

F.No.10-71/2018-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 15th October, 2018

To,

**The Associate Vice President,
M/s Hyderabad International Airport Limited**
GMR Aero Towers, Rajiv Gandhi International Airport.
Shamshabad, Hyderabad - 500409, Telangana
Email: alumallaravinder.reddy@gmrgroup.in

Subject: Proposed Expansion of Rajiv Gandhi International Airport from 25 MPPA to 50 MPPA, Shamshabad, Hyderabad, Telangana by M/s Hyderabad International Airport Limited - Terms of Reference - reg.

Sir,

This has reference to your proposal No. IA/TG/MIS/78250/2018 dated 8th September, 2018, submitted to this Ministry for seeking Terms of Reference (ToR) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of Terms of Reference (ToR) to the project 'Proposed Expansion of Rajiv Gandhi International Airport from 25 MPPA to 50 MPPA, Shamshabad, Hyderabad, Telangana by M/s Hyderabad International Airport Limited was considered by the Expert Appraisal Committee (Infra-2) in its 34th meeting held on 24-26 September, 2018.

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said meeting, are as under:-

(i) M/s GMR Hyderabad International Airport Limited (GHIAL) proposes to expand the terminal and associated facilities to augment passenger processing capacity in order to meet the demand of the projected traffic growth. GHIAL proposes for expansion of RGIA airport from the current approved 25 MPPA capacity to 50 MPPA.

(ii) **The current expansion proposal includes:**

- Construction of new Terminal (T2)
- Expansion of Terminal (T1)
- Expansion of Cargo Terminals, cargo Satellite building and associate warehouse to cater up to 5.75LTPA capacity
- Development of one new Runway 10/28
- Additional Rapid exit taxiways, parallel Taxiways & taxi lane's
- Additional Aprons, GSE tunnel, General Aviation & VVIP facilities
- Development of landside facilities such as airport access road, MLCP parking, passenger transport centre, Transport Hub, Commercial spaces, etc.,



- Supporting Utilities and facilities such as fuel tank, warehouse, CFR & ATC radar control station, Administrative & engineering Facilities, etc.
 - Capacity improvement of DG yard from 12MVA to 26MVA
- (iii) **The project will be carried out in following phases:**
- Phase 1 C - 25MPPA to 40MPPA: FY2020- FY2022;
Phase 2A – 40MPPA to 50MPPA: FY2025-FY2028.
- The project phases may be taken early or together with other phases as per the aviation growth and demand.
- (iv) No additional land is required as part of the proposed expansion. The total airport area is 5495 acres. Land for the proposed expansion is part of the existing airport complex which is vacant.
- (v) The total water demand after full expansion is estimated to be about 14322 KLD. Water demand will be met through HMWSSB.
- (vi) Additional power requirement for the proposed expansion is estimated to be around 12000 KWH which will be met from Telangana Power Transmission Corporation Limited (TSTRANSCO). GHIAL has also developed a 5 MW solar power plant for captive consumption at Hyderabad airport.
- (vii) The expansion project proposal will generate indirect employment of about 4000 persons for utility services along with other 5 to 6 thousand in commercial & support services. Project construction is expected to generate more than 5000 direct employment and double the figure indirect employment which will span across 4-5 years for each phases.
- (viii) The preliminary estimated cost for the proposed expansion project is Rs. 8500 Crores.

4. The project/activity is covered under category 'A' of item 7 (a) i.e. 'Airports' of the schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central level by sectoral EAC.

5. The Committee during deliberation noted that this is an expansion project. Earlier environmental clearance was given for expansion of airport from 12 MPPA to 25 MPPA vide letter F. No. 10-35/2017-IA-III dated 28th July, 2017. Now the project proponent has proposed for Expansion of Rajiv Gandhi International Airport from 25 MPPA to 50 MPPA. The project proponent has informed the Committee that no additional land is required as part of the proposed expansion and public hearing was conducted by the Telangana State Pollution Control Board on 28.02.2017 for the same nature of airport expansion similar to the current proposal and requested Committee to exempt the instant project from conducting public hearing.

6. The EAC, in its meeting held on 24-26 September, 2018, after detailed deliberations, recommended the project for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity (**Annexure-I**) and the following ToR in addition to Standard ToR for preparation of EIA-EMP report. As per the recommendation of the EAC, the Ministry of Environment, Forest and Climate

Change hereby accords ToR to the project 'Proposed Expansion of Rajiv Gandhi International Airport from 25 MPPA to 50 MPPA, Shamshabad, Hyderabad, Telangana by M/s Hyderabad International Airport Limited for preparation of the Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) with the following specific and general conditions:-

- (i) Importance and benefits of the project.
- (ii) A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet (including all eco-sensitive areas and environmentally sensitive places).
- (iii) Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- (iv) Cost of project and time of completion.
- (v) The impacts of demolition and the activities related thereto shall be examined and a management plan drawn up to conform to the Construction and Demolition Waste Management Rules, 2016 under the E.P. Act, 1986.
- (vi) Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or non/not complied.
- (vii) The report shall examine the details of excavations, its impacts and the impacts of transport of excavated material. A detailed Management Plan shall be suggested.
- (viii) The avifauna in the surrounding area shall be studied specially with reference to sensitive bird habitats, migratory routes, breeding grounds etc and a plan developed for conservation of bird habitats coupled with minimizing bird hits as per AAI norms.
- (ix) The impact of the proposed activities on the nearby inhabited areas will be presented in details in terms of transport management, accessibility to public places/schools/work places etc and air port noise.
- (x) The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area inside the Airport premises.
- (xi) 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.
- (xii) A detailed report on compliance to ECBC-2017 norms for proposed terminal buildings.

- (xiii) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xiv) 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.
- (xv) Details shall be provided regarding the solar generation proposed and the extent of substitution, along with compliance to the ECBC rules.
- (xvi) Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft.
- (xvii) The impact of aircraft emissions in different scenarios of idling, taxiing, take off and touchdown shall be examined and a management plan suggested.
- (xviii) The impact of air emissions from speed controlled and other vehicles plying within the Airport shall be examined and management plan drawn up.
- (xix) A detailed management plan, drawn up in consultation with the competent District Authorities, shall be submitted for the regulation of unauthorized development and encroachments within a 05 Km radians of the Airport.
- (xx) The E.I.A. will also examine the impacts of construction and operation of the proposed STP and draw up a detailed plan for management including that for odour control.
- (xxi) Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.
- (xxii) Noise monitoring and impact assessment shall be done for each representative area (as per the Noise Rules of MoEF&CC). A noise management plan shall be submitted to conform to the guidelines of the MoEF&CC and the DGCA.
- (xxiii) Noise monitoring shall be carried out in the funnel area of flight path.
- (xxiv) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xxv) Ground water abstraction and rain water recharge shall be as prescribed by the CGWA. A clearance/permission of the CGWA shall be obtained in this regards.
- (xxvi) Details of fuel tank farm and its risk assessment.
- (xxvii) Plan for management of Food waste from landing Air Crafts.

- (xxviii) The E.I.A. should present details on the compliance of the project to the Fly Ash Notification issued under the E.P. Act of 1986.
- (xxix) Rain water harvesting systems and adequate provision for storage and reuse shall be detailed in the EIA.
- (xxx) The report should give a detailed impact analysis and management plan for handling of the following wastes for the existing and proposed scenarios.
- (a) Trash collected in flight and disposed at the Airport including the segregation mechanism.
 - (b) Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - (c) Maintenance and workshop wastes.
 - (d) Wastes arising out of eateries and shops situated within the airport.
- (xxxi) 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. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- (xxxii) Plan for Corporate Environment Responsibility (CER) as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 shall be prepared and submitted along with EIA Report.
- (xxxiii) A tabular chart with index for point wise compliance of above ToR.

General Guidelines

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) All documents should be properly indexed, page numbered.
- (iii) Period/date of data collection should be clearly indicated.
- (iv) Authenticated English translation of all material provided in Regional languages.
- (v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the ToR.
- (vi) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- (vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues mentioned in ToR. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific ToR prescribed by the Ministry have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- (viii) Grant of ToR does not mean grant of EC.
- (ix) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.

- (x) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed ToRs (ToR proposed by the project proponent and additional ToR given by the MoEF&CC) have been complied with and the data submitted is factually correct (Refer MoEF&CC Office memorandum dated 4th August, 2009).
- (xi) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF&CC Office Memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.
- (xii) All the ToR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

7. The above ToR should be considered for the project 'Proposed Expansion of Rajiv Gandhi International Airport from 25 MPPA to 50 MPPA, Shamshabad, Hyderabad, Telangana by M/s Hyderabad International Airport Limited, 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. The Committee exempted Public hearing as per para 7(ii) of EIA the Notification, 2006.

8. The project proponent shall submit the detailed final EIA/EMP prepared as per ToR to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.

9. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/ Laboratories including their status of approvals etc. vide Notification of the MoEF&CC dated 19.07.2013.

10. The prescribed ToR would be valid for a period of three years for submission of the EIA/EMP Reports.

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



(Kushal Vashist)
Director

Copy to:

The Member Secretary, Telangana State Pollution Control Board,
A-3, Industrial Estate, Sanath Nagar, Hyderabad, Telangana.

7(a): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR AIRPORTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

- (i) 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.
- (ii) 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.
- (iii) 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 activities. Check on flood plain of any river.
- (iv) 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.
- (v) 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.
- (vi) Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- (vii) Examine the impact of proposed project on the nearest settlements.
- (viii) Examine baseline environmental quality along with projected incremental load due to the proposed project/activities
- (ix) 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
- (x) 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.
- (xi) Submit details regarding R&R involved in the project
- (xii) 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.
- (xiii) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.



- (xiv) Examine details of Solid waste generation treatment and its disposal.
- (xv) Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- (xvi) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xvii) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- (xviii) Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
- (xix) The air quality monitoring should be carried out as per the notification issued on 16th November, 2009.
- (xx) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xxi) Submit details of corporate social responsibilities (CSR)
- (xxii) 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.
- (xxiii) 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.
- (xxiv) 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.
- (xxv) 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.
- (xxvi) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- (xxvii) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- (xxviii) 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 "<http://moef.nic.in/Manual/Airport>".

