Minutes of 187th meeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial estate/parks/complexes/areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather Complexes and National Highways projects held on 12th April, 2018 at Indira Paryavaran Bhawan, Ministry of Environment, Forest and Climate Change, Jor Bagh Road, New Delhi

- 1. Opening remarks by the Chairman.
- 2. Confirmation of the minutes of the 185th meeting held on 26th March, 2018 at New Delhi

The EAC, having taken note that no comments were offered on the minutes of 185th meeting held on 26th March, 2018 at New Delhi, confirmed the same.

3. Consideration of Proposals

3.1 Construction of New Road Math – Kudal –Pandur - Ghotage – Sonawade – Naikwadi –Gargoti Ghat Road, State Highway 120 and 121 in Sindhudurg and Kolhapur Districts of Maharashtra State (Math-kudal Pandur Ghotage Sonwade Shivdav Kadgaon Gargot Road SH-179 km 45/00 to 58/00 Taluk Kudal & Bhudargad, District Sindhudurga & Kolhapur) by M/s Public Works (South) Division Kolhapur – Environmental Clearance

[IA/MH/MIS/59665/2016] [F. No. 10-81/2016-IA.III]

- 3.1.1 The project proponent along with EIA Consultant MITCON Consultancy and Engineering Services Ltd. Pune, made a presentation and provided following information to the Committee:
 - (i) The proposed Sonawade-Ghodge, Nardev-Shivdav Road passing through the Districts of Sindhudurg and Kolhapur, alignment starts from village Sonawade Tahsil Kudal, District Sindhudurg to Shivdav Tahsil Budargadh, District Kolhapur in between chainage 1/897 to chainage 11/499.5 as missing links on existing SH-120 and SH 121. The elevation difference between starting point and end is roughly 365m.
 - (ii) The details of proposed alignment are:

Sr. No.	Particulars	Value
1	Total Length	9.595 km
а	Length though Forest	9.292 km
b	Length through Non-Forest	0.300 km
2	Land Width	
а	From Ch. 1/897 to 7/400	30 m
b	From Ch. 7/400 to 11/499	24 m

3	Carriage way	Two lane	
4	Design Speed	40-60 km	
5	H. P. Drains		
а	900 mm - 3Rows	9 Nos.	
b	900 mm - 4 Rows	2 Nos.	
С	900 mm - 5 Rows	1 Nos.	
d	900 mm - 6 Rows	2 Nos.	
е	Box Culvert	2 Nos.	
6	Slab Drain	21 Nos.	
7	Bridges/Flyover	1 Flyover Bridge -1100 m 2 Major Bridge-300m 3 Major Bridge-100m 4 Major Bridge-80m	
8	Estimated Cost	Approximately Rs. 210 Crores	
9	Category of Road	S. H. – 120 and 121 (SH- 179)	

- (iii) Water requirement, source, status of clearance: For site activities 95 laths litres of water will be required. Drinking Water 3.51 lakhs litre (@ 60 litres per day/person). The water will be obtained from nearby surface water through tanker.
- (iv) Eco-Sensitive Zone / National Park / Wildlife Sanctuary in 10 km radius area: The proposed alignment is located within within 5 km from external boundary of the Radhanagari Wildlife Sanctuary, the areal distance is 2.75 km along the length of the proposed road at various places.
- (v) Details of Forest land involved, if any: The 9.292 Km of proposed alignment is passing through Reserved Forest area of 25.76 ha.
- (vi) Tree cutting, types, numbers, girth size etc.: The alignment will require cutting of approximately 8730 nos. of tress in Sindhudurg district and 9093 nos. of trees in Kolhapur district.
- (vii) Investment/Cost: Rs. 210Crores.
- (viii) Court cases if any: Nil.
- (ix) Date of ToR: Letter No. 10-81/2016-IA.III dated 09.12.2016
- (x) Date of Public Hearing:
 - (a) The public hearing conducted on 27.10.2017 at Mahapurush Mandir Ghodage Bajar, Taluka Kudal District Sindhudurg.
 - (b) The public hearing conducted on 07.11.2017 at Grampanchayat Office, Shivadav, Taluka Bhudargad, District Kolhapur.

- (xi) **Employment Potential**: About 100 persons per day for 30 months.
- (xii) Benefits of the project:

(a) Direct Benefit:

- Fast and Safe Connectivity,
- Decongestion of traffic on Kurul and Phonda Ghat roads.
- Savings in fuel, travel time and total transportation road users,
- Reduction in road accidents,
- Reduction in air and noise pollution due to easy gradient and constant flow

(b) Macro Level Benefit

- Development of tourism in the region
- Development of local industry and handicrafts
- Quick transportation of agricultural produce and perishable goods like Food grain, fruits, vegetables, etc.
- Improved quality of life for people
- During the deliberation in its meeting held on 12thApril, 2018, the Committee noted that:
 - (i) The proposed alignment passes through ecologically fragile land of Western Ghats and Radhnagari Tiger corridor. In this regard report of Wildlife Institute of India(WII) was taken on record. Committee has noted the mitigation measures recommended by WII.
 - (ii) Status of Wildlife clearance.
 - (iii) Details about source of water and permission to use water during construction to be furnished.
 - (iv) Measures for protection of water springs.
 - (v) Measures for protection from soil erosion and land slide.
 - (vi) Submission of seasonal wind rose diagram.
 - (vii) Air modeling details to be furnished in tabular form like Baseline values, incremental values and prediction (total) values at all air monitoring stations.
 - (viii) Details of public hearing issues raised, commitments made by project proponent during public hearing and also time bound action plan for implementation of same along with fund provision.
 - (ix) Status of Forest clearance.
 - (x) Distance of proposed project from Songad fort, an archaeological and historical monument.
 - (xi) Chapter related to disclosure of EIA Consultant is not given in the EIA report.

Hence, the project was deferred for want of additional information mentioned in para 3.1.2 (ii to xi) above.

Since, the proposed alignment passes through ecologically fragile land of Western Ghats, the EAC suggested that a sub-committee to conduct a field inspection of the proposed project site and furnish its report to the EAC for any further decision regarding grant of environmental clearance.

Integrated Industrial Township at Pen, Raigad by Karanja Infrastructure Pvt. Ltd now named as Orange Smart City Infrastructure Pvt. Ltd. at villages Boregaon, Shene, Virani, Belavade, Walak, Mugoshi, Govirle and Hamarpur, Tehsil Pen, District Raigad (Maharashtra) – Environmental Clearance

[IA/MH/MIS/73042/2015] [F.No.21-130/2015-IA.III]

- 3.2.1 The project proponent made a presentation along with EIA Consultant M/s. Building Environment (India) Pvt. Ltd., Navi Mumbai and provided the following information to the Committee:
 - (i) The proposal is for the Development of Integrated Industrial Township at Pen, Raigad by Karanja Infrastructure Pvt. Ltd now named as Orange Smart City Infrastructure Pvt. Ltd. at villages Boregaon, Shene, Virani, Belavade, Walak, Mugoshi, Govirle and Hamarpur, Tehsil Pen, District Raigad (Maharashtra).
 - (ii) The project is located at four land parcels the latitude and longitude of each land parcel is tabulated below:

Land Parcels	Geographical Coordinates
T1:	Latitude: 18 ⁰ 42'14.11" N
	Longitude: 73 ⁰ 08'37.90" E
T2:	Latitude: 18 ⁰ 46'23.80" N
	Longitude: 73 ⁰ 07'17.44" E
T3:	Latitude: 18 ⁰ 46'53.73" N
	Longitude: 73 ⁰ 07'28.52" E
T4:	Latitude: 18 ⁰ 47'26.51" N
	Longitude: 73 ⁰ 05'27.74" E

(iii) The land use details are as under:

Sr.	Land use	Area	in	%
No.		Acres		

1	Industrial	390	36%
2	Commercial/ Office Spaces	88	8%
3	Residential	138	13%
4	Major Traffic and Transportation	129	12%
5	Public Green	268	25%
6 Ancillary/ Supportive Uses including utilities		59	6%
Total Area		1072.38	100

(iv) The total fresh water demand is 36.24 MLD and Non-potable water demand is 27.72 MLD. The source of water is Hetwane Dam & Jite water treatment plant.

(v) Water requirement:

Construction Phase: Total water requirement is expected to be 80 - 320 KLD which will be met by tankers through which will be in the scope of the contractor. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.

Operation Phase: Total water demand of the project is expected to be 63.96 MLD and the same will be met by the Hetawane Dam and Jite water treatment plant / Recycled Water. Wastewater generated (45.44 MLD) will be treated in STP. 27.72 MLD of treated wastewater will be recycled back into the system, 17.72 MLD for HVAC, horticulture, flushing, etc).

- (vi) Waste water generation, treatment and disposal: The 45.44 MLD out of which 27.72 MLD treated water will be recycled back, for the rest 17.72 MLD Provisions have been made to supply this treated water to the nearby Grampanchayat for non-potable water use. The treated water from the Steps will be used for the non potable usage in residential, commercial and industrial areas of the project, hence reducing the fresh water intake from Hetawane dam and Jite WTP. The individual industries will comply with zero effluent discharge principle. If not possible then CETPs will be planned within the project site for treatment of the effluent. The waste water will be treated in four STPs (one STP for each parcel, i.e., T1,T2,T3 and T4)- total capacity of the STPs being 50.50 MLD. Each STP will occupy an area of 3600 sq. m.
- (vii) About 121 TPD solid waste will be generated in the project. The biodegradable waste (54.45 TPD) will be processed by composting and will

- be used as bio-fertilizer and the non-biodegradable waste generated (42.35 TPD) will be handed over to authorized local vendor and 24.2 TPD inert waste will be disposed off at the nearest landfill of Municipal Council at Pen/disposed off at the internal landfill sites identified within the project site.
- (viii) Power requirement and source: The total power requirement during construction phase is 5MOAand will be met from MSEDCL and total power requirement during operation phase is 353 MVA and will be met from MSEDCL.
- (ix) Eco-Sensitive Zone / National Park / Wild Life Sanctuary in 10 km radius area: Karnala ESZ buffer zone is approximately 6.7 km from Northern point of T3 land parcel.
- (x) **Investment cost:** The cost of the project is Rs. 2032 crores (+ Rs 2000 crores land cost).
- (xi) **ToR details**: ToR was granted vide letter No. 21-130/2015-IA.III dated 23rd November, 2015.
- (xii) Court cases if any: No
- (xiii) **Public Hearing**: The Public Hearing was conducted on 11th July, 2017 at 11.00 am at Aagri Samaj Hall, Nagarpalika Road, Chichpada, Taluk Pen, and District Raigad.
- (xiv) **Employment potential:** Approximately 1, 50,000 nos.
- (xv) Benefits of the project:
 - (a) Employment: The socio-economic benefits arising out of this project for the local populace will include creation of direct and indirect jobs and consequent rise in the income levels, associated commercial and social infrastructure development in the mofussil areas, improved quality. The skilled manpower required for operation of the industrial estate will be easily available from the proposed areas. Manpower training and skill up-gradation will be encouraged.
 - (b) Infrastructure Development: The proposed project will increase the Infrastructural facility for the area especially which will provide an opportunity for employment generation and development of service sectors.
 - (c) **Economic Development:** Proposed project will add benefit to the regional socio economic status due to development of ancillary facilities' besides main project.
 - (d) **Multiplier Effect:** The project will have excellent multiplier effect and will become truly a win-win situation for all the stakeholders. Thus, the proposed project has substantial socio-economic and environmental benefits at the local, the State, the Regional and the National levels.
 - (e) **Aesthetic Environment:** The proposed project will reduce the pollution load in the micro level environment. And the aesthetic beauty will get a chance to be much better than earlier.

- 3.2.2 The project was first considered in the 185th meeting held on 26.3.2018. Proponent did not submit the desired documents/information through e-mail, hence EAC did not consider the project.
- **3.2.3** After detailed deliberations during 187th meeting, the EAC noted the following:
 - (i) Navi Mumbai International Airport (NMIA) is located approximately 21 km (aerial distance) from the northern edge of the T3 land parcel. The funnel zone of the NMIA has been superimposed on Google Earth and reflects that the project is 19.83 km away from the funnel zone of NMIA.
 - (ii) Orange Smart City plans to source water from the CIDCO pipeline near Jite for the T3 land parcel and from the Konkan Irrigation Department which is owner of Hetavane Dam for the land parcels T1, T2 and T4. However, permission from competent authority is yet to be obtained.
 - (iii) The Tarapur industrial cluster is located at an aerial distance of approximately 115km from the T3 land parcel.
 - (iv) The proponent has desired that CRZ clearance is not required and hence, omitted 29 acres of land near coastal region, which comes under CRZ area. Now the area of proposed site stands 1,043 acres (1,072 29 acres).
 - (v) The proponent has also submitted in EIA report about of types of industries to be housed within the proposed Industrial township. It is observed that there is no A or B category industries mentioned in the EIA report. However, as per ToR issued by this Ministry, there are A category industry, i.e., Manmade Fibre and Synthetic Organic Chemicals.

"As per the rule position, any industrial estate below 500 ha having at least one B category industry falls under category B of entry 7(c) of the EIA Notification, 2006 as amended from time to time. In the instant case, the project lies at a distance of 6.7 km from ESZ of Karnala bird sanctuary, it was treated as A category project, hence appraised at central level by EAC. If the area is less than 500 ha but contains building and construction projects greater than 20,000 sq. m and are developmental area more than 50 ha, it will be treated as activity listed at SI. No. 8(a) or 8(b) in the schedule, as the case may be."

In view of above, the PP is required to revise the EIA/EMP with layout plan including A category industry for proposed Industrial Township project as per prescribed ToR issued by the Ministry. Layout plan should cover area under each category of industries including utilities and other amenities.

3.2.4 In view of EAC's observations at para 3.2.3(v) above, the Committee deferred the proposal.

Industrial Park near Gandrajupalle Village, Gangavaram Mandal, Chittoor District, Andhra Pradesh State by M/s. Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC)–Further Consideration of Environmental Clearance

[IA/AP/NCP/61712/2015] [F.No. 21-141/2015-IA-III]

- The project proponent made a presentation along with EIA Consultant M/s Ramky Enviro Engineers Ltd, Hyderabad and provided the following information to the Committee:
 - (i) The proposal is for development of Industrial Park near Gandrajupalle Village, Gangavaram Mandal, Chittoor District, Andhra Pradesh promoted by Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC).
 - (ii) The project is located at 13° 11' 36.5" N Latitude and 78° 34' 50.9" E longitude.
 - (iii) The proposed 'Development of Industrial park' with a vision of providing 'Hassle free production environment' for light engineering industries (like bearing industry process control system, steel forging), textile park, electrical & electronics, Agro, food and allied industries, spun pipes, MSME (micro, small and medium enterprises), leather and footwear manufacturing, paper products, glass and ceramic, green house for sericulture etc.
 - (iv) Total area required for the development is 482.51 acres (195.27 ha), the majority of the land area is covered with thorns and degraded shrub and or bushes; and some land is also covered with barren land and agriculture with a few operating/existing industries. The role of the APIIC for the proposed industrial park will consists of developing common infrastructural facilities roads, water source, power, drainage, street lightening, greenbelt, CETP, TSDF and STP etc. Social Infrastructure banks, post office, canteen, primary health centre etc. The proposed industrial park will also have an industrial area local authority for maintenance of the facility, approval of building plans etc.
 - (v) During construction phase, total water requirement is expected about 10 KLD which will be met by Ground water sources/ tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
 - (vi) During operational phase, total water demand of the project is expected to be 3530 KLD and the same will be met by the 2021 KLD fresh water &1509 KLD recycled water. Wastewater generated (1588 KLD) will be treated in 1 STP (0.5 MLD capacity) & 1 CETP of 1.5 MLD capacity. 1509 KLD of treated wastewater will be recycled (314 KLD for Industrial use/ flushing & 1195 KLD for gardening).
 - (vii) It is proposed that the industrial park will stick to the Zero Liquid Discharge policy to avoid contamination of the nearby areas and so the groundwater. A systematic CETP and STP are operational 24 Hours to treat the wastewater

- generation from different systems. Wastewater treated from these facilities will be used as a secondary purpose in the industries and also for the landscape development.
- (viii) About 4.6 TPD solid wastes will be generated in the project. The biodegradable waste (2.1 TPD) will be processed in OWC and the non-biodegradable waste generated (2.5 TPD) will be handed over to authorized local vendor.
- (ix) An area of 159 acre of land is allocated for green belt development which is around 33% of total area. A 15 m wide green belt will be developed all along the industrial area boundary and all along the roads within the site boundary.
- (x) The total power requirement during construction phase is 100 KVA and will be met from AP TRANSCO/other sources and total power requirement during operation phase is 16.6 MW and will be met from AP TRANSCO.
- (xi) Over all RWH from Rooftop rainwater of buildings, roads & greenbelt will be collected in RWH tanks and the collected water will be utilized after filtration.
- (xii) Truck parking facility is proposed in 9.48 acres of industrial area.
- (xiii) Energy saving measures would be adopted and solar lighting is proposed for street lights & common areas etc.
- (xiv) **ESZ**: It is not located within 10 km of any Eco Sensitive areas
- (xv) There is no court case pending against the project.
- (xvi) **Diversion of forest land:** Not applicable.
- (xvii) **Investment/Cost** of the project is Rs.96.5 crores.
- (xviii)**Employment Potential:** Around 9000 jobs will be generated due to the proposed project.
- (xix) **Benefits of the project:** Industrial development in the region, local employment improvement & Infrastructure & amenities will be developing in the surroundings.
- (xx) **ToR Details:** ToR was granted vide letter No.21-141/2015-IA.III dated 1st February, 2016.
- (xxi) **Public Hearing:** Conducted on 20.08.2016 at the proposed project site near Gandrajupalle village, Gangavaram Mandal in Chittoor District of Andhra Pradesh.
- The proposal was earlier considered by the EAC in its 171th meeting held on 12th May wherein the EAC noted the following:
 - (i) The proposal is for grant of EC to the proposed Industrial Park in a total area of 195.27 ha near Gandrajupalle Village, Gangavaram Mandal, District Chittoor (AP) promoted by Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC).
 - (ii) Different industrial projects/activities proposed to be housed therein would include engineering, paper products, rubber products etc. However, none of the proposed units seems to covered either under Category A or B, and thus difficult to arrive at the consent appraisal/regulatory authority.

- (iii) Total freshwater demand of 2 MLD is proposed to be partly sourced through an unlined canal from non-perennial Kaudinya River, 1.5 km from the project site. To meet the balance requirement of water during four months, storage tanks are proposed in the industrial area only.
- (iv) Neither there was any commitment to ensure the sustainable water supply through surface water resources so identified, nor providing storage tanks in a huge area of 50 ha were considered to be feasible.
- (v) The clarification in respect of the proposed CETP and STP was also not found convincing.
- (v) Kaundinya Wildlife Sanctuary is in the proximity of the proposed project. The sanctuary is primarily an elephant reserve and is home to about 78 Indian elephants. Even though it is beyond 10km, the movement of elephant needs to be understood so that proposed industrial park doesn't lead to human-wildlife conflict. Thus appropriate study be undertaken and mitigation plan developed if found necessary. State Forest Department should be consulted on the same and report to be submitted to MoEF&CC.
- (vi) The EIA states presence of *Bungarus candidus* (Malayan Krait or blue Krait) at project site. It is a species from Thailand and is not known from India.
- Further this project was considered in EAC meeting held on 8th September, 2017. During the deliberation, the Committee noted the following:
 - (i) The proposal is for grant of EC to the proposed Industrial Park in a total area of 195.27 ha near Gandrajupalle Village, Gangavaram Mandal, District Chittoor (AP) promoted by Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC).
 - (ii) Project/Activity 3(a) Metallurgical industries (ferrous & non-ferrous) Category 'B':
 - Sponge Iron Manufacturing <200 TPD
 - Secondary metallurgical processing units
 - All Toxic & heavy metal producing industries< 20000 TPA
 - All other Non Toxic industries >5000 TPA
 - Project / Activity 7 (i) Common Effluent Treatment Plants (CETPs)
 - (iii) Total freshwater demand of 2 MLD is proposed to be partly sourced through an unlined canal from non-perennial Kaundinya River, 1.5 km from the project site. To meet the balance requirement of water during four months, storage tanks are proposed in the industrial area only.
 - (iv) The supply of 2 MLD water from the Sankarayalapeta M.I. Tank which is connected to HNSS Canal(Kuppam branch Canal). Water will be stored & supplied to the industrial Park from Sankarayalapeta M.I. tank (located

- about 3 km N). Proponent has not submitted allocation of water from kuppam branch canal.
- (v) The proposed CETP and STP details furnished below:
 - The industrial wastewater generation was calculated based on the water allocation made to proposed industries considering 5 KLD/acre as most of the industries proposed are not major water consuming industries
 - The wastewater generation is assumed as 80% of water required for respective industry (4 KLD/acre). The wastewater generation on industrial park is 1257 KLD.
 - The domestic water requirement is calculated assuming 45 LPD/person for industrial workers of 8170. The wastewater generation is 331KLD from Domestic activities.
 - The CETP is around 1.5 MLD having primary, secondary (MBBR) and tertiary (MMF, ACF) and final treated water is reused for greenbelt and industrial uses (cooling, floor washing, etc)
 - The CSTP capacity is around 0.5 MLD having primary, secondary (activated sludge), tertiary (MMF, ACF) and final treated water is reused for greenbelt development and floor washings.
- (vi) The Kaundinya wildlife sanctuary is 13 km away from the proposed project site. But as per the information available in the Ministry the above sanctuary is 6.42 km away from the project site. However, EAC advised proponent to submit authentication map certified by Chief Wildlife warden, AP in this regard. Proponent has not submitted any mitigation plan to avoid humanwildlife conflict with consultation of state forest department.
- The EAC after detail deliberations deferred the proposal for want of desired information as under:
 - Permission for allocation of water from kuppam branch canal from concerned authority.
 - (ii) Proponent has to submit authentication map duly certified by Chief wildlife warden, AP regarding the distance of the proposed project from Kaundinya wildlife sanctuary.
 - (iii) Appropriate study to be under taken and mitigation plan to be prepared to avoid human-wildlife conflict with consultation of state forest department and same will be submitted to MoEF&CC.
- Further this project was considered in 187thEAC meeting held on 12thApril, 2018. During the deliberation, the Committee noted the following:
 - (i) Submitted permission for allocation of 2 MLD water from Kuppam branch canal from competent authority.

- (ii) In addition to above, ground water permission has been obtained from Ground Water Audit Department, Govt. of Andhra Pradesh to draw 150 KLD of water from existing 18 bore wells.
- (iii) Proponent has submitted authentication map from duly certified by Chief Wildlife Warden, AP regarding distance of proposed Kaundinya WLS, which is at a distance of 16.50 km and also the Royal Elephant Reserve is 6.20 km from the proposed site.
- (iv) A study was undertaken to avoid human wildlife conflict, a wildlife conservation and mitigation plan was prepared in consultation with State Forest Department, AP with fund provision 190.00 lakhs
- The EAC, after detailed deliberations, recommended the project for grant of Environmental Clearance, subject to compliance of all generic conditions applicable for such projects, and the additional conditions as under:
 - (i) No. of bore wells should be minimized during construction and operation phases. In no case, number of bore wells should exceed five.
 - (ii) Construction of Piezometer in the premises to monitor groundwater use on real time basis.
 - (iii) Report on implementation of Wildlife Conservation and Mitigation Plan to be submitted to Regional Office concerned and appropriate fund allocation to be made to state forest department to implement plan.
- Goregaon Mulund Link Road, Mumbai (Maharashtra) by M/s Municipal Corporation of Greater Mumbai Amendment of Terms of Reference
 [IA/MH/MIS/65826/2017] [F. No. 10-40/2017-IA.III]
- The Ministry considered the project for grant of ToR based on following information provided in Form1 application and also presentation made before EAC during earlier meetings:
 - (i) During earlier presentations before EAC, proponent informed that this link road is connecting Eastern and Western Expressways.
 - (ii) The link road is a green field project connecting two expressways.
 - (iii) It is A category project because General Conditions of EIA Notification, 2006 are applicable to this project as the proposed alignment is passing beneath the Sanjay Gandhi National Park.
- The project proponent made a presentation along with M/s EIA Consultant Global Management and Engineering Consultants international, Jaipur and provided the following information to the Committee:
 - (i) The Ministry issued the ToR to the M/s Municipal Corporation of Greater Mumbai (MCGM) for development of Goregaon-Mulund link Road project on 31st January, 2018.

- (ii) It was request to exempt public consultation and reduce the duration of Biodiversity studies to 3 years from one year as stipulated in ToR issued by the Ministry.
- (iii) The lands falling in the alignment of the tunnel and its approaches belong to the State Government and do not involve acquisition of lands of any private agencies.
- (iv) The lands where R&R issues are involved are not "Forest lands" and are Government lands situated outside the boundaries of SGNP.
- (v) The R&R issue on such lands will be dealt with as per R&R policies of the Government of Maharashtra.
- (vi) The proposed link road does not directly connect Eastern and Western Expressways directly. Instead, this link road on either side joins a local PWD road/bridge. As per definition, expressways should be accesscontrolled.
- (vii) The proposed Link Road is only a Development Plan Road of the MCGM and does not even form part of any State or National Highway.
- 3.4.3 Since, the proponent did not provide correct information at the time of submission of online application, the Ministry considered the proposal and issued ToR. However, now the project proponent has informed that the said project does not require prior EC because it is only a Development Plan Road of the MCGM and does not even form part any Expressway or State/National Highway.

In view of above, the proponent desired to withdraw the proposal as it does not attract the provisions of EIA Notification, 2006 as amended from time to time. Hence, the proposal for amendment of ToR was rejected by EAC.

3.5 Rehabilitation and Up-gradation of 4-laning of Cuttack Angul Section of NH-42 (km. 0.000 km 112.00) in the State of Odisha under NHDP-III by M/s National Highways Authority of India – Amendment of Environmental Clearance

[IA/OR/MIS/18259/2013] [F. No. 10-76/2011-IA.III]

3.5.1 Earlier the project was considered in 180th EAC meeting held on 29.11.2017. The project proponent did not attend the meeting. On request of proponent, project was again considered in 187th meeting held on 12.04.2018.

The information was submitted very late, i.e., through email on 11th April, 2018 after 8:30 PM. Also, no documents in hard copy (Form-1 application, reasons for EC amendment) were submitted to the Ministry. The environmental clearance for rehabilitation and upgradation of existing 2-lane road to 4-lane road with paved shoulder configuration of NH stretches from Cuttak-Angul section of NH-42 on 4th

July, 2013. It was mentioned in the EC letter that road did not pass through any national park, wildlife sanctuary and eco-sensitive zone.

During the meeting the proponent provided contradictory information and misguided the EAC as well the Ministry on following points:

- (i) Through email, it was informed to the Ministry that proposal does not require environmental clearance because it has been split into two package each having length of road less than 100 km. However, in the meeting proponent requested for EC amendment to revise the EC to include ecosensitive zone (ESZ) of Kapilash WLS. However, on perusal of Stage-1 Forest Clearance letter dated 23.2.2017 submitted by the proponent, it was observed that certain portion of project was also coming under the Mahanadi Elephant Reserve and some portion under adjoining area of buffer zone of Satkosla Tiger Reserve. Proponent has to submit clarification and also presentation before EAC in this regard.
- (ii) Proponent is also required to submit reasons/justification for not mentioning that proposed alignment is passing through national park, wildlife sanctuary and eco-sensitive zone during process of obtaining EC for proposed alignment in the year 2013.
- (iii) Also Proponent needs to submit details of the alignments mentioned in their proposals of 2013 and 2018 submitted in the Ministry for grant of EC and subsequent EC amendment, respectively.
- (iv) Submission of certified compliance report from concerned regional office on Environmental clearance issued to above on 4th July, 2013

Hence, the proposal was differed by EAC for want of clarifications/justification and information on the above points.

8-lane of Bangalore-Chennai Expressway Phase-III from km 156.000 near 190 Village Ramapuram, Mandal Gudipal, District Chittoor (Andhra Pradesh) and ends at km 262.569 near Village Irungattukottai, Taluk Sriperambudur, District Kanchipuram (Tamil Nadu)(Length of 106.569 km) M/s National Highways Authority of India - Terms of Reference

[IA/AP/MIS/73485/2018] [F. No. 10-13/2018-IA.III]

- The project proponent made a presentation and provided the following information to the Committee:
 - (i) A new Bangalore-Chennai Expressway have been proposed to construct for providing new connectivity between Bangalore to Chennai passing through Karnataka, Andhra Pradesh and Tamil Nadu. The Bangalore-Chennai Expressway has been divided into 3 phases, via Phase-II and Phase-III
 - (ii) The proposed project is a new 8-Lane Expressway connecting Bangalore to Chennai. The proposed Phase-III of 8 Iane Bangalore Chennai Expressway

- starts from Km 156.000 near 190.Ramapuram Village, Gudipala mandal, Chittoor District in Andhra Pradesh and ends at Km 262.569 near Irungattukottai village, Sriperambudur Taluk, Kanchipuram District in Tamil Nadu. The total length of Phase-III of the proposed Bangalore Chennai Expressway is 106.569 Km. The project stretch falls in the states of Andhra Pradesh and Tamil Nadu.
- (iii) Around 1118.105 hectares of land is required for construction of Bangalore-Chennai expressway.
- (iv) The stretch of the proposed alignment in the state of Tamil Nadu passes through Mahimandalam Reserved Forest, from 171.250 Km to 171.935 (685m on Right Hand Side) and from Km 171.270 to Km 171.837 (567m on Left Hand Side). The total forest land proposed to be diverted in the state of Tamilnadu is 5.42 ha under Arcot Range, Vellore Forest Division.
- (v) The project implementation involves construction of Bangalore Chennai Expressway of 8-lane configuration with uniform ROW of 90 m and carriageway width of 37.50 m.
- (vi) The Proposed road will have 34 nos. of Major bridges, 22 nos. of Minor bridges, 125 nos. of Culverts, 3 nos. of ROBs, 13 nos. of Vehicular Underpasses, 35 nos. Light Vehicular Underpasses, 01 no. Vehicular Overpasses, 1 no. of toll plaza, 5 nos. of interchange with toll plaza. In addition, there is provision of 2 nos. Truck lay byes, 4 nos. of Rest areas, High mast lights along the project Expressway locations like Interchange locations.
- (vii) The land use pattern on 10 Km either side of the project road is predominantly agriculture followed by habitation area and forests. The major settlements along the alignment are Banavaram, Sriperumbudu.
- (viii) **ESZ**: The project does not fall within Eco-sensitive area.
- (ix) There is no court case pending against the project.
- (x) **Diversion of forest land:** Total 5.42 ha of forest land involved in the project. Application for forest clearance is under process (Stage-I).
- (xi) Tree cutting: About 10450 trees fall within the proposed ROW. The affected major species are mango, palm, neem and babool. The girth size mainly range between 30 cm- 90 cm. Efforts will be made to minimize the trees loss by restricting tree cutting within formation width. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements. The enumerations (tree inventories) of total trees and trees to be felled will be prepared during detailed EIA study. Required tree cutting will be done after having requisite permission from competent authority. The loss of tree cover due to cutting of trees will be compensated through tree plantation. The Plantation program would rigorously be done using indigenous species.

- (xii) **Rehabilitation involved, if any:** A total number of 368 structures will be affected due to proposed road. The THAI shall compensate the affected title holder as per the THAI act, 1956. All the temporary sites used for construction activities will be rehabilitated properly before handing over back to the land owner. The solid waste generated due to construction and allied activities will be reused for rehabilitation of borrow area / quarries sites, campsite and in temporary diversions and slopes.
- (xiii) Investment/Cost: of Rs. 5774.43 crores.
- (xiv) **Employment Potential:** This Road project will improve the economic and social welfare of those using the road or served by it. Ultimately it will create jobs by increasing access to markets, education and health services etc.
- (xv) Benefits of the project: This Road project will improve the economic and social welfare of those using the road or served by it. Increased road capacity and improved pavements can reduce travel times and lower the costs of vehicle use. Benefits include increased access to markets, jobs, education and health services, and reduced transport costs for both freight and passengers, reduce fuel consumption and exhaust emissions from the vehicle plying on the road. Further, expressway construction will lead to economic development of the region that might propel change in land use as ribbon development in the neighbouring area in future.
- **3.6.1** After detailed deliberation EAC recommended granting ToR subject to all standard ToR conditions in addition to following specific conditions:
 - (i) Quantity and Source of water utilization and its permission.
 - (ii) NoC from Archaeological survey of India if any structures falling within distance from 300 m from proposed alignment.
 - (iii) Traffic density study to be carried out.
 - (iv) Cumulative impact assessment study to be carried out along proposed alignment including other packages in the alignment.
 - (v) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers, if any.
- 8-lane of Bangalore-Chennai Expressway Phase-II from km 71.000 near Village N.G.Hulkur, Taluka Bangarpet, District Kolar (Karnataka) and ends at km 156.000 near 190. Village Ramapuram, Mandal Gudipala, District Chittoor (Andhra Pradesh) (Length of 85 km) by M/s National Highways Authority of India Terms of Reference

[IA/KA/MIS/73482/2018] [F. No. 10-14/2018-IA.III]

The project proponent made a presentation and provided the following information to the Committee:

- (i) A new Bangalore-Chennai Expressway have been proposed to construct for providing new connectivity between Bangalore to Chennai passing through Karnataka, Andhra Pradesh and Tamil Nadu. The Bangalore-Chennai Expressway has been divided into 3 phases, viz Phase-I, Phase-II and Phase-III. The present proposal is related to Phase-II.
- (ii) The proposed project is a new 8-Lane Expressway connecting Bangalore to Chennai. The proposed Phase-II of 8 Iane Bangalore Chennai Expressway starts from Km 71.000 near N.G. Hulkur Village, Bangarpet Toluca, Kola District, Karnataka and ends at km 156.000 near 190.Ramapuram Village, Gudipala mandal, Chittoor District, Andhra Pradesh of Proposed BCE.
- (iii) The total proposed project length of phase-II is 85.00 Km. Around 810.592 hectares of land is required for construction of Bangalore- Chennai expressway. The project stretch falls in the state of Karnataka and Andhra Pradesh. The proposed ROW width is 90 m throughout the project length.
- (iv) The Proposed project road section from proposed Km 115.288 to proposed Km 122.310, for a length of 7.02 Km, passes through Rayala Elephant Reserve, Palamaner Range, Chittoor West Forest Division in the state of Andhra Pradesh and proposed the diversion of 63. 7 ha of land from this reserve forest.
- (v) The outer North Eastern boundary of the Kaundinya Wild life Sanctuary is situated nearest at a distance of 2.2 Km from the Project. The proposed alignment of Bangalore-Chennai Expressway Phase-II from proposed Km 86.500 to Km 135.500 coming within 10 Km distance (Eco sensitive Zone) from boundary of the Kaundinya Wild life Sanctuary.
- (vi) The project implementation involves construction of Bangalore Chennai Expressway of 8-lane configuration with uniform ROW of 90 m and carriageway width of 37.50 m.
- (vii) The proposed land acquisition for proposed alignment is 810.592 Ha.
- (viii) The Proposed road will have 12 nos. of Major bridges, 30 nos. of Minor bridges, 79 nos. of Culverts,16 nos. of Vehicular Underpasses, 11 nos. Light Vehicular Underpasses, 8 nos. Vehicular Overpasses, 2 nos. of Flyover, 2 nos. interchange with toll plaza, 2 nos. elevated crossing. In addition, there is provision of 2 nos. Truck lay byes, 2 nos. of Rest areas. High mast lights have been proposed along the project Expressway locations like Interchange locations.
- (ix) The land use pattern on 10 Km either side of the project road is predominantly agriculture followed by habitation and Forest area.
- (x) Safety measures will be provided as per NHAI Safety Manual and IRC: SP 88 and Expressway Manual IRC: SP 99). Safety Measures, as provided in NHAI Safety Manual i.e. Unit-3 (pertaining to Traffic Safety, such as traffic control zone, advance warning zones, traffic control devices, regulatory &

- warning signs cylindrical cones, drums, flagman, Barricades, Pedestrian Safety, speed control etc) and other safety guidelines & measures suggested in Unit -4 (Construction Zone Safety), Unit 5 (Temporary Structures Safety), Unit-6 (Workers & Work Zone Safety), Unit-7 (Electrical & Mechanical Safety) will be strictly implemented. All required illustrative plans for safety at construction sites keeping in view all situations highlighted IRC: SP: 55 andin NHAI Safety Manual will be prepared and strictly implemented.
- (xi) **ESZ:** The Proposed project road section from proposed Km 115.288 to proposed Km 122.310, for a length of 7.02 Km, passes through Rayala Elephant Reserve, Palamaner Range, Chittoor West Forest Division in the state of Andhra Pradesh and proposed the diversion of 63. 7 ha of land from this reserve forest. The outer North Eastern boundary of the Kaundinya Wildlife Sanctuary is situated nearest at a distance of 2.2 Km from the Project. The proposed alignment of Bangalore-Chennai Expressway Phase-II from proposed Km 86.500 to Km 135.500 coming within 10 Km distance (Eco sensitive Zone) from boundary of the Kaundinya Wildlife Sanctuary.
- (xii) Water will be required mainly during construction period. About 17400KL/day water will be consumed during peak construction period for the project road during construction. Drinking water for construction workers will be sourced from groundwater after having requisite permission from competent Authority
- (xiii) Diversion of forest land: Total 63.7 ha of forest land involved in the project.
- (xiv) Tree cutting: About 24800 trees fall within the proposed ROW. The affected trees are predominantly Eucalyptus trees. The other major species are mango & coconut. The girth size mainly range between 30 cm- 90 cm. Efforts will be made to minimize the trees loss by restricting tree cutting within formation width. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements. The enumerations (tree inventories) of total trees and trees to be felled will be prepared during detailed EIA study. Required tree cutting will be done after having requisite permission from competent authority. Tree cutting will be managed through plantation. The Plantation program would rigorously be done using indigenous species.
- (xv) **Rehabilitation involved, if any:** A total number of 607 structures will be affected due to proposed road. The NHAI shall compensate the affected title holder as per the NHAI act ,1956. All the temporary sites used for construction activities will be rehabilitated properly before handing over back to the land owner. The solid waste generated due to construction and allied activities will be reused for rehabilitation of borrow area / quarries sites, campsite and in temporary diversions and slopes.
- (xvi) There is no court case pending against the project.

- (xvii) Investment/Cost: Rs. 4354.61 crores.
- (xviii) **Employment Potential:** This Road projects will improve the economic and social welfare of those using the road or served by it. Ultimately it will create jobs by increasing access to markets, education and health services etc.
- (xix) **Benefits of the project:** This Road project will improve the economic and social welfare of those using the road or served by it. Increased road capacity and improved pavements can reduce travel times and lower the costs of vehicle use. Benefits include increased access to markets, jobs, education and health services, and reduced transport costs for both freight and passengers, reduce fuel consumption and exhaust emissions from the vehicle plying on the road. Further, expressway construction will lead to economic development of the region that might propel change in land use as ribbon development in the neighbouring area in future.
- **3.7.2** After detailed deliberation EAC recommended granting ToR subject to all standard ToR conditions in addition to following specific conditions:
 - (i) Quantity and Source of water utilization and its permission.
 - (ii) Traffic density study to be carried out.
 - (iii) Cumulative impact assessment study to be carried out along proposed alignment including other packages in the alignment.
 - (iv) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers, if any.
 - (v) Designing underpasses in consultation with the Chief Wildlife Warden, Andhra Pradesh for smooth movement of elephants as the proposed alignment is passing through Rayala Elephant Reserve.
 - (vi) Impact assessment study to be carried out with mitigation plan in consultation with concerned wildlife DFO and approved by Chief Wildlife Warden as the 2.2 km of proposed alignment passes through Kaundinya Wild life Sanctuary.
- 8-lane of Bangalore-Chennai Expressway Phase-I from Bangalore at km 0.000 and ends at km 71.000 near Village N.G. Hulkur, Taluk Bangarpet, District Kolar (Karnataka) (Length of 73.050 including Spur Alignment of 2.05 km) by M/s National Highways Authority of India Terms of Reference [IA/KA/MIS/73474/2018] [F. No. 10-15/2018-IA.III]
- The project proponent made a presentation and provided the following information to the Committee:
 - (i) A new Bangalore-Chennai Expressway have been proposed to construct for providing new connectivity between Bangalore to Chennai passing through Karnataka, Andhra Pradesh and Tamil Nadu. The Bangalore-

- Chennai Expressway has been divided into 3 phases, viz Phase-I, Phase-II and Phase-III. The present proposal is related to Phase-I.
- (ii) The proposed Phase-I of 8 lane Bangalore Chennai Expressway starts from east of Bangalore at Km 301.200 of NH-4 and ends at Km 71.000 near N.G.Hulkur Village, Bangarpet Taluka, Kolar District, Karnataka. The total length of proposed Bangalore Chennai Expressway (Phase-I) is 73.050 Km including spur alignment of length Km 2.05. The project stretch falls in the state of Karnataka. The proposed road passes through Bangalore Rural and Kolar districts in the state of Karnataka. The project also includes proposal of Spur Alignment for connectivity from the industrial town of Kolar Gold Fields (KGF)/ Robertsonpet to Bangalore Chennai Expressway.
- (iii) The total proposed project length of phase-I is 71.00 Km. Around 778.007 hectares of land is required for construction of Bangalore- Chennai expressway including spur at Kolar Gold fields.
- (iv) The project implementation involves construction of Bangalore Chennai Expressway of 8-lane configuration with uniform ROW of 90 m and carriageway width of 37.50 m.
- (v) The project also includes spur which starts from proposed Km 52.080 of Bangalore Chennai Expressway (BCE) and ends at Major District Road which is connecting SH-95 and Kolar Gold Field. The length of spur is 2.05 Km. So the total project length including spur will be 73.050 Km. The proposed ROW for the spur is 45m. The major settlements along the alignment are Hoskote, Bangarpet, Kolar.
- (vi) The Proposed road will have 12 nos. of Major bridges, 43 nos. of Minor bridges, 54 nos. of Culverts, 1 nos. of ROBs, 15 nos. of Vehicular Underpasses, 18 nos. Light Vehicular Underpasses, 06 nos. Vehicular Overpasses, 1 nos. of toll plaza, 4 nos. interchange with toll plaza.
- (vii) There is provision of 2 nos. Truck lay byes, 2 nos. of Rest areas. High mast lights have been proposed along the project Expressway locations like Interchange locations, Rest Area, Toll Plaza Locations and Check Post locations.
- (viii) The land use pattern on 10 Km either side of the project road is predominantly agriculture followed by habitation, Forest area.
- (ix) The proposed land acquisition for proposed alignment is 778.007 Ha.
- (x) Safety measures will be provided as per NHAI Safety Manual and IRC: SP 88 and Expressway Manual IRC: SP 99). Safety Measures, as provided in NHAI Safety Manual i.e. Unit-3 (pertaining to Traffic Safety, such as traffic control zone, advance warning zones, traffic control devices, regulatory & warning signs cylindrical cones, drums, flagman, Barricades, Pedestrian Safety, speed control etc) and other safety guidelines & measures

- suggested in Unit -4 (Construction Zone Safety) , Unit 5 (Temporary Structures Safety) , Unit-6 (Workers & Work Zone Safety) , Unit-7 (Electrical & Mechanical Safety) will be strictly implemented . All required illustrative plans for safety at construction sites keeping in view all situations highlighted IRC: SP: 55 andin NHAI Safety Manual will be prepared and strictly implemented.
- (xi) Water will be required mainly during construction period. About 15000KL/day water will be consumed during peak construction period for the project road during construction. Drinking water for construction workers will be sourced from groundwater after having requisite permission from competent Authority.
- (xii) **ESZ:** The project does not fall within Eco-sensitive area.
- (xiii) Diversion of forest land: No
- (xiv) Tree cutting: About one lakh trees fall within the proposed ROW. The affected trees are predominantly Eucalyptus trees. The other major species are mango, chikoo and babool. The girth size mainly range between 30 cm- 90 cm. Efforts will be made to minimize the trees loss by restricting tree cutting within formation width. Avenue plantation shall be carried out as per IRC SP: 21:2009 on available ROW apart from statutory requirements. The enumerations (tree inventories) of total trees and trees to be felled will be prepared during detailed EIA study. Required tree cutting will be done after having requisite permission from competent authority. Tree cutting will be managed through plantation. The Plantation program would rigorously be done using indigenous species.
- (xv) Rehabilitation involved, if any:A total number of 210 structures will be affected due to proposed road. The NHAI shall compensate the affected title holder as per the NHAI act ,1956. All the temporary sites used for construction activities will be rehabilitated properly before handing over back to the land owner. The solid waste generated due to construction and allied activities will be reused for rehabilitation of borrow area / quarries sites, campsite and in temporary diversions and slopes.
- (xvi) Court case, if any: No
- (xvii) Investment/Cost: Rs. 3313.86 crores.
- (xviii) **Employment Potential:**This Road project will improve the economic and social welfare of those using the road or served by it. Ultimately it will create jobs by increasing access to markets, education and health services etc.
- (xix) **Benefits of the project:** This Road project will improve the economic and social welfare of those using the road or served by it. Increased road capacity and improved pavements can reduce travel times and lower the costs of vehicle use. Benefits include increased access to markets, jobs, education and health services, and reduced transport costs for both freight

and passengers, reduce fuel consumption and exhaust emissions from the vehicle plying on the road. Further, expressway construction will lead to economic development of the region that might propel change in land use as ribbon development in the neighbouring area in future.

- **3.8.2** After detailed deliberation EAC recommended to grant the ToR subject to all standard ToR conditions in addition to following specific conditions:
 - (i) Quantity and Source of water utilization and its permission.
 - (ii) Traffic density study to be carried out.
 - (iii) Cumulative impact assessment study to be carried out along proposed alignment including other packages.
 - (iv) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers if any.
 - (v) Composite plan to compensate the loss of tree cover though massive tree plantation programme with time schedule and financial outlay.
- 3.9 Proposed New National Highway NH-965D (Inter Corridor Route of Bharatmala Project Route 2 from Lonand (Satara District) to Kedagaon (Pune District) (SH 117, 118 & MDR 67) of length 51.375 by M/s National Highway Authority of India Terms of Reference

[IA/MH/MIS/73540/2018] [F. No. 10-16/2018-IA.III]

- The project proponent made a presentation and provided the following information to the Committee:
 - (i) The project road section of The Bharatmala Route 2 corridor is a proposed New National highway -NH-965D, an Inter Corridor Route, starting from Lonand (Ch 0+000) in Satara district and ends at Kedagaon (Ch 53+000) in Pune district (approximately 53 km) in Maharashtra.
 - (ii) The project corridor is proposed for development to 4-lane partial access-controlled roads, provision of basic amenities like bus bays, truck bays, rest areas, &toll plaza with administrative buildings, etc., and other ancillary structures. Three bypasses are proposed at Lonand, Nira, Morgaon and these proposed bypasses will be 2+2 lane, access-controlled road.
 - (iii) The project connecting the two-major artery of National Highway; Mumbai-Bangalore section of NH-48 and Pune-Solapur section of NH-65 and it also crosses Shirval-Phaltan-Pandharpur Road.
 - (iv) Avenue plantation shall be provided as per Green Highway (Plantation and Maintenance) policy and Green Highways (Plantation Trans-plantation beautification and Maintenance) policy 2015.

- (v) The major settlement enroute are Lonand Nira Morgaon Supe Kedagaon of Satara and Pune district. Lonand – Nira – Morgaon – Supe – Kedagaon of Satara and Pune district.
- (vi) The proposed total land acquisition is 318.00 ha. This includes 114.18 ha of Government land, 8.85 ha. of Forest land, 222.13 ha private land.
- (vii) The existing RoW is 18-20 m. The proposed ROW is 60 m including Bypass and realignment. However, ROW is been restricted to 30 m in Forest patches and 45 m in Built up Area.
- (viii) The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by habitation area.
- (ix) **Rehabilitation involved if any**: The affected families and structures shall be compensated as per NH Act 1956.
- (x) **ESZ:** Approximately 850 m of the alignment is abutting the Mayureshwar Wildlife Sanctuary at village Supe (Chainage 42+350 km to 43+100 km; Ch-45+500 km to 45+600 km).
- (xi) Diversion of forest land: Approximately 2100 m (2.1 km) length of the alignment passes through Reserved Forest (Chainage 19+150 km to 21+250 km) and the total extent of forest area is 9 Ha.
- (xii) Court case, if any: No
- (xiii) Investment/Cost: Rs. 555.85 crores.
- (xiv) **Employment Potential:** Temporarily 200 labours shall be employed per day.
- (xv) **Benefits of the project:** Implementation of the project is expected to yield the following benefits:
 - Improved road transport corridors and road network connectivity
 - Reduction in the air & noise pollution
 - Reduction in accident rate
 - Time savings for passengers and goods transport.
 - Lower transport costs for freight and passengers of motorized and nonmotorized vehicles.
 - Improvement in basic amenities to the towns/ village along the highway
 - Economic benefits in the terms of saving in Vehicle operating cost including fuel and maintenance.
 - Avoidance of congestion
 - Industrialization and other economic activities will develop rapidly which will lead to increased production; thereby bring prosperity to those areas
- **3.9.2** After detailed deliberation EAC recommended to grant the ToR subject to all standard ToR conditions in addition to following specific conditions:
 - (i) Quantity and Source of water utilization and its permission.
 - (ii) Details of tree felling species, age and girth.

- (iii) Traffic density study to be carried out.
- (iv) Cumulative impact assessment study to be carried out along proposed alignment including other packages if any in the alignment.
- (v) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers if any.
- (vi) Impact assessment study to be carried out for conservation of grassland with mitigation plan to avoid man-animal conflict as the proposed alignment abducting Mayureshwar Wildlife Sanctuary. The assessment should also focus to provide impact and measures for free movement of wolf and its habitat around the proposed alignment.
- (vii) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers if any.
- Proposed New National highway NH-160D (SH-45) Feeder Route of Bharatmala Project Route 4 starts from Junction of NH-60 near Nandur Shingote District Nashik connecting Dighe, Talegaon, Loni and terminating at its junction with NH-160 near Kolhar in District Ahmednagar (Maharashtra) length of 48.70 km by M/s National Highway Authority of India, PIU Kolhapur Terms of Reference

[IA/MH/MIS/73763/2018] [F. No. 10-17/2018-IA.III]

- The project proponent made a presentation and provided the following information to the Committee:
 - (i) The project road section of The Bharatmala Route 4 corridor is a Proposed New National highway -NH-160D (Feeder Route of Bharatmala Project Route 4 starts from Junction of NH-60 near Nandur Shingote District-Nashik connecting Dighe, Talegaon, Loni and terminating at its junction with NH-160 near Kolhar in District-Ahmednagar (approximately 48.70 km) in Maharashtra.
 - (ii) The project corridor is proposed for development to 4-lane partial accesscontrolled road, provision of basic amenities like slab culverts, major bridges, minor bridges, ROB,VUP, LVUP, Bypass, bus bays, truck bays, rest areas, & toll plaza with administrative buildings, etc., and other ancillary structures.
 - (iii) Two bypasses are proposed at Loni and Talegaon Dighe and these proposed bypasses will be 2+2 lane, access-controlled road, with service roads on either side.
 - (iv) Avenue plantation shall be provided as per Green Highway (Plantation and Maintenance) policy and Green Highways (Plantation Trans-plantation beautification and Maintenance) policy 2015.

- (v) The proposed project passes through 17 villages (approx.), namely Nandur shingote, Loni, Talegaon Dighe, Nimon, Kolhar.
- (vi) The proposed land acquisition is 288.00 ha. This includes 111.80 ha existing road of Government land, 176.20 ha to be acquired.
- (vii) The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by habitation area.
- (viii) Rehabilitation involved if any: There will be Project Affected People and Project Affected Households due to the project road. The entitled persons shall be made according to the provisions of the National Highways Act, 1956.
- (ix) **ESZ:**The project does not fall within Eco-sensitive area.
- (x) Diversion of forest land: No
- (xi) Court case, if any: No
- (xii) Investment/Cost: Rs. 463.22 crores.
- (xiii) **Employment Potential:** Temporarily 200 labours shall be employed per day.
- (xiv) **Benefits of the project:** Implementation of the project is expected to yield the following benefits:
 - Improved road transport corridors and road network connectivity
 - Reduction in the air & noise pollution
 - Reduction in accident rate
 - Time savings for passengers and goods transport.
 - Lower transport costs for freight and passengers of motorized and non- motorized vehicles.
 - Improvement in basic amenities to the towns/ village along the highway
 - Economic benefits in the terms of saving in Vehicle operating cost including fuel and maintenance.
 - Avoidance of congestion
 - Industrialization and other economic activities will develop rapidly which will lead to increased production; thereby bring prosperity to those areas.
- **3.10.2** After detailed deliberation EAC recommended to grant the ToR subject to all standard ToR conditions in addition to following specific conditions:
 - (i) Quantity and Source of water utilization and its permission.
 - (ii) Details of tree felling species, age and girth.
 - (iii) Traffic density study to be carried out.
 - (iv) Cumulative impact assessment study to be carried out along proposed alignment including other packages if any in the alignment.

- (v) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers if any.
- 3.11 Proposed New National highway 753 BB (MSH 1 & SH 6) Inter corridor route of Bharatmala project Route 3 from Village Songir, Taluka Dhule, District Dhule to Village Visarwadi, Taluka Navapur, District Nandurbar (Maharashtra) approximately 114.50 km by M/s National Highway Authority of India, PIU Kolhapur Terms of Reference

[IA/MH/MIS/73795/2018] [F. No. 10-18/2018-IA.III]

- The project proponent made a presentation and provided the following information to the Committee:
 - (i) The project road section of The Bharatmala Route 3 corridor is a proposed New National highway -NH-965D, an Inter Corridor Route, starting from Songir (Ch 0+000), in Dhule district to Visarwadi (Ch 114+500), in Nandurbar district approximately 114.500 km) starting from Songir (Ch 0+000), in Dhule district to Visarwadi (Ch 114+500), in Nandurbar district (approximately 114.500 km) in Maharashtra.
 - (ii) It is an expansion project into a new National Highway NH-753 BB. The total length of the project alignment is 114.500 km.
 - (iii) The project corridor is proposed for development to 4 lane partial access-controlled roads. This improvement/widening involves large number of balancing culverts, minor bridge, and major bridges to maintain the existing drainage pattern. it also involves structures like underpass, overpass, ROB, flyover and other basic amenities like bus bays, truck bays, rest areas, & toll plaza with administrative buildings, etc., and other ancillary structures.
 - (iv) Two bypasses are proposed at Dondaicha and Nandurbar and these proposed bypasses will be 2+2 lane, access-controlled road, with service roads on either side.
 - (v) Avenue plantation shall be provided as per Green Highway (Plantation and Maintenance) policy and Green Highways (Plantation Trans-plantation beautification and Maintenance) policy 2015.
 - (vi) The proposed project passes through 45 villages (approx.), namely Songir –
 Methi Dondaicha Ranale -Vawad Nandurbar Khandabara Mothi Kadwan Visarwadi.
 - (vii) The proposed land acquisition is 672.00 ha. This includes existing road 318.65 ha. of Government land, 15.00 ha. of Forest land, 353.35 ha to be acquired.
 - (viii) The existing RoW is 18-20 m. The proposed ROW is 60 m including Bypass and realignment. However, ROW is been restricted to 30 m in Forest patches and 45 m in Built up Area.

- (ix) The land use pattern on either side of 10 Km of the project road is predominantly agriculture followed by habitation area.
- (x) Rehabilitation involved if any: There will be Project Affected People and Project Affected Households due to the project road. The entitled persons shall be made according to the provisions of the National Highways Act, 1956.
- (xi) **ESZ:**The project does not fall within Eco-sensitive area.
- (xii) **Diversion of forest land:**Approximately 4900 m length of the alignment passes through forest area of 15 ha. is the total extent of forest area and hence forest diversion is required as per Forest Conservation Act 1980.
- (xiii) Court case, if any: No
- (xiv) Investment/Cost: Rs. 936.11 crores.
- (xv) **Employment Potential:** Temporarily 200 labours shall be employed per day.
- (xvi) **Benefits of the project:** Implementation of the project is expected to yield the following benefits:
 - Improved road transport corridors and road network connectivity
 - Reduction in the air & noise pollution
 - · Reduction in accident rate
 - Time savings for passengers and goods transport.
 - Lower transport costs for freight and passengers of motorized and nonmotorized vehicles.
 - Improvement in basic amenities to the towns/ village along the highway
 - Economic benefits in the terms of saving in Vehicle operating cost including fuel and maintenance.
 - Avoidance of congestion
 - Industrialization and other economic activities will develop rapidly which will lead to increased production; thereby bring prosperity to those areas
- **3.11.2** After detailed deliberation EAC recommended to grant the ToR subject to all standard ToR conditions in addition to following specific conditions:
 - (i) Quantity and Source of water utilization and its permission.
 - (ii) Details of tree felling species, age and girth.
 - (iii) Traffic density study to be carried out.
 - (iv) Cumulative impact assessment study to be carried out along proposed alignment including other packages if any in the alignment.
 - (v) Detailed Impact assessment study to be carried out with mitigation measures for protection of reservoirs, water bodies and rivers if any.

List of the Members attended 187thmeeting of Expert Appraisal Committee for Projects related to Infrastructure Development, Industrial Estate and Miscellaneous projects held on 12th April 2018 and approved the above minutes.

SI. No.	Name of the EAC member	Role/Designation	Signature
1.	Dr. Deepak Arun Apte, Director, Bombay Natural History Society (BNHS), Mumbai	Chairman	
2.	Dr. V.K. Jain, Professor of Chemistry, School of Sciences, Gujarat University, Ahmedabad	Member	20
3.	Dr. M.V. Ramana Murthy, Project Director, NIOT Campus, Pallikarai, Chennai	Member	
4.	Shri T.P Singh, Advisor, MEITY, New Delhi	Member	
5.	Dr. N.K. Verma, Former AD, CPCB, New Delhi	Member	Charche.
6.	Dr. Asha Ashok Juwarkar, Former Chief Scientist and Head, NEERI, Nagpur	Member	
7.	Dr. Anil Kumar Singh, IFS (Retd), Ex PCCF Assam, Tower F, Float No. 103 Grand Ajnara Heritage, Sector 74, Noida, UP	Member	AR
8.	Dr. Mohan Singh Panwar, Associate Professor, Garhwal University, Uttarakhand.	Member	
9.	Shri Narendra Surana, Managing Director, Bhagyanagar India Limited and Surana Telecom. and Power Limited, Hyderabad	Member	
10.	Shri Prabhakar Singh, Special DG, CPWD, Delhi Region, Nirman Bhawan, New Delhi (Building Construction Sector)	Member	
11.	Dr. Anuradha Shukla, Central Road Research Institute (CRRI), Mathura Road, New Delhi	Member	Xour.
12.	Dr. D. Chakraborty, Scientist MoWR, RD & GR, New Delhi	Member	Ny my
13.	Shri N.K. Gupta, Member (EAC), Scientist E & In-charge (ESS), Central Pollution Control Board,	Member	Phill .
14.	Smt. Bindu Manghat, Director Survey of India New Delhi	Member	
15.	Shri Raghu Kumar Kodali, Director/Scientist-F, IA-III Division, MoEF&CC	Member Secretary (Infra-1 EAC)	Reiner
16.	Dr. Ashish Kumar, Joint Director, Ministry of Environment, Forest and Climate Change,	Special invitee	Ashrb.