



सत्यमेव जयते

File No: 21-40/2023-IA.III  
Government of India  
Ministry of Environment, Forest and Climate Change  
IA Division

\*\*\*



Dated 20/11/2023



To,  
Debadutta Suranjita Jena  
Transport Department  
Kharavela Bhawan, Bhubaneswar-751001, KHORDHA, ODISHA, 751001  
ctsec.or@nic.in

Subject: **Terms of Reference to development of Greenfield Shree Jagannath International Airport at Sipasarubali, Puri District, Odisha by M/s Commerce and Transport (Transport) Department, Government of Odisha - regarding.**

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project Development of Greenfield Shree Jagannath International Airport at Sipasarubali, Puri District, Odisha submitted to Ministry vide proposal number IA/OR/INFRA2/442771/2023 dated 07/10/2023.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO23A2901OR5260229N
(ii) File No.	21-40/2023-IA.III
(iii) Clearance Type	TOR
(iv) Category	A
(v) Project/Activity Included Schedule No.	7(a) Airports
(vi) Sector	INFRA-2
(vii) Name of Project	Development of Greenfield Shree Jagannath International Airport at Sipasarubali, Puri District, Odisha
(viii) Name of Company/Organization	Transport Department
(ix) Location of Project (District, State)	PURI, ODISHA
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

3. The project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and required appraisal as category A by sectoral EAC at central level.

4. Accordingly, the proposal for grant of Terms of Reference (ToR) for development of Greenfield Shree Jagannath International Airport at Sipasarubali, Puri District, Odisha by M/s Commerce and Transport (Transport) Department, Government of Odisha has been examined by the Expert Appraisal Committee (Infra) in its 112<sup>th</sup> meeting held on 31.10.2023.

5. The details of the project, as per the documents submitted by the project proponent, and also as informed during the aforesaid meeting of EAC, are provided below for reference:

i. The proposed new Shree Jagannatha International Airport (SJIA) is a Greenfield airport.

ii. The proposed airport project is located at Sipasarubali village, Brahmagiri tehsil, Puri district, Odisha. The site is very close to the Bay of Bengal. The nearest highway to the proposed site is NH-316/NH-203A connecting Puri city to Bhubaneswar. Nearest Railway Station is Puri Railway Station situated at a distance of ~12 km.

iii. Justification for the proposed site:

a. Constraints at Biju Patnaik International Airport (BPIA), Bhubaneswar

- BPIA is under operation since 1962 and its runway has been designed for handling Code 4C aircrafts. The existing runway has a total length of 2740 meters while its passenger terminal has a total handling capacity of 4 million passengers.
- It has been mutually agreed by AAI and State Government that, due to non-availability of desired land area, no further expansion or extension of runway is possible at BPIA and this places significant airside capacity constraints.
- Such capacity constraint at BPIA would substantially influence the capability to meet air travel demand going forward for Odisha. The domestic terminal at BPIA which has a capacity to handle 4 million passengers per annum, clocked its peak capacity in FY 19. Further, basis existing capacity available from a code 4C runway, BPIA can handle maximum of 7-8 Million passengers which is expected to reach by 2030.

b. Puri Airport will provide much needed capacity for future air traffic growth

- Operations at BPIA would be limited by capacity constraints with limited scope for air side expansion.
- The estimated future air travel demand in Odisha would be split between Bhubaneswar and Puri based upon stakeholder consultations/surveys. Therefore, a phased shift of passengers from BPIA, Bhubaneswar to Puri Airport is expected given exhaustion of total possible capacity a BPIA. Beyond FY 30, 45% of projected traffic is expected to shift to Puri given capacity constraints at BPIA.

c. International Traffic Growth

- Puri Airport would resolve capacity constraints at BPIA especially for international operations as it would be capable to handle wide-bodied long haul aircrafts preferred for international operations.

d. Strategic location of Puri airport

- Puri as a cultural and leisure tourism hub.
- Gateway to Western Odisha, largest industrial ecosystem in Odisha State

iv. Latitude of the proposed airport is 19°47'09.60"N and longitude is 85°45'37.75"E.

v. Existing land-use pattern of the proposed project is barren, agricultural and forest land. The land required for the proposed project is 471.401 Ha. Out of the total land, 353.883 Ha is Government land, 89.632 Ha private land and 27.854 Ha forest land.

vi. The proposed project will include development of Runway, Apron, Air Traffic Control, Isolation Bay, Passenger Terminal Building, Electric Substation, Car Parking, Approach Road, Peripheral Road, etc. along with airside and cityside development activities. The facilities planned in the airport include passenger terminal buildings, runway, taxiways and aprons system, airfield lighting system, air traffic control tower, NAVAIDs, airport support facilities, utilities and infrastructure including roads, car parking, power supply system, storm water drainage system, sewage treatment plant, etc., and aircraft support facilities like refueling, repairs and overhaul, ground support etc. The forecasted passenger traffic for 1st Phase is estimated to be 3.71 Million Passengers Per Annum (MPPA) which will be increased upto 14.6 MPPA FY 2043-45.

vii. A team of experts from Airports Authority of India visited the site on June 2021 and Pre-feasibility report has been prepared. Site Clearance Certificate is issued from Ministry of Civil Aviation vide letter no. AV-2001 5/1 12021 – AD dated 22/09/2023.

viii. The proposed airport project is 9.95 km away from eco-sensitive zone of Balukhanda-Konark Wildlife Sanctuary.

ix. Area of 27.854 Ha forest land will be diverted for construction of proposed airport. The forest land comes under Sipasarubali village area. Forest application has already been submitted on Parivesh portal vide Proposal No. FP/OR/Airport/426096/2023 dated 14/04/2023. The Regional Empowered Committee of Ministry of Environment, Forest and Climate Change, Bhubaneswar has recommended the diversion of forest land.

x. The project does not lie in a critically polluted area.

xi. Baseline Data Collection for the project will be from October-December 2023.

xii. The proposed site has relatively flat terrain with level difference of 12 m and an elevation of 1.5 m from HFL.

xiii. Water requirement for operation phase shall be ~6MLD (Phase-I) and sourced from Puri District Administration/IDCO. The total potable water demand in Phase I is 1.6 MLD.

xiv. The estimated sewerage generation for Phase I will be 1.07 MLD. A Sewage Treatment Plant (STP) of 1.3 MLD has been proposed. Treated water from STP will be completely reused in the premises for landscaping and flushing purposes.

xv. The estimated total solid waste generation for Phase I is 3 tons/day which shall be collected, segregated and managed by external agency for disposal as per applicable Solid Waste Management Rules 2016. Biodegradable waste will be converted to manure and used for landscaping purposes. STP Sludge will also be used as manure in green area.

xvi. Total 13504 number of trees (12213 trees comes under non-forest land & 1291 trees comes under forest land) will be cut due to the proposed project.

xvii. There are 60 project affected families comes under two villages. No displacement of permanent structures is envisaged.

xviii. There is no diversion of water bodies envisaged.

xix. No litigation is pending against the project.

xx. Total power requirement for the proposed project will be 16 MW and sourced from State Grid. Solar Energy shall cater 160 KW.

xxi. The total estimated cost for the proposed project is about Rs. 5,631 Crores.

xxii. CRZ Clearance is required for some portion of the airport area which comes under CRZ III. Odisha Coastal Zone Management Authority (OCZMA) recommendation will be taken for the CRZ areas as per CRZ Notification 2019.

xxiii. NBWL Clearance is not applicable.

xxiv. Employment Potential during Construction Phase will be around 2000 nos. temporary (peak period). In Operation Phase, 186 nos. permanent employment will be generated along with many temporary employment.

xxv. Benefits of the project: Proposed project is intended to cater the increasing tourist demand at Puri and increase connectivity of cities such as Puri, Jagatsinghpur, Brahmapur, etc. to world aviation network. As the airport catchment increases, better surface connectivity to the airport and more avenues for tourism may further drive air traffic to/from the city. This ease in accessibility shall help in promoting tourism, trade, commerce etc. of the region resulting in enhanced regional economy and elevate employment rate of locals since more business and industrial opportunities shall lead to employment potential to the people. A greenfield airport at Puri will not only provide much needed air connectivity but will also result in creating a demand center for social as well as economic growth.

**6.** The EAC deliberated upon the information provided by the project proponent. EAC noted that existing land-use pattern of the proposed project is barren, agricultural and forest land. The land required for the proposed project is 471.401 ha, of which 353.883 ha is Government land, 89.632 ha private land and 27.854 ha forest land. Application for diversion of the forest land has already been submitted to the Ministry through PARIVESH portal vide Proposal No. FP/OR/Airport/426096/2023 dated 14/04/2023. Further, CRZ Clearance is required for 14 ha of the proposed site, which comes under CRZ III and recommendations of the Odisha Coastal Zone Management Authority (OCZMA) will be obtained as per CRZ Notification 2019.

**7.** After detailed deliberation, EAC recommended for grant of Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said the project/activity along the additional Terms of Reference over and above the Standard ToR for preparation of the EIA and EMP report with Public Consultation.

**8.** As per the recommendations of the EAC (Infra 2), the Ministry of Environment, Forest and Climate Change hereby accords ToR for preparation of the Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) with Public Consultation for development of Greenfield Shree Jagannath International Airport at Sipasarubali, Puri District, Odisha by M/s Commerce and Transport (Transport) Department, Government of Odisha, with the specific ToR

in addition to Standard ToR enclosed in **Annexure 1**.

**9.** The above ToR should be considered for preparation of EIA/EMP report with public consultation for development of Greenfield Shree Jagannath International Airport at Sipasarubali, Puri District, Odisha by M/s Commerce and Transport (Transport) Department, Government of Odisha, in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006 as amended.

**10.** As stipulated in amendment notification No. S.O. 751(E) dated 17<sup>th</sup> February, 2020, the above ToR would be valid for a period of four years from the date of issue. The project proponent shall submit detailed final EIA Report and EMP prepared as per above ToR within the stipulated period of four years as per Ministry's OM issued vide F. No. IA3-22/10/2022-IA.III [E 177258] dated 08.06.2022.

**11.** As per amendment notification No. 648(E) dated 3<sup>rd</sup> March, 2016, the Environmental consultant organizations which are accredited for a particular sector and the category of project for that sector with the Quality Council of India (QCI) or National Accreditation Board for Education and Training (NABET) or any other agency as may be notified by the Ministry of Environment, Forest and Climate Change from time to time shall be allowed to prepare the EIA Report and EMP of a project and appear before the concerned EAC. The consultants involved in preparation of EIA Report would need to include a certificate in this regard in the EIA report and EMP prepared by them and details for data provided by other Organization(s)/ Laboratories including their status of approvals etc.

**12.** This issues with the approval of the Competent Authority.

### **Copy To**

1. The Regional Officer, Integrated Regional Office, Ministry of Environment, forest & Climate Change, A/3 Chandrasekharpur, Bhubaneswar – 751 023.
2. The Member Secretary, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII, Bhubaneswar – 751 012, Odisha.

**Annexure 1**

### **Specific Terms of Reference for (Airports)**

#### **1. Specific Conditions**

<b>S. No</b>	<b>Terms of Reference</b>
<b>1.1</b>	A certificate from the Chief Wildlife Warden of the State Government stating that proposed project does not intrude any National Park or Wildlife Sanctuary and also does not interfere with any important wildlife corridor, whether officially notified or not.
<b>1.2</b>	A sensitivity analysis of the site shall be carried out as per the MoEF&CC criteria and form part of the EIA report.
<b>1.3</b>	Impact of proposed project on Bird Movement in particular and wildlife in general in the region.
<b>1.4</b>	Impact of proposed project on adjacent water bodies and possible mitigation measures.
<b>1.5</b>	Feasibility study on the use of Natural gas in power generation sets in place of diesel for mitigation of air pollution.
<b>1.6</b>	Importance and benefits of the project.
<b>1.7</b>	Layout maps of proposed project indicating runway, terminal building, parking, greenbelt area, utilities etc.

S. No	Terms of Reference
1.8	The details of excavations, its impacts and the impact of transport of excavated material. A detailed management plan shall be suggested.
1.9	An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
1.10	The impacts of demolition and the activities related thereto shall be examined and a management plan shall be prepared to conform to the C&D Waste Management Rules.
1.11	An onsite disaster management plan shall be prepared to account for risks and accidents. This onsite plan shall be dovetailed with the disaster management plan for the district.
1.12	A note on appropriate process and materials to be used to encourage reduction in carbon footprint. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
1.13	Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
1.14	Details of emissions, effluents, solid waste (including de-plane waste) and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from the various types of aircrafts.
1.15	Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
1.16	Cost of project and time of completion.
1.17	A tabular chart with index for point wise compliance of above TORs.
1.18	Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.

**Standard Terms of Reference for (Airports)**

**1. Project Details**

S. No	Terms of Reference
1.1	Importance and benefits of the project.

S. No	Terms of Reference
1.2	Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.
1.3	Examine and submit details of levels, quantity required for filling, source of filling material and transportation details etc. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disaster integrating with existing airport.
1.4	Details of man-power requirement (regular and contract).
1.5	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.6	Submit Layout plans of proposed project indicating runway, terminal building, parking, greenbelt area, utilities etc.

## 2. Road And Traffic

S. No	Terms of Reference
2.1	Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
2.2	An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

## 3. Land Environment

S. No	Terms of Reference
3.1	Details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site. Examine and submit detail of land use around 10 km radius of the project site and map of the project area and 10 km area from boundary of the proposed/existing project area, delineating project areas notified under the wild life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/inter-state boundaries and international boundaries. Analysis should be made based on latest satellite imagery for land use with raw images.
3.2	Submit the present land use and permission required for any conversion such as forest, agriculture etc. land acquisition status, rehabilitation of communities/ villages and present status of such

S. No	Terms of Reference
	activities. Check on flood plain of any river.
3.3	The details of excavations, its impacts and the impact of transport of excavated material. A detailed management plan shall be included in compliance with C&D Waste Management Rule, 2016.

#### 4. Drainage

S. No	Terms of Reference
4.1	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area, any obstruction of the same by the airport.

#### 5. Water Environment

S. No	Terms of Reference
5.1	Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project. Submit CRZ map in case the proposed site falls in CRZ region.

#### 6. Land Acquisition And R&R

S. No	Terms of Reference
6.1	Submit the present land use and permission required for any conversion such as forest, agriculture etc.
6.2	Submit details regarding R&R involved in the project.
6.3	Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
6.4	Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.

#### 7. Water Management

S. No	Terms of Reference
7.1	Examine the details of water requirement, use of treated waste water and prepare a water balance chart. Source of water vis-à-vis waste water to be generated along with treatment facilities to be proposed.
7.2	Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.

#### 8. Waste Management

S. No	Terms of Reference
8.1	Examine details of Solid waste generation (including de-plane waste and hazardous waste) treatment and its disposal.
8.2	The impacts of demolition and the activities related thereto shall be examined and a management plan shall be prepared to conform to the C&D Waste Management Rules.

### 9. Energy Management

S. No	Terms of Reference
9.1	Requirement of power, with source of supply, status of approval.
9.2	Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
9.3	A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2017 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.

### 10. Environmental Monitoring And Management

S. No	Terms of Reference
10.1	Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
10.2	The air quality monitoring should be carried out as per the notification issued on 16th November, 2009.
10.3	A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
10.4	Air quality modelling and noise modelling shall be carried out for the emissions from the various types of aircrafts.
10.5	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

### 11. Disaster Management Plan

S. No	Terms of Reference
11.1	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.



## 12. Socioeconomic Environment

S. No	Terms of Reference
12.1	Examine the impact of proposed project on the nearest settlements.
12.2	Submit details of corporate social responsibilities (CSR).
12.3	Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

## 13. Forest

S. No	Terms of Reference
13.1	Submit details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation. Explore the possibilities of relocating the existing trees.
13.2	Submit status of permission to be obtained from concerned local authorities for the proposed tree cutting/pruning/transplantation.
13.3	Examine the details of afforestation measures indicating land and financial outlay. Landscape plan, green belts and open spaces may be described. A thick green belt should be planned all around the nearest settlement to mitigate noise and vibrations. The identification of species/ plants should be made based on the botanical studies.

## 14. Court Cases

S. No	Terms of Reference
14.1	Details of litigation pending against the project, if any, with direction/order passed by any Court of Law against the Project should be given.

## 15. Miscellaneous

S. No	Terms of Reference
15.1	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website <a href="http://moef.nic.in/Manual/Airport">http://moef.nic.in/Manual/Airport</a> .