

Minutes of the 313th meeting of Expert Appraisal Committee (Infra-1) held on 22nd November, 2022 through Hybrid Mode (Physical + Video Conference) for the projects related to Infrastructure Development, all Ship breaking yards including ship breaking units 7(b); Industrial Estate/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes7(c); Ports, Harbors, Breakwaters, Dredging7(e) and National Highways 7(f).

The 314th Meeting of Expert Appraisal Committee (EAC) of Infra-1 Sector was held through Hybrid Mode during 22nd November, 2022 under the Chairmanship of Dr. Deepak Arun Apte. A list of participants is annexed as **Annexure-A**.

1. OPENING REMARKS OF THE CHAIRMAN

At the outset, Dr. Deepak Arun Apte, Chairman, EAC welcomed the Members of the EAC and requested Shri Amardeep Raju, the Member Secretary of the EAC to initiate the proceedings of the meeting with a brief account of the activities undertaken by the Ministry under Infra-1 Division.

2. AGENDA WISE CONSIDERATION OF PROPOSALS:

Agenda wise details of proposals discussed and decided in the meeting are as following:

Agenda No. 2

Construction of 4/6 Laning of Palakkad – Kozhikode of NH-966 (Greenfield) from Km 0.000 to Km 121.006 (Total Length – 121.006 km) in the state of Kerala under Bharatmala Pariyojana on HAM mode by M/s National Highways Authority of India - Terms of Reference.

[Proposal No. IA/KL/NCP/261224/2022 and File No. 10/20/2022-IA.III].

“The EAC noted that the Project Proponent and the consultant have submitted the application and enclosures are true to the best of their knowledge and belief and no information has been suppressed in PFR/DPR/Form-1/Annexure-III. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and ToR/Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”

2.1 The proposed project is for development of 4/6 lane partially access controlled Greenfield highway to ease the infrastructure asymmetry and improve the efficiency of freight movement under Bharatmala Pariyojana. Total length of the proposed highway is 121.006 km. The alignment will start from Ch 0+000 (10°46'30.53"N, 76°42'6.25"E) at NH-544 (Salem-Kochi-Kanyakumari Highway) at Marutharode Village, Palakkad District and traverses entirely through plain/rolling terrain and it will end at Ch 121+006 (11°14'16.19"N, 75°50'30.19"E) of NH-66 at Olavanna Village, Kozhikode District. The proposed project will cover Palakkad, Malappuram and Kozhikode districts in Kerala State.

2.2. The proposed project falls under Schedule 7(f), Highway, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 7937.96 Crores.

2.3. The EAC, taking into account the submission made by the project proponent had a detailed deliberation in its 296th meeting during 28th – 29th April 2022 and deferred the proposal for grant of Terms of Reference (ToR) for the want of following documents/information:

- i. Explore suitable alignment beyond 10 km ESZ of the Silent Valley NP and adjoining forest areas.
- ii. Will the development of green field alignment will bring more population closer to the boundary of Silent Valley National Park? What are the impact of the same on human-wildlife conflict? And habitat destruction at the buffer areas of Silent Valley National Park?
- iii. Considering extremely sensitive nature of the forests near the alignment, a sub-committee will make a site visit before considering the proposal further for ToR.

2.4. As per the observations of EAC, the Sub-Committee conducted site visit for the proposed project on 19th October, 2022, and the proposal was further placed before EAC in its 313th EAC Meeting on 22nd November, 2022. The report of the subcommittee has been presented to the before the Committee which is placed at *Annexure-B*. On the request of the PP and approval of Chairman, EAC, the report was discussed in the EAC. PP mentioned the following:

- i. NHAI submitted that the alignment will be shifted to south-west, so that forest diversion area will be reduced. Further felling of trees can be reduced due to this revised change. Suitable mitigation measure at all sensitive location suggested by Forest department like trenching at forest boundaries, high embankment construction, animal passage etc. will be incorporate in the project in due course of time while processing the forest diversion proposal under section 2 of FCA 1980 and wildlife proposal under WPA 1972 as suggested by Forest department.

2.5. The EAC also noted that development activities in the proposed road alignment at two stretches which are virgin and ecologically sensitive should be reconsidered. A stretch near Silent Valley National Park passes very close to the park boundary, bringing human interference very close to the proposed alignment. In light of the foregoing, EAC advised the PP to explore elevated roads between Km.7.720 to Km.8.800, Km.17.550 to Km.18.200, and Km.51.970 to Km.52.550. The Committee **recommended** the proposal for grant of ToR subject to the conditions prescribed in the report of the EAC Sub-Committee as enclosed at Annexure-B; in addition to all standard conditions applicable for such projects:

Specific Condition:

- i. To build elevated roads between Km.7.720 to Km.8.800, Km.17.550 to Km.18.200, and Km.51.970 to Km.52.550.
- ii. Provide details regarding the number and type of trees to be felled and planted for the proposed project.
- iii. Cumulative impact assessment study should be carried out along the entire stretch including the other packages and the current stretch under consideration.

- iv. The proponent shall carry out a detailed traffic flow study to assess inflow of traffic from adjoining areas like airport/urban cities. The detailed traffic planning studies shall include complete design, drawings and traffic circulation plans (taking into consideration integration with proposed alignment and other state roads etc.). Wherever required adequate connectivity in terms of VUP (vehicle underpass)/ PUP (Pedestrian underpass) needs to be included.
- v. Provide compilation of road kill data on the wildlife on the existing roads (national and state highways) in the vicinity of the proposed project. Provide measures to avoid road kills of wildlife by the way of road kill management plan.
- vi. The alignment of road should be such that the cutting of trees is kept at bare minimum. Alignment also should be such that it will avoid cutting old and large and heritage trees if any. All such trees should be geo-tagged, photographed and details be submitted in the EIA –EMP report.
- vii. All trees with heronry (breeding ground for herons), pelicanary or community nesting of birds like Painted Storks, Ibis, Egrets, Pelican, etc will not be allowed to fell. In case of presence of such, alignment will be required to be changed to save such trees. Presence of such trees should be marked chainage wise and present as a separate table in EIA-EMP.
- viii. The entire alignment passing near the buffer areas of Silent Valley National Park will be access controlled and no entry and exits permitted in these areas. Accordingly, design be presented.
- ix. The proponent shall carry out a comprehensive socio-economic assessment and also impact on biodiversity with emphasis on impact of ongoing land acquisition on the local people living around the proposed alignment. The Social Impact Assessment should have social indicators which can reflect on impact of acquisition on fertile land. The Social Impact Assessment shall take into consideration of key parameters like people's dependency on fertile agricultural land, socio-economic spectrum, impact of the project at local and regional levels.
- x. As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 30th September, 2020, the project proponent, based on the commitments made during the public hearing, shall include all the activities required to be taken to fulfil these commitments in the Environment Management Plan along with cost estimates of these activities, in addition to the activities proposed as per recommendations of EIA Studies and the same shall be submitted to the Ministry as part of the EIA Report. The EMP shall be implemented at the project cost or any other funding source available with the project proponent. In pursuance of this OM the project proponent shall add one annexure in the EIA Report indicating all the commitments made by the PP to the public during public hearing and submit it to the Ministry and the EAC.
- xi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25th October, 2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- xii. Passage for animal movement has to be detailed in the EIA/EMP report.
- xiii. A comprehensive plan for plantation of three rows of native species, as per IRC guidelines, shall be provided. Such plantation alongside of forest stretch will be over and above the compensatory afforestation. Tree species should be same as per the forest type.

- xiv. Detailed Biodiversity assessment and conservation/mitigation plan be developed by a reputed institute either SACON or Wildlife Institute of India duly endorsed by state forest department.
- xv. A specific study on elephant movement and impact of proposed project on the same be studied by SACON including mitigation plan duly endorsed by state forest department
- xvi. Recommendation from the office of PCCF of the state forest department about viability of the alignment specific to elephant conflict and impact on the buffer areas of Silent Valley NP be provided.

Annexure-A

Following members were present during the 313th EAC(Infra-1) meeting held on 22nd November, 2022.

3	Name	Designation	22nd November, 2022
1.	Dr. Deepak Arun Apte	Chairman	Present
2.	Shri S. Jeyakrishnan	Member	Present
3.	Shri Manmohan Singh Negi	Member	Present
4.	Shri Sham Wagh	Member	Present
5.	Dr. Mukesh Khare	Member	Conveyed inability to attend
6.	Dr. Ashok Kumar Pachauri	Member	Present
7.	Dr. V. K Jain	Member	Present
8.	Dr. Manoranjan Hota	Member	Present
9.	Representative of CPCB	Member	Absent
10.	Representative of CGWA	Member	Absent
11.	Dr. M. V Ramana Murthy	Member	Absent
12.	Dr. Nirmalendu Kumar	Member	Absent
13.	Dr. Niraj Sharma	Member	Absent
14.	Shri Amardeep Raju	Scientist 'E' & MS - EAC (Infra-1)	Present

A Site visit report of EAC (Infra-1 & CRZ) sub-committee, Ministry of Environment, Forest & Climate Change, New Delhi-India for a proposed project “Construction of 4/6 Laning of Palakkad – Kozhikode of NH-966 (Greenfield) from Km 0.000 to Km 121.006 (Total Length – 121.006 km) in the state of Kerala under Bharatmala Pariyojana on HAM mode by M/s NHAI [Proposal No. IA/KL/NCP/261224/2022 File No. 10/20/2022-IA.III].

1.0 Background of the Proposal.

1.1 The proposed project is for development of 4/6 lane partially access controlled Greenfield highway to ease the infrastructure asymmetry and improve the efficiency of freight movement under Bharatmala Pariyojana. Total length of the proposed highway is 121.006 km. The alignment will start from Ch 0+000 (10°46'30.53"N, 76°42'6.25"E) at NH-544 (SalemKochi-Kanyakumari Highway) at Marutharode Village, Palakkad District and traverses entirely through plain/rolling terrain and it will end at Ch 121+006 (11°14'16.19"N, 75°50'30.19"E) of NH-66 at Olavanna Village, Kozhikode District. The proposed project will cover Palakkad, Malappuram and Kozhikode districts in Kerala State.

1.2 The above-mentioned proposal was earlier placed before the EAC during its 281st meeting on 28th -29th April, 2022 and deferred the proposal for grant of Terms of Reference for the want of following documents/ information:

- i.* Explore suitable alignment beyond 10km ESZ of the Silent Valley NP and adjoining forest areas.
- ii.* All the other alternate alignments were found not viable and are infact much nearer to the Silent Valley National Park
- iii.* Will the development of green field alignment will bring more population closer the to the boundary of Silent Valley National Park? What are the impact of the same on human-wildlife conflict? And habitat destruction at Silent Valley National Park?
- iv.* Considering extremely sensitive nature of the forests near the alignment, a subcommittee will make a site visit before considering the proposal further for ToR.

2.0 Site Visit and Brief of Project.

2.1 Accordingly, a site visit by the Sub-committee was conducted on 19th October, 2022 for the proposed project. NHAI inter-alia presented a brief on the project to the sub-Committee as following:

- i. The proposed project falls under Schedule 7(f), Highway, Category “A” of EIA Notification 2006. Total estimated civil cost of the project is about Rs. 7937.96 Crores.
- ii. Total Length of the Proposed Project is 121.006 Km.
- iii. The project is falling 5.5 km away from the boundary of Silent Valley National Park. The nearest Eco-Sensitive Area (ESA) of Western Ghats is at a distance of 1.0 km from the proposed alignment at Palakkad district.
- iv. The proposed land acquisition for the proposed alignment is approx. 547.407 Ha. The proposed RoW is 45.0 m.
- v. About 1,22,470 Nos. trees proposed to be removed within RoW of 45 m.

3.0 Review and Observations of the Sub-Committee.

3.1 During the site visit, the Sub-Committee reviewed the feasibility of the proposed Greenfield project in the Palakkad – Kozhikode of NH-966.

- i. The alignment will start from Ch 0+000 (10°46'30.53"N, 76°42'6.25"E) at NH-544 (SalemKochi-Kanyakumari Highway) at Marutharode Village, Palakkad District and it will end at Ch 121+006 (11°14'16.19"N, 75°50'30.19"E) of NH-66 at Olavanna Village, Kozhikode District.
- ii. The land use of the proposed road is undulated, hilly & steep and the proposed greenfield is rolling & hilly. However, the Sub-Committee observed that the new alignment is going close to the Silent Valley National Park buffer areas in certain parts. The new alignment may result in new developmental activities closer to the Silent Valley National Park buffer region with chances of increased human-elephant conflict.
- iii. There are certain locations on the proposed project alignment; especially falling under Palakkad Division involving severe the human-elephant conflict.

4.0 Conclusion and Recommendations

- i. The subcommittee was of the view that the proposed road alignment at two stretches needs review. A stretch near silent Valley National park is passing very close to park boundary which is likely bring human interference very close to park. In the southern side also the alignment is passing very close to forests in lower slopes of hill which is being used by elephants there have been instances of some elephant human conflict in this area.

- ii. The new alignment is also likely to result in the new developmental activities in the area which is nearer to Silent Valley buffer areas with chances of increased human-elephant conflict.
- iii. As briefed to Regional officer and Project Director of NHAI as well as concerned CCF and DFO without waiting for the written report of the subcommittee, shall jointly visit the site after grant of ToR and find out the possibility of change in alignment in these two stretches. The change in alignment shall be clearly spelt along with justification for this change in alignment. In case change in alignment is not suggested the justification for the same shall be clearly spelt along with a undertaking of taking up mitigation measures as suggested by the forest department shall be submitted. A joint report along with shape files of modified alignment shall be submitted to the ministry. The concerned CCF and FD shall submit their recommendations in clear terms indicating that proposed alignment will not add to human wildlife conflict in the area.
- iv. The PP shall refer to the order of Hon'ble NGT in the matter of Goa Foundation Vs UoI in the Original application no.597/2018 dated 24th August, 2018 wherein the Hon'ble NGT directed that "no environmental clearance be granted and no activity adversely impacting eco-sensitive areas be permitted in the area covered by draft notification dated 27.02.2017 till the matter is finalised.
- v. There are certain locations (Kalladikonde, Karimba, Karayamkode, Mundur, Cheekuzhi Road, Athathethara villages) on the proposed project alignment, especially falling under Palakkad Division jurisdiction human-elephant conflict issues are reported, and hence proposed alignment required to be re-evaluated by PP along with suitable mitigation measures suggested and proposed by the Forest Department.
- vi. Human-elephant conflict areas in the proposed alignment shall be identified with the coordination of forest department. After identification of such areas, NHAI shall interpolate those locations with the proposed alignment. In case of high intensity of human-wildlife conflict areas falling in the proposed alignment, NHAI may explore the possibility of shifting the proposed alignment along with detailed mitigating measures and EMP costing.
- vii. NHAI is also advised to explore the entire stretch of alignment passing near the Silent Valley buffer region to be elevated with minimum 10m height to address the issue of elephant movement.
- viii. Thus, NHAI should explore the possibility to shift alignment towards the south from Chainage Km 16+700 to Km 18+800 to avoid the Human-wildlife conflict areas in the proposed alignment.
- ix. NHAI should also explore reducing RoW from 45 m to 30 m to reduce the number of tree felling.

- x. NHAI informed the Committee that they will explore the possibility of realigning the proposed alignment if technically viable, in consultation with concerned forest officials and district administration during detailed design as well as finalization of forest & wildlife proposals which are applicable as per respective regulations.
- xi. The Unambiguous recommendations on alignment from Chief Wildlife Warden are required regarding the viability of the proposed alignment passing near the buffer region of the Silent Valley NP.
- xii. The above decision/remarks after field inspection and discussion shall be submitted by both CCF to Chief Wildlife Warden and Nodal Officer, FC, Kerala Forest Department, GoK for onward submission to Member Secretary & Chairman EAC (Infra-1) for further consideration for Terms of References (ToR).

Annexure -A

An EAC sub-committee of MoEF&CC, New Delhi members participated in the site visit from Palakkad – Kozhikode Project.

1	Dr. Deepak Arun Apte	Chairman, EAC
2	Dr. Niraj Sharman	Member, EAC
3	Shri.Manmohan Singh Negi	Member, EAC
4	Shri. S. Jeyakrishnan	Member, EAC
5	Dr. Murali	Scientist 'E' IRO, Bangalore
6	Dr. Ramesh. A	RO, MoEF&CC

The following are the members from Forest Department, Government of Kerala side were present:

1	Shri. K. Vijayanathan IFS	CCF, Eastern Circle and Custodian of Vested Forests, Palakkad
2	Shri.Mohamad Shabab IFS	CCF (Wildlife) and Field Director, Palakkad
3	Shri. Kurra Srinivas IFS	DFO-Palakkad
4	Shri. M. K. Surjith	DFO-Manarkkad
5	Shri. Vegi, Range Forest Officer	Silent Valley Range

The following are the members from NHAI (PP) and Consultants side were present:

1	Dr. Biswajit Mukhopadhyay	Advisor (Environment), NHAI HQ, New Delhi
2	Bipin Madhu	DGM (Tech) & Project Director, NHAI, Palakkad
3	Sh. Deepak Jotawar	AVP, DPR Consultant M/s.TPF Getinsa Euroestudios SL in JV with TPF Engineering Pvt Ltd.
4	Dr. Chandrashekhar. C. Marathe	GM (Environment), DPR Consultant M/s.TPF Getinsa Euroestudios SL in JV with TPF Engineering Pvt Ltd.

Annexure -B: Project Map and Site Visit Photographs



