farakka/Malda making this project necessary on its own merit. Combined together, it will provide expressway connectivity in South Bihar from Purvanchal express in UP to Bangladesh border.

Recommendations

- 11.** After detailed deliberations, the PPPAC unanimously recommended the proposal for “Construction of 4-laning of Greenfield Section from Mokama to Munger of NH-33 in the State of Bihar on HAM Mode” 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. 4447.38 crore.
 - b) Since NH-33 and NH-31 are already runs parallel to the proposed alignment, the tolling on the proposed alignment will be limited. Therefore, the project shall be taken up on HAM under NH(O) scheme.
 - c) MoRTH shall examine the feasibility of a straight-line alignment for the proposed highway and to ensure that the optimal alignment is selected for the project.
 - d) On the northern side of Ganga River, a 4 lane NH-31 having equal length exists. Further, a two-lane section of NH-33 is also running parallel to the proposed alignment. Considering this, MoRTH shall ascertain the need for the proposed greenfield alignment before going to the approval of the competent authority.
 - e) MoRTH shall ensure that the project is not over-designed.
 - f) MoRTH shall make arrangement for continuous maintenance of the existing road in collaboration with State Government even after denotification.
 - g) The decision of approving new NHs is not only about enhancing connectivity, it is also about incurring huge public expenditure for developing such highways. It has been observed that NHs are approved and the land acquisition starts before approval of such expenditure by the Competent Authority. Therefore, MoRTH should seek guidance from Cabinet Secretariat and develop a clear SOP for approving new NHs.
- 12.** 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.
 - b) Non-substantial change in risk-allocation.
 - c) Any other changes/modification in the project proposal with the overall objective of making project successful.

- 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) Development of 6 lane Greenfield Nashik – Ahmednagar – Solapur – Akkalkot section of NH-60 in the state of Maharashtra under NH(O) on BOT (Toll) Mode.

1. The details of the project are given in the table below:

Table 2: Details of the project

Project Description	Development of 6 lane Greenfield Nashik – Ahmednagar – Solapur – Akkalkot section of NH-60 in the state of Maharashtra under NH(O) on BOT (Toll) Mode”. The current proposal is developed in two packages as follows:				
	Package	Location	From	To	Length (KM)
	I	Nashik to Ahmednagar	138.00	290.00	152
	II	Ahmednagar to Akkalkot	290.00	512.000	222
PPP Model	Hybrid Annuity Mode				
Sponsoring Authority	Ministry of Road Transport and Highways, Government of India				
Implementing Agency	National Highways Authority of India (NHAI)				
Location	State: Maharashtra District: Nashik, Ahmednagar, Beed, Dharashiv (Osmanabad) & Solapur.				
Type of Pavement	Flexible				
Lane configuration	6-lane with paved shoulder				
Details of Structures	S. N	Project Features	Package -I	Package -II	Combined
	1	Length (km)	152.00	222.00	374 (Greenfield corridor)
	2	Proposed ROW	70m	60 m	70 m – Length 152 Km (Km 138.000 to Km 290.000) 60 m – Length 222 Km (Km 290.00 to Km. 512.00)
	3	Lane Configuration	6-lane with PS (Flexible Pavement)	6-lane with PS (Flexible Pavement)	6-lane with PS (Flexible Pavement)
	4	Service Road/ Slip Road (LHS+RHS)	14.67 km / 7.97 km	3.58 km / 5.40 km	18.25 km / 13.37 km (LHS+RHS)

	5	Interchanges	6 Nos.	4 Nos.	10 Nos.
	6	Vehicular Underpass (VUPs)	29 Nos.	8 Nos.	37 Nos.
	7	Light Vehicular Underpass (LVUPs)	96 Nos.	62 Nos.	158 Nos.
	8	Small Vehicular Underpass (SVUPs)	Nil	04 Nos.	04 Nos.
	9	Overpasses	6 Nos.	9 Nos.	15 Nos.
	10	Design Period	20 years	20 years	20 years
	11	Viaduct	2.9 Km	2.7 Km	5.6 Km
	12	Major Bridge	11 Nos.	16 Nos.	27 Nos.
	13	Minor Bridges	62 Nos.	102 Nos.	164 Nos.
	14	ROB	02 nos.	03 nos.	05 nos.
	15	Boundary Wall	10 km (both sides)	10 km (both sides)	20 km
	16	Entry/Exit locations	8 Nos.	9 Nos.	17 Nos.
	17	Rest Areas	2 nos. (Land & boundary wall provision only)	12 nos. (Land & boundary wall provision only)	14 nos. (Land & boundary wall provision only)
	18	Construction period	24 months (730 days)	24 months (730 days)	24 months (730 days)
	19	Concession Period	20 Years	20 years	20 Years
	20	Proposed start date of project	01 April 2026	01 April 2026	-
	21	Estimated Average Traffic on	42,629 PCU	34,736 PCU	

		Greenfield stretch on COD date (2028-29)				
Concession Period	20 years (including 2 years for construction)					
Estimated Capital Cost with Break-up under major heads of expenditure	S. N	Particulars	For Concession Period of 20 Years			
			Package-I (Rs. in Crore)	Package-II (Rs in Crore)	Total (Rs. In Crore)	
	1	Base Civil Construction cost without GST	5,119.54	6187.83	11,307	
	2	Utility Shifting Cost	107.40	60.46	168	
	3	Civil Construction Cost Incl. Utility Shifting (without GST)	5,226.54	6,248.29	11,475	
	4	Escalation during construction @ 4%	240.42	287.42	528	
	5	IC & pre-operative expenses @ 1% of 3	52.27	62.48	115	
	6	Financing charges 0.75% of debt	33.58	41.77	75	
	7	Interest during construction (IDC) @ 11.04% p.a.	338.24	419.29	758	
	8	GST on civil cost-plus escalation @ 18% of (3+4)	984.05	1176.43	2,160	
	9	GST on services @ 18% of (5+6)	15.45	18.76	35	
	10	Estimated Project Cost	6891	8255	15,146	
	11	Pre-Construction activities	2603	1393	3,996	
		(a) Land acquisition Cost including interest from date of 3(A) till April, 2025	2497	1356	3,853	
(b) EIA Cost		106	37	143		

	12	Total Estimated Capital Cost (10+11)	9,494	9,648	19,142
Land Acquisition Status	S. N	Description	Nashik - Ahmednagar - Solapur - Akkalkot greenfield highway		
	1	Name of Package	Package-I	Package-II	Total
	2	Total Land Required (Ha)	1457	1665	3122
	3	Land already available (Ha)	0	0	0
	4	Balance land (Ha) ((2)-(3))	1457	1665	3122
	5	3A done (% of (4))	100	100	100%
	6	3D done (% of (4))	85	82	84%
	7	3G done (% of (4))	60	47	53%
	8	3H done (% of (4))	0	8	4%
	Financial Viability	Particulars	Package-I	Package-II	
PIRR		13.55%	13.48%		
EIRR		15%	15%		
Concession Agreement	<div>- Package-I is proposed to be implemented as per New BOT MCA (under approval by IMC).</div> <div>- Package-II is proposed based on BOT (Toll) MCA for capacity augmentation.</div>				
Bidding parameter	Lowest grant sought or highest premium offered				
Bidding process	Single Stage Two-part system of bidding				

2. The proposed project was earlier submitted to the PPPAC, as a greenfield alignment with a total length of 468 km (MH/Gujarat Border to Akkalkot) divided in 13 packages on HAM Mode in September, 2024. The reply of MoRTH to the observation of PPPAC (issued vide OM dated 28.9.24) is attached at Annexure II. Based on the observation of the PPPAC, the proposed project has been revised to a greenfield alignment starting from Nashik in place of Maharashtra-Gujarat Border and end at Akkalkot with a reduced length of 374 Km and divided in 2 packages on BOT (Toll) Mode. A 20-year concession period is proposed, along with the grant of rights of tolling of existing competing roads as an incentive to the new BOT (Toll) concessionaire, to make the tolling easier, no conflict in competing roads and attractive project for bidders. The primary purpose of the proposed access controlled six-lane greenfield project corridor is to improve travel efficiency between Surat and Chennai. The proposed corridor shall also provide connectivity to Agra - Mumbai Corridor at Nashik at Junction with NH-60 (Adegaon), Vadodara Mumbai Expressway through Samruddhi Mahamargh at Pangri (near Nashik). The proposed corridor will provide connectivity to Chennai Port & Hazira Port. Accordingly, the instant proposal is to develop Six-lane access-controlled, greenfield corridor from Nashik to Ahmednagar (package-I) and Ahmednagar to Akkalkot

(package-II). Package-I with 20-year concession requires an estimated grant of Rs. 495 crore and Package-II is viable without grant.

3. The proposed greenfield alignment, designed for 100 km/h, is expected to reduce travel time by ~6 hours and reduce the travel distance by 306 km. In addition, it would also provide other benefit such as enhance the existing tourism and pilgrimage circuit, reduction in accidents and pollution, reduction in traffic congestion, support the development of Industrial sector, etc.
4. The project will be executed under the BOT (Toll) model with an estimated project cost of Rs.15,146 crore and an estimated Total Capital Cost of Rs. 19,142 crore. The project is included under the NH(O) for the FY 2025-26. The financial assessment indicates the project IRR is higher than 12% and the equity IRR is 15%.
5. 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.
6. Director, DoE raised the following observations:
 - a) The cost of debt is on a higher side and the same to be as per the prevailing market rates.
 - b) The traffic on the existing corridor is around 17,000 PCU only. What is the rationale for proposing 6-lane greenfield corridor ?
7. PD, NITI Aayog raised the following observations:
 - a) The toll collection on existing route between Nashik and Akkalkot is proposed as a sweetener to the new BOT (Toll) Concessionaire. Presently, the existing corridor has been developed or being developed on various modes i.e., BOT, HAM and EPC. It would be difficult for MoRTH to ensure timely CoD of under construction sections and ending of ongoing concessions of functional sections. It will bring the revenue risk for the concessionaire and MoRTH may ensure that such risks are mitigated.
 - b) The existing brownfield section between Nashik and Solapur has traffic between 9,000 and 40,000 PCU and the traffic projection for the proposed corridor is 38,000 PCU. It may be clarified from which corridor the traffic of 38000 PCU will be diverted? Additionally, it was observed that the basis of the estimation of target traffic mentioned in BOT(Toll) document is not clear and MoRTH should bring out the basis of target traffic as it's a major factor in toll revenue.
 - c) The corridor may be taken up for development as Expressway instead of Access-controlled Expressway.

- d) The cost considered in the estimate towards protection works is very high. The same may be reviewed.

8. JS(ISD) highlighted the following observations:

- a) The project cost is 11.8% higher than the normative cost for Package-I. What is the justification for the same?
- b) For Package-I, the estimated grant is Rs. 495 crore with 20-year concession period whereas for 25 year concession period, the project is yielding premium. Therefore, 25 year concession period can be considered.
- c) Who will give the Grant for Package-I, if discovered through bidding?
- d) For Package-I and Package-II, a ROW of 70m and 60m have been adopted respectively. MoRTH may ensure having same RoW for different packages of a project to ensure uniformity and future expansion?

9. The Chair made the following observations:

- a) The corridor is proposed to connect port cities of Surat and Chennai. Whereas, port cities preferred connectivity shall through sea route (which is cheaper mode of transportation vis a vis road). For future projects, MoRTH should consider intermodal/ multimodal connectivity before developing highways.
- b) Which alignment of the existing roads shall be handed over to the new BOT (Toll) concessionaire as a sweetener?
- c) After developing the proposed corridor as a shorter connectivity between Surat to Chennai, who will do the required and timely maintenance and upgradation the existing corridors?

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

- a) The cost of debt shall be revised as per prevalent market rate.
- b) Based on the O-D Survey and considering the diversion of traffic from NH-48 (Mumbai – Pune -Bengaluru) and NH-52 (Dhule-Aurangabad-Solapur) on other alternate routes, the estimated traffic on the greenfield corridor is around 38,000 PCU in 2028-29 qualifying for a 6-lane corridor.
- c) The instant project is proposed for completion by 2029 and all under construction projects proposed as sweetener are planned to be completed before 2029. Considering the Kumbh mela to be held at Nashik, the projects are being monitored on quarterly basis for timely completion. Additionally, the stretches under BOT(Toll) Concession period is ending in 2031 and 2033 with no provision for extension of Concession period. As stipulated in the Concession Agreement of the existing BOT (Toll) sections, the concessionaire

shall be compensated for any toll revenue loss rather than extending the concession period.

- d) The ROW acquired in the corridor is 60m/70 m which is not sufficient to develop the corridor with Expressway standards. Further, due to various technical constraints such as width of carriageway, curves, etc., it has been proposed to develop the corridor as access-controlled highway with 100 kmph design speed.
- e) The cost of protection work includes major items like drainage, embankment slope protection and safety items and is reasonably assessed.
- f) The normative cost for Package-I is higher due to the long lead distance for earth and aggregates.
- g) The design life of the asset is 20 years and accordingly, 20 years concession period has been considered. MoRTH will give the grant for Package-I, if discovered through bidding process.
- h) The RoW as per MORTH guidelines are 70m. Package-II has a reduced 60m ROW to minimize land acquisition and preserve fertile agricultural land, as per local requests, however, in future projects, efforts will be made to maintain uniformity of RoW.
- i) Future highway projects will prioritize intermodal/ multimodal connectivity to enhance overall transportation efficiency.
- j) The competing roads of sections of NH-60, NH-160D and NH-160 will be given as a sweetener to the concessionaire of Package I. While section of NH-160 & 161, NH-561A, NH-65 and NH-150E will be given as a sweetener to the concessionaire of Package-II.

Recommendations

11. After detailed deliberations, the PPPAC unanimously recommended the proposal for **“Development of 6 lane Greenfield Nashik – Ahmednagar – Solapur – Akkalkot section of NH-60 in the state of Maharashtra under NH(O) on BOT (Toll) Mode”** 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. 19,142 crore.
- b) The project should be taken up on BOT (Toll) under NH(O) Scheme with 20 years concession period including construction period.

- c) For Package-I, based on market discovery through bidding, a grant up to Rs.495 crore may be provided by MoRTH under NH(O) scheme. The Package-II is expected to attract a premium.
 - d) While seeking approval of the competent authority, MoRTH should clearly bring out details of the existing roads and the tolling rights on them being included in the project concession to make the project viable.
 - e) For future projects, MoRTH should ensure intermodal/ multimodal connectivity while developing NHs.
 - f) The existing corridors between Surat to Chennai, such as those via Pune and Bengaluru and via Hyderabad are also connecting large and important habitations and economic nodes. Lot of economic development has happened along these corridors. After developing the proposed corridor as a shorter connectivity between Surat to Chennai, MoRTH shall ensure that required and timely maintenance and upgradation of existing corridors are not to be neglected.
 - g) The decision of approving new NHs is not only about enhancing connectivity, it is also about incurring huge public expenditure for developing such highways. It has been observed that NHs are approved and the land acquisition starts before approval of such expenditure by the Competent Authority. Therefore, MoRTH should seek guidance from Cabinet Secretariat and develop a clear SOP for approving new NHs.
 - h) MoRTH should ensure that projects which are to be given as a sweetener to the concessionaire are completed well within time and there should not be any extension in the concession period.
- 12. 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.
 - b) Non-substantial change in risk-allocation.
 - c) Any other changes/modification in the project proposal with the overall objective of making project successful.
 - 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 129th meeting of the PPPAC

a) Department of Economic Affairs, Ministry of Finance

1. Shri Ajay Seth, Secretary, EA- In Chair
2. Shri Baldeo Purushartha, JS (ISD)
3. Ms. Arya Balan Kumari, Joint Director
4. Shri Rajender Singh, SO (PIU)
5. Shri Manjeet Yadav, ASO(PIU)
6. Shri Deepak Meena, ASO(PIU)

b) Department of Expenditure

1. Shri L. K. Trivedi, Director

c) NITI Aayog

1. Shri. Partha Reddy, Programme Director

d) Department of Legal Affairs

1. Shri Arpit Mishra, Deputy Legal Adviser

e) Ministry of Road Transport and Highways

1. Shri V Umashankar, Secretary (RTH)
2. Shri Vinay Kumar, AS(H)
3. Shri Shashi Bhushan, SE

f) National Highway Authority of India (NHAI)

1. Shri Santosh Kumar Yadav, Chairman
2. Shri Anil Chaudhary, Member
3. Shri L P Padhy, CGM
4. Shri Alok Deepankar, Member (Technical)
5. Shri Rajat Trivedi, Manager (Tech.)



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)
प्लॉट नं. 4, मिनार-10, इण्डिया गेट, नई दिल्ली - 110 073 * G.O.S.R. Series-10, Dwarka New Delhi-110075
दूरभाष/Phone: 31-11-26574131-26574204



NHAI/Tech/MH/S-N-A-S/E-237115/2024/

27.06.2025

To,

The Additional Secretary (Highways)
Ministry of Road Transport & Highways,
Transport Bhawan, 1, Parliament Street
New Delhi - 110 001

(Kind Attention: Sh. Shashi Bhushan, SE (BP& SP Cell))

Sub: Six laning of Nashik - Ahmednagar - Solapur - Akkalkot Greenfield stretch from Pkg-IV to XIII & Pkg-XV - XVI in the State of Maharashtra to be executed on Hybrid Annuity Mode under under NH (O)- **Modified Reply to the comments of DEA - Reg.**

Ref: (i) DEA O.M. No. F.No.2/11/2024-PIU dated 28.09.2024.
(ii) NHAI letter No. NHAI/Tech/MH/S-N-A-S/E-237115/2024 dated 09.10.2024
(iii) DEA O.M. No. F.No.2/9/2024-PIU dated 29.01.2025.

Sir,

Please refer to this office letter dated 9.10.2024 cited under reference (ii) wherein NHAI has submitted reply of PPPAC meeting held on 5.09.24 (issued through DEA OM dated 28.09.24 cited under reference (i)). NHAI has further received observation of DEA OM dated 29.01.2025 (cited under reference (iii)).

2. Based on above observation of DEA, NHAI has revised project proposal is as under:

- (i) Mode of project is changed to BOT (Toll) in place of HAM
- (ii) Length of Project is modified to 374 Km in place of 468 Km
- (iii) Service road length is modified to 18.25 km in place of 150.23 km
- (iv) No of Packages is modified to 02 in place of 13.

Detailed comparative summary of project features and Cost of instant proposal with earlier submitted proposal is enclosed at **Annex-1**.

3. Modified reply to the earlier observations of PPPAC cited under ref.(i) are enclosed at Annex-2 & reply to DEA observation cited under ref. (iii) is enclosed at **Annex-3**.

Encl: As above

Rajneesh Kapoor

(Rajneesh Kapoor)
CGM (T)
Maharashtra Division

(a) Comparison of project features of instant proposal with earlier submitted PPPAC proposal:

S. No.	Details	Earlier appraised to PPPAC on 05.09.2024	Instant proposal
1	Length of the project corridor (Km)	468.78	374
2	No. of Construction Packages (Nos.)	13 (HAM)	2 (BOT(Toll))
3	Mode of Implementation	HAM	BOT (Toll)
4	Major Bridges (Nos.)	30	27
5	Minor bridge (Nos.)	204	164
6	Viaduct (Km)	5.6	5.6
7	ROB (Nos.)	8	5
8	VUP / LVUP / Overpass (Nos.)	296 (78/ 202/ 16)	210 (37/ 158/ 15)
9	Length of Service Road / Slip Road (Km)	150.23 km / 8.16 km	18.25 km / 13.37 km
10	Interchanges (Nos.)	22	10
a	Double Trumpets	17	9
b	Diamond Interchange	2	0
c	VUP with slip roads	0	7
d	Trumpet	3	1
11	Side Slope considered	2:1	1.5:1
12	Retaining Wall / Toe wall (Km)	137.84	86.5
13	Boundary Wall	468 km x 2	20 km x 2

(b) Comparison of Civil cost and Capital Cost of instant proposal with earlier submitted PPPAC proposal:

S. No.	Details	Earlier appraised to PPPAC on 05.09.2024 (Rs. in Cr.)	Instant proposal (Rs. in Cr.)
1	Base Civil Construction cost without GST (Cr.)	15,146	11,307
2	Utility Shifting Cost (Cr.)	175	167.86
3	Civil Construction Cost Incl. Utility Shifting (without GST) (Cr.)	15,322	11,475
4	Pre-Construction activities (Cr.)	4,228	3,996
	(a) Land acquisition Cost (Cr.)	3,983	3,853
	(b) EIA Cost (Cr.)	192	143
	(c) ATMS cost (including GST) (Cr.)	54	0
5	Total Capital Cost including centages and other pre-const. cost (Cr.)	23,112	19,142

S. No	Observations of DEA vide O.M. dated 28.09.2024	Modified Reply
1	This is not a six laning of an existing National Highway, but development of a new greenfield highway.	Yes. Project is 6 lane Access controlled Greenfield Highway.
2	This project has been posed as a part of a larger Surat Chennai Economic Corridor. The approval of the competent authority for the economic corridor and scope of the corridor may be informed. As the proposal entails a greenfield national highway, the norms for assessing need for a new national highway and the approval level may be indicated.	<p>The Revised Cost Estimate of Phase-I of Bharatmala Pariyojana was appraised by PIB vide minutes dated 19th July 2022 in which Surat-Solapur corridor was present at Sl. No. 200-206 of Annexure-1A. As per the instructions from Ministry of Finance in its D.O. letter dated 16th November 2023, award under BPP-I has been discontinued. As such, Instant Project of Nashik – Akkalkot, part of Surat-Chennai Economic Corridor, is proposed to be approved by CCEA after appraisal through PPPAC under NH(O) as per Extant Guidelines of appraisal & approval of NH(O) Project.</p> <p>For assessing the need for a greenfield corridor, MoRTH uses a structured framework considering parameters under 3 major categories:</p> <ul style="list-style-type: none"> – Ease of Implementation: Length of realignment required for access controlling, number of structures on existing alignment – Efficiency: Alignment efficiency ratio, Capacity of existing alignment to cater to future traffic, LA and Civil Cost comparison – Effectiveness: Connectivity to additional nodes via greenfield alignment
3	This project was posed to the PIB in April/May 2022 as a four-lane project. The PIB had recommended that the lane kilometre and the category of the project would frozen and no charges would be allowed.	<p>Surat-Solapur corridor was proposed as 4-lane based on preliminary traffic estimates present at the time of PIB appraisal of Revised Cost Estimate of BPP-I in 2022. Since Bharatmala Pariyojana has been discontinued, Nashik – Akkalkot project is proposed to be approved by CCEA after appraisal through PPPAC under NH(O) as per Extant Guidelines of appraisal & approval of NH(O) Project.</p> <p>As per the traffic survey conducted by DPR, traffic on the proposed section is expected to reach 38,682 PCU by 2028-29, 55,700 PCU by 2036-37 and 86,300 PCU by 2046-47. Capacity of 4-lane high-speed corridor (49,500 PCU as per Indo-HCM) will be breached by 2034-35, and the capacity of 6-lane high-speed corridor (76,500 PCU as per Indo-HCM) by 2044-45. Hence, a 6-lane access-controlled highway is proposed.</p>

S. No	Observations of DEA vide O.M. dated 28.09.2024	Modified Reply																						
4	The cost of the project is higher by 43 per cent than the cost recommended by the PIB.	<p>Earlier cost proposed was 43% higher than PIB. However, Cost is now optimised and 18.8% higher than PIB approved cost. Details of higher cost is as under:</p> <table><tr><th>Details</th><th>As per PIB</th><th>Current Cost</th></tr><tr><td>Civil + centages (Rs. Cr.)</td><td>11,676</td><td>15,146</td></tr><tr><td>LA + Pre-construction cost (Rs. Cr.)</td><td>4,436</td><td>3,996</td></tr><tr><td>Total (in Cr.)</td><td>16,112</td><td>19,142 (3030 Cr i.e. 18.8% higher than PIB approved cost)</td></tr></table> <p>Reason for Higher Cost is as under:</p> <table><tr><th>Detail of Project</th><th>Cost Increase (Rs. Cr.)</th></tr><tr><td>Increase in cost due to change from 4 lane to 6 lane access controlled greenfield corridor</td><td>2,138</td></tr><tr><td>GST slab revision from 12% to 18%</td><td>732</td></tr><tr><td>Increase in cost due to escalation from 2022 to 2025</td><td>160</td></tr><tr><td>Total</td><td>3,030</td></tr></table>	Details	As per PIB	Current Cost	Civil + centages (Rs. Cr.)	11,676	15,146	LA + Pre-construction cost (Rs. Cr.)	4,436	3,996	Total (in Cr.)	16,112	19,142 (3030 Cr i.e. 18.8% higher than PIB approved cost)	Detail of Project	Cost Increase (Rs. Cr.)	Increase in cost due to change from 4 lane to 6 lane access controlled greenfield corridor	2,138	GST slab revision from 12% to 18%	732	Increase in cost due to escalation from 2022 to 2025	160	Total	3,030
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5	Any review and change in the recommendation of the PIB should be done by the PIB itself	<p>The Bharatmala Pariyojana Phase-I was appraised by PIB vide minutes dated 19th July 2022. However, as per the instructions from Ministry of Finance in its D.O letter dated 16th November 2023, award under BPP was discontinued with immediate effect.</p> <p>Since BPP-I has been discontinued, revised PIB appraisal of the project is not required and approval is sought through PPPAC under NH(O) as per Extant Guidelines of appraisal & approval of NH(O) Project.</p>																						
6	The proposed greenfield project is in close proximity to recently improved or under construction alternate routes via Pune and Aurangabad.	<p>Existing connectivity between Surat – Solapur is already congested and needs capacity augmentation.</p> <p>(i) Surat-Dhule-Aurangabad-Solapur (694 km; 4-lane): This section has 31,000 PCU Traffic against 27,000 PCU Capacity (LOS-B).</p> <p>(ii) Surat-Mumbai-Pune-Solapur (420 km 6 lane & 253 km 4 lane): 6-Lane Surat-Mumbai section has 1,35,000 PCU traffic against 41,000 PCU Capacity (LOS-B). Mumbai-Pune section has 85,000 PCU traffic. Pune-Solapur section is only 4-lane with traffic of 39,000 PCU against 27,000 PCU capacity.</p> <p>Both the above mentioned alternate corridors are about 100 km away from the proposed corridor at Ahilya Nagar. Due to this, they provide a longer route of 694 km (Surat-Dhule-Aurangabad-Solapur) and 673 km (Surat-Mumbai-Pune-Solapur) compared to 606 km for Surat-Nashik-Akkalkot greenfield alignment for the</p>																						

S. No	Observations of DEA vide O.M. dated 28.09.2024	Modified Reply
		traffic between Surat and Chennai. Further, both the alternate alignments are non-access controlled. Development of a shorter high-speed corridor alignment will improve the logistics efficiency for the freight traffic between Surat-Solapur and further to Chennai.
7	Instead of assessing the traffic on the proposed new corridor on a standalone basis, MoRTH may consider reviewing the traffic estimates based on network impact.	<p>As per the OD surveys conducted as part of the DPR study, 15% of traffic is expected to be diverted from Surat-Dhule-Aurangabad-Solapur and 27.5% of traffic is expected to be diverted from Surat-Mumbai-Pune-Solapur to the proposed Nashik-Akkalkot section.</p> <p>Overall, the total estimated traffic on the proposed Nashik-Akkalkot section is 38,682 PCU in FY2028-29.</p>
8	MoRTH's analysis indicate that 72 per cent of the freight traffic in general covers distance of less than 600 km. In FY24, more than 87% of the freight traffic by number and 83% by value covered less than 1000 km, as per the e-way bill data. With such traffic needs, the rationale of very long-distance point to point greenfield corridors may be revisited.	<p>As per the analysis conducted by MoRTH using GSTN data, 59% of freight movement is <350km, 13% is between 350-600 km and 27% is >600 km.</p> <p>Traffic movement on Nashik-Akkalkot corridor falls under 4 broad categories – Through traffic, East-bound traffic from the corridor, West-bound traffic from the corridor, and Traffic within the ODs on the corridor. The long-distance point-to-point traffic referred in the query considers only 1 out of the 4 categories, i.e. through traffic.</p> <p>As per the freight OD assessment conducted using GSTN data for 2021-22, the estimated freight movement along the proposed Nashik-Akkalkot section is as follows:</p> <ul style="list-style-type: none"> – Through Traffic (freight originating and terminating outside the corridor districts, using the full stretch): 27.8 MMT (47%) – North-bound Traffic (Freight originating/ terminating between the districts on the corridor and the districts in North-West): 12.9 MMT (22%) – South-bound traffic (Freight originating/ terminating between the districts on the corridor and the districts in South-East): 10.9 MM (18%) – Local Traffic (freight originating and terminating within the corridor districts): 8 MMT (13%) <p>As such, the proposed Nashik-Akkalkot section is expected to serve a significant share of North-West-bound, South-East-bound and local freight movement, in addition to through traffic traversing the complete corridor. The through traffic on the corridor forms only 47% of the total traffic on the corridor.</p>

Annexure-3

S. No	Observations of DEA vide O.M. dated 29.01.2025	Modified Reply
1	Revised Cost appraisal is required by PIB	<p>The Bharatmala Pariyojana Phase-I was appraised by PIB vide minutes dated 19th July 2022. However, as per the instructions from Ministry of Finance in its D.O letter dated 16th November 2023, award under BPP was discontinued with immediate effect.</p> <p>Since BPP-I has been discontinued, revised PIB appraisal of the project is not required and approval is sought through PPPAC under NH(O) as per Extant Guidelines of appraisal & approval of NH(O) Project.</p>
2	Proper need analysis is required.	<p>The need analysis of Nashik-Akkalkot corridor is conducted based on traffic assessment and freight assessment.</p> <p>Traffic Assessment: Existing connectivity between Surat – Solapur is through two alternate alignments.</p> <p>(i) Surat-Dhule-Aurangabad-Solapur (NH-53 and NH-52): This section has 31,000 PCU Traffic against 27,000 PCU Capacity (LOS-B).</p> <p>(ii) Surat-Mumbai-Pune-Solapur (NH-48 and NH-65): This section has 90,000 PCU average traffic against 41,000/27,000 PCU Capacity (LOS-B).</p> <p>As per the OD surveys conducted as part of the DPR study, 15% of traffic is expected to be diverted from Surat-Dhule-Aurangabad-Solapur and 27.5% of traffic is expected to be diverted from Surat-Mumbai-Pune-Solapur to the proposed Nashik-Akkalkot section.</p> <p>Overall, the total estimated traffic on the proposed Nashik-Akkalkot section is 38,682 PCU in FY2028-29.</p> <p>Freight Assessment: Total freight movement between the proposed section is estimated as 59.6 MMT in 2021-22 (based on GSTN data) driven by movement between O-D pairs such as Surat – Bengaluru (1.4 MMT), Surat – Chennai (0.8 MMT) etc. and commodities such as Cement, Chemicals, Granite/marbles etc. Due to the high freight movement along the corridor, a high-speed corridor is necessary to provide logistically efficient movement.</p> <p>Further to the above, two options for development of Nashik-Akkalkot corridor were studied – 8 laning of existing brownfield alignment and 6-lane greenfield access-controlled highway. The greenfield alignment with length of 374 km and cost Rs. 15,741 Cr. was found to be more cost efficient than brownfield alignment of</p>

S. No	Observations of DEA vide O.M. dated 29.01.2025	Modified Reply
		length 431 km and cost Rs. 20,182 Cr. Further, greenfield high-speed corridor will reduce the length and improve average travel speeds leading to reduction in logistics cost.

