Minutes of the 251st meeting of Expert Appraisal Committee held on 28th December, 2020 through Video Conferencing 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 Complexes 7(c); Ports, harbours, break waters, dredging 7(e) and National Highways 7(f)

The 251st Meeting of Expert Appraisal Committee (EAC) of Infra-1 (IA-III) was held through Video Conferencing at the Ministry of Environment, Forest & Climate Change (MoEF &CC), Indira Paryavaran Bhavan, New Delhi on **28th December, 2020** 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. CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The Committee confirmed the Minutes of 249th EAC meeting held on 14thDecember, 2020 with correction in the MOM of 249th EAC as following:

> ***Proposal no 3.3***: The dredge disposal area was mentioned as 51 Km^2 beyond (-) 20 m contour, in the Brief Report submitted by the PP. However, in the Annexure-II submitted by the PP it was mentioned as 56 Km^2 beyond (-) 20 m contour. The PP vide e-mail requested to correct the typological error in the dredge disposal area from 51 Km^2 to5 6 Km^2. Accordingly, in the Minutes of the Meeting of the 249th EAC at proposal No. 3.3, Para 2, the line "*51 Km^2beyond (-) 20 m contour*" may be read as "*56 Km^2beyond (-) 20 m contour*".

3. AGENDA WISE CONSIDERATION OF PROPOSALS: Agenda wise details of proposals discussed and decided in the meeting are as following:

Agenda No. 3.1 **[Proposal No. IA/KA/NCP/187221/2020 & File No. 10-70/2020-IA.III]**

Development of 4/6 lane Greenfield alignment from Akkalkot - KN/TSborder section in the State of Maharashtra under Bharatmala Pariyojana(Lot-5/Package-2) (length 203.00 km) by M/s National Highways Authorityof India - Terms of Reference [P. No. IA/KA/NCP/187221/2020; F. No. 10-70/2020-IA.III].

The project proponent along with the EIA consultant M/s Aarvee Associates made a presentation through Video Conferencing and submitted the following information.

1. The proposed project is for the Development of 4/6 lane Greenfield alignment from Akkalkot – KN/TS border section in the state of Maharashtra under Bharathmala Pariyojana. The proposed project road is a part of Economic Corridor, which starts from Akkalkot Bypass near Rampur village on NH-150 E in the state of Maharashtra and ends at KN/TS Border near Singnodi village in the State of Karnataka. Total Investment/Cost of the project is Rs. 4621.3 crores (₹ 462130 lakhs).The proposed project falls under Category A, 7 (f) Highways.

2. The proposed alignment has total length of 203 km. The land use in the project area is cultivated and barren lands. The proposed road will have 9 major bridges, 65 minor bridges, 3 RoB, 290 culverts, 27 vehicular underpasses (VUP),15 light vehicular underpasses(LVUPs), 56 small vehicular underpasses(SVUPs), 8 interchanges, 1 toll plaza and 8 toll booths. There is provision of 4 Rest areas. The land use pattern in 10 km either side of the project road is predominately cultivated and barren fields. All safety measures will be provided as per IRC guidelines, NHAI safety manual and MoRTH guidelines, circulars etc.

3. The proposed project road crosses River Bori at Km 1.800, River Amarja at Km 45.675, River Bhima at Km 70.537 and River Krishna 161.460. The proposed road is also crossing canals. There should not be any diversion/obstruction of free flow of water as per detail geo-hydrological study. Details of Water Bodies along the proposed project corridor (Akkalkot – KN/TS border) is as following-

S. No	Name of the River or Tributary	Design Chainage (Km)	ProposedSpan Arrangement (m)
1	River Bori	1+800	2x30
2	River Amarja	45+675	4x20
3	River Bhima	70+537	11x30
4	Tributary of River Bhima	105+604	3x25
5	Tributary of River Bhima	122+884	4x30
6	River Krishna	161+460	24x30
7	Tributary of River Krishna	169+818	8x20
8	Tributary of River Krishna	181+254	3x20
9	Tributary of River Krishna	183+493	8x20

4. The proposed land acquisition for the proposed alignment is approx. 1830 Ha. The proposed RoW is 60 m.Project area is having plain terrain. Mean Sea Level of the project region is +444 m. Project does not require filling.

5. The proposed project does not involve diversion of any forest land. The project neither pass through any National park/ Wildlife Sanctuary/ Conservation reserve etc., nor falls within 10 km boundary of any Protected Area under Wildlife Protection Act 1972.The proposed project does not involve CRZ areas.

6. A total of 2,300 Nos. trees which are coming in the alignment need to be removed and

about 12,000 trees will be planted on available ROW as per IRC:SP-21: 2009 code. When there is removal of native species, the same will be planted during the compensatory plantation program. The detail of development of green belt will be prepared after approval of alignment. No rehabilitation is required for the proposed project.

7. About 6053724 cum fly ash are proposed to be used for construction of embankment from KPCL Raichur Thermal Power Station during construction phase, if available.

8. Total water requirement for the proposed construction work is 6898310 KL that will be met from surface water bodies. Ground water will be used for construction, where surface water is not available after obtaining prior permission from concerned authorities.

9. No permanent wastewater/sewage generation is envisaged from the present project. However, the temporary waste water generated will be treated by settling tank, septic tank with soak pit in the camp site and also semi pucca drain in the camp site.The solid wastes mainly of earth materials/ construction wastes generated out of construction activities will be reused for rehabilitation of borrow area/quarry sites, camp sites and in temporary diversions and slopes. Sewage generating temporarily from labor camps will be discharged into septic tanks with soak pit facility and also semi pucca drain in the camp site. The municipal solid wastes generated in construction & workers camp (approximately 1150 kg) will be disposed of to the nearest identified location of disposal/landfill sites of local authority with payments in environmentally acceptable manner. Salvage material/demolition wastes will be reused to the possible extent in embankments, shoulders, slopes, approach roads and temporary camp sites.

10. The Socio-economic condition of local people is based on agriculture.

11. Benefits of the project: Existing road is very congested with heavy traffic. Hence, this proposed green field corridor would reduce substantial length, travelling time and fuel consumption. This proposed corridor is also intended to augment the Transport Infrastructure in the states of Maharashtra and Karnataka and boost the industrial, freight movement and tourism sectors by providing faster inter-region connectivity. The project road will cause several benefits to local people both during construction and operation stage. Increase agro-industrial activities are also expected to take an advantage of improved access to urban centres, Further, tourism activities in the area and state will be enhanced which in many terms will boost the local economy and build better investment climate for industries creating more employment opportunities to local people.It is anticipated that it will create employment for 4600 during peak construction period (two years) and for 2300 during non peak construction phase (two years) for the skilled and unskilled work force in the area.

12. No court cases are pending against the proposed project.

The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 251st meeting on **28th December, 2020** and **recommended the proposal for granting Terms of Reference** with the specific conditions, as mentioned

below, in addition to all standard conditions applicable for such projects.

i. The proponent shall carry out a detailed traffic 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.

ii. Road safety audit (along with accident/black spots analysis) by any third-party competent organization at all stages namely at detailed design stage, construction stage and pre-opening stage to ensure that the project road has been constructed considering all the elements of road safety.

iii. Cumulative impact assessment study to be carried out along the entire stretch including the other packages in the same stretch.

iv. 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.

v. The alignment of road should be such that the cutting of trees is kept at bare minimum and for this the proponent shall obtain permission from the competent authorities. Committee recommended not to cut very large and old trees especially species such as ficus. Each such tree needs to be geomarked, photographed and details be submitted in the EIA –EMP.

vi. 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.

vii. 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.

viii. 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.

ix. In pursuance of Ministry's OM No stated above, 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 in tabular form.

x. 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.

Agenda No. 3.2 **[Proposal No. IA/AP/NCP/121915/2019 & File No. 10-5/2020-IA.III]**

Development of Economic Corridors, Inter-Corridors, feeder routes and Coastal Road primarily to improve the efficiency of freight movement in India (Lot-3/Odisha & Jharkhand/Package-2) Raipur-Vishakhapatnam (Ch365.033 - Ch 464.662 km) in the State of Andhra Pradesh by M/s National Highways Authority of India (NHAI) under Bharatmala Pariyojana -Environmental Clearance [P. No. IA/AP/NCP/121915/2019; F. No.10-5/2020-IA.III].

The project proponent along with the EIA consultant M/s Enviro Infra Solutions Pvt. Ltd., Ghaziabad in association with CEMC Pvt. Ltd has made a presentation through Video Conferencing and provided the following information.

1. The Ministry of Road Transport and Highways (MoRTH) through National Highways Authority of India (NHAI) has decided the assignment of Development of Economic Corridors, Inter-corridors and feeder routes and Coastal road primarily to improve the efficiency of freight movement in India under Bharatmala Pariyojna Lot-3/Odisha& Jharkhand/Package-2, having proposed alignment length of 464.662 km (totally green field), which starts from near Abhanpur (CH. 0.000) and ends at Sabbavaram village in Vishakhapatnam district.

2. The proposed NH is Green field alignment project and proposed for 6 lane carriageway. The project highway starts from Salur village in Vizianagaram district to Sabbavaram village in Visakhapatnam district in the state of Andhra Pradesh from CH: 365+033 to 464+662 having a total length of 99.629 Kms.The proposed road will have 26 Major bridges, 27 Minor Bridges, 1 ROB, 11 VUP, 21 LVUP and 2 VOP, 12 Viaduct & other structures along the project stretch. All safety measures will be provided as per NHAI Safety Manual and IRC: SP88.

3. The proposed project falls under 7(f), Category-A as per EIA notification 2006. Total investment/cost of the project is Rs 318300 Lakhs (3183 Crores).The Terms of Reference (ToR) for the proposed project was considered in 230th EAC Meeting on 29thJanuary, 2020 and it was granted by EAC *vide* letter no. 10-5/2020-IA.III, dated 02nd March, 2020.Public Hearing was conducted at Visakhapatnam and Vizanagram districts on 28th August 2020 and 17th September 2020, respectively.

4. Total land acquisition for the proposed project is 642.991 Ha, out of which Private land is 438.531 Ha, Government land is 165.911 Ha and Forest land is 38.549 Ha.The proposed Right of Way (RoW) is 60m in general and 45 m in Forest area.

5. The proposed highway lies generally in plain terrain. However, certain length of highway lies in rolling terrain. The existing land use around the proposed National Highway primarily comprises of agricultural land, forest area, land for cattle grazing, village settlements and village ponds/nallah. The proposed alignment passes mostly through uninhabited area avoiding village establishments. The project alignment passes through 54 village areas. All

the settlement areas have been avoided by careful selection of alignment in order to avoid mass displacement. Estimated cost of Rs.226.57Crores has been proposed for Rehabilitation & Resettlement including land acquisition. The NHAI shall compensate the entire affected title holder as per NHAI Act, 1956 and Right to fair compensation and transparency in land acquisition, rehabilitation and Resettlement Act, 2013.

6. The proposed project road crosses about 26 water bodies (Ponds/Tank).The natural drainage of the project impacted area shall be maintained through improvement of 280 nos. of culverts, 26 nos. of major bridges and 27 nos. minor of bridges. The proposed alignment does not pass through any flood prone area.

7. As per detailed field surveys, truck lay-bys and bus stop have been proposed. The rest area will provide common facilities like petrol pump, first aid medical facilities, police-office, restaurant, vehicle parking, etc. For petrol pump, the guidelines issued by OISD of Ministry of Petroleum shall be followed. The facilities shall be planned at approximately 50 km of interval.

8. About 10,397 nos. of trees will be removed and about 31,191 nos. of trees shall be planted as the compensatory plantation program. Avenue plantation shall be carried out as per IRC SP:21:2009 on available ROW apart from stator requirement. The work of green belt development will be taken up by the project proponent in consultation with the Forest Department of the Government of Andhra Pradesh.

9. Total water requirement for the project is 3338116 KL during construction stage that will be extracted from local surface water resources after obtaining necessary permissions from the concerned authority. Rainwater harvesting structures shall be provided near the disposal point of the side drains as prescribed by CGWB guidelines. The budget proposed for rain water harvesting structures including its maintenance is Rs. 1,05,00,000.

10. Total waste of about 500 kg/day during construction phase and approx. 50 kg/day during operation phase may be generated at tolls and wayside amenities area within PROW. Bio degradable waste shall be disposed through bio-composting and other waste through landfill site.

11. Provision for solar power plant has been recommended in the nearby villages and it's budget have been incorporated in CER budget.

12. Benefits of the project: The proposed project would act as the prime artery for the economic flow to this region. It will enhance connectivity between rural & urban population, which will benefit all the sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc. It will improve economy of the people with generation of employment opportunities. During construction phase around 1000 persons would be employed temporarily. However, due to construction of toll plazas approx. 50 persons will be employed on permanent basis.

13. Details of Court cases: No court case is pending against the proposed project.

14. Eco sensitive area: The proposed alignment does not pass through Wildlife Sanctuary/National Park and any eco-sensitive zone.

The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 251st meeting on **28th December, 2020** and **deferred** the proposal for the want of following documents/information:

i. Endorsement/recommendation and Verification of the proposed alignment from the Project Elephant of the MoEFCC to ascertain if the proposed alignment will be passing through the elephant movement corridor and if yes, will it cause major fragmentation of the elephant corridor in the region. Submit the mitigation measures if advised by the Project Elephant and duly endorsed by the Chief Wildlife Warden of respective states.

ii. Justification for considering the proposed ROW from 30 to 45 m in the forest area.

iii. The kml file submitted by the project proponent is corrupted and can not be opened. Project proponent will need to submit fresh kml file with chainage clearly marking elephant crossovers areas if any.

Agenda No. 3.3 **[Proposal No. IA/AP/MIS/75727/2018 & File No. 10-49/2018-IA.III]**

Construction of 6-lane highway from Chittoor to Thatchur NH-716B (Km0.000 to 126.550) from District Chittoor, Andhra Pradesh to Thatchur,District Tiruvallur, Tamil Nadu by M/s National Highways Authority of India(NHAI) - Environmental Clearance [P. No. IA/AP/MIS/75727/2018; F. No 10-49/2018-IA.III].

The above mentioned proposal was earlier considered by Expert Appraisal Committee (EAC) (Infra-2) in its 239thEAC meeting held on 29thJuly, 2020, wherein the EAC had observed that the EIA/EMP report was prepared using very old secondary data on climate, land use and forest ecosystem, collected from documents/reports of various departments/agencies. Further, the EIA/EMP report had no clarity and consistency in the facts, figures and analytical methods. Accordingly, the EAC had deferred the proposal for want of additional information and revised EIA/EMP report along with revised Form-2 application.

As per recommendations made by the EAC during 239th EAC meeting on 29thJuly, 2020, the aforementioned proposal has been revised accordingly considering all the associated recommendations in the EIA/EMP report as well as other studies carried out for the proposed project.

At this instant, the aforementioned proposal was further placed before the EAC during its 251stmeeting on 28thDecember, 2020. The project proponent alongwith EIA consultant M/s Louis Berger, Gurgaon, Haryana made thepresentation through Video Conferencing and provided the following information-

1. This is a new greenfield alignment project. The Chittoor to Thachur Section (Newly declared NH 716) is proposed 6-lane highway having total length of 126.550 Km in the states Andhra Pradesh and Tamil Nadu. The Project start (Ch. 0+000) from junction of proposed Bangalore-Chennai expressway (Ch. 152+100) near Chittoor in Andhra Pradesh and ends at NH 5 near Thatchur in the proposed Chennai Peripheral Road project (Ch.126+550) in Thiruvallur district in Tamil Nadu. The proposed alignment is newly declared National

Highway-716B. It passes through 2 districts namely Chittoor district in Andhra Pradesh and Thiruvallur district in Tamil Nadu. The proposed project is comprising of 4 number of major bridges, 19 number of minor bridges, 2 number of ROB's, 65 number of Vehicular Underpasses, and 8 number of Interchanges. All safety measures will be considered as per NHAI Safety Manual and IRC: SP 88.The proposed Right of Way (ROW) requirement is 70 meter throughout the corridor.

2. The proposed proposal fall under 7(f), Category A as per EIC notification 2006. The overall cost of the project is Rs. 3,840.00.Total Environmental Budget considered is Rs. 46.5 Crores.Term of Reference (ToR) was issued vide letter No.10-49/2018/IA.III dated 9thOctober 2018.Public hearing was done at Thiruvallur and Chittoor district on 5thJuly, 2019 and 30thAugust 2019, respectively.

3. The terrain and topographical features of the Chittoor district forms a part of the Mysore plateau with many hill ranges and undulating plains.The Project road section of Chittoor - Thatchur (NH-716B) passes mainly through rolling terrain while some stretch passes through plain terrain.The project road crosses River Ponnai at 14.500 km, Nagari River at 65.700 kmand Arani river at 2 location in 100.200 km and 109.000 km. There are total 30 pond/tanks falls along the project road. Few are directly getting impact due to proposed development. Mitigations of affected water bodies are proposed by deepening the ponds. Bridges are proposed where the project road is crossing the ponds/water bodies.

4. Total land acquisition for the proposed project alignment is approx. 849.782 Ha (including AP Section: 541.050 Ha + TN Section: 308.822 Ha).Resettlement & rehabilitation (R&R) Plan and Social Impact Assessment (SIA) has been Prepared for the said project. Total No. of Project Affected households (HHs) Losing Privately owned structures are 192. Project Affected Persons (PAPs) are 768 (No. of PAPs was calculated as per the avg. HH size of the District). The impacted persons are calculated based on affected persons and structures. Apart from this there are seven community properties. Also, there are 329 minor assets like hand pump, bore well pump house etc. Approximately a total number of 45 kiosks and local mobile vendors are affected. Land acquisition (LA) and R&R Budget was prepared based on Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR) and National Highways Act 1956.

6. Altogether, about 3,642 numbers of trees falls within the Corridor of Impact (CoI). However, trees with less than 30cm girth size have been categorized as poles. The total number of poles is 16,042. The total number of trees and poles is 19,684. There are about 830 trees in forest section of the Road.Efforts will be made to minimize 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.

7. Total 2,504,101 cum of fly ash are proposed to be used for the construction of embankment subject to the availability of the same, from Ennore Thermal Power Station, North Chennai.

8. Total water requirement for construction is estimated approx. 36.5 lacs KL for 2 years that will be sourced from purchasing Tankers. However, the ground water will be extracted for bare minimum requirement after obtaining the permission of appropriate authorities. Provision of rainwater recharge pits at every 500m interval (staggered) is supposed; subject to the first aquifer below 10m. DG sets will be used as a source of energy.

9. About 96,000 and 19,200 L/Day wastewater will be generated during the construction and operation phases, respectively. Septic tanks will be provided for waste management.

10. Benefits of the project: The project will give significant economic benefits to the State. Development of highway will lead to better connectivity and will play a significant role in reducing the pollution due to traffic congestion in city area as well as it will help in changing the socio-economic condition of the people living in the region. Installation of proper road safety system through signage, barricades, crash barriers, noise barrier etc. on project road will further enhance the road safety and minimize human-animal conflicts. The project will also generate direct and indirect employment to the local people of the State. The indirect benefits include savings in vehicle operating costs, less fuel consumption and decreased cost and time of passenger travel. About 2000 Workers will be employed for three years during the construction Phase and 200 Workers will be employed during the Operation Phase.

11. **Details of Court cases: No court cases are pending against the proposed project.**

12. Forest diversion: The proposed project requires diversion of 18.801 Ha forest land. The forest diversion of 4.772 ha land(No: FP/AP/ROAD/41508/2019) is proposed in Chittoor District of Andhra Pradesh. Also, the forest diversion of 14.029 ha land(No: FP/TN/ROAD/53276/2020)is proposed in Tiruvallur District of Tamilnadu

13. **Eco-sensitive area**: There is no Eco-Sensitive Zone (ESZ)/Protected Areas such as National Parks, Sanctuaries and Tiger Reserves etc., within the 10 km radius of the project area.

The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 251st meeting on **28th December, 2020** and **recommended the proposal for grant of Environmental Clearance** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

(i) Proponent shall keep the finish road level sufficiently elevated from ground level with provision of railing on both sides to restrict animal crossing in order to avoid the possibility of wildlife injury/death. Sufficient animal passes shall be provided by NHAI at regular interval as suggested in the Mitigation Plan and the Wildlife Conservation Plan prepared and approved by Chief Wildlife Warden as per recent guidelines of Wildlife Institute of India for linear infrastructure projects.

(ii) Prepare the traffic prediction report for complete project (including all packages of this project) considering the cumulative impact of the traffic on the environment and submit to the Ministry and concerned Regional Office within 3 months.

(iii) The recommendations of Cumulative Impact Assessment studies and proposed mitigation measures for all the packages shall be implemented in toto and be submitted to the concerned Regional Office of the MoEF&CC along with half yearly compliance report.

(iv) All the major, minor bridges and culverts should not affect the drainage systems. Flood plains of the rivers/ drainage systems are not to be disturbed.

(v) No Ground water shall be extracted and used during the construction and post-construction phases. Approval/permission of concerned authority shall be obtained before drawing surface water from canal or any other sources.

(vi) The proponent shall obtain permission from the competent authorities for tree felling along the proposed alignment.

(vii) Quarry areas shall be developed as water reservoirs with proper fencing around quarry area. Rain water harvesting pit shall be at least 3 - 5 m above the highest ground water table.

(viii) The RoW shall not exceed 70 m at any point of the proposed alignment, except for the junction improvement at the intersections of the other roads. Standardisation of ROW for plain land, undulating land, hilly and mountain terrain and forest land to be defined and to be remain constant for all the packages.

(ix) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV, Compensatory afforestation etc., either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.

Agenda No. 3.4 **[Proposal No. IA/KL/NCP/74865/2018 & File No. 21-63/2018-IA.III]**

Development of "Petrochemical Park' at Village Puthencruz, TalukKunnathunadu and Village Thiruvankulam, Taluk Kanayannur, DistrictErnakulam, Kerala by M/s Kerala Industrial Infrastructure DevelopmentCorporation - Environmental Clearance [P. No. IA/KL/NCP/74865/2018; F. No. 21-63/2018-IA.III]

The above mentioned proposal was earlier considered by Expert Appraisal Committee (EAC) (Infra-1) in its 247thmeeting on 23rd– 24thNovember, 2020 and noted that the category of the project proposed to be housed with the project site was not appropriate. Further, it was noted by the EAC that the details of Public Hearing were also not found. In view of the above, the EAC had deferred the proposaland requested the PP to submit the revised table of project category by re-orienting the red category project with orange category project proposed to be housed on the habitation side alongwith the submission of details of Public Hearing. As per recommendations made by the EAC during 247th meeting on 23rd – 24th November, 2020, the proposedproject has been revised accordingly.

At this instant, the aforementioned proposal was further placed before the EAC during its 251st meeting on 28th December, 2020. The project proponent alongwith EIA consultant M/s Voyants Solution Pvt Ltd. has made a presentation through Video Conferencing and provided the following information-

1. The Petrochemical Park is proposed to be established in approximately 489.46 acres of land in FACT premises at Ambalamughal, Kochi with all modern facilities exclusive for the Petrochemical Industry. The project site area is located at a distance of 16 km from Kochi and 35 km from Cochin International Airport and with excellent connectivity through road, rail and air.No historical/cultural monuments will be affected as a result of the proposed development. Truck terminal warehouse will have 25 ECS while Petro Chemical and Pharma Plots will have separate parking scheme.

2. The project falls under7(c), Category A. ToR was given vide letter No. 21-63/2018-IA.III dated 20th Sept. 2018. Public Hearing was chaired by the District Collector, and was conducted at the Collectorate of Ernakulam on 01st July 2019.Total cost of the is Rs. 320.90 Cr. Estimated Cost for Environmental Management Plan is Rs. 116.1 Crore, wherein the Capital Cost is 38.9 crore & Recurring Cost is Rs. 2.6 Crore. The recurring cost shall be considered annually every year (For next 30 years & Total Recurring Cost 77.4 Crore) & shall be operated phase wise for the proposed petrochemical park.

3. The project area has hilly and plain topography. The general slope of the study area is from north-east to south-west and follows the general trend of drainage. Almost 88% of the area is covers under 0-15% of slope range. Chitrapuzha River is adjacent to the project boundary, while Ambalamedu Lake is also in vicinity of the project site. Near the river, green belt is proposed as per the norms. Ambalamedu Lake is artificial lake, which harvest the run-off from the project area.

4. In the proposed project, the red category of Industries shall cover up to 15.88 acres out of 489.46 acres and Orange & Green industries of around 288.54 acres shall be establish. Orange & Green category Industries will be housed near the settlement area. Further Red category Industries are oriented away from Water body and oriented in Plot IC-1 ,IC-2, SC-1, SC-2 of area 4.17 acres , 4.78 acres, 4.47 acres & 2.46 acres respectively to minimize the impact on the environment of high pollution contributing industries.Details of industries supposed to be housed with the proposed project site as given below-

Broad category	Basic Feedstock	Likely focus /target products	Category of Industry
Ancillary and allied industries	--	• Packaging materials-Bags, Drums, Cans, Carboys, Reprocessing of waste plastic including PVC, Phenyl/toilet cleaner formulation and bottling , Polythene and plastic processed products manufacturing • Industries engaged in recycling /reprocessing/ recovery/ reuse of Hazardous Waste under schedule IV of HW (M, H & TBM) rules, 2008 – Items namely – Used oil, Waste oil, Paints & Ink sludge residues. • Beside other related industries that can use the infrastructure and services at the location	Green + Orange
Pharmaceuticals	API grade Toluene, Benzene, Iso	R&D	Orange

	butylene and other solvents		
Speciality chemicals	Acrylic Acid, Iso Butylene, Acrylates, Oxo Alcohol, EO, PO, PG etc.	Personal care ingredients, Polymer additives, Resins, Water chemicals, Textile chemicals, Construction chemicals, Surfactants, Flavour and Fragrances	Red + Orange
End products	Acrylates, Oxo alcohols, Acrylic acid, Butyl acetate, Polyol ethers, SAP, Nylon /PET chips etc.	Adhesives & Sealants, Paints, Coatings and emulsions, Lacquers, Inks, Polyurethane Components, SAP Based Hygiene Products, Tyre cords, PET Products , Synthetic detergents and soaps(excluding formulation), Fertilizer (granulation / formulation /blending only) Liquid floor cleaner, black phenyl, liquid soap, glycerol mono-stearate manufacturing , Paint blending and mixing (Ball mill) , Paints and varnishes (mixing and blending) , Printing ink manufacturing.	Red + Orange
Petrochemical intermediates	Propylene, Iso Butylene, Ethylene, Ethylene Oxide, MEG, Propylene Oxide, Butanol/Iso butanol, Caprolactum	Epichlorohydrine (ECH); Iso Propyl Alcohol (IPA); EPDM; Polyisobutylene (PIB); Alkyl Phenols; Methacrylic Acid (MAA); Butylated Hydroxytoluene (BHT), butyl rubber, Isoprene ; Ethylene Vinyl Acetate (EVA) / Vinyl Acetate Ethylene (VAE); Ethanol Amines/ Glycol Ethers / Ethylene carbonate; PET Chips ; Iso-propanol amine/ Propylene Glycol ethers; Butyl Acetate/ Iso butane acetate; Nylon 6 resin.	Red

6. Total water requirement will be 14.148 MLD, and total treated water availability will be 4.005 KLD, so total fresh water requirement is 10.143 MLD. About 40% of the water demand of the process industries shall be met by recycled water; the remaining 60% of the water demand will be met through Water supply tapping from KINFRA Export Promotion Industrial Park (KEPIP), which is approximately for a length of 5 Kms.

7. No groundwater shall be extracted. The storm water on site will be treated through CETP.

7. The quantity of wastewater will be generated around 4.45 MLD. The wastewater generated from other areas of the petrochemical park area will be collected & treated at the Common Effluent Treatment Plant (CETP). The proposed CETP would essentially be for proposed industries with capacity of 1 MLD and 3.5 MLD.

8. Total load of the project area is 33.36 MVA without considering BPCL Kochi Refineries (170 Acre) as it already has a substation of 220/33KV and other adjacent plots/amenities, outside of the project area. It is proposed to install DG sets to meet the total power requirements during power failure.. The DG sets will have emission of various pollutants. To achieve adequate natural dispersion, stack height will be provided to DG sets respectively in accordance with the guidelines of Central Pollution Control Board (CPCB).

9. During Operation Phase in the proposed Petro-Chemical Park, waste produced will be divided into 4 major categories such as Municipal Solid waste from all sources (9.116 Ton /

Day), Hazardous and Non-Hazardous Industrial Waste (87.068 Ton / Day) and Construction Waste. The solid waste including hazardous waste shall be properly handled and disposed. TSDF (Treatment, Storage, Disposal Facility) project (KEIL i.e., KERALA ENVIRO INFRASTRUCTURE LTD) is existing adjacent to Petro-chemical Park and same can be used for proposed project. E-waste will be given to Suchitra Mission or similar NGO/ company for recycling. Plastic, paper and other wastes will be given to CREDAI (Confederation of Real Estate Developers Association of India). KINFRA may give a plot to set up recycling unit inside the Petro Chemical Park so that hazard related to transportation will also be avoided.

10. The Petrochemical Park is coming up in already industrial notified area, however approx. 15008 trees will be cut as a part of site clearance after getting permission from forest department. No forestland will be diverted for the proposed project.

11. Benefit of the project: It will provide various business opportunities for entrepreneurs for setting up the different types of industries that will generate Direct and In-Direct employment. Total 9330 (3,733 on permanent basis and 5,597 on temporary basis) peoples will be employed.

12. Details of Court cases: No Court case is pending against the proposed project.

13. Eco-sensitive areas: Mangalavanam Bird Sanctuary is at 9.5 km in the west direction from the project site. No endemic and endangered species of flora and fauna has been reported within 10 kms of the project area. However, Ramsar site, i.e., Vembanad (Vembanad Kayal or Vembanad Kol) is about 8.5 kms southwest and migrant birds are recorded to visit the same.

The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 251stmeeting on **28thDecember, 2020 and recommended the proposal for grant of Environmental Clearance** with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

(i) The proponent shall submit a detailed physical and fiscal targets and means of achieving as a part of the EMP for disaster management in the project area. .

(ii) The project shall have Zero Liquid Discharge from the industrial complex. To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or reused for the identified uses.

(iii) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured/recorded to ensure the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six Monthly Monitoring reports.

(iv) All the recommendation of the EMP shall be complied with in letter and spirit.

(v) The member units shall provide storage tanks for storage of effluent for monitoring the characteristics of effluent before taking into the CETP for further treatment.

(vi) Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity sent from member industries to CETP and from CETP to the final disposal/re-use on a continuous basis.

(vii) Ambient noise levels shall conform to the prescribed standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during development/ construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.

(viii) Rain water harvesting for roof run-off and surface run- off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging shall be kept at least 4 mts above the highest ground water table.

(ix) The "Red Zone" to be clearly demarcated in the plot plan and submitted along with the 6 monthly compliance report.

(x) Risk Contours (BLEVE scenario) as derived from Quantitative Risk Assessment Studies/ Modelling shall be submitted with 6 monthly compliance report.

(xi) Signages to be displayed prominently at junctions/ approach roads informing the general public regarding the sensitive nature of the installation and the operations thereof.

(xii) Emergency contact numbers shall be displayed prominently as well as shared with District Authorities including Disaster Management Group and local emergency services, i.e Police, Fire Services, Government Hospitals and other such services.

(xiii) As per the Ministry's Office Memorandum F. No. 22-65/2017-IA.III dated 30th September, 2020, the project proponent shall abide by all the commitments made by them to address the concerns raised during the public consultation. The project proponent shall initiate the activities proposed by them, based on the commitment made in the public hearing, and incorporate in the Environmental Management Plan and submit to the Ministry. All other activities including pollution control, environmental protection and conservation, R&R, health and safety, hazard mitigation and compensation, wildlife and forest conservation/protection measures including the NPV, Compensatory Aforestation etc, either proposed by the project proponent based on the social impact assessment and R&R action plan carried out during the preparation of EIA report or prescribed by EAC, shall also be implemented and become part of EMP.

Agenda No. 3.5 **[Proposal No. IA/OR/NCP/188731/2020 & File No. 10-10/2019-IA.III]**

Development of Port on River Mahanadi in Kendrapada District, Odisha byM/s Directorate of Ports and Inland Water Transport - Amendment to the Terms of Reference [P. No IA/OR/NCP/188731/2020; F. No 10-10/2019-IA.III]

The above mentioned proposal was earlier considered by Expert Appraisal Committee (EAC) in its 38thEAC meeting held on 06-08thFebruary 2019. TOR was accorded *vide* letter No. 10-10/2019-IA-III, dated 07th March 2019. Now, the PP *vide* online submission of an application on 18th December 2020 requested the Ministry for the Amendment in Terms of Reference, which was earlier issued on 07th March 2019. The PP has stated that the alignment of Navigation channel as per approved TOR was coming under CRZ-IA category, but the new proposed layout willavoid the CRZ-IA category and the capital dredging quantity will be reduced.

At this instant, the aforementioned proposal was further placed before the EAC during its 251stmeeting on 28thDecember, 2020. The project proponent alongwith EIA consultant M/s WAPCOS Limitedhas made a presentation through Video Conferencing and provided the following information-

1. The proposed project envisages the construction of Port on the left bank of Mahanadi River in Kendrapada district, approximately 3 km from Paradeep town. Port will be developed in two phases. The cargo proposed to be handled in Phase-I include dry bulk, break bulk and containers. The proposed project will envisage the facilities such as 2 nos. Multi Cargo Handling Berths, Projected Cargo – 18.43 MTPA, Dredging in 13 km long channel in River Mahanadi and 14 km long channel in sea up to river mouth, Quantity of dredged material- 26 Mm^3, Admin Building, Rail Bridge, Fire Station, Port Users Building, Rail Yard For Coal, Rail Yard For Iron Ore, Bulk cargo and container Storage Area.

2. The proposed Port site is located on the left bank of the River Mahanadi. Total five villages i.e., Akhadasali, Dasaraapur, Palligarh, Bahakuda and Baharagada Badadandua of Kendrapada district in Odisha. The site coordinates are- Latitude: 20°20'19"N to 20°20'55"N and Longitude: 86°36'53"E to 86°37'46"E.The site is connected to Cuttack by NH-5A highway, which is about 90 Km from the project site. Paradip railway station is located 8 km away to the project site.

3. The proposed project falls under item 7(e) as per EIA notification 2006. The Terms of reference (ToR) for the proposed Project was issued vide Ministry's Letter No. 10-10/2019-IA-III, dated 07th March 2019 during 38th EAC meeting held on 06-08th February 2019. Total Investment/Cost of the project has been estimated as Rs. 2085 Crore.

4. Total area required for the proposed project is 300 ha. However, about 175 ha land is to be reclaimed to a level of +5.0m above CD for the development in Phase-I. Hence, 175 ha area will be utilized for the proposed project. The terrain of the proposed port site is uncultivated, flat land devoid of significant vegetation except for sparsely spread common shrubs and grasses. It is low-lying and gets water logged during monsoon and needs to be

raised to an average height of 3 m above the existing level. The land is generally low-lying and gets inundated during monsoon season.

5. Total Fresh Water requirement under Construction and Operation Phases are20 KLD and 6 MLD, respectively, that will be sourced from Mahanadi River. In case of Groundwater extraction, the NOC will be taken from CGWA. There is no major tree cover on the land to be acquired and hence, no vegetation (tree) shall be removed/ affected. No forest diversion is required for the proposed project.

6. The protected areas such as Gahirmatha Marine Sanctuary and Hatamundia Reserved Forest are located at 15 km and 12 Km from the proposed port site, respectively. There is an Eco Sensitive Zone i.e. "Bhitarkanika Eco Sensitive Zone" within 6 Km from the proposed project site.

7. The proposed project does not include any industrial area, and therefore CETP shall not be designed. The sewage from the community toilets will be treated in a sewage treatment plant (STP) comprising of an aerated lagoon and secondary settling tank.Adequate facilities for collection, conveyance and disposal of solid wastes likely to be generated from labour camps shall be developed.

8. Proposed port is a riverine port in shallow area and will be located 13 Km from the River mouth. In order to have access to the port a 190 m wide outer channel and 160 m inner channel is proposed to be dredged to the length of -14 m and -12 m.*Dredging in navigation channel:* Mahanadi river - 13 km; Sea up to river mouth - 14 km; Capital dredging - 26 Mm^3 and Maintenance dredging- 4.5 Mm^3/year. About 10% of the dredged material will be used in reclamation and rest will be disposed off beyond -20 m contour in the sea. Suitable dumping site shall be identified and dispersion modelling studies shall be carried out through CWPRS.The cargo proposed to be handled in Phase-I shall include dry bulk, break bulk and containers.Paradip fishing harbor is located near sea mouth (500m Away from Navigation Channel)

9. Development of proposed port shall improve the socio economic status of the project area. Detailed study shall be conducted as a part of the project. Total 175 ha land shall be acquired as a part of project. As per present level of investigation about 100 ha of private land is to be acquired. R&R Plan shall be prepared as per Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

10. Details of Court cases: No Court is pending against the proposed project.

The EAC, taking into account the submission made by the project proponent had a detailed deliberation during its 251st meeting on **28th December, 2020** and **recommended the proposal for Amendment in Terms of Reference** for the new layout to avoid the CRZ-IA category and reduction of capital dredging quantity from 30Mm^3 to 26 Mm^3. An additional condition is added to the amended Tor as follows

1. As an abundant precaution, a detailed study on impact of the proposed port and its construction and operation activities on the sea turtle nesting in the region be studied

by a reputed institute/university.

Agenda No. 3.6 **[Proposal No. IA/HR/NCP/142015/2020 & File No. 21-31/2020-IA.III]**

Development of Industrial Estate of Sector 38 Phase-II and Sector 39 at Rai, District Sonepat, Haryana by M/s Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC) - Terms of Reference [P. No. IA/HR/NCP/142015/2020; F. No. 21-31/2020-IA.III]

The aforementioned proposal was earlier considered during the 133rd meeting of Expert Appraisal Committee on 21st – 22nd April, 2014 and the proposal was deferred due to lack of NOC from CGWA for 8000 KLD water demand. The PP had submitted the NOC from CGWA only for 262 KLD (for domestic use only) water instead of 8000 KLD water demand, on 28th November 2017. However, the proposal was de-listed from MoEF & CC Web Portal as the base line data was more then 3-years old.

The PP HSIIDC *vide* online Proposal No. - IA/HR/NCP/125097/2019, dated 13th November 2019 re-submitted a fresh application for ToR for an area of 304 Ha. But, the application was withdrawn by the PP & Consultant on 21st January 2020 due to observation that it was a violation case as the construction was started without EC on 16th December 2010 and till date about 49 % of construction had already been done in Phase 2 of Sector 38 of the project. The PP has further informed that sector 39 is completely fresh area.

The proposal was further re-considered during the 235th EAC Meeting of New Construction Projects and Industrial Estates Committee held on 26th May, 2020, wherein it was observed that it was a violation case and such proposal to be appraised under notification S.O.804(E) dated 14th March, 2017 and hence the proposal was returned in original.

At this instance, the aforementioned proposal was further placed before the EAC-Infra-1 during its 251st meeting on 28th December, 2020. The project proponent alongwith EIA consultant M/s WOLKEM India Limited, Udaipur has made a presentation through Video Conferencing and provided the following information-

1. Haryana State Industrial and Infrastructure Development Corporation Limited (HSIIDC) have proposed to develop Sector-38 Phase II and Sector-39 as Industrial Estate near the town of Rai on NH-1, covering an area of 371.55 (Sec-38 Ph-II) + 386.22 (Sec-39) = 757.77 Acres or 306.66 Hect. in Sonepat district.

2. The Geo-coordinates of project site having lat. & long of 4 corner points of the project site are a) 28056'20.77" N 7704'48.38" E; b) 28055'37.91" N 7706'5.82" E; c) 28054'11.51" N 7706'4.18" E and d) 28053'48.48" N 7706'46.53" E.

3. Total area of the proposed project is 757.77 Acres i.e., 306.66 Ha (Sec-38: 371.55 (Ph-II) + Sec-39: 386.22 Acres). Total cost of the project is Rs. 267.74 Crores (exclusive of the cost of the land).

4. The proposed project falls under scheduled 7(c).

5. The project envisages the establishment of pollution free industries based on advanced technologies. The spectrum of industries, which are expected to come up in the Industrial Estate at Rai, would be Mega Food Park (Food Processing units -Juice, pickle, jam etc.); Automobile; General Engineering; General Industries (corrugated box, printing, medicos, surgical instruments, cold store, Automobile parts, fabrications, manufacturing of electrical transformers etc.); Gems and Jewellery and Auxiliary Industries.

6. The River Yamuna, which borders the district in the 10.64 Km E directions, is the main river in the district. The district is drained by drain no.8, which was constructed to take out excess monsoon runoff from uplands to River Yamuna.

7. The total project water demand is estimated at 13.3 MLD (fresh water – 8 MLD and recycled water- 5.3 MLD), which will be met by bore wells (Nos. of 12) at site and additional at Jagdishpur near Yamuna) and recycled water. Ground water will be extracted after prior approval of the competent authority. NOC of CGWA was received vide letter No. Z1-4(656)/NWR/CGWA/2014-1952, dated 24th November 17.

9. The generated sewage (6 MLD) would be passed through a septic tank and would be discharged into a CETP of 10 MLD capacity installed in Phase- IV, Kundli. STPs of appropriate capacity will be provided to treat sewage in a phased manner.

10. Benefits of the project: The project aims at development of Industrial Estate at Phase-II Sec. 38 & 39, Rai, will develop industrial infrastructure in the district. The project also aims at development of better landscaping in the vicinity as well as creation of green belt in the area, which would eventually help in the improvement of visual and aesthetic quality of the area. With the implementation of the project, other utilities would also be created like development of road network, sewerage network, augmentation of water supply system & wastewater treatment, solid waste collection facility, educational and health facilities etc. In nutshell, project aims at amelioration of the socio- economy of the areas as well as providing basic amenities to people. The proposed project will facilitate in creation of direct and indirect employment opportunities for local population. About 500 peoples will be employed directly or indirectly.

11. Details of Court cases: No court case is pending against Sect. 38 (Ph-II). However, for Sect. 39 – Land is under Status – Quo due to the enhancement cases filed by the land owners in Hon'ble High Court, Panjab & Haryana, Chandigarh.

12. Forest diversion: There is no diversion of forest land. Mamupur Narela Reserve Forest (RF), Ghoga RF, Bawana RF and Niwara RF are situated at4.5 Km S direction, 9.7 Km south-southwest (SSW) directions, 10.7 Km. south-southwest (SSW) directions, and 11.1 Km NE direction of the project site, respectively.

13. Eco-sensitive area: There are no protected areas (PA) including National Parks, Sanctuaries and Tiger Reserves in the vicinity of the project site.

14. It is observed by the EAC-Infra-1 that earlier the same proposal was considered by the EAC and it was noted to be a case of violation and such proposal to be appraised under notification S.O.804(E) dated 14th March, 2017 and therefore the EAC decided to return the proposal in its present form.

15. Member Secretary, MoEFCC apprised the EAC-Infra-1 that proposals submitted under violation category are being appraised by the EAC-Violation under the provisions of the Notification S.O 804 (E) dated 14.03.2017. As per the notification, six-month window period (14.03.2017 to 13.09.2017) was given to the Project Proponents to submit the proposals which are under violation of the EIA Notification. Later, as per the Hon'ble High court of Madras Order dated 14.03.2018, another one month (14.03.2018 to 13.04.2018) was given to the Project Proponents to submit the proposals under violation category. However, since the extant proposal has been submitted to the Ministry after the window periods, the Ministry has recently taken decisions in such matters, which shall be communicated to the EAC.

The EAC, taking into account the submission made by the project proponent for the aforementioned proposal had a detailed deliberation during its 251st meeting on 28th December, 2020 and **deferred the proposal,** stating that it is a case violation and sought advisory and guidelines from the Ministry to appraise such proposals.

Agenda No. 3.7 **[Proposal No. IA/CG/NCP/189409/2020 & File No. 10-33/2019-IA.III]**

Development of Economic Corridor to improve the efficiency of freight movement in India under Bharatmala Pariyojana, Urga Pathalgaon section(87.535 Km) of NH-130A (Raipur - Dhanbad Economic Corridor) [Lot-3/Pkg-I] by M/s National Highway Authority of India – Amendment to Terms of Reference.[Proposal No. IA/CG/NCP/189409/2020] [F. No. 10-33/2019-IA.III]

The above mentioned proposal was earlier considered by Expert Appraisal Committee (EAC) in its 220th EAC meeting held on 13th July, 2019. TOR was accorded *vide* letter No. 10-33/2019-IA.III dated 13th August 2020. Now, the PP *vide* online submission of an application on 22nd December 2020 requested the Ministry for the Amendment in Terms of Reference, which was earlier issued on 13th August 2020.

The PP has stated that the EAC vide specific ToR conditions (IV) and (V) directed to restrict the proposed RoW to 60 m in general and 30 m in Forest Areas in respect to project design requirement of 70 m. As per direction of EAC,the proposed RoW has been restricted to 60m in general; however, RoW in forest area is likely to be varied as proposed road passing through undulated, rolling and hilly terrain at several locations. It is also submitted that exit / entrance, slope protection, service road, junction improvements, etc. are essential and integral part for designing 4 laning access controlled National Highway (Part of economic corridor Raipur-Dhanbad under Bharatmala Pariyojana) as per IRC & MoRTH specifications / guidelines. The Chainage wise bare minimum RoW requirement has been accounted and amendment in ToR has been requested accordingly.

At this instant, the aforementioned proposal was placed before the EAC during its 251st meeting on 28th December, 2020. The project proponent alongwith EIA consultants M/s Transys Consulting Pvt. Ltd., Gurugram & M/s Feedback Infra Pvt. Ltd., Gurugram has made a presentation through Video Conferencing and provided the following information-

1. The proposed project is for Development of Economic Corridor to improve the efficiency of freight movement in India under Bharatmala Pariyojana, Urga Pathalgaon section (87.535 Km.) of NH-130A (Raipur – Dhanbad Economic Corridor) [Lot-3/Pkg-I]. Total length of the proposed project highway is 87.535 Km and the alignment starts from Chitapali village at ch. 8/150 of SH-04 and terminates near Turua Ama village, 10 km away from Pathalgaon along NH-43 towards Jharkhand border. The proposed project traverses through Korba, Raigarh and Jashpur districts.

2. The present proposal is for amendment of ToR issued *vide* F. No. 10-33/2019-IA.III, dated 13th August, 2019 as the Project Highway passes through undulated, rolling and hilly terrain at several locations in forest area, therefore, TCS in forest area need more than 30m RoW as suggested by EAC under specific condition IV and V of the ToR letter.

3. The proposed project falls under scheduled 7 (f) Highways, Category A as per EIA Notification, 2006 & amended thereof. Total Investment / Cost of the project is Rs. 212835 Lakhs. About 769 ha land shall be required for the proposed project. The land acquisition shall be done as per NH Act, 1956 and LARR Act, 2013. The R&R issues shall be resolved as per LARR Act, 2013. The detailed report will be provided in EIA report. Proposed RoW is 60 meters in general except exit / entrance, slope protection, service road, junction improvements, etc.

4. Terrain of the landform or the topography of the project stretch is undulating plain with highly varying elevations i.e. as low as 261mtrs above mean sea level (AMSL) to 318mtrs AMSL. Fourteen water bodies shall be affected by the project, out of which 13 are Rivers and Canals and 1 is pond.

5. About 30,49,185 KL of water shall be required for construction of the proposed section. Water shall be sourced from surface water bodies through Tanker after necessary approval. No groundwater will be extracted; however, if potable water is required, same shall be extracted after necessary permission from the appropriate authority.

6. The tree enumeration for affected trees shall be undertaken during detailed EIA Study. The inventory will include tree species, girth and height. Diversion of about 168.5 ha forest area is required for the development of proposed alignment. Joint inspection for identification and finalization with Forest Dept. is under process. The actual affected forest area shall be given in EIA after joint verification with the forest department. Application for Forest Clearance is yet to be submitted. No eco-sensitive area falls within 10 Kms of the project stretch.

7. The proposed stretch shall pass through 33 nos. of villages. Approx. 20 structures shall be affected in the proposed RoW of the road. The detailed Socio-economic profile will be provided in EIA report.

8. Benefits of the project: The proposed project shall provide better connectivity to economic, social and political hubs of Chhattisgarh, Odisha and Jharkhand; Fast and safe connectivity resulting in savings in fuel, travel time and total transportation cost; Faster transportation of perishable goods like fruits, vegetables, and dairy products and indirect and direct employment opportunity to people from all skilled, semi-skilled and unskilled streams. Project shall provide employment opportunities for ~2150 population (including permanent and temporary) based on Ministry of Road Transport & Highways Press Disclosure.

9. Details of Court cases: No Court is pending against the proposed project.

The EAC, taking into account the submission made by the project proponent for the aforementioned proposal had a detailed deliberation during its 251st meeting on 28th December, 2020 and suggested PP to submit the detailed analysis of the terrain including chainage, length of the section, existing RoW and revised RoW and details on cut and fill. PP has submitted the details as desired by EAC. Based on the detailed information and analysis submitted by the PP the **EAC recommended the proposal for amendment in ToR with the details enclosed at Annexure 1.**

Agenda No. 3.8 Issues related to MoRT&H

Requirement of Environmental Clearance for National Highways projects under EIA Notification, 2006

The representation of MoRTH regarding requirement of Environmental Clearance for National Highways projects under EIA Notification, 2006 was discussed by the Committee and the Member Secretary was requested to circulate relevant documents to all the EAC members for their views before subsequent discussion in the matter.

Annexure-A

Following members were present during the 251st EAC(Infra-1) meeting held on 28th December, 2020:

S. No.	Name	Designation
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. Ashok Kumar Pachauri, Member	Present
6.	Dr. Manoranjan Hota, Member	Present
7.	Dr. V.K Jain, Member	Present
8.	Dr. Mukesh Khare, Member	**Absent**
9.	Dr. Ramana Murthy, Member	Present
10.	Dr. Niraj Sharma, Member	Present
11.	Shri Amardeep Raju, Scientist 'E' & Member Secretary	Present
12.	Dr. Rajesh P Rastogi, Scientist 'C', MoEF&CC	Present

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Annexure-1

Development of Economic Corridor to improve the efficiency of freight movement in India under Bharatmala Pariyojana, Urga Pathalgaon section (87.535 Km.) of NH-130A (Raipur-Dhanbad Economic Corridor) in the State of Chattishgarh [Lot-3/Pkg-I]

ROW requirement in Forest area

Sl. No.	Design Chainage		Length (m)	District	Type of Forest	ROW Earlier Proposed			After redesigning required ROW to fit the X-section			Remarks	Earth work in cutting (cum)	Earth work in filling (cum)
	From	To				LHS	RHS	Total	LHS	RHS	Total			
1	70+900	71+150	250	Korba	Unclassified	35	35	70	30	30	60	Filling due to LVUP 71+140 minor bridge 72+054 and Service road on and Both Side slope protection	75	2,30,951
	71+150	72+000	850	Korba	Unclassified	35	30	65	35	30	65			
2	73+400	73+900	500	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	high embankment filling on approach of Minor Bridge 73+630	0	1,39,407
3	74+100	74+300	200	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	high embankment filling on approach of Minor Bridge 74+200	0	35,731
4	74+900	75+600	700	Korba	Unclassified	20	20	40	20	20	40		0	72,699
5	77+800	78+490	690	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	Undulated terrain cutting and filling	6,868	19,890
6	78+490	78+600	110	Korba	Unclassified	30	30	60	30	30	60	Service Road on LHS and high embankment on RHS	337	20,550
7	79+000	79+200	200	Korba	Unclassified	30	30	60	30	30	60	High embankment filling due to LVUP 78+910	15	59,886
8	83+500	85+900	2400	Korba	Unclassified	22.5	22.5 - 27.5	45 - 50	22.5	22.5 - 27.5	45 - 50	RHS Service Road and LHS cutting of 7m depth and slope protection works	99,320	1,72,174
9	89+350	90+800	1450	Korba	Protected	22.5	22.5	45	22.5	22.5	45	high embankment filling in Major Bridge 89+150 approach	8	1,22,539
10	92+500	93+200	700	Korba	Protected	22.5	22.5	45	22.5	22.5	45	high embankment filling in Major Bridge 92+520 and LVUP 93+118 approach	0	1,41,155
11	95+800	96+100	300	Korba	Protected	35	35	70	30	30	60	Cutting of hill and filling in valley. Service Road on both side to connect SH-04, and slope protection works - 21m of cutting	1,74,257	9,573
12	96+100	96+260	160	Korba	Protected	60	45	105	30	30	60	box cutting on both sides and Service Road on both side to connect SH-04 and slope protection works - 8m cutting	1,17,800	1
13	96+260	96+900	640	Korba	Protected	65	65	130	32.5	32.5	65	Box cutting due to hill and slope protection works - 9m cutting	2,14,385	10,694
14	97+600	99+700	2100	Korba	Protected	22.5	22.5	45	22.5	22.5	45	high embankment filling on Minor Bridge 97+620 and Elephant underpass 98+540 approach	16,313	2,60,050
15	99+900	100+150	250	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	high embankment filling in approach of Major Bridge 99+825	778	23,882
16	101+450	101+700	250	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	Cutting of hills and slope protection works - 6m cutting	35,676	5,946
17	102+500	103+500	1000	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	Approach of LVUP at 103+215	366	1,82,326
18	103+600	106+200	2600	Korba	Unclassified	22.5	22.5	45	22.5	22.5	45	Cutting and filling, udulated terrain and slope protection works - 7m cutting	1,38,657	1,86,418
19	107+200	108+200	1000	Raigarh	Protected	15	15	30	15	15	30		0	2,59,066
20	108+200	109+500	1300	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	filling in approach of SVUP 108+572		
21	110+600	111+100	500	Raigarh	Unclassified	22.5	22.5	45	22.5	22.5	45	High embankment filling on valley portion	4,017	33,361
22	118+100	118+550	450	Raigarh	Protected	30-44	30-46	60-90	30	30	60	Junction improvement along with provision of entry/exit for SH01.	104	1,26,644

ROW requirement in Forest area

Sl. No.	Design Chainage		Length (m)	District	Type of Forest	ROW Earlier Proposed			After redesigning required ROW to fit the X-section			Remarks	Earth work in cutting (cum)	Earth work in filling (cum)
	From	To				LHS	RHS	Total	LHS	RHS	Total			
23	118+700	118+800	100	Raigarh	Protected	30	30	60	30	30	60	High embankment	0	17,138
24	118+800	119+200	400	Raigarh	Protected	15	15	30	15	15	30		12	3,940
25	119+200	119+900	700	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	Embankment filling on approach of minor bridge at 119+610	25,939	54,672
26	119+900	120+100	200	Raigarh	Protected	27.5	27.5	55	27.5	27.5	55	box Cuting both Side due to hill, 31 m cutting and slope protection works	63,192	0
27	120+100	120+350	250	Raigarh	Protected	37.5	37.5	75	32.5	32.5	65		2,48,769	38
28	122+600	123+400	800	Raigarh	Protected	22.5	22.5 - 32.5	45 - 55	22.5	22.5 - 32.5	45 - 55	Filling on approach of LVUP at 122+627 and Cuting on hill side and slope protection works	43,850	74,128
29	123+400	124+260	860	Raigarh	Protected	22.5 - 27.5	22.5 - 32.5	45 - 60	22.5 - 27.5	22.5 - 32.5	45 - 60	In Cuting on hill side and filling in valley Side	1,29,499	73,932
30	124+260	124+870	610	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	In Cuting on hill side and filling in valley Side	19,703	93,861
31	124+870	124+980	110	Raigarh	Protected	32.5	22.5	55	32.5	22.5	55	box cutting due to hill and slope protection works, max 22m cutting	45,355	3
32	124+980	125+280	300	Raigarh	Protected	37.5	32.5	70	37.5	32.5	70		2,87,314	0
33	125+280	125+440	160	Raigarh	Protected	32.5	27.5	60	32.5	27.5	60		88,343	161
34	125+440	126+660	1220	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	box Cuting in hill side and slope protection works & Filling in LVUP approach	32,329	73,455
35	126+660	126+800	140	Raigarh	Protected	22.5	30	52.5	22.5	22.5	45	Embankmeent filling on approach of LVUP 126+770	0	30,442
36	129+100	130+400	1300	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	Embankment filling on minor bridges at 129+302 and minor bridge 129+463 approach	335	1,70,365
37	131+300	132+940	1640	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	Cutting with slope protection works and filling on approach of elephant underpass at 132+380	50,081	1,55,730
38	132+940	133+450	510	Raigarh	Protected	32.5	22.5	55	32.5	22.5	55	In Cuting both Side and slope protection works & Service Road on LHS, max 9m cutting	75,841	3,178
39	133+450	133+600	150	Raigarh	Protected	27.5	22.5	50	27.5	22.5	50		22,306	1,940
40	133+600	133+900	300	Raigarh	Protected	27.5	27.5	55	27.5	27.5	55		61,978	2,608
41	134+900	135+080	180	Raigarh	Protected	15	15	30	15	15	30		15,567	11
42	135+080	135+300	220	Raigarh	Protected	27.5	27.5	55	27.5	27.5	55	Box Cuting with slope protection works due to hill, 8.7m cutting	67,062	0
43	135+300	136+100	800	Raigarh	Protected	20	20	40	20	20	40		34,493	45,119
44	136+100	136+300	200	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	embankment filling on undulating terrain		
45	137+400	137+700	300	Raigarh	Protected	22.5	22.5	45	22.5	22.5	45	Embankmnet filling on approach of LVUP at 137+270	3	26,838
46	140+000	140+600	600	Jashpur	Unclassified	22.5	22.5	45	22.5	22.5	45	Cutting on hill with slope protection works and filling on valley portion of undulating terrain.	34,207	25,161
													21,55,152	**29,65,664**