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F.N. AERA/20010/MYTP/GIAL/MOPA GOA/CP-I/2023-24

परामर्श पत्र संख्या 11/2023-24
Consultation Paper No.11/2023-24



सत्यमेव जयते

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India

मनोहर अंतर्राष्ट्रीय हवाईअड्डा, मोपा, गोवा (जीओएक्स) के लिए प्रथम नियंत्रण अवधि (01 अप्रैल, 2023 से 31 मार्च, 2028) के लिए वैमानिक टैरिफ निर्धारित करने के मामले में

IN THE MATTER OF
DETERMINATION OF AERONAUTICAL TARIFF FOR
MANOHAR INTERNATIONAL AIRPORT, MOPA, GOA (GOX)
FOR THE FIRST CONTROL PERIOD
(01ST APRIL 2023 TO 31ST MARCH 2028)

जारी करने की तारीख: 31.08.2023

Date of Issue: 31.08.2023

ऐरा भवन/AERA Building
प्रशासनिक कॉम्प्लेक्स/Administrative Complex
सफदरजंग हवाईअड्डा/Safdarjung Airport
नई दिल्ली/New Delhi – 110003

Stakeholders' Comments

GMR Airports Limited (GAL) won the bid for development of the new greenfield airport at Mopa, Goa and signed the Concession Agreement (CA) on 8th November 2016 via a special purpose vehicle namely Goa International Airport Limited (GIAL) at Mopa, Goa. As per the Concession Agreement, GIAL, Mopa, Goa will develop the airport under the DBFOT (Design, Build, Finance, Operate and Transfer) model for an initial period of 40 years from the appointment date (4th September 2017), which is extendable by another 20 years (based on bidding process) with the First Right of Refusal available to the Concessionaire.

Manohar International Airport, a greenfield airport at Mopa, Goa is categorized as a Major Airport in accordance with the provisions of the AERA Act 2008 read with AERA (Amendment) Act 2019 and 2021, designed to operate with designated capacity of more than 3.5 MPPA as stipulated under clause 12.2.1 (Refer Annexure 1) of Concession agreement executed between GoG and GIAL, Mopa, Goa.

The Airport was inaugurated on 11th December 2022. Operations in Manohar International Airport, Mopa, Goa commenced from 5th January 2023 (COD). With the commencement of operations at Manohar International Airport, Mopa, Goa (IATA: GOX), Goa has 2 International Airports in the state.

As the operations have commenced in the last quarter of FY 2022-23, in order to consider a full 5-year Regulatory Period, the Authority proposes to consider 1st April 2023 to 31st March 2028 as the First Control period for the Airport, together with considering the results for the period commencing from COD (5th January 2023) to 31st March 2023.

In adherence to the regulatory requirements, GIAL, Mopa, Goa has submitted MYTP for aeronautical tariff determination for the period from 7th December 2022 to 31st March 2023 and First Control Period in the following manner:

- Determination of Tariff from 7th December 2022 to 31st March 2023.
- Multi Year Tariff Proposal (MYTP) for First Control Period (FCP) starting from FY 2023-24 to FY 2027-28.

For this Consultation Paper, the Authority has considered the audited figures submitted by GIAL, Mopa, Goa for the period ended 31st March 2023.

The Authority, after considering all information currently available and analysing various scenarios and the views of the Airport Operators, Expert Agency appointed by the Airport Operator and Independent Consultant appointed by the Authority, has reviewed the necessary adjustments in traffic and other regulatory building blocks. However, these adjustments would be finalized only after consideration of the comments from the stakeholders.

The Authority has released this Consultation Paper, after considering various assumptions stipulated in the Multi-Year Tariff Proposal (MYTP) submitted by GIAL, Mopa, Goa in respect of Manohar International Airport, Mopa, Goa. Accordingly, the Authority's proposals on the various aspects of the Tariff determination process have been explained in detail in this Consultation Paper.

Thus, in accordance with the provisions of Section 13(4) of the AERA Act, 2008, the written comments on Consultation Paper No. 11/2023-24 dated 31st August 2023 are invited from the Stakeholders, preferably in electronic form, at the following address:

Director (P&S, Tariff)

Airports Economic Regulatory Authority of India (AERA),

AERA Administrative Complex,

Safdarjung Airport, New Delhi – 110003, India

Email: director-ps@era.gov.in, rajan.gupta1@era.gov.in, secretary@era.gov.in

Stakeholders' Consultation Meeting (Virtual)	15 th September 2023
Last Date for submission of comments	29 th September 2023
Last Date for submission of counter comments	09 th October 2023

Comments and Counter Comments will be posted on AERA website www.era.gov.in

For any clarification/information, Director (P&S, Tariff) may be contacted at Telephone Number: 011-24695043.

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List of Abbreviations

Abbreviation	Expansion
AAI	Airports Authority of India
ACI	Airports Council International
AERA/ Authority	Airports Economic Regulatory Authority of India
AEMB	Airline Engineering and Maintenance Building
AGL	Aeronautical Ground Lighting
ANS	Air Navigation Services
AO	Airport Operator
AOCC	Airports Operations Control Centre
ARFF	Aviation Rescue and Fire Fighting
ARR	Aggregate Revenue Requirement
ASDC	Aviation Skill Development Center
ASQ	Airport Service Quality
ATC	Air Traffic Control
ATM	Air Traffic Movement
ATV	Average Ticket Value
AUCC	Airport User Consultative Committee
BHS	Baggage Handling System
BIAL	Bangalore International Airport Limited
BOQ	Bill of Quantity
BPCL	Bharat Petroleum Corporation Limited
BSE	Bombay Stock Exchange
CA	Concession Agreement
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CCTV	Closed Circuit Television
CGF	Cargo, Ground handling and Fuel Farm
CIAL	Cochin International Airport Limited
CISF	Central Industrial Security Force
COD	Commercial Operation Date
COVID-19	Corona Virus Disease-2019
CP	Consultation Paper
CPI	Consumer Price Index
CPWD	Central Public Works Department
CSR	Corporate Social Responsibility
CUTE	Common User Terminal Equipment
CWIP	Capital Work in Progress
DBFOT	Design, Build, Finance, Operate and Transfer
DGCA	Directorate General of Civil Aviation
DGU	Double Glazing Unit
DIAL	Delhi International Airport Limited
DSRA	Debt Service Reserve Account
EC	Environment Clearance
EHCR	Employee Headcount Ratio
EHS	Environment, Health & Safety

Abbreviation	Expansion
EPC	Engineering, Procurement and Construction
F&B	Food and Beverages
FA	Financing Allowance
FCP	First Control Period
FRoR	Fair Rate of Return
GAL	GMR Airports Limited
GDP	Gross Domestic Product
GIAL	Goa International Airport Limited
GoG	Government of Goa
GoI	Government of India
GOI	Goa International Airport, Dabolim (IATA Code)
GOX	Manohar International Airport, Mopa, Goa (IATA Code)
GST	Goods and Services Tax
HIAL	Hyderabad International Airport Limited
HVAC	Heating, Ventilation and Air Conditioning
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IDC	Interest During Construction
IFK	In-Flight Kitchen
IMG	Inter-Ministerial Group
IPP	Income Per Passenger
IT	Information Technology
MAG	Management Assurance Group
MAT	Minimum Alternate Tax
MCLR	Marginal Cost of Funds based Lending Rate
MEP	Mechanical, Electrical and Plumbing
MIAL	Mumbai International Airport Limited
MRO	Maintenance, Repair and Overhaul
MYTP	Multi Year Tariff Proposal
NAR	Non-Aeronautical Revenue
NGT	National Green Tribunal
PBB	Passenger Boarding Bridges
PBG	Performance Bank Guarantee
PBT	Profit Before Tax
PH&E	Public Health & Engineering
PMC	Project Management Consultancy
PO	Purchase Order
PPP	Public Private Partnership
PTB	Passenger Terminal Building
PV	Present Value
R&M	Repairs and Maintenance
RAB	Regulatory Asset Base
RBI	Reserve Bank of India
RFP	Request for Proposal
SCI	Hon'ble Supreme Court of India
SCP	Second Control Period

Abbreviation	Expansion
SPP	Sales Per Passenger
TB	Terminal Building
TBLR	Terminal Building Ratio
TOPS	Terminal Operations
UDF	User Development Fee
WACC	Weighted Average Cost of Capital
WDV	Written Down Value
WIP	Work in Progress
WPI	Wholesale Price Index
Unit of Measurement	
Cr	Crore
FY	Financial Year
Mn	Million
MPPA	Million Passenger Per Annum
MT	Metric Tonne
Nos	Number
Rs.	Rupees
Sq.m.	Square meter
YoY	Year on Year

1. BACKGROUND

1.1 Introduction

- 1.1.1** Goa, located on the western coast in the Konkan region, is one of the most popular tourist destinations in the country. It is the fourth smallest state by population and has only two districts – North Goa and South Goa. Tourism is one of the major industry providing direct and indirect employment in the state. Goa witnessed more than 80 lakhs tourist arrivals in the year 2019 including 9 lakh foreign tourists.
- 1.1.2** Goa International Airport (known as “Dabolim Airport” or “GOI”) is an airport existing in Dabolim, Goa, which is operated by Airports Authority of India (AAI) and the Indian Navy. Being a civil enclave, Dabolim Airport is constrained with operational restrictions resulting in congestion and non-availability of slots for airlines during daytime. Considering the difficulties and the future economic growth of the state, the Government of Goa (GoG) decided to develop a greenfield airport at Mopa, Goa through a Public Private Partnership (PPP) mode.
- 1.1.3** With the commencement of operations at Manohar International Airport, Mopa, Goa (IATA: GOX), Goa has 2 International Airports in the state.

1.2 Concession Agreement for development of Manohar International Airport, Mopa, Goa

- 1.2.1** GMR Airports Limited (GAL) won the bid for development of the new airport at Mopa, Goa and signed the Concession Agreement on 8th November 2016 via a special purpose vehicle named “Goa International Airport Limited (GIAL)”. GIAL, Mopa, Goa was incorporated on 14th October 2016 with 99.99% holding by GAL and one Golden share (Non-transferable equity share with various rights) in favor of GoG.
- 1.2.2** As per the agreement, GIAL, Mopa, Goa, will develop the airport under the DBFOT (Design, Build, Finance, Operate and Transfer) model for an initial period of 40 years from the appointment date (4th September 2017), which is extendable by another 20 years (based on bidding process) with the First Right of Refusal available to the Concessionaire, i.e., GIAL, Mopa, Goa.
- 1.2.3** Concession Agreement (CA) envisaged development of Manohar International Airport, Mopa, Goa as an integrated international and domestic airport in a phased manner based on a traffic-trigger principle. Accordingly, the Concession Agreement stipulated the capacity for different phases of development. The following table indicates the capacities as per CA (Refer Clause 12.2.1 under Annexure 1).

Table 1: Phase-wise Airport Development proposed in Annex-II of CA

Phasing	Traffic Design Capacity (In MPPA)	Trigger for Phasing
Phase I	4.4	On the date of COD
Phase II	5.8	80% of Phase I Capacity
Phase III	9.4	80% of Phase II Capacity
Phase IV	13.1	80% of Phase III Capacity

- 1.2.4** Key clauses from the CA are as detailed below. A summary of clauses from the CA are listed in Annexure 1.

Table 2: Key Highlights of the Concession Agreement

Headings	Clause No.	Description
Concession requirement	3.1.(i)	Construction and procurement of the Aeronautical Assets including Runways, taxiways, apron, aircraft parking bays and other associated facilities.
Construction and procurement of the Terminal Building	3.1.(ii) & Annexure II of Schedule A	Level of service for Terminal Building – IATA Level of Service “C” (optimum standards) compliant. The total area of the Terminal Building should be based on 25 to 40 square meter per peak hour passenger for the design year.
		80% (eighty per cent) of each of the international and domestic aircrafts B737/ A320 or larger aircrafts shall be served by the boarding bridges.
		Provide international standard range of retail and other passenger services.
		Terminal design must be capable of incremental expansion with minimum impact on current operations.
City side development	5.1	381 acres out of 2093 acres is earmarked for city side development.
	3.6.2	For avoidance of doubt, revenues of the Concessionaire from City Side Development shall be excluded from the Shared-Till framework for the determination and regulation of the Aeronautical Charges.
Defense area	6.1	5 acres out of 2093 acres shall be carved out for the use of Defense forces
Cargo facilities (Schedule B of CA)	7.1	The Concessionaire shall earmark land within the site for the development of a Cargo Facility in the Airport.
Maintenance, Repair and Overhaul (MRO) Facilities (Schedule B of CA)	8.1	The Concessionaire shall earmark minimum 26 acres of land within the Site for the development of an MRO Facility in the Airport as per the applicable Standards and Specifications.
Annual premium	30.2.1	Concessionaire agrees to pay to the Authority for each year commencing from the 6th (sixth) year of the occurrence of the Appointed Date, a premium (the "Annual Premium") equal to 36.99 % of Gross Revenue.
	32.3.3	The Annual Premium shall not be considered as a part of the capital outlay for the Airport or the regulatory asset base or operating expense for the purpose of the determination of the Aeronautical Charges and shall always be excluded from being considered as a part of the cost for the determination of the Aeronautical Charges.

1.3 Development of Greenfield Airport through Public Private Partnership (PPP)

1.3.1 On 28th October 2015, Environment Clearance was granted for the project. Construction of Manohar International Airport, Mopa, Goa commenced in FY 2015-16. The airport was expected to be commissioned by November 2019 as per the CA.

1.3.2 The construction activities in the airport were suspended for an interim period due to certain orders issued by the Hon'ble courts. Following orders were issued by Hon'ble courts relating to the Airport Project:

- On 8th March 2018, an order was issued by the Hon'ble High Court of Bombay to stay tree cutting in the region, as a response to concerns about environmental degradation and the loss of greenery in the area.

- On 19th March 2019, the Hon'ble Supreme Court of India (SCI) suspended the Environment Clearance that had been granted for the project, due to concerns about the environmental impact of the project and the need for a more thorough assessment of the potential consequences.
- By 16th January 2020, the petition related to the suspension of the Environment Clearance was dismissed by the Hon'ble Supreme Court of India. As a result, the suspension of the Environment Clearance was removed but with certain conditions attached to ensure that the project would not have an undue impact on the environment.

1.3.3 Due to the Hon'ble Supreme Court status quo order which prevailed for about one year against Environment clearance of the project, the completion date got postponed to August 2022. Based on the change in commencement date, GIAL, Mopa, Goa proposed a revised phasing of construction, which was approved by GoG. The phasing of construction and the revised phase-wise capacity planned at the Airport is as indicated below:

Table 3: Revised Phase-wise Airport Development proposed as per GIAL, Mopa, Goa Business Plan

Phase	Capacity in MPPA	Financial Year
Phase 1	4.40	FY 2022-23
Phase 2	7.70	FY 2023-24
Phase 3	11.10	FY 2025-26
Phase 4	16.00	FY 2030-31
Phase 5	21.60	FY 2042-43

1.3.4 Manohar International Airport, Mopa, Goa is presently connected with NH66 via a 2-lane operational access road. As per the terms of CA, GoG has to complete four-lane expressway (6.59 kms) connecting NH-66 with airport in 5 years from the appointed date. The 6.59 kms connecting road has been declared as a National Highway (NH-166S) under the Bharat Mala Pariyojna and would be developed by National Highways Authority of India (NHAI). The land acquisition and other activities have started as per the NH Act and expressway is expected to be operational in FY 2023-24.

1.3.5 The Airport was inaugurated on 11th December 2022 and the operations commenced on 5th January 2023.

1.3.6 Technical and Terminal Building details submitted by GIAL, Mopa, Goa for Phase I, II & III are as detailed below:

Table 4: Technical and Terminal Building details submitted by GIAL, Mopa, Goa

Particulars	Phase I	Phase II	Phase III
Airside			
Runway	3500X 45 m+7.5 m Shoulder each side, Flexible Pavement		
Apron	57150 Sqm, Rigid Pavement + Isolation Bay of 19,100 sqm	~20,000 Sqm	~35,000 Sqm
Total In contact Aircraft Stands	5 Nos (3 for code C, 1 MARS, 1 code E or 2 code C)	4 Nos (Code C)	
Remote stands	9 Nos		
VDGS	6 Nos	2 Nos	

Particulars	Phase I	Phase II	Phase III
Landside			
Departure Forecourt	5 Lane (3 movement + 2 parking); Carriage width: 14.5 m		
Arrival Forecourt	5 Lane (3 movement +2 parking); Carriage width: 14.5 m		
ATC & ATCTB	Height 46.8 M, Tech. Bldg. G+3 (Area 3865 Sq. m)		
Passenger Terminal Building			
Capacity	4.4 MPPA (Shell built for 7.7 MPPA)	7.7 MPPA	11.1 MPPA
Total Built-up	67,726 Sqm.		~25,000 Sqm
Entry Gates (Check -in Hall)	3 Nos		
Check-in-Island	1 No	1 No	
Check-in counters	22 (4 nos. for Self-Baggage Drop)	20 Nos	
ATRS	7 in nos. (~300 Bags / hr.)	2 Nos	
Baggage reclaim belt	2(Domestic) + 1(International)		
Passenger Boarding Bridges	5 Nos	2 Nos	
Baggage Screening Capacity	2 Lines (2400-3000 bags / hr.)	Extension for 2 nd island	
Bus Gate Domestic	3 Nos.		
Bus Gate International	2 Nos.		
Bus Gate VIP	1 No.		
Emigration counters	8 Nos. (Departure)	4 Nos.	
Immigration counters	12 Nos. (Arrival)	8 Nos.	

1.4 Cargo, Ground handling and Fuel Farm (CGF) Operations

1.4.1 The Concession Agreement details the provision of Cargo, Ground Handling and Fuel facilities at the Airport. The Concession Agreement also states that Aeronautical Services have the meaning as set forth in AERA Act in relation to the services to be provided at the Airport. Aeronautical Services defined in AERA Act include services relating to Cargo, Ground Handling and Fuel facilities. The Authority's responsibilities defined in AERA Act also provide for determination of charges for Aeronautical activities of Cargo, Ground Handling and Fuel facilities at the Airport.

Cargo Operations

1.4.2 Over the past decade, Cargo traffic at Goa's Dabolim airport had remained constant at approximately 4,500 metric tonnes per annum due to limited cargo handling infrastructure. Furthermore, the lack of adequate infrastructure has prevented the airport from attracting dedicated freight carriers, resulting in all cargo being transported in civilian aircraft's belly holds.

1.4.3 The Concession Agreement has included provisions for the development of a cargo facility within the site. Once completed, the cargo facilities at Manohar International Airport, Mopa, Goa are expected to contribute to increase in the capacity from 4,500 to 25,000 metric tonnes per annum across the 2 airports in Goa.

1.4.4 On 16th November 2021, GIAL, Mopa, Goa awarded the cargo license through a bidding process, resulting in a 15.3% revenue share. The license has an initial period of 20 years effective from 16th November 2021.

Ground Handling (GH) Operations

- 1.4.5** Clause 18.2 of the Concession Agreement (Refer Annexure 1) details GIAL, Mopa, Goa's obligations towards provision of infrastructure required for ground handling services at Manohar International Airport, Mopa, Goa.
- 1.4.6** Subject to the provisions of the Concession Agreement, GIAL, Mopa, Goa has the right to grant License to any entity for providing Ground Handling Services at Manohar International Airport, Mopa, Goa on such terms and conditions to be mentioned in the License Agreement between GIAL, Mopa, Goa and the potential service provider.
- 1.4.7** Pursuant to above terms of the Concession Agreement, GIAL, Mopa, Goa has engaged Celebi Airport Services (India) Private Limited (CASIPL) for provision of such Ground Handling services at Manohar International Airport, Mopa, Goa through a bidding process, resulting in a revenue share of 5% in case of domestic and 30.5% in case of international and other services.

Fuel Facility Operations

- 1.4.8** GIAL, Mopa, Goa's obligations to provide aircraft fueling services are detailed in clause 18.3 of the Concession Agreement (Refer Annexure 1).
- 1.4.9** Subject to the terms of the Concession Agreement, GIAL, Mopa, Goa has the right to grant a license to any entity for the provision of Aircraft Fueling Services at Manohar International Airport, Mopa, Goa on terms and conditions specified in the License Agreement between GIAL, Mopa, Goa and the potential service providers.
- 1.4.10** According to the conditions of the Concession Agreement, GIAL, Mopa, Goa has sub-licensed Aircraft Fueling Services to Bharat Petroleum Corporation Limited for a period of 20 years under the framework of designing, building, financing, operation, maintenance, and transfer. The Fuel Farm will operate on an "open access" basis with a 15% & 5% revenue share to GIAL, Mopa, Goa from the gross revenue earned on account of Fuel Infrastructure Charges (FIC) and Into Plane charges respectively.

2. METHODOLOGY OF TARIFF DETERMINATION OF MANOHAR INTERNATIONAL AIRPORT

2.1 Tariff setting principles

2.1.1 AERA was established by the Government of India vide notification No. GSR 317(E) dated 12th May 2009. The functions of AERA, in respect of Major Airports, are specified in section 13(1) of The Airports Economic Regulatory Authority of India Act, 2008 ('AERA Act' or 'the Act') read with AERA (Amendment) Act 2019 and 2021, which are as below:

- a) To determine the tariff for aeronautical services taking into consideration.
 - i. The capital expenditure incurred and timely investment in improvement of airport facilities;
 - ii. The service provided, its quality and other relevant factors;
 - iii. The cost for improving efficiency;
 - iv. Economic and viable operation of major airports;
 - v. Revenue received from services other than aeronautical services;
 - vi. Any Concession offered by the Central Government in any agreement or memorandum of understanding or otherwise;
 - vii. Any other factor which may be relevant for the purposes of the Act:

Provided that different tariff structures may be determined for different airports having regard to all or any of the above considerations specified at sub-clauses (i) to (vii).

- b) To determine the amount of development fees in respect of major airports;
- c) To determine the amount of passenger service fee levied under rule 88 of the Aircraft Rules, 1937 made under Aircraft Act, 1934;
- d) To monitor the set performance standards relating to quality, continuity and reliability of service as may be specified by the Central Government or any Authority authorized by it in this behalf;
- e) To call for such information as may be necessary to determine the tariff under clause 13(1)(a).
- f) To perform such other functions relating to tariff, as may be entrusted to it by the Central Government or as may be necessary to carry out the provisions of this Act.

2.1.2 As per the AERA Act, 2008 the following are the Aeronautical services:

- i. Aeronautical Services Provided by the Airport Operators
- ii. Cargo, Ground Handling and Fuel Supply Services; and
- iii. Air Navigation Services

2.1.3 AAI shall be handling the Air Navigation Systems (ANS) at Manohar International Airport, Mopa, Goa. Tariff for ANS is presently regulated by the Ministry of Civil Aviation. All the assets, expenses and revenues pertaining to ANS are considered separately by the Ministry while determining tariff for ANS services. Further, the tariff for ANS services is determined at the Central level by the Ministry of Civil Aviation to

ensure uniformity across the Airports in India. Hence, AERA determines tariff for Aeronautical services of the Airport Operator, by excluding the assets, expenses and revenues from ANS.

2.1.4 The Methodology adopted by the Authority to determine Aggregate Revenue Requirement (ARR) is based on AERA Act, 2008 read with AERA (Amendment) Act 2019 and 2021, the AERA (Terms and Conditions for determination of Tariff for Airport Operators) Guidelines, 2011 and further Guidelines issued by AERA from time to time.

2.1.5 The Authority has adopted the Hybrid-Till mechanism for tariff determination for the First Control Period wherein, 30% of the non-aeronautical revenues is to be used for cross-subsidizing the aeronautical charges.

2.1.6 The ARR for a given Control Period, under Hybrid Till, is calculated as

$$ARR = \sum_{t=1}^5 ARR_t$$

$$ARR = (FRoR \times RAB_t) + D_t + O_t + T_t - s \times NAR_t$$

Where,

t is the tariff year in the control period, ranging from 1 to 5

ARR_t is the Aggregate Revenue Requirement for tariff year ‘t’

$FRoR$ is the Fair Rate of Return for the Control Period

RAB_t is the Aeronautical Regulatory Asset Base for tariff year ‘t’

D_t is the Depreciation corresponding to the Regulatory Asset Base for tariff year ‘t’

O_t is the Aeronautical Operation and Maintenance expenditure for the tariff year ‘t’

T_t is the Aeronautical taxation expense for the tariff year ‘t’

s is the cross-subsidy factor for revenue from services other than Aeronautical services under the Hybrid Till methodology followed by the Authority, $s = 30\%$.

NAR_t is the Non-Aeronautical Revenue in tariff year ‘t’.

2.1.7 Based on ARR, Yield per passenger (Y) is calculated as per the formula given below:

$$Yield\ per\ passenger\ (Y) = \frac{\sum_{t=1}^5 PV(ARR_t)}{\sum_{t=1}^5 VE_t}$$

Where,

$PV(ARR_t)$ is the Present Value of ARR. All cash flows are assumed to occur at the end of the year. The Authority has considered discounting cash flows, one year from the start of the Control Period.

VE_t is the passenger traffic in year ‘t’.

2.2 Authority’s Order applied in Tariff Proposals in this Consultation Paper

2.2.1 The Authority’s Orders applied in the tariff proposals in this Consultation Paper (CP) are:

- i. Order No. 13 dated 12th January 2011 (Regulatory philosophy and approach in Economic Regulation of Airport Operators) and Direction No. 5 dated 28th February 2011 (Terms and conditions for determination of tariff for Airport Operators);
- ii. Order No. 05 dated 02nd August 2010 ((Regulatory philosophy and approach in Economic Regulation of the services provided for Cargo facility, Ground Handling and Supply of Fuel to aircrafts); Order No. 12 dated 10th January 2011 and Direction No. 4 dated 10th January 2011 (Terms and conditions for determination of tariff for services provided for Cargo facility, Ground Handling and Supply of Fuel to aircrafts).
- iii. Order No. 07/2016-17 dated 13th June 2016 (Normative Approach to Building Blocks in Economic Regulation of Major Airports).
- iv. Order No. 14/2016-17 dated 23rd January 2017 in the matter of aligning certain aspects of AERA's Regulatory Approach (Adoption of Regulatory Till) with the provisions of the National Civil Aviation Policy – 2016 (NCAP-2016) approved by the Government of India.
- v. Order No. 20/2016-17 dated 31st March 2017 in the matter of allowing Concession to Regional Connectivity Scheme (RCS) Flights under RCS – Ude Desh ka Aam Nagarik (UDAN) at Major Airports.
- vi. Order No. 35/2017-18 dated 12th January 2018 and Amendment No. 01 to Order No. 35/2017-18 dated 09th April 2018 in the matter of determination of useful life of Airport assets.
- vii. Order No. 42/2018-19 dated 5th March 2019 in the matter of Determination of Fair Rate of Return (FRoR) to be provided on Cost of Land incurred by various Airport Operators in India.

2.3 Control Period

- 2.3.1** The Authority notes that GIAL, Mopa, Goa has submitted the MYTP for the initial period starting from 7th December 2022 to 31st March 2023 together with 5-year period from FY 2023-24 to FY 2027-28.
- 2.3.2** The Authority notes that the Airport was commissioned on 7th December 2022 and commenced its commercial operations on 5th January 2023. Further, the Authority notes that the first financial year only contains under 3 months of operations. To give effect of a full term of 5 years, the Authority proposes to consider the Control Period as effective from FY 2023-24 to FY 2027-28 together with considering the results of the period from 5th January 2023 i.e. COD to 31st March 2023
- 2.3.3** Accordingly, Authority has reviewed the actuals for the period ended 31st March 2023 in Chapter 3 and considered the same appropriately in the computation of Aggregate Revenue Requirement in Chapter 12.

2.4 Past tariff determination history

- 2.4.1** The Authority vide Order No. 19/2022-23 dated 26th August 2022 allowed GIAL, Mopa, Goa to levy and collect the tariff for Aeronautical Services on an Ad-hoc basis w.e.f. Commercial Date of Operation (COD) to 31st March 2023 or till the determination of the regular Aeronautical Tariff for the First Control Period, whichever is earlier. The Authority noted that the regular tariff determination was under process and since this will take some time, the Authority further extended the existing tariff order for a period of six (06) months w.e.f 01.04.2023 to 30.09.2023 or till the determination of regular tariffs for the relevant Control Period, whichever is earlier, vide Order No. 41/2022-23 dated 22nd March 2023.
- 2.4.2** Order No. 25/2022-23 dated 7th October 2022 was issued granting approval to M/s Celebi Airport Services (India) Pvt. Ltd. (CASPIIL) to levy and collect on an Ad-hoc basis, tariff for Ground Handling Services at the

airport w.e.f. COD till 31st March 2023 or till the determination of the regular Tariff, whichever is earlier. Vide Order No. 11/2023-24 dated 15th June 2023, the Authority decided to determine the regular tariff for CASPIL, under the ‘Light Touch Approach’ for the First Control Period (FY 2023-24 to FY 2027-28) and has approved the tariff rate card.

- 2.4.3** GIAL, Mopa, Goa had sub-licensed the designing, building, financing, operation, maintenance and transfer of Cargo Terminal Facilities and Services at the Airport to GMR Airports Limited (GAL) for an initial period of 20 years as approved by GoG. GAL vide letter dated 14th July 2022 had requested the authority to allow it to levy Ad-hoc tariff as proposed. Pursuant to the letter, the Authority vide Order No. 28/2022-23 dated 14th November 2022 had allowed GAL to levy and collect tariff on an Ad-hoc basis for Cargo Handling Services at the airport w.e.f. COD till 30th September 2023 or till the determination of the regular Tariff, whichever is earlier.
- 2.4.4** As requested by ISP, the Authority vide the Order No. 29/2022-23 dated 30th November 2022 has allowed Bharat Petroleum Corporation Limited (BPCL) to levy and collect, on an Ad-hoc basis, tariff for Fuel Farm & Into Plane (ITP) Services w.e.f. COD till 30th September 2023 or till the determination of the regular Tariff, whichever is earlier.
- 2.4.5** In response to GIAL, Mopa, Goa letter dated 6th March 2023 regarding levy of Ad-hoc tariff for Bridge Mounted Equipment Service, the Authority issued Order No. 01/2023-24 on 18th April 2023. Vide the Order, the Authority allowed GIAL, Mopa, Goa to levy and collect the tariff on Ad-hoc basis w.e.f. 24th April 2023 to 30th September 2023 or till the determination of the regular Aeronautical Tariff for the First Control Period, whichever is earlier.

2.5 MYTP submissions by GIAL, Mopa, Goa

- 2.5.1** On 7th January 2022, GIAL, Mopa, Goa submitted its Multi-Year Tariff Proposal (MYTP) for the period from September 2022 to 31st March 2023, and the First Control Period from FY 2023-24 to FY 2027-28. The initial submission contained provisional figures for the period from September 2022 to 31st March 2023.
- 2.5.2** GIAL, Mopa, Goa upon commissioning of airport on 7th December 2022 and on commencement of commercial operations from 5th January 2023, submitted the revised MYTP vide letter dated 29th March 2023. GIAL, Mopa, Goa incorporated adjustments related to various factors such as Revenues, FRoR and Operating Expenditure in the revised MYTP submitted. This revised MYTP has been taken up by the Authority for review and evaluation. The MYTP is made available on the Airports Economic Regulatory Authority (AERA) website.
- 2.5.3** GIAL, Mopa, Goa was subsequently requested to provide the actual financials for the period ended 31st March 2023.
- 2.5.4** The Authority has appointed M/s PKF Sridhar and Santhanam LLP (M/s PKF S&S LLP), an independent consultant, to assess the MYTP submitted by GIAL for Manohar International Airport, Mopa, Goa. M/s PKF S&S LLP assisted AERA in verifying the data from various supporting documents submitted by GIAL, Mopa, Goa such as audited Financial Statements, contracts awarded for expenses and revenues (mainly non aeronautical revenues) for examining the building blocks in tariff determination of COD till 31st March and First Control Period and also ensuring that the treatment given to it is consistent with the Authority's methodology, approach etc.

2.5.5 The Authority through its Independent Consultant has examined the revised MYTP submitted by GIAL, Mopa, Goa and verified the data and the projections. The Authority requested various clarifications on the information shared by GIAL, Mopa, Goa to assess the reasonableness of the proposed capital expenditure, operating expenditure, non-aeronautical revenue, FRoR, etc., for finalizing this Consultation Paper. GIAL, Mopa, Goa provided additional information based on clarifications sought and queries raised by the AERA from time to time. All of this information has been used to finalize this Consultation Paper.

Financing Allowance

2.5.6 The Authority, through its Independent Consultant (M/s PKF S&S LLP), examined the computation and application of the Financing Allowance to be given to GIAL, Mopa, Goa, as being a Greenfield Airport. The Consultant has also taken cognizance of the Independent Study report conducted by M/s KITCO in this regard. Furthermore, the Consultant has done thorough review while computing the financing allowance to be provided during the first tariff cycle for GIAL, Mopa, Goa. The detailed computation in this regard has been provided in para 5.3.17.

Related Party Transactions

2.5.7 The Authority through its Independent Consultant conducted an analysis of the tendering procedures implemented by the Goa International Airport Limited (GIAL, Mopa, Goa) and has reviewed the associated contract agreements concerning operating expenses and revenues entered with related parties. The Concession Agreement entered by GIAL, Mopa, Goa details the process to be followed for award of contracts to related parties as given below:

“5.6.2 For procurement of goods, works or services and for award of leases, licenses, sub-licenses or any other rights or privilege where the consideration exceeds Rs. 25,00,00,000 (Rupees twenty-five crores) in any Accounting Year (collectively the “Contracts”), the Concessionaire shall invite offers through open competitive bidding by means of e-tendering and shall select the awardees in accordance with the policy specified under Clause 5.6.1. For the avoidance of doubt, the Parties agree that the Concessionaire may, in its discretion, pre-qualify and short-list the applicants in a fair and transparent manner for ensuring that only experienced and qualified applicants are finally selected on arm's length in a manner that is commercially prudent and protects the interests of the Users. The Parties further agree that the Concessionaire shall not enter into any Related Party Transaction or Contract with any Related Party except with (a) with the prior written consent of the Authority, which consent shall not be unreasonably withheld as a reserved item/affirmative action in accordance with the terms of the Shareholders' Agreement; and (b) such transaction is on arm's length basis and is in compliance with the provisions of the Companies Act, 2013. The Parties also agree that before granting any consent hereunder, the Authority shall be entitled to seek such information as it may reasonably require in relation to the Contract and the Related Party with whom the Contract is proposed to be executed and in the event the Authority does not approve or reject the proposal within 30 (thirty) days of the date on which the required information has been provided, it shall be deemed that the Authority has no-objection to such Contract.

5.6.3 Notwithstanding anything contained contrary elsewhere, the Concessionaire shall adhere to the following contracting principles in respect of any of the Related Party Transactions:

(a) No shareholder of the Concessionaire, and/or Key Managerial Person that has an interest in the contract, can be involved in the design of the contract, or the contracting process or decision-making;

(b) Where a shareholder of the Concessionaire, Key Managerial Person or any Related Party intends to tender for the contract, an independent probity auditor must be appointed to review and monitor the tender to ensure a complete arms' length arrangement. It is clarified that the independent probity auditor shall not be a Related Party of the Concessionaire or any of its shareholders. Concessionaire shall agree to the appropriate terms of reference and the selection procedure of the independent probity auditor as laid down by the Authority; and

(c) The Concessionaire shall constitute an audit committee headed by a nominee of the Authority which would be responsible for auditing all the Related Party Transactions. The Board of the Concessionaire shall provide the terms of reference of the audit committee at the time of its constitution. The Concessionaire shall enter into any Related Party Transaction only after obtaining approval of audit committee in writing. Any amendment / modification in the terms and conditions of the Related Party Transaction shall also require prior approval of the audit committee.”

The Authority notes that GIAL, Mopa, Goa has engaged various Related Parties for providing various services as mentioned in the below:

Table 5: Services provided to GIAL by related parties

S. No.	Nature of Service	Name of the Related Party	Description of Relationship
1	Cargo Operations	GMR Airports Limited	Holding Company
2	Ground Handling Services	Celebi Delhi Cargo Terminal Management India Private Limited	Joint Venture of Fellow Subsidiary
3	Master Service Agreement to operate and manage Non-Aeronautical Facilities	GMR Airports Limited	Holding Company
4	Project Management Consultancy	GMR Airport Developers Limited	Fellow Subsidiary
5	Engineering & Maintenance Services (R&M)	GMR Airport Developers Limited	Fellow Subsidiary
6	Security Services	Raxa Security Services Limited	Fellow Subsidiary
7	Solar Power on Build, own, operate and transfer basis	GMR Solar Energy Private Limited	Companies in the same group

The Authority has sought confirmation from GIAL, Mopa, Goa that due process has been followed as per appropriate governance practices and that Probity audit reports have been submitted to GoG and approved by GoG. GIAL, Mopa, Goa has confirmed the same.

The Authority expects that GIAL will comply with the defined requirements of the Concession Agreement without any deviations and that contracts are awarded with a view to ensure protection of interest of all stakeholders. This compliance will be reviewed by the Authority during the review and true up to be carried out in the next control period.

2.5.8 Timeline of various submissions made by GIAL, Mopa, Goa are as given below.

Table 6: MYTP submissions by GIAL, Mopa, Goa

Activity	Date
MYTP submission	7 th January 2022
Initial Requirement List	14 th December 2022
Discussion of queries and responses with GIAL, Mopa, Goa	24 th January 2023
Data receipt based on additional queries and clarifications	4 th February 2023
Updated MYTP submission	29 th March 2023
Data Receipt based on queries and responses after analyzing the revised MYTP submission	April 2023 – May 2023
Audited Financial Statement for the year ended 31 st March 2023	26 th June 2023
Clarifications for various building blocks	June 2023 – August 2023

2.6 Construct of this Consultation Paper

2.6.1 This Consultation Paper has been developed in the following order as explained below. Chapter-wise details have been summarized as follows:

- The background of the Airport is explained in Chapter 1.
- Methodology of Tariff determination has been detailed in this chapter i.e. Chapter 2.
- Chapter 3 presents the submission of GIAL, Mopa, Goa regarding period from 7th December 2022 to 31st March 2023 and Authority's Proposals from COD to 31st March 2023.
- Chapter 4 presents the submissions of GIAL, Mopa, Goa regarding Traffic Projections for the First Control Period and the Authority's proposals on the same.
- Chapter 5 includes the submissions of GIAL, Mopa, Goa regarding Capital Expenditure (CAPEX), Depreciation and RAB for the First Control Period along with the Authority's detailed examination, adjustments, rationalization and proposals on the Aeronautical capital expenditure, useful lives and RAB for the First Control Period.
- Chapter 6-11 includes the submissions of GIAL, Mopa, Goa regarding various building blocks pertaining to the First Control Period including Fair Rate of Return, Inflation, Operating Expenses, Non-aeronautical Revenue, Taxation and Quality of Service along with Authority's examination and proposals on each matter.
- Chapter 12 presents the Aggregate Revenue Requirement as determined by the Authority based on the proposals for the First Control Period.
- Chapter 13 summarizes Authority's proposals put forward for consultation.
- In Chapter 14 the Authority invites views of all the stakeholders regarding proposals put forward for tariff determination for the First Control Period in the Consultation Paper.
- Chapter 15 contains Annexures.
- Chapter 16 contains Appendices.

2.7 Study Commissioned by the Authority

- 2.7.1** The Authority commissioned a study through its Independent Consultant, for detailed analysis of Capital Expenditure incurred by GIAL, Mopa, Goa.
- 2.7.2** The Study has carried out a detailed analysis of the Capital Expenditure incurred by GIAL, Mopa, Goa and provided details of expenditure that can be considered allowable for the purpose of inclusion in RAB for Tariff Determination.
- 2.7.3** The recommendations of the independent study conducted by M/s KITCO have been used in this Consultation Paper. The details of the Study is discussed in Chapter 5 of this Consultation Paper and the study is attached as Appendix 1 of this Consultation Paper.

3. DETERMINATION OF TARIFF FOR THE PERIOD FROM COD (5TH JANUARY) TO 31ST MARCH 2023.

3.1 GIAL's submissions regarding Tariff for the period from 7th December 2022 to 31st March 2023

3.1.1 GIAL, Mopa, Goa had, together with the projections for the First Control period, submitted the details for the period from 7th December 2022 till 31st March 2023.

3.1.2 Details for various building blocks submitted by GIAL, Mopa, Goa for the period from 7th December 2022 to 31st March 2023, as part of its Tariff calculations, are as detailed below.

Table 7: Details of building blocks of ARR for the period from 7th December 2022 to 31st March 2023 submitted by GIAL, Mopa, Goa

(Rs. in crores)

Particulars	Reference	Amount
Average RAB	A	3,483.72
Fair Rate of Return	B	15.89%
Return on RAB	$C=A*B*115/365$	175.34
Aeronautical Operating Expenditure	D	93.74
Aeronautical Depreciation	E	49.25
Taxation	F	0.00
Aggregate Revenue Requirement	$G=C+D+E+F$	318.34
Non-Aeronautical Revenue	H	5.39
Less: 30% of Non-Aeronautical Revenue	$I=H*30\%$	1.62
Net Aggregate Revenue Requirement	$J=G-I$	316.72
Discount factor	K	1.05
PV of ARR	$L=J*K$	331.87
Aeronautical Revenue		
Landing, Parking	M	4.02
UDF	N	15.44
Others	O	0.32
Total of Aeronautical Revenue	$P=M+N+O$	19.78
PV of Aeronautical Revenue	$Q=P*K$	20.73
Shortfall	$R=L-Q$	311.14

3.1.3 GIAL, Mopa, Goa has considered the ARR for the period from 7th December 2022 to 31st March 2023 along with the estimation of ARR for the First Control Period in its MYTP submission.

3.2 Authority's examination regarding Tariff for the period from COD (5th January) to 31st March 2023

3.2.1 The Authority has, in the ensuing Chapters, detailed its principles and analysis with respect to different building blocks. The same principles, to the extent applicable, have been used for computing the ARR and shortfall for the period from COD to 31st March 2023 also.

3.2.2 The Authority had sought financial statements for the year ended 31st March 2023. Audited Financial Statements have been provided by GIAL, Mopa, Goa. The Authority proposes to consider the same as the basis for the computation for the period from COD to 31st March 2023.

Traffic

3.2.3 The Authority has considered the actual traffic for Manohar International Airport, Mopa, Goa available from the AAI website for the period from COD to 31st March 2023 which is as presented below:

Table 8: Traffic for Period from COD to 31st March 2023

Domestic Passenger Traffic				
Particulars (in Nos)	Jan-23	Feb-23	Mar-23	Total
Manohar International Airport, Mopa, Goa	154,422	229,431	280,307	664,160
Domestic ATM				
Particulars (in Nos)	Jan-23	Feb-23	Mar-23	Total
Manohar International Airport, Mopa, Goa	1,108	1,646	2,087	4,841

3.2.4 The Authority notes that the traffic volume in Manohar International Airport, Mopa, Goa has been steadily increasing on a monthly basis.

Capital Expenditure, Regulatory Asset Base and Depreciation

3.2.5 The Authority notes that the Airport was commissioned on 7th December 2022 and commenced its commercial operations on 5th January 2023.

3.2.6 The Authority had commissioned an Independent Study for evaluation of Capital Expenditure. Details of the study and its findings are elaborated in para 5.3.4. Based on the details of cost evaluation as detailed in para 5.3.4 and the adjustments proposed to be made by the Authority, the Authority has tabulated the amount proposed to be added to Regulatory Asset Base for the Period from COD to 31st March 2023 and First Control Period in Table 68.

3.2.7 The Authority notes from MYTP submission that Phase I capital expenditure proposed by GIAL, Mopa, Goa has been considered to be fully capitalized in FY 2022-23. The Authority, while examining the Audited Financial Statements submitted by GIAL, Mopa, Goa for March 2023 and certificate from statutory auditors, notes that the amount capitalized in FY 2022-23 for Phase I is Rs. 2,742.20 crores as against Rs. 3,375.29 crores (proposed by GIAL, Mopa, Goa for Phase I excluding FA and including IDC) which is 81.24% of the total Phase-I cost being capitalized in the books.

3.2.8 Based on the above, the Authority proposes to consider the ratio of actual to total capital expenditure of GIAL, Mopa, Goa as base for capitalizing the cost proposed by the Authority for Phase I in FY 2022-23 and the remaining cost of Phase-I to be capitalized in the FY 2023-24. Accordingly, 81.24% of the total Capital Expenditure (Table 63) for Phase 1 is capitalized in FY 2022-23 as shown in the table below:

Table 9: Computation of Addition to RAB for the period from COD to 31st March 2023 by the Authority*(Rs. in crores)*

Particulars	Reference	Amount
Total addition for Phase 1 as per Authority (Table 63)	A	3,225.79
Total addition for Phase 1 as per GIAL, Mopa, Goa (Table 32)	B	3,603.29
Add: Interest during construction (IDC)	C	220.00
Less: Financing Allowance (FA)	D	448.00
Total Capitalization to be in financial statement	E = B+C-D	3,375.29
Addition to Gross Block as per Financial Statement for FY 2022-23	F	2,742.20
% of Capitalization done	G = F/E	81.24%
Proportionate addition to RAB for FY 2022-23 by Authority	H = A * G	2,620.74

3.2.10 The Authority notes that GIAL, Mopa, Goa has undertaken development activities on the land provided by the GoG on lease for the construction of Manohar International Airport, Mopa, Goa. These activities have been done across the area of land, to prepare the same for further construction activities.

The Authority notes the details mentioned in the Order 35/2017-18 dated 12th January 2018 as presented below:

“Land development activities in relation to Airports comprise of preparing and leveling the land to be fit for further development activities relating to Airside works, Buildings, Roads etc. Land development activities carried out before further construction works are done, are permanent in nature and do not need to be altered / changed in any time in future and do not have a determinate useful life. Where Land is owned by the company, these are generally to be treated as part of the Land value and is not to be depreciated. In cases where the development activities are carried out on land which is leased to the Airport Operator, the development charges are generally to be charged off over the period of the lease rentals.

Land Development related costs should be identified and accounted as a separate line item under a sub-head of “Land Development” cost. If the land is leased to the Airport Operator, Land development cost shall be depreciated over the balance period of lease term.”

As per Annexure 1 of Order 35/2017-18 dated 12th January 2018, Land Development Cost incurred on Leased land is to be amortized over the lease period. The Authority notes that this practice has also been followed in Authority’s Order No. 11/2021-22 dated 28th August 2021 on determination of Aeronautical tariff for third control period for BIAL.

3.2.11 Accordingly, the cost of Rs.792.73 crores incurred on Land Development (including loading of FA and other indirect cost) is proposed to be considered as a separate line item which will be depreciated over the balance lease period of 36.5 years. The balance lease period has been computed as given below.

Table 10: Useful Life to be considered for Land Development

Particulars	Reference	Date/Year
Appointed date as per Concession Agreement (para 1.2.2)	A	4-Sep-17
Completion of 40 years lease period (para 1.2.2)	B	3-Sep-57

DETERMINATION OF TARIFF FOR THE PERIOD FROM COD (5TH JANUARY) TO 31ST MARCH 2023.

Particulars	Reference	Date/Year
Extended completion of Concession period i.e. 40 years	C	30-May-59*
Date of capitalization (para 3.2.5)	D	7-Dec-22
Lease period for Depreciation (In years) (Useful life)	$E = (C - D + 1) / 365$	36.50
Depreciation rate		2.74%

*Upon seeking clarification on the extended timeline, GIAL, Mopa, Goa submitted that Government of Goa (GoG) decided to extend the Concession Period for the Manohar International Airport, Mopa, Goa. This extension was granted due to the delays in construction and development activities caused by the adverse impact of the Covid-19 pandemic. The original Concession Period, which was supposed to end on 3rd September 2057, has now been extended, and the airport's operations under the concession will continue until 30th May 2059.

3.2.12 Based on the above, the category wise capital additions proposed to be considered for FY 2022-23 is as presented below:

Table 11: Asset Category wise additions for the period from COD to 31st March 2023 proposed by the Authority

(Rs. in crores)

Particulars	Amount
Building	760.63
Roads	172.84
Runway	505.19
Plant & Machinery	300.49
Apron	78.79
Furniture & Fixtures other than trolley	10.07
Land Development (Refer para 3.2.10 for explanation on Land Development)	792.73
Total	2,620.74

3.2.13 The Authority proposes to use the allocation ratio for assets as detailed in para 5.4.6 and 5.4.8 for the additions to RAB. Accordingly, the total Aeronautical addition to RAB for FY 2022-23 is computed to be Rs. 2,507.92 crores (Refer Table 68).

3.2.14 The Authority notes that GIAL, Mopa, Goa has submitted that the detailed Fixed Asset Register has not yet been prepared and this could have an impact on the depreciation values, together with Authority's proposal for considering Land Development cost as a separate line item. The Authority proposes to consider the depreciation as per the financial statement submitted by GIAL, Mopa, Goa, which will be reviewed at the time of determination of aeronautical tariff for the second control period.

3.2.15 Based on the above, the Regulatory Asset Base for FY 2022-23 is computed as follows:

Table 12: Regulatory Asset Base for the period from COD to 31st March 2023 computed by the Authority

(Rs. in crores)

Particulars	Reference	Amount
Opening RAB	A	-
Additions to RAB	B	2,507.92
Depreciation	C	31.49
Closing RAB	$D = A + B - C$	2,476.43
Average RAB	$E = (A + D) / 2$	1,238.21

3.2.16 The Authority notes that the Regulatory Asset Base has been commissioned for a period of 115 days in FY 2022-23. Accordingly, the Authority proposes to provide a return for 115 days for FY 2022-23 on the closing RAB.

Fair Rate of Return

3.2.17 The Authority has detailed its analysis for estimation of Fair Rate of Return in Chapter 6. The Authority proposes to consider the same Fair Rate of return calculated and considered for the First Control Period (refer Table 77) i.e. 12.21% for the period from COD to 31st March 2023 also.

Operating Expenditure

3.2.18 The Authority notes from the financial statement of March 2023 that GIAL, Mopa, Goa has incurred a total Expenditure of Rs. 55.79 crores for the period from COD to 31st March 2023 as against the estimated expenditure of Rs. 93.74 crores submitted by it in MYTP.

3.2.19 Further, the Authority notes that GIAL, Mopa, Goa has prepared Financial Statements following Indian Accounting Standards (IND AS)¹ on 31st March 2023. Accordingly, certain notional entries have been passed relating to Finance cost, Security deposit etc. to ensure IND AS compliance on security deposit and lease. The Authority proposes to exclude such notional IND AS adjustments from Operating expenditure for the purpose of true up exercise.

3.2.20 The Authority has explained its analysis on allocation ratios for Aeronautical expenses in para 8.2.1 (I). The Authority proposes to use the same and accordingly consider Rs. 55.43 crores as Aeronautical expenses for the period from COD to 31st March 2023 as presented below:

Table 13: Operating Expenditure for the period from COD to 31st March 2023 proposed by the Authority

<i>(Rs. in crores)</i>		
Particulars	Reference	Amount
Operating Expenditure as per Financial Statement (Refer Annexure 3)	A	55.79
IND AS adjustment (Lease rentals on equipment was capitalized as Asset under IND AS, this has been treated as Operating expenditure) (Refer Annexure 3)	B	2.99
Amount proposed to be considered by the Authority	C = A+B	58.78
Impact of Allocation Ratio	D	3.35
Aeronautical Opex	E = C-D	55.43

Non-Aeronautical Revenue

3.2.21 The Authority notes that GIAL, Mopa, Goa has earned Rs. 4.38 crores as Non-Aeronautical Revenue as per the break-up of Actual Revenues provided by GIAL, Mopa, Goa.

3.2.22 The Authority noted in para 3.2.19 that GIAL, Mopa, Goa has prepared IND AS Financial Statements as on 31st March 2023. Accordingly, certain notional entries have been passed relating to Fair valuation gain from security deposits etc. The Authority proposes to exclude such notional IND AS adjustments from Non-Aeronautical Revenues.

¹ Indian Accounting Standards (IND AS) as notified by Ministry of Company Affairs under Companies (Indian Accounting Standard (IND AS) Rules 2015

3.2.23 The Authority has detailed its proposal to consider the rental income earned from Aeronautical Service providers as Aeronautical, in para 9.2.23. Considering the same, the recomputed Non-Aeronautical Revenue for FY 2022-23 proposed to be considered by the Authority is as follows:

Table 14: Non-Aeronautical Revenue for the period from COD to 31st March 2023 proposed by the Authority

(Rs. in crores)

Particulars	Reference	Amount
Non-Aeronautical Revenue as per break-up provided by GIAL, Mopa, Goa (Refer Annexure 4)	A	4.38
IND AS Adjustment (Notional Income on Fair value of Security Deposit as per IND AS) (Refer Annexure 4)	B	0.86
Lease rentals from Airlines and Aeronautical concessionaires*	C	1.05
Non-Aeronautical Revenue proposed to be considered by Authority	D = A+B-C	4.19

*refer para 9.2.23 for explanation

Taxation

3.2.24 The Authority has noted that GIAL, Mopa, Goa has incurred losses in FY 22-23 and hence no tax is due to be paid by it. The carry forward loss benefits available, which can be utilized to set off against future profit will be considered appropriately in the tariff determination for the First Control Period.

3.2.25 The Authority had asked GIAL, Mopa, Goa to provide details of Income tax loss carry forward already available as of 1st April 2022. GIAL, Mopa, Goa has submitted that the tax loss carried forward and available as of 1st April 2022 is Rs. 2.80 crores as per the Income Tax Returns.

3.2.26 Based on the workings below, there is no Aeronautical Taxation for FY 2022-23. Accordingly, the Authority does not propose to consider any Taxation payment in the estimation of ARR.

Table 15: Aeronautical taxes for the period from COD to 31st March 2023 proposed by the Authority

(Rs. in crores)

Particulars	Reference	Amount
Aero Revenue (Table 17)	A	20.74
Aero Opex (Table 13)	B	55.43
Depreciation as per Income Tax *	C	132.34
Interest cost estimate**	D	45.85
Aero PBT	E = A – (B+C+D)	(212.88)
B/f loss of previous years (para 3.2.25)	F	(2.80)
Losses Added/Utilized	G=E	(212.88)
C/f losses	H=F+G	(215.68)
Tax rate	I	25.17%
Income Tax	J	-

*Computed using Written Down Value (WDV) method considering useful lives as per IT Act

**Interest Cost estimated are based on the actuals from the audited financial statement proportionate to Gross Block Ratio for Aeronautical assets

Aeronautical Revenues

3.2.27 The Authority notes from the break-up of Revenues provided by GIAL, Mopa, Goa that it has earned the following Aeronautical Revenue from COD (5th January 2023) till 31st March 2023.

Table 16: Aeronautical Revenue for the period from 7th December 2022 to 31st March 2023 proposed by GIAL, Mopa, Goa

(Rs. in crores)

Particulars	Reference	Amount
Landing and parking charges	A	3.33
User Development Fee (UDF)	B	15.07
Fuel farm	C	1.39
Ground handling	D	1.37
Cargo	E	0.29
Total Aeronautical Revenue	F= A+B+C+D+E	21.44

3.2.28 The Authority noted in para 3.2.19 that GIAL, Mopa, Goa has prepared IND AS Financial Statements as on 31st March 2023. Accordingly, certain notional entries have been passed relating to Fair valuation gain from security deposits etc. The Authority proposes to exclude such notional IND AS adjustments from Aeronautical Revenues.

3.2.29 The Authority further proposes to consider lease rentals from Airlines and Aeronautical concessionaires as Aeronautical (refer Table 14). Considering the same, the Aeronautical Revenue proposed to be considered by the Authority is as given below:

Table 17: Aeronautical Revenue for the period from COD to 31st March 2023 proposed by the Authority

(Rs. in crores)

Particulars	Reference	Amount
Aeronautical Revenue as per GIAL, Mopa, Goa (Table 16)	A	21.44
IND AS Adjustment (Notional Income on Fair value of Security Deposit as per IND AS)	B	1.75
Lease rentals from Airlines and Aeronautical concessionaires	C	1.05
Aeronautical Revenue proposed to be considered by Authority (refer Annexure 4)	D=A-B+C	20.74

Aggregate Revenue Requirement and Shortfall

3.2.30 GIAL, Mopa, Goa had submitted a shortfall of Rs. 311.34 Crores for the period from 7th December 2022 to 31st March 2023. The Authority has recomputed the Aggregate Revenue Requirement, based on the evaluation of the individual building blocks detailed above, as below, which the Authority proposes to consider in the determination of ARR for the first control period.

Table 18: ARR and shortfall for the period from COD to 31st March 2023 proposed by the Authority*(Rs. in crores)*

Particulars	Ref	Amount
Closing RAB* (Table 12)	A	2,476.43
Fair Rate of Return (para 3.2.17)	B	12.21%
Return on RAB for 115 days	$C=A*B*115/365$	95.27
Aeronautical Operating Expenditure (Table 13)	D	55.43
Aeronautical Depreciation (Table 12)	E	31.49
Taxation	F	0
Aggregate Revenue Requirement	$G=C+D+E+F$	182.19
Non-Aeronautical Revenue (Table 14)	H	4.19
Less: 30% of Non-Aeronautical Revenue	$I=H*30\%$	1.26
Net Aggregate Revenue Requirement	$J=G-I$	180.93
Less: Aeronautical Revenues (Table 17)	K	20.74
Shortfall	$L=J-K$	160.19
Discount factor (@ 12.21%)	M	1.12
PV of Under-recovery as on 31st March 2024	$N=L*M$	179.75

* Being initial commissioning, to calculate the return on RAB (Regulatory Asset Base), the approach of using the closing RAB has been adopted instead of the average RAB. The assets were put to use on 7th December 2022 within the financial year 2022-23. The return is adjusted for 115 days, corresponding to the period from the commissioning of the assets on 7th December 2022.

3.3 Authority's proposals regarding Tariff for the period from COD to 31st March 2023

Based on the material before it and its examination, the Authority proposes the following with regard to tariff for the period from COD to 31st March 2023 for Manohar International Airport, Mopa, Goa:

- 3.3.1 To consider Traffic as per Table 8
- 3.3.2 To consider RAB and depreciation as per Table 12.
- 3.3.3 To consider FRoR as per para 3.2.17.
- 3.3.4 To consider Aeronautical O&M expenses as per Table 13.
- 3.3.5 To consider Non-aeronautical revenue as per Table 14.
- 3.3.6 To consider the Aeronautical tax as per Table 15.
- 3.3.7 To consider Aeronautical revenue as per Table 17.
- 3.3.8 To consider under recovery of Rs. 179.75 crores as per Table 18 and adjust the same in the ARR for the First Control Period.
- 3.3.9 To true up the additions to RAB and depreciation for the year based on the total completed cost for Phase I and the Fixed Asset Register to be submitted by GIAL in the next control period.

4. TRAFFIC FOR THE FIRST CONTROL PERIOD

4.1 GIAL's submissions regarding Traffic for the First Control Period

4.1.1 GIAL, Mopa, Goa has appointed M/s CRISIL, an independent agency to study the traffic at Manohar International Airport, Mopa, Goa. M/s CRISIL has undertaken market scan, historical trend analysis, assessment of ongoing COVID condition and economic scenario to forecast traffic for Manohar International Airport, Mopa, Goa for the First Control Period.

4.1.2 Basis of determination of traffic as per M/s CRISIL is as detailed below:

- M/s CRISIL has predicted the passenger traffic movement for domestic and international flights at Goa airport using an econometric model approach.
- For domestic passenger forecasting, the Consolidated Gross Domestic Product (GDP) variable was used, while the Blended GDP variable was used for international passenger forecasting.
- Regression analysis using the Ordinary Least Square method was conducted to arrive at the results, which showed that for every 1% increase in income level, the domestic and international air passenger traffic demand at the Goa airport will grow by 2% and 1.23% respectively. The data was corrected using a correction factor of 2.24% to reverse the impact of COVID-19 on air passenger movement.

4.1.3 Traffic forecast was revised by GIAL, Mopa, Goa in the MYTP submission made on 29th March 2023. Forecast of traffic along with the market share in the state of Goa for Manohar International Airport, Mopa, Goa submitted by GIAL, Mopa, Goa has been presented below:

Table 19: Traffic for the First Control Period submitted by GIAL, Mopa, Goa for Manohar International Airport, Mopa, Goa

Year	Passenger (In Mn)			ATM (in Nos)			Cargo (in MT)		
	Domestic	Int'l	Total	Domestic	Int'l	Total	Domestic	Int'l	Total
Traffic									
FY 24	6.09	0.79	6.88	40,620	4,798	45,418	5,397	5,814	11,211
FY 25	6.91	0.94	7.85	46,079	5,668	51,747	7,058	8,592	15,650
FY 26	8.62	0.98	9.6	57,499	5,951	63,450	7,806	9,384	17,190
FY 27	10.67	1.12	11.79	71,156	6,784	77,940	9,560	14,742	24,302
FY 28	12.11	1.21	13.32	80,719	7,327	88,046	10,474	15,116	25,590
Total (FY24 to FY28)	44.40	5.04	49.44	296,073	30,528	326,601	40,295	53,648	93,943
Growth (%)									
FY 25*	13.40%	18.99%	14.10%	13.44%	18.13%	13.94%	30.78%	47.78%	39.60%
FY 26	24.77%	4.26%	22.29%	24.78%	4.99%	22.62%	10.60%	9.22%	9.84%
FY 27	23.80%	14.29%	22.81%	23.75%	14.00%	22.84%	22.47%	57.10%	41.37%
FY 28	13.49%	8.04%	12.98%	13.44%	8.00%	12.97%	9.56%	2.54%	5.30%

*Growth rates are computed based on FY 2023-24

Table 20: GIAL, Mopa, Goa's submission of market share estimate in the state of Goa for Manohar International Airport, Mopa, Goa

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28
Domestic	50%	50%	55%	60%	60%
International	80%	90%	90%	95%	95%

4.2 Authority's examination regarding Traffic for the First Control Period

4.2.1 The Authority has taken note of the fact that the state of Goa has the privilege of having two airports, which are competing with each other to meet the increasing demand of tourism in the state. The traffic projection for Dabolim Goa has been decided by the Authority in clause 4.5.4 of Order No. 04/2022-23 for the Third Control Period, after taking into consideration the then impending airport's (Manohar International Airport, Mopa, Goa) expected traffic capacity and demand. The share of traffic as decided by the Authority in Dabolim Goa is presented below:

Table 21: Share of Passenger Traffic at Dabolim Airport as decided by the Authority

Particulars (in Mn)	FY 24	FY 25	FY 26	Total
Passengers decided by the Authority for Dabolim Airport	8.02	9.36	10.80	28.18
% of Passengers for Dabolim Airport	61%	63%	64%	-
% Remaining passengers in Manohar International Airport, Mopa, Goa	39%	37%	36%	-

4.2.2 Based on M/s CRISIL's Traffic Forecast report issued in December 2021, the total passenger traffic in Goa is predicted to grow to 21 MPPA by FY 2027-28, which will be handled together by Dabolim Airport and Manohar International Airport, Mopa, Goa.

Passenger Traffic

4.2.3 The Authority notes that GIAL, Mopa, Goa has only considered billable domestic passengers, excluding 2% of domestic passenger traffic. The Authority notes that Government of India has allowed exemption of UDF to certain categories of passengers through Order No. AIC 14/ 2019 read with AIC 20/ 2019. GIAL, Mopa, Goa cannot claim any passthrough regarding UDF on such categories and this is followed by AERA across at all Major Airports. Therefore, there is no reason to consider the billable PAX traffic separately, as the Authority follows a consistent approach across all Major Airports, that naturally accounts for such considerations while projecting aeronautical revenues. The Authority notes that if this has been considered differently in any of the recent tariff orders, the same will be changed at the time of true up.

4.2.4 The Authority has reviewed the estimated Compounded Annual Growth Rate (CAGR) of Dabolim Airport in Goa, for both domestic and international passenger traffic. The data indicates that for the past 4 years (FY 2015-16 to FY 2018-19), the domestic passenger traffic grew at a CAGR of 12.90%, while for the past 8 years (FY 2011-12 to FY 2018-19), it grew at a CAGR of 12.74%. Similarly, for international passenger traffic, the CAGR for the past 4 years was 4.89%, and for the past 8 years, it was 3.84%.

Table 22: 4-Year and 8-Year CAGR of Passenger Traffic at Dabolim Airport

Particulars (in %)	4 Year (FY16-FY19)	8 Year (FY12-FY19)
Goa Dabolim		
Domestic Pax	12.90%	12.74%
International Pax	4.89%	3.84%

- 4.2.5** In order to project the air traffic demand for Goa as a whole, the Authority analyzed various factors such as the new Manohar International Airport, Mopa, Goa and the impact of the COVID-19 pandemic. After considering these factors, the Authority concluded that using a single growth factor such as Compound Annual Growth Rate (CAGR) would not be appropriate to project the traffic for Goa as a whole.
- 4.2.6** The Authority reviewed the study conducted by M/s CRISIL for Manohar International Airport, Mopa, Goa traffic. The study employed an econometric model to estimate the demand for air traffic among passengers in the state of Goa. A new variable, named "consolidated GDP," has been developed for this purpose which is the sum of states' highest share of passengers at the Goa airport (Gujarat, Maharashtra, Delhi, Telangana, Karnataka, Andhra Pradesh, and Goa). The consolidated GDP is kept as the explanatory variable and the domestic passenger demand at the Goa airports as the dependent variable.
- 4.2.7** Based on this study, growth of the consolidated Gross Domestic Product (GDP) over the forecast period and the consolidated GDP elasticity of passenger demand has been considered as the growth factor for projecting passenger traffic. The growth factor calculated by M/s CRISIL for domestic passenger traffic is 13.40% and for international passenger traffic is 5% from FY 2024-25 to FY 2025-26 and thereafter 8.00% for the further years of the Control Period as presented below.

Table 23: Air Passenger Traffic growth rates submitted by GIAL, Mopa, Goa

Particulars (in %)	FY24	FY25	FY26	FY27	FY28
Domestic	13.40%	13.40%	13.40%	13.40%	13.40%
International	5.00%	5.00%	5.00%	8.00%	8.00%

- 4.2.8** The Authority notes that this is an uncommon situation of 2 airports within the same vicinity which may attract passengers from nearby areas including adjacent states. The Authority proposes to use, for the current estimation, the growth of consolidated GDP and its elasticity with passenger demand as the growth factor, as calculated by M/s CRISIL as an indicator in its estimation of traffic for Manohar International Airport, Mopa, Goa.
- 4.2.9** The Authority compared the actual traffic achieved during the FY 2022-23 with that of the corresponding period in FY 2019-20 (Pre-COVID period) and noted that the actual domestic passenger and ATM traffic has already surpassed the Pre-COVID levels of FY 2019-20. The details of the same are as follows:

Table 24: Actual Domestic Passenger and ATM traffic for FY 2019-20 (Pre-COVID period) and FY 2022-23 for Dabolim and Manohar International Airport, Mopa, Goa

Particulars (in Nos)	FY 20			FY 23		
	Dabolim	Manohar International Airport, Mopa, Goa	Total Domestic	Dabolim	Manohar International Airport, Mopa, Goa (5 th Jan- 31 st March 2023)	Total Domestic
Passenger	7,651,362	-	7,651,362	7,891,983	664,160	8,556,143
ATM	53,636	-	53,636	53,889	4,841	58,730

- 4.2.10** The government has clarified that the commissioning of the new greenfield International Airport at Mopa, in North Goa will not result in the shutdown of the existing airport at Dabolim in South Goa. Instead, both airports will co-exist and handle air traffic in the state.
- 4.2.11** As the restrictions of the COVID-19 pandemic are removed and tourism increases, it is expected that the air traffic demand in Goa will also increase.
- 4.2.12** The Authority after observing the actual passenger traffic for FY 2022-23, notes that the traffic at Goa is increasing. The traffic forecasts provided by M/s CRISIL in their studies align with the views of the Authority. Therefore, the Authority proposes to consider the traffic for Goa as a whole, as suggested by the M/s CRISIL study:

Table 25: Air Passenger traffic as proposed by the Authority for the state of Goa

Particulars (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic	12.19	13.82	15.68	17.79	20.18	79.66
International	0.99	1.04	1.09	1.18	1.27	5.57
Total	13.18	14.86	16.77	18.97	21.45	85.23

- 4.2.13** Due to existing operational restrictions at Dabolim airport, such as no night parking availability and operational restrictions during the daytime, it is expected that domestic airlines will initially shift to Manohar International Airport, Mopa, Goa. The Authority notes that the % share of Manohar International Airport, Mopa, Goa projected by M/s CRISIL report appear reasonable considering the actual domestic traffic from January 2023 (Commencement Operation Date) to May 2023 of Manohar International Airport, Mopa, Goa. It can be observed that Manohar International Airport, Mopa, Goa has achieved approximately 35% of market share in domestic traffic for both passenger and ATM.

Table 26: Actual Traffic for Dabolim and Manohar International Airport, Mopa, Goa

Domestic Passenger Traffic							
Particulars (in Nos)	Jan-23	Feb-23	Mar-23	Total	Apr-23	May-23	Total
Dabolim Airport	782,573	673,740	691,960	2,148,273	641,551	585,182	1,226,733
Manohar International Airport, Mopa, Goa	154,422	229,431	280,307	664,160	332,695	335,265	667,960
Total	936,995	903,171	972,267	2,812,433	974,246	920,447	1,894,693
Market Share (PAX)							

Domestic Passenger Traffic							
Dabolim Airport	83.52%	74.60%	71.17%	76.38%	65.85%	63.58%	64.75%
Manohar International Airport, Mopa, Goa	16.48%	25.40%	28.83%	23.62%	34.15%	36.42%	35.25%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Domestic ATM							
Particulars (in Nos)	Jan-23	Feb-23	Mar-23	Total	Apr-23	May-23	Total
Dabolim Airport	5,095	4,259	4,530	13,884	4,204	3,716	7,920
Manohar International Airport, Mopa, Goa	1,108	1,646	2,087	4,841	2,298	2,200	4,498
Total	6,203	5,905	6,617	18,725	6,502	5,916	12,418
Market Share (ATM)							
Dabolim Airport	82.14%	72.13%	68.46%	74.15%	64.66%	62.81%	63.78%
Manohar International Airport, Mopa, Goa	17.86%	27.87%	31.54%	25.85%	35.34%	37.19%	36.22%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

- 4.2.14** According to the factors considered by the Independent consultant appointed by the Authority for review of the Capital Expenditure, M/s KITCO, the latest statistics from the AAI indicate that the Manohar International Airport, Mopa, Goa has shown significant growth in domestic passenger traffic. In January 2023, Manohar International Airport, Mopa, Goa recorded 1.54 lakh passengers (compared to 7.83 lakh at Dabolim), which increased to 2.29 lakh in February 2023 (compared to 6.74 lakh at Dabolim), and further rose to 2.80 lakh in March 2023 (compared to 6.92 lakh at Dabolim). This indicates that with the presence of the new airport at Mopa, Goa has created additional demand and attracted new passengers, rather than relying solely on passengers shifting from Dabolim. Consequently, both airports operating simultaneously has resulted in increased domestic passenger numbers compared to the previous year. These trends suggest that the air passenger capacity of the state is on track to meet the forecasted figures submitted by M/s CRISIL.
- 4.2.15** Considering the views presented by M/s KITCO and based on its own analysis, the Authority proposes to adopt the market share for domestic traffic at Manohar International Airport, Mopa, Goa as estimated by the M/s CRISIL report submitted by GIAL, Mopa, Goa. The shift in domestic passengers from Dabolim to Manohar International Airport, Mopa, Goa is expected to enhance the operational efficiency of both airports, enabling them to handle air traffic more effectively.
- 4.2.16** Most international passengers, except chartered flights, are expected to shift to the new Manohar International Airport, Mopa, Goa by FY 2025-26, as the majority of tourist destinations in Goa are located in the vicinity of the new airport in the Northern part of the state. Dabolim airport is expected to handle mainly domestic passengers and chartered flights in FY 2025-26.
- 4.2.17** Based on the above proposals, the % share of passenger traffic proposed to be considered for Manohar International Airport, Mopa, Goa is presented below:

Table 27: Percentage share of total Goa passenger traffic to be handled by Manohar International Airport, Mopa, Goa

Particulars (in %)	FY 24	FY 25	FY 26	FY 27	FY 28
Domestic					
Proposed by GIAL, Mopa, Goa	50%	50%	55%	60%	60%
Proposed by Authority for Manohar International Airport, Mopa, Goa	50%	50%	55%	60%	60%
International					
Proposed by GIAL, Mopa, Goa	80%	90%	90%	95%	95%
Proposed by Authority for Manohar International Airport, Mopa, Goa	80%	90%	90%	95%	95%

4.2.18 After analyzing the percentage share and growth rate, the Authority proposes to adopt the traffic projections put forth by GIAL, Mopa, Goa for Manohar International Airport, Mopa, Goa. The proposed traffic figures are as follows:

Table 28: Passenger traffic proposed by the Authority to be handled at Manohar International Airport, Mopa, Goa

Particulars (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic	6.09	6.91	8.62	10.67	12.11	44.40
International	0.79	0.94	0.98	1.12	1.21	5.04
Total	6.88	7.85	9.6	11.79	13.32	49.44

4.2.19 In summary, the new Manohar International Airport, Mopa, Goa in Goa is expected to gradually attract a significant portion of passenger traffic, particularly international passengers, due to its location near popular tourist destinations. The existing Dabolim airport will continue to handle domestic passengers and chartered flights and both airports will co-exist and handle air traffic in the state.

ATM Traffic

4.2.20 According to estimates provided by GIAL, Mopa, Goa, the number of passengers per ATM (Air Traffic Movement) at Manohar International Airport, Mopa, Goa is expected to be 150 for the domestic segment and 165 for the international segment. This is because Manohar International Airport, Mopa, Goa is expected to mostly handle Code C Aircrafts for domestic flights, which are generally designed to handle up to 150 passengers. For international travel, a mix of Code C and Code E aircraft will be used, with an average capacity of 165 passengers.

4.2.21 The Authority estimates that Manohar International Airport, Mopa, Goa will experience growth and improvement over time, in contrast to other airports where passenger numbers tend to remain stagnant due to their operational maturity. As a new airport, it is expected that there will be an increase in the passenger load factor in the subsequent control periods.

4.2.22 As more airlines start operating at Manohar International Airport, Mopa, Goa, the demand for air travel is likely to increase, resulting in more passengers per ATM. Furthermore, improvements in airport infrastructure and services can help attract more passengers and airlines, further increasing the number of passengers per ATM.

4.2.23 In line with the proposal to consider the passenger traffic submitted by GIAL, for Manohar International Airport, Mopa, Goa, the Authority also proposes to consider the ATM traffic as suggested by GIAL, Mopa, Goa. It is anticipated that the number of passengers per ATM will increase gradually as the airport becomes more established and the demand for air travel continue to grow.

Table 29: ATM as proposed by the Authority for the First Control Period

Particulars (in Nos)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic	40,620	46,079	57,499	71,156	80,719	296,073
International	4,798	5,668	5,951	6,784	7,327	30,528
Total	45,418	51,747	63,450	77,940	88,046	326,601

Cargo Freight

- 4.2.24** The Authority notes that GIAL, Mopa, Goa, through a bidding process, has appointed GMR Airports Limited (GAL) to provide cargo handling services at the upcoming Manohar International Airport, Mopa, Goa in Goa. GIAL, Mopa, Goa has entered into a license agreement with its holding company GAL, on 16th November 2021, granting them the right to design, build, finance, operate, maintain, and transfer the cargo facilities for an initial period of 20 years through a tendering process. GIAL, Mopa, Goa has confirmed that the contract was awarded in accordance with the defined process mentioned in the Concession Agreement, and that the contract received approval from the GOG (Government of Goa) after undergoing a probity check, including an assessment of related party transactions.
- 4.2.25** Under the license agreement, the licensee (GAL) will pay a land license fee to GIAL, Mopa, Goa, which will increase on a yearly basis based on the notified Consumer Price Index (CPI). Additionally, the licensee will share 15.30% of its gross revenue with GIAL, Mopa, Goa during the license period.
- 4.2.26** Currently, the Dabolim airport in Goa does not have adequate cargo handling facilities, limiting the freight traffic to between 4,000 MT to 5,000 MT per annum. As the economy of Goa grows, the demand for cargo movement is increasing, which cannot be solely handled by the Dabolim airport.
- 4.2.27** M/s CRISIL study on freight traffic projections shows that the cargo movement demand in Goa is currently being spilled over to nearby major airports like Mumbai and Bangalore due to the lack of dedicated cargo handling infrastructure at the Dabolim airport. Almost 50,000 MT of international cargo comprising of pharmaceutical products is spilled over to Mumbai Airport as well as other international airports. Similarly, almost 30,000 MT of domestic cargo is moved via road to other airports due to lack of infrastructure and space availability at current airport in Goa.
- 4.2.28** With Cargo facilities built at Manohar International Airport, Mopa, Goa, the capacity restrictions present at Dabolim airport will no longer exist, and the dedicated cargo handling facility at Manohar International Airport, Mopa, Goa will act as a supporting infrastructure for the growth of cargo freight demand in the state of Goa.
- 4.2.29** Based on this information, the Authority proposes that the cargo projections as submitted by GIAL, Mopa, Goa can be considered for the current control period.

Table 30: Cargo traffic proposed by the Authority for the First Control Period

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic	5,397	7,058	7,806	9,560	10,474	40,295
Market Share %	50%	50%	60%	60%	70%	-
International	5,814	8,592	9,384	14,742	15,116	53,648
Market Share %	80%	80%	90%	90%	90%	-
Total	11,211	15,650	17,190	24,302	25,590	93,943

4.2.30 Based on the overall above analysis, the traffic proposed by the Authority for Manohar International Airport, Mopa, Goa for the First control period is as follows:

Table 31: Traffic proposed by the Authority for the First Control Period

Domestic Passengers (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic PAX submitted by GIAL, Mopa, Goa (Table 19)	6.09	6.91	8.62	10.67	12.11	44.40
Domestic PAX proposed by the Authority (A) (Table 28)	6.09	6.91	8.62	10.67	12.11	44.40
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	13.46%	24.75%	23.78%	13.50%	-
Authority's Proposal Y-o-Y % growth in traffic	-	13.46%	24.75%	23.78%	13.50%	-
Domestic exempted PAX %	FY 24	FY 25	FY 26	FY 27	FY 28	Average
Submitted by GIAL, Mopa, Goa	2%	2%	2%	2%	2%	2%
As per the Authority (B)	-	-	-	-	-	-
Billable Domestic Passengers (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Submitted by GIAL, Mopa, Goa	5.97	6.77	8.45	10.46	11.87	43.51
As per the Authority (C=A*(1-B))	6.09	6.91	8.62	10.67	12.11	44.40
International Passengers (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
International PAX submitted by GIAL, Mopa, Goa (Table 19)	0.79	0.94	0.98	1.12	1.21	5.04
International PAX proposed by the Authority (D) (Table 28)	0.79	0.94	0.98	1.12	1.21	5.04
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	18.99%	4.26%	14.29%	8.04%	-
Authority's Proposal Y-o-Y % growth in traffic	-	18.99%	4.26%	14.29%	8.04%	-
Total passengers (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Total PAX as per GIAL, Mopa, Goa's submission	6.88	7.85	9.60	11.79	13.32	49.44
Total PAX proposed by the Authority	6.88	7.85	9.60	11.79	13.32	49.44
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	14.10%	22.29%	22.81%	12.98%	-
Authority's Proposal Y-o-Y % growth in traffic	-	14.10%	22.29%	22.81%	12.98%	-
Total Billable Passengers (in Mn)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Submitted by GIAL, Mopa, Goa	6.76	7.71	9.43	11.58	13.08	48.55
As per the Authority (E=C+D)	6.88	7.85	9.60	11.79	13.32	49.44

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Domestic ATM (in Nos)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic ATM submitted by GIAL, Mopa, Goa (Table 19)	40,620	46,079	57,499	71,156	80,719	296,073
Domestic ATM proposed by the Authority (F) (Table 29)	40,620	46,079	57,499	71,156	80,719	296,073
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	13.44%	28.11%	33.62%	23.54%	-
Authority's Proposal Y-o-Y % growth in traffic	-	13.44%	28.11%	33.62%	23.54%	-
International ATM (in Nos)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
International ATM submitted by GIAL, Mopa, Goa (Table 19)	4,798	5,668	5,951	6,784	7,327	30,528
International ATM proposed by the Authority (G) (Table 29)	4,798	5,668	5,951	6,784	7,327	30,528
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	18.13%	4.99%	14.00%	8.00%	-
Authority's Proposal Y-o-Y % growth in traffic	-	18.13%	4.99%	14.00%	8.00%	-
Total ATM (in Nos)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Total ATM as per GIAL, Mopa, Goa's submission	45,418	51,747	63,450	77,940	88,046	326,601
Total ATM proposed by the Authority (H=G+F)	45,418	51,747	63,450	77,940	88,046	326,601
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	13.94%	22.62%	22.84%	12.97%	-
Authority's Proposal Y-o-Y % growth in traffic	-	13.94%	22.62%	22.84%	12.97%	-
Domestic Cargo (in MT)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Domestic Cargo submitted by GIAL, Mopa, Goa (Table 19)	5,397	7,058	7,806	9,560	10,474	40,295
Domestic Cargo proposed by the Authority (Table 30) (I)	5,397	7,058	7,806	9,560	10,474	40,295
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	30.78%	10.60%	22.47%	9.56%	-
Authority's Proposal Y-o-Y % growth in traffic	-	30.78%	10.60%	22.47%	9.56%	-
International Cargo (in MT)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
International Cargo submitted by GIAL, Mopa, Goa (Table 19)	5,814	8,592	9,384	14,742	15,116	53,648
International Cargo proposed by the Authority (Table 30) (J)	5,814	8,592	9,384	14,742	15,116	53,648
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	47.78%	9.22%	57.10%	2.54%	-
Authority's Proposal Y-o-Y % growth in traffic	-	47.78%	9.22%	57.10%	2.54%	-
Total Cargo (in MT)	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Total Cargo submitted by GIAL, Mopa, Goa	11,211	15,650	17,190	24,302	25,590	93,943
Total Cargo proposed by the Authority (K=I+J)	11,211	15,650	17,190	24,302	25,590	93,943
GIAL, Mopa, Goa's submission Y-o-Y % growth in traffic	-	39.60%	9.84%	41.37%	5.30%	-
Authority's Proposal Y-o-Y % growth in traffic	-	39.60%	9.84%	41.37%	5.30%	-

4.3 Authority's proposals regarding Traffic for the First Control Period

Based on the material before it and its analysis, the Authority proposes the following with regard to traffic for the First Control Period:

- 4.3.1** To consider Passenger Traffic, ATM and Cargo Traffic for the First Control Period for Manohar International Airport, Mopa, Goa as per Table 31.
- 4.3.2** To true up the traffic volumes (Passenger, ATM and Cargo) based on actual numbers for the First Control Period at the time of determination of tariff for the next control period.

5. CAPITAL EXPENDITURE (CAPEX), DEPRECIATION AND REGULATORY ASSET BASE (RAB) FOR THE FIRST CONTROL PERIOD

5.1 Background

5.1.1 RAB is an essential element in the process of tariff determination. The return to be provided on the RAB constitutes a considerable portion of the Aggregate Revenue Requirement for GIAL, Mopa, Goa. To encourage the participation of the private sector in airport development and operations, investors must be fairly compensated for the capital outlays involved. At the same time, to safeguard the interests of the airport users, it must be ensured that the capital additions are efficient, their needs justified, and the return on investment provided solely on the assets related to the core operations (i.e., Aeronautical services) of the airport.

5.1.2 The Authority notes that, as part of the Concession Agreement (CA), GIAL, Mopa, Goa has proposed to plan and develop Mopa, Goa in a phased manner during the Concession period, to cater to the annual passenger throughput capacity (domestic and international) and annual cargo handling capacity, along with ancillary facilities as per its demand projections. Development of the airport includes construction and procurement of various assets as described in Schedule B to the CA such as:

- Runways, Taxiways, Apron, Aircraft parking bays and associated facilities.
- Construction and procurement of Terminal Building

5.1.3 The Authority notes that GIAL, Mopa, Goa is mandated to develop an integrated terminal building which is efficiently planned, flexible for phase-wise development, sustainable and economical, as stipulated in Schedule B of Annex I of the CA. Further, as per clause 26.8.1 of the CA, GIAL, Mopa, Goa should participate in the user survey of (Airport Service Quality) ASQ undertaken by Airports Council International (ACI) conducted every quarter and ensure that the Airport achieves and maintains a rating of at least 4.2 out of 5.0 and / or shall appear within top 20 percentile of all airports, in its category in the world in such survey.

5.1.4 The Authority observed that the assessment of expansion/ modification plan of the Airport and its phasing is a technical matter, which requires analysis by the domain expert. The Independent Consultant M/s KITCO appointed by the Authority has performed an in-depth analysis of the submissions made by GIAL, Mopa, Goa towards Capital Additions and RAB. In this respect, the Independent Consultant has performed the following functions:

- i. Examined the proposal of GIAL, Mopa, Goa in terms of the designated capacity of the airport/scope with reference to Passenger Growth/Cargo volumes/Air Traffic Movement and assessed cost effectiveness of the proposal.
- ii. Examined the Building standards, Designs and Pavement works including Cost thereon proposed by GIAL, Mopa, Goa to be in line with IMG norms/IATA/ICAO norms.
- iii. Analyzed the reasonableness of the proposed cost with reference to the Tentative Ceiling decided by the Authority vide order No. 7/2016-17 dated 13.06.2016 based on the details of the rates and quantity as per Government / Industry approved norms.
- iv. Sought documentary evidence and verified the process of approval of CAPEX projects including bidding process for award of various work orders and justified reasonableness of Time Schedule of Completion of work proposed by GIAL, Mopa, Goa.

CAPITAL EXPENDITURE (CAPEX), DEPRECIATION AND REGULATORY ASSET BASE (RAB) FOR THE
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Based on the above, the Authority has rationalized the capital addition projects based on the essentiality, necessity for Airport operations etc.

5.1.5 In addition to the above, M/s KITCO the independent consultant has analyzed the tendering procedures adopted by GIAL, Mopa, Goa and relevant contract agreements related to capital expenditure submitted by GIAL, Mopa, Goa.

5.1.6 The Authority has sought and examined GIAL, Mopa, Goa's submission based on the following details/criteria:

- Nature of the expenditure
- Necessity / requirement of the expenditure
- Business plan and Master plan for all projects
- Number of PAX projected for the First Control Period
- Terminal Capacity projected for the First Control Period
- Other short-term and long-term plans of the GIAL, Mopa, Goa
- Sustainability of airport operations
- Passenger consideration
- Safety and security of the airport
- Process of approval and sanction for various work orders / purchase orders

5.1.7 In the background of the facts stated above, the Authority has examined the entire CAPEX plan in detail, considering the historical traffic trends in Goa and future traffic estimates such that only essential, reasonable and efficient CAPEX is considered as part of RAB for the First Control Period with a view to encourage the investors and maintain a balanced approach between the sustainable operations of the GIAL, Mopa, Goa and the interest of the airport users. Further, the Authority takes cognizance of the fact that, if any excessive CAPEX is allowed in this Control Period, it would be against the regulatory framework, as tariff would have no link to the services/ facilities created at the Airport and the resultant high aeronautical charges would be unfair to the ultimate users.

5.1.8 Towards this objective, the Authority has examined in detail the Aeronautical Capital Expenditure and RAB submitted by the GIAL, Mopa, Goa and has presented its views in the following order:

- i. Aeronautical Capital expenditure proposed for the First Control Period
- ii. Asset Allocation Ratios and Aeronautical Allocation of CAPEX
- iii. Aeronautical Depreciation for the First Control Period
- iv. Regulatory Asset Base for the First Control Period

5.1.9 The Authority notes that the Independent Engineer appointed by GoG has recommended the capex costs which has been approved by GoG.

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5.1.10 Based on the above, the Authority through its Independent consultant (M/s PKF S&S LLP) has rationalized the capital expenditure for all the projects and accordingly proposed capital additions for the First Control Period.

5.2 GIAL's submission regarding Capital Expenditure (CAPEX) for the First Control Period

5.2.1 GIAL, Mopa, Goa submitted a total Capital Expenditure of Rs. 4,494.65 crores** in the revised MYTP dated 29th March 2023, for the First Control period, the details of which are as given below:

Table 32: Project wise revised Capital Expenditure submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

SL. No	Component	Phase I	Phase II Expansion	Phase III Expansion	CAPEX for First Control Period
1	General Requirements & Site Establishment	964.34	-	-	964.34
a)	Site Establishment & Site Management charges	386.53	-	-	386.53
b)	Site office/Admin building	43.47	-	-	43.47
c)	Site Preparation/Earthworks	534.34	-	-	534.34
2	Airside infrastructure	716.95	65.51	67.50	849.96
a)	Runway, Taxiways and Apron	415.95	65.51	63.00	544.46
b)	Airside Buildings, Roads and Drainage Systems	301.00	0.00	4.50	305.50
3	Passenger Terminal Building (a to f)	730.00	108.18	369.50	1207.68
a)	Civil & Structural Works	347.00	-	-	347.00
b)	Terminal Equipment (HVAC, Plumbing, LV, ELV, etc.)	232.00	-	-	232.00
c)	Contact Stand & Visual Docking Guidance System (VDGS)	16.00	-	-	0.00
d)	BHS & Other Aero Equipment	79.00	-	-	79.00
e)	Operating Equipment	19.00	-	-	19.00
f)	Utilities (Power & Water)	37.00	-	-	37.00
4	Main Access Road and spine road	98.00	-	-	98.00
5	Car Park Area	3.00	-	-	3.00
6	Air Traffic Control (ATC) Complex	87.00	-	-	87.00
7	Additional Works	68.00	-	2.00	70.00
8	Permanent Water and Electricity	20.00	-	-	20.00
9	Aviation Skill Development Center (ASDC)	8.00	-	-	8.00
A	Sub Total (1 to 9)	2695.29	173.69	439.00	3307.98

CAPITAL EXPENDITURE (CAPEX), DEPRECIATION AND REGULATORY ASSET BASE (RAB) FOR THE
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SL. No	Component	Phase I	Phase II Expansion	Phase III Expansion	CAPEX for First Control Period
10	Design Consultancy & PMC Expenses	112.00	13.90	36.00	161.90
11	Pre-Operative Expense	259.00	3.47	3.30	265.77
12	Contingencies	0.00	9.55	22.50	32.05
B	Sub Total (10 to 12)	371.00	26.92	61.80	459.72
13	Financing Allowance	448.00	15.44	52.25	515.69
14	Debt Service Reserve Account (DSRA)	89.00	-	-	89.00
C	Sub Total (13+14)	537.00	15.44	52.25	604.69
	General Capex				125.00
	Grand Total (A+B+C)	3603.29	216.05	553.05	4497.39*

*The total amount of Rs.4,497.39 crores include the Capital spend of Rs.6.85 crores on the City Side Development.

** The difference of Rs.2.74 crores between the MYTP submission of Rs. 4,494.65 crores as per para 5.2.1 and Rs. 4,497.39 crores as per the table above, is due to certain rounding off differences in the Phase II and Phase III amounts submitted by GIAL, Mopa, Goa.

Financing Allowance

5.2.2 GIAL, Mopa, Goa in its submission has stated that it has computed the Financing Allowance in accordance with section 5.2.7 of AERA guidelines. As per GIAL, Mopa, Goa, following is the computation of financing allowance:

Table 33: Financing Allowance as submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Financial Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Total
Capital Work in Progress (CWIP)-Opening Balance	-	12.38	25.18	156.95	316.70	631.39	1,456.59	
Addition	12.38	12.80	131.77	159.75	314.69	825.20	1,691.49	
Capitalization	-	-	-	-	-	-	3,148.07	3,148.07
Closing WIP	12.38	25.18	156.95	316.70	631.39	1,456.59	-	
Average CWIP	6.19	18.78	91.07	236.83	474.05	1,043.99	728.30	
Financing Allowance	0.63	1.93	9.69	25.53	50.96	112.23	247.20	448.17
Total								448.17

5.2.3 Further, GIAL, Mopa, Goa in its submission has considered financing allowance of Rs. 15.44 crores and Rs. 52.25 crores for Phase-II and Phase-III expansion for the purpose of calculating RAB for the First Control Period.

Means of finance for the capital expenditure plan for the First Control Period

5.2.4 The debt and equity financing for the different capex categories as submitted by GIAL, Mopa, Goa has been summarized below:

Table 34: Project Means & Finance as submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Project	Total Project Cost	Equity	Debt
Phase I	3,603.09	1,376.00	2,227.09
Phase II	200.00	60.00	140.00

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Project	Total Project Cost	Equity	Debt
Phase III	500.00	150.00	350.00
General Capex	125.00	-	-

5.2.5 The same has been discussed in detail in the Chapter 6.

5.3 Authority's examination regarding Capital expenditure (CAPEX) for the First Control Period

Authority's examination of Capital Expenditure

5.3.1 The Authority has carried out a detailed review of the Capital Expenditure for both the demonstration of need and the reasonableness of costs incurred. This review has evaluated each project carried out by GIAL, Mopa, Goa as part of Phase I and those proposed to be carried out as part of Phase II and Phase III of the current control period.

5.3.2 The Authority observed that the assessment of the capital expenditure, expansion plans and its phasing is a technical matter and therefore requires analysis to be undertaken by domain experts. In this backdrop, the Authority appointed M/s KITCO to examine the overall project cost submitted by GIAL, Mopa, Goa. The complete report of the independent study conducted by M/s KITCO is detailed in **Appendix 1** of this Consultation Paper.

5.3.3 M/s KITCO as a part of its examination has analyzed a total Capital Expenditure of Rs. 4,304.70 crores out of total capital expenditure of Rs. 4,494.65 crores submitted by GIAL, Mopa, Goa. The list of items not forming part of M/s KITCO's analysis are as follows:

- Financing Allowance for Phase II and Phase III amounting to Rs. 15.44 crores and Rs. 51.45 crores respectively.
- General Capex of Rs. 25 crores each year totaling Rs. 125 crores for the First Control Period

Table 35: Reconciliation between the Capex submitted by GIAL, Mopa, Goa and CAPEX analyzed by M/s KITCO

(Rs. in crores)

Particulars	Amount
Amount considered by M/s KITCO for its analysis	4,304.70
Add: Financing Allowance for Phase II	15.44
Add: Financing Allowance for Phase III	52.25
Add: General Capex	125.00
Amount submitted by GIAL, Mopa, Goa (para 5.2.1)	4,494.65
Add: Round off difference	2.74
Project wise amount submitted by GIAL, Mopa, Goa (Table 32)	4,497.39

5.3.4 The independent study conducted by M/s KITCO analyzed the submissions made by GIAL, Mopa, Goa regarding CAPEX proposed for the First Control Period and examined the need for the proposed Project and its capacity including assessment of cost-effective alternatives, whether the building standards and designs are in line with IMG/IATA norms and the reasonableness of the proposed cost with reference to the tentative

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ceiling as decided by the Authority. The independent study has the following observations and recommendations with regards to the cost estimates proposed for the CAPEX of the First Control Period which are summarized below:

Hard Cost

a) Airside Pavement (Runway, Taxiways and Apron)

The Apron area considered for evaluation by M/s KITCO is 7,93,241 sqm for Phase I & Phase II and 35,000 sqm for Phase III as submitted by GIAL, Mopa, Goa. M/s KITCO as per AERA normative approach order No. 07/2016-17 issued on 13th June 2016, has rationalized the normative cost submitted by GIAL, Mopa, Goa which is explained and summarized as follows:

- M/s KITCO has considered inflation adjusted normative cost for Pavement in FY 2021-22 (based on actual Wholesale Price Index (WPI) inflation rates for period FY 2015-16 to FY 2020-21) and included 6% adjustment for the impact of GST as given in the table below:

Table 36: Inflation Adjusted Normative Cost for Apron

Normative Cost (INR per Sq.m)	FY16	FY17	FY18	FY19	FY20	FY21
Apron (A)	4,700					
WPI Index (B)*	109.70	111.60	114.90	119.80	121.80	123.40
Inflation adjusted Cost (C=A x B/109.70)	4,700	4,781	4,923	5,133	5,218	5,287

*Source: <https://eaindustry.nic.in/default.as>

Table 37: Inflation Adjusted Normative Cost for Pavement

Particulars (in Rs.)	Amount (Rs.)
Normative Cost for Airside Pavement considered in FY 2020-21 (A)	5,287.00/Sq.m
Inflation considered for FY 2021-22 (B)*	7.14%
Inflation adjusted Normative Cost in FY 2021-22 (C)=[Ax(1+B)]	5,664.00/Sq.m
Adjustment for impact of GST (D)**	6%
Final cost in FY 2021-22 [C x (1 +D)]	6,004.00/Sq.m

*Average of WPI inflation for FY 2020-21 and FY 2021-22

** Normative cost as per AERA Order No.7/2016-17 dated 13th June 2016 includes the prevalent tax of 12%, additional 6% provided to account for the impact of GST as against 18%

Table 38: Inflation Indexed Rate considered for Phase III- Airside Pavement

Particulars	FY 23	FY 24	FY 25	FY 26
WPI Inflation	9.70%	3.30%	3.30%	3.30%
Per Sq.m cost in INR	6,586	6,804	7,028	7,260

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Table 39: Cost Proposed by M/s KITCO for Airside Pavement for the First Control Period

Description	Inflation adjusted unit rate (Rs. per Sq.m) as per M/s KITCO	Quantity (Sq.m)	Amount claimed by GIAL, Mopa, Goa (Rs. in crores)	Amount recommended by M/s KITCO (Rs. in crores)	Remarks by M/s KITCO
(a) Cost of Airside Pavement		7,93,241 (Phase I & II)	525.94 (Phase I & II)	524.00 (Phase I & II) (Normative Cost)	GIAL, Mopa, Goa has incurred Rs. 50 crores for extra width of 22 mtr for parallel taxi way to be used as Emergency Runway. It can be used as Emergency runway only after installation of all equipment and DGCA approval. Accordingly, this CAPEX can be allowed (in absolute terms) when assets is put to use.
				Less: 50.00	
				474.00	
	7,260.00 (Phase III) (Inflation adjusted normative rate)	35,000 (Phase III)	63.00 (Phase III)	25.41 (Phase III)	
(b) Prolongation cost due to restraints caused by National Green Tribunal (NGT) & Hon'ble Supreme Court of India			28.77 (Phase I)	28.77 (Phase I)	The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has recommended this cost which has been approved by GoG.
(c) Additional Overhead (OH) charges due to scope change			13.99 (Phase I)	- (Phase I)	It is not to be considered, as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So,

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Description	Inflation adjusted unit rate (Rs. per Sq.m) as per M/s KITCO	Quantity (Sq.m)	Amount claimed by GIAL, Mopa, Goa (Rs. in crores)	Amount recommended by M/s KITCO (Rs. in crores)	Remarks by M/s KITCO
					remobilization of resources related cost not applicable.
Total (a+b+c)			631.70	528.18	

b) Passenger Terminal Building (PTB) including Fit Outs

GIAL, Mopa, Goa had submitted that the warm shell for PTB corresponding to 7.7 MPPA amounting Rs. 780.69 crores is commissioned in the FY 2022-23 and Fit Outs amounting to Rs. 108.81 crores for Phase II is expected to be commissioned in the FY 2023-24.

M/s KITCO has worked out the justifiable cost based on following:

- a) Cost allowed for various other PPP airports like Hyderabad International Airport Limited (HIAL), Bangalore International Airport Limited (BIAL), Delhi International Airport Limited (DIAL) by AERA, based on the studies conducted by Independent Consultants.
- b) Terminal Building Cost considering the design and specifications provided by GIAL, Mopa, Goa

On the basis of above two factors, the cost of Phase I & Phase II is considered justified. During the review of cost of PTB for Phase III, M/s KITCO has adopted the same procedure that had been adopted to calculate the cost for the Airside Pavement. M/s KITCO has considered the inflation adjusted rate per sq.m for the Phase III expansion as shown in the below table:

Table 40: Inflation Indexed rate considered for Phase III - PTB

Particulars	FY 23	FY 24	FY 25	FY 26
WPI Inflation	9.70%	3.30%	3.30%	3.30%
Cost Per Sq.m (INR)	131,500*	135,840	140,322	144,953

Source: Survey of Professional Forecasters on Macroeconomic indicators – Results of 80th Round (RBI)

**Cost per sq.m by GIAL, Mopa, Goa in Phase I & Phase II*

Table 41: Cost Proposed by M/s KITCO for PTB for the First Control Period

Description	Inflation adjusted unit rate (Rs. per sq.m) as per M/s KITCO	Quantity (sq.m)	Amount submitted by GIAL, Mopa, Goa (Rs. in crores) including GST	Amount recommended by M/s KITCO (Rs. in crores) including GST	Remarks by M/s KITCO
(a) Cost for PTB	1,31,500	67,726	888.87 (Phase I & II)	888.87 (Phase I & II)	Cost Justified as per analysis

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Description	Inflation adjusted unit rate (Rs. per sq.m) as per M/s KITCO	Quantity (sq.m)	Amount submitted by GIAL, Mopa, Goa (Rs. in crores) including GST	Amount recommended by M/s KITCO (Rs. in crores) including GST	Remarks by M/s KITCO
	1,44,953 (Inflation adjusted normative cost)	25,000	369.50 (Phase III)	362.38 (Phase III)	Inflation adjusted cost
(b) Prolongation cost due to restraints caused by NGT & SCI			32.78 (Phase I)	32.78 (Phase I)	The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has recommended this cost which has been approved by GoG.
(c) Additional Overhead (OH) charges due to scope change			15.95 (Phase I)	- (Phase I)	It is not to be considered as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So, remobilization of resources related cost not applicable.
Total (a+b+c)			1307.10	1284.03	

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c) Airside Buildings, Roads and Drainage Systems

M/s KITCO on analysis of the cost relating to the Airside Buildings, Roads and Drainage systems has proposed the following:

Table 42: Cost Proposed by M/s KITCO for Airside Buildings, Roads and Drainage Systems for the First Control period

(Rs. in crores)

Sl. No.	Particulars	Amount Claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
a.	Storm water drainage system	107.34		Length of RCC Drain for entire area considered is 19.126 km. As per the direction of Hon'ble Supreme Court/ NGT, the complete drainage plan was revisited and additional provision of culverts, manhole was also included, other than drainage works. The cost was checked and found to be reasonable.
b.	Roads (Airside Road, Cross Service Roads at both east and west of parking stands, Vehicle Turn Pads in Head of stand Road	38.18		As per GIAL, Mopa, Goa for flexible pavement of 14.015 km, 2 lane road, rate adopted is Rs. 3632/sqm including marking, signage etc. all complete. As per MoRTH, for flexible pavement, rate per sqm comes to Rs. 4632/-, (considering BC:40mm, DBM: 60mm and SSB:250mm). Hence, rate considered is found reasonable.
c.	Buildings & Other Airside Infrastructure, Fire station, Sub-station, Pump house, NAVAIID, Utility building, DG yard, STP, boundary wall, Workshop, Watch Tower and Morcha) Washing & Hot treatment area	75.21		For service building with Civil works, MEP and other service-related requirements, rates adopted are found to be reasonable considering DSR rates.
d.	MEP works (Runway, taxiway lighting, AGL system, CCTV system and IT works, HT Electrical works, Fire Hydrant Line)	38.20		Comparing with similar airside facilities airport the rates adopted for MEP works at Airside are found reasonable.
e.	Installation of Gabion wall	20.36		Gabion walls provided with heights varying from 10.40 m to 18.40 m. Comparing the rate of Maccafferri Terramesh and other related components with similar project values is found reasonable.

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Sl. No.	Particulars	Amount Claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
A	Sub Total (a to e)	279.29	279.29	As the rates adopted by GIAL, Mopa, Goa are comparable with the rates worked out by KITCO comparing CPWD/ MoRTH/ Similar projects the amount submitted by GIAL, Mopa, Goa under the head Airside Buildings, Roads and Drainage system is found justified.
f.	Prolongation Cost by EPC due to restraints imposed by NGT & Hon'ble Supreme Court of India	14.48 (Phase I)	14.48 (Phase I)	The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has recommended this cost which has been approved by GoG.
g.	Additional OH charges by EPC due to scope change	7.04 (Phase I)	- (Phase I)	It is not to be considered as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So, remobilization of resources related costs are not applicable.
B	Sub Total (A+f+g)	300.81	293.77	-
h.	GST @18%	54.14	52.88	-
C	Sub Total (B+h) including GST	354.95	346.65	-
i.	Airside additional works in Phase III	4.50	-	Detailed estimate not provided for analysis. Hence, not admitted
	Total (C+i)	359.45	346.65	-

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d) Site Preparation/Earth Work:

Cost of Site Preparation/Earth Work is as follows:

Table 43: Cost proposed by M/s KITCO for Site Preparation/Earth Work for the First Control Period

(Rs. in crores)

Particulars	Quantity (m ³)	Rate (Rs. per m ³)	Amount submitted by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
a) Earth work excavation in ordinary soil	1,17,00,000*	225.00**	263.25	263.25	<p>* Total quantity considered in the tender assuming ordinary soil and normal excavation methodology. ** For the purpose of Amendment 1 to EPC contract post Hon'ble Supreme Court of India and Hon'ble High Court/NGT stay order and related delays, as on Jan 2019 (immediately before Hon'ble Supreme Court of India stay order, ~40 Lakh cubic meters of excavation was completed at contracted rate but out of that only ~0.6 lakh cubic meter could be filled due to the restriction on tree felling and consequently unavailability of filling sites. This balance excavated earth was stored within the site at various locations available for filling and remained there for more than one year during the stay order, exposed to natural elements including monsoon rains.)</p> <p>While revised rates were worked out for remaining cut & fill quantity of ~76.87 lakhs cubic meters, a reduced rate for re-transport of balance quantity already excavated and stored for refilling was necessitated, and a rate of Rs. 117 per cubic meter was agreed for re-transportation and filling as the earth had to be picked up through earth moving equipment and transported to intended fill locations before processing and filling. This rate was lower than amended composite Cut & Fill rate of Rs. 225 as the earth was already excavated and was only to be transported and compacted. The amended rate so arrived was inclusive of steep increase in diesel price during this intervening period and earthwork rates primarily consists around 60% on account of diesel since the machines are primarily running on diesel. Diesel prices moved</p>

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Particulars	Quantity (m ³)	Rate (Rs. per m ³)	Amount submitted by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
					<p>up from Rs. 54 per liter to Rs. 72 per liter, which was the primary factor.</p> <p>In addition, an idling claim of Rs. 10.62 crores was also agreed to be paid as most of the machineries used for Earthwork (Rippers etc.) were kept at site due to the uncertainty of lifting of stay order Hon'ble Supreme Court of India till June, 2019.</p> <p>For the purpose of ease and enabling measurements, all these above factors were agreed to be captured in terms of composite rate for entire quantity of earthwork at a rate of Rs. 225 per cum from Rs. 129 per cum (as per original EPC contract) to arrive at the price in Amended EPC contract, Amendment 1 (As per revised schedule 3A & 3B).</p>
b) Earth work excavation in rock					* Quantity allowed by GIAL, Mopa, Goa as rock requiring specialized excavation methodology
i) Ripping	1,04,38,314*	51.00**	53.24	53.24	** Rate as per the conditional clause submitted by EPC during tendering as per item no. 2.1.2 (a) & (b).
ii) Crushing	85,24,748*	161.00**	137.25	137.25	
c) Earth work initiation charge			47.52	47.52	
d) Prolongation Cost due to restraints imposed by NGT & Hon'ble Supreme Court of India			31.31 (Phase I)	31.31 (Phase I)	<p>The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has recommended this cost which has been approved by GoG.</p>

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Particulars	Quantity (m ³)	Rate (Rs. per m ³)	Amount submitted by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
e) Additional Overhead (OH) charges due to scope change			15.23 (Phase I)	- (Phase I)	Not admitted as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So, remobilization of resources included related cost not applicable.
Total (a+b+c+d+e)			547.80	532.57	
Total incl. GST@18%			646.41	628.43	

e) Administrative Office Building & Site Office

Cost of Administrative Office Building & Site Office is as follows:

Table 44: Cost proposed by M/s KITCO for Administrative Office Building and Site Office for the First Control Period

(Rs. in crores)

Sl. No.	Particulars	Amount Claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
a.	Building Works	35.95	35.95	Justified as per the similar works executed, considering the rate per sqm as Rs. 65,000/- (As per CPWD Schedule of Rates)
b.	Profit, Preliminaries, Labor cess	0.69	-	Already included in the rates adopted. Hence not allowed
c.	External works	4.29	4.29	As per the similar works executed, the amount for Gabion wall is justified.
A	Sub Total (a to c)	40.93	40.24	
d	Prolongation Cost by contractor due to restraints by NGT & Hon'ble Supreme Court of India	2.45 (Phase I)	2.45 (Phase I)	The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has

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Sl. No.	Particulars	Amount Claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
				recommended this cost which has been approved by GoG.
e	Additional Overhead (OH) charges due to scope change	1.19 (Phase I)	- (Phase I)	It is not to be considered as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So, remobilization of resources related cost not applicable.
B	Sub Total (A + d + e)	44.57	42.69	
f	GST @18%	8.02	7.68	
	Total (B + f)	52.59	50.37	Amount admitted by KITCO excluding item (b) & (e)

f) ATC Technical Block & ATC Tower

Cost of ATC Technical block & ATC tower is as follows:

Table 45: Cost proposed by M/s KITCO for ATC Technical block & ATC tower for the First Control Period

(Rs. in crores)

Particulars	Amount claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
(a) ATC Technical block of built-up area 3826 sqm including MEP and other services and with external envelope	45.26	41.80	Rate adopted by GIAL for ATC TB including civil, structural and MEP (considering the enhanced electromechanical and Extra Low Voltage (ELV) infrastructure) and with external envelope comprising of steel and aluminum sections and 46 mm thick DGU unitized glass facade is analyzed comparing similar projects executed and the technical backup requirements. The final amount justified and recommended is Rs. 41.80 Cr.
(b) ATC Tower of built-up area 721sqm with MEP and other services and with external envelope.	35.98	27.78	Rate adopted by GIAL for ATC Tower including civil, structural (considering the height of 50 mtrs approx. and related design considerations) and MEP (considering the enhanced electromechanical and Extra Low Voltage (ELV) infrastructure and with external envelope comprising of heavy steel and aluminum sections and 46 mm thick DGU unitized glass facade is analyzed comparing similar projects executed and the technical backup

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Particulars	Amount claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
			requirements. The final amount justified and recommended is Rs. 27.78 Cr.
Sub Total A=(a+b)	81.24	69.58	
(c) Prolongation cost due to restraints imposed by NGT & Hon'ble Supreme Court of India	4.51 (Phase I)	4.51 (Phase I)	The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has recommended this cost which has been approved by GoG.
(d) Additional Overhead (OH) charges due to scope change	2.19 (Phase I)	-	It is not to be considered as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So, remobilization of resources related cost not applicable.
Sub Total (B=A+c+d)	87.94	74.09	
(e) GST @ 18%	15.83	13.34	
Total C=(B+e)	103.77	87.43	

Table 46: Breakup of cost assessed by M/s KITCO for ATC Technical block and ATC Tower

(Rs. in crores)

A) ATC Technical Block of built-up area 3826 sq. mtr. Including MEP and other services and with external envelope.	Amount
Cost for civil, structural, flooring and finishes= 3826 sq. mtr. X Rs. 35,000 * per sq.m	13.39
External envelope (consisting of 46 mm thick DGU glazing and associated structural supports)	9.43
Furniture and Cabling	2.90
MEP and ELV services (considering enhanced MEP and ELV infrastructure)	16.08
Total	41.80
B) ATC Tower of built up area 721 sq. mtr with MEP and other services and with external envelope.	Amount
Cost for civil, structural, flooring and finishes= 721 sq. mtr. X Rs. 45,000* per sq. mtr	3.24
External envelope (consisting of 46 mm thick large panel DGU glazing and associated heavy structural supports)	20.24
MEP and ELV services (considering enhanced MEP and ELV Infrastructure)	4.30
Total	27.78

**Rate (excluding GST) as per CPWD Schedule of rates*

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The Authority observes that the basic cost of ATC technical Block & ATC tower was higher than the cost of the Terminal Building. Certain additional costs incurred by GIAL, Mopa, Goa as below has already been considered by the Authority

- Extra height of control tower,
- Utilization of high-strength steel due to the tower's height, and
- Elevated expenses for Aluminum Glazing to counter the impact of wind pressure.

Cost after consideration of above factors is still higher than the cost per sq.m considered by the Authority for Terminal Building. Accordingly, these costs have been rationalized by M/s KITCO as detailed in Table 46.

g) Main Access Road & Car Park

Cost analysis of Main Access Road and car park is as follows:

Table 47: Cost proposed by M/s KITCO for Main Access Road & Car Park for the First Control Period

(Rs. in crores)

Sl. No.	Particulars	Length of road (in KM)	Amount claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
a.	Main access road to terminal / car park including, intersections, rotary, Marking, signage and road furniture all complete	0.84	13.35	35.65	Total length of road = 4.723km (Item a to d). Width of road 5 lane & 2 lane As per MoRTH , for flexible pavement, rate per sqm comes to Rs. 4632/-, considering BC:40mm, DBM:60mm and SSB:250mm As per the details submitted by GIAL, Mopa, Goa, the rate per sqm including marking, signages and etc. all complete comes to Rs. 4,597.56/- As the amount claimed by GIAL, Mopa, Goa is within the amount as per the rate adopted based on MoRTH, the amount claimed is justified. (a to d)
b.	Terminal forecourt, waiting lane, passenger drop-off, pick up points including drainage, marking, signage and road furniture all complete	0.663	8.94		
c.	Service roads on land side including marking, signage and road furniture all complete	2.00	8.94		
d.	Other approach roads on landside including Marking, Signage and Road furniture all complete	1.22	4.42		
e	Road connecting express way to PTB		50.97		
I	Sub Total (a+b+c+d+e)		86.62	86.62	

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Sl. No.	Particulars	Length of road (in KM)	Amount claimed by GIAL, Mopa, Goa	Amount recommended by M/s KITCO	Remarks by M/s KITCO
f	Prolongation cost due to restraints by NGT & Hon'ble Supreme Court of India		2.14 (Phase I)	2.14 (Phase I)	The delays in project extension and resulting additional costs, caused by constraints imposed by the NGT and the Hon'ble Supreme Court of India, cannot be solely attributed to GIAL, Mopa, Goa. The endorsement process, supported by the recommendation of the Independent Engineer, M/s Engineers India Limited (EIL) is vital indicator that GIAL, Mopa, Goa adhered to regulatory approvals. It is key to consider that certain external factors, like subsequent court interventions significantly contributed to the extended project timeline and increased expenses. Further it is noted that Independent engineer appointed by GoG has recommended this cost which has been approved by GoG.
g	Additional Overhead (OH) charges due to scope change		1.04 (Phase I)	- (Phase I)	It is not to be considered as machinery to carry out additional works including mobilization, site office and other infrastructure was already available. So, remobilization of resources related cost not applicable.
II	Sub Total (I+f+g)		89.80	88.73	
h	GST @ 18%		16.16	15.98	
	Total (II + h)		105.96	104.71	Amount admitted by KITCO excluding item (g)
i	Car Park		3.00	-	Not analyzed as not forming part of aeronautical.

h) Additional works

Cost analysis of Additional work is as follows:

Table 48: Cost proposed by M/s KITCO for Additional Works for the First Control period

(Rs. in crores)

Sl. No.	Particulars	Amount claimed by GIAL, Mopa, Goa	Amount recommended by KITCO	Remarks By KITCO
I	Additional works for Phase I			
a.	Police Station	4.79	4.79	Justified based on similar work undertaken by KITCO. Hence admitting the amount submitted by GIAL, Mopa, Goa
b.	Taxi driver's facility, AEP, Post office, Bank, Tensile Fiber covered footpath, Canteen etc.,	5.41	1.79	Out of Rs. 5.08 Crore submitted by GIAL, Mopa, Goa details submitted is only for Rs. 1.79 Crore as given below which is justified by KITCO: Canteen : Rs. 1.00 Cr

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SI. No.	Particulars	Amount claimed by GIAL, Mopa, Goa	Amount recommended by KITCO	Remarks By KITCO
				AEP : Rs. 0.41 Cr Taxi Driver Facility: Rs. 0.38 Cr Total : Rs. 1.79 Cr
c.	Material Storage yard (2000 Sq.m)	5.08	5.08	Admitted as per details submitted by GIAL, Mopa, Goa
d.	Infrastructure Tax	1.69	1.69	Tax paid to Mopa, Airport Development Authority.
e.	Tree Translocation	0.85	0.66	Admitted as per the PO submitted by GIAL, Mopa, Goa and as per the requirement of Hon'ble Supreme Court of India.
f.	Landside Staff Canteen	0.85	0.85	Admitted as per the PO submitted by GIAL, Mopa, Goa
g.	Central Store	0.85	0.26	Admitted as per the PO submitted by GIAL, Mopa, Goa
h.	Post Office (20 sqm) & Bank	0.85	0.85	Admitted as per the PO submitted by GIAL, Mopa, Goa
i.	Miscellaneous	1.69	1.69	Admitted as per the PO submitted by GIAL, Mopa, Goa
j.	ASR/MSSR Building & Other Airside Infrastructure	5.63	5.63	Admitted as per the PO submitted by GIAL, Mopa, Goa for items (j) to (t).
k.	MT and GSE WS Area (1000 SQM)	5.09	5.09	
l.	Compliance with new conditions imposed by Hon'ble Supreme Court of India	7.63	7.63	
m.	Art works -Subodh Kerkar	1.69	1.69	
n.	Signages- NH66	1.69	1.69	
o.	Signages - Approach Road	0.85	0.85	
p.	Signages- Village Road	0.85	0.85	
q.	Signages & Installations- Airport	2.96	2.96	
r.	Horticulture	2.33	2.33	
s.	Pax Experience	3.28	3.28	
t.	City side Development	4.23	4.23	
A	Sub Total (a to t)	57.63	53.89	
u.	GST @18%	10.37	9.70	
B	Sub Total (A+u)	68.00	63.59	
v.	Additional works for Phase III	2.00		Cost not admitted as no details available for analysis.
C	Sub Total (v)	2.00		
	Total (B+C)	70.00	63.59	

i) Permanent Water & Electricity

For Permanent Water & Electricity infrastructure, GIAL, Mopa, Goa has deposited Rs. 20 Cr. to GoG. Being a statutory levy, the same is recommended to be considered.

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j) Construction of Aviation Skill Development Center (ASDC)

As per the Concessionaire Agreement, development, operation and maintenance of ASDC and ancillary facilities has been done by GIAL, Mopa, Goa. Thus, recommended to take this into consideration, as it aligns with the specifications of the concession agreement.

Details of analysis and recommendations are given below:

Sl. No	Description of item	Cost		Variance (A) – (B)
		As per GIAL (A)	As per KITCO (B)	
1	ASDC	8.00	7.66	0.34

Soft Cost

k) Design Consultancy & Project Management Consultancy (PMC) Expenses

Amount analysed by M/s KITCO for Design Consultancy & PMC expenses are as follows:

Table 49: Cost proposed by M/s KITCO for Design consultancy & PMC expenses

(Rs. in crores)

Description	Amount claimed by GIAL, Mopa, Goa (Phase I, II & III)	Amount recommended by KITCO	Remarks by M/s KITCO
Design Consultancy Charges	14.00	14.00	Admitted as per PO submitted by GIAL, Mopa, Goa.
PMC expenses towards Airside works, PTB and Landside works	a) 82.00 Phase I b) 13.90 Phase II c) 36.00 Phase III	a) 81.59 Phase I b) 5.22 Phase II c) 21.95 Phase III	a) As clause 3.2 (Technical Criteria) of RFQ for selection of PMC Consultants for Mopa, Goa Project was found to be restrictive, recommending a deduction of 0.5 % from the PMC fee of Rs. 82 crores assessed. b) As Phase II works includes only additional fit outs required to attain 7.7 MPPA, and all items included are Supply, Installation, Testing and Commissioning (SITC), only 3% of CAPEX submitted by GIAL, Mopa, Goa for Phase II allowed towards PMC charges. c) Phase III works considers increase in PTB area with fit outs and expansion in Apron area. This being an extension of already adopted procedures of contracting, 5% of CAPEX submitted by GIAL, Mopa, Goa for Phase III considered for design and PMC charges.
Fee for Independent Engineer Services	16.00	15.07	Considered Rs. 15.07 crores as per PO submitted by GIAL, Mopa, Goa (against claim amount of Rs. 16 crores) and approved by GoG
Total	161.90	137.83	

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1) Pre-Operative Expenses

Pre-Operative expenses submitted by GIAL, Mopa, Goa is analyzed as follows:

Table 50: Cost proposed by M/s KITCO for Pre-Operative expenses

(Rs. in crores)

S.No	Description of item	Cost submitted by GIAL, Mopa, Goa including cost to be incurred for International Operations	Amount recommended by M/s KITCO	Remarks by M/s KITCO
I	Phase I			
1	Manpower related cost	96.65	96.65	Cost admitted as per details submitted by GIAL, Mopa, Goa/ CA certificate for amount incurred. *The cost provided by GIAL, Mopa, Goa includes security coverage for the entire area, encompassing both land parcels and the airport premises. As a result, only 2/3rd of the total cost is allocated to security expenses specifically related to the airport premises. ** Since the legal charges primarily pertain to complying with the orders of the NGT and the Hon'ble Supreme Court of India, 2/3rd of the cost is allocated for these expenses.
2	Other Consultancy Charges	38.07	38.07	
3	Others (Incl. Admin & Finance Charges)	87.37	87.37	
4	Security Cost	15.60	*10.40	
5	Legal Charges	7.31	**4.87	
6	Operational Readiness and Airport Transfer (ORAT)	14.00	14.00	As submitted by GIAL, Mopa, Goa
	Total for Phase I	259.00	251.36	-
II	Phase II	3.47	-	No details submitted by GIAL, Mopa, Goa for analysis. Hence, not allowed.
III	Phase III	3.30	-	
	Total (Phase I to III)	265.77	251.36	-

m) Contingency

The provision of contingencies is towards physical contingencies including any modification to the scope of the work and unforeseen work. Considering the magnitude of the project, a provision of 3% towards contingencies is considered adequate (Rs. 9.55 crores towards Phase-II and Rs. 22.50 crores towards Phase-III totaling to Rs. 32.05 crores) as same is presently being followed by Govt. organizations such as CPWD etc.

n) Financing Allowance

GIAL, Mopa, Goa has submitted financing allowance as part of capital expenditure of the First Control Period. The computation of financing allowance by GIAL, Mopa, Goa has presented below:

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Table 51: Financing Allowance as submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Financial Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Total
Capital Work in Progress (CWIP)-Opening Balance	-	12.38	25.18	156.95	316.70	631.39	1,456.59	
Addition	12.38	12.80	131.77	159.75	314.69	825.20	1,691.49	
Capitalization	-	-	-	-	-	-	3,148.07	3,148.07
Closing WIP	12.38	25.18	156.95	316.70	631.39	1,456.59	-	
Average CWIP	6.19	18.78	91.07	236.83	474.05	1,043.99	728.30	
Financing Allowance	0.63	1.93	9.69	25.53	50.96	112.23	247.20	448.17
Total								448.17

M/s KITCO, based on the revised capital expenditure as proposed by it, has arrived at the financing allowance by applying the formula as provided under section 5.2.7 of the AERA guidelines 2011. Further for the purpose of Cost of Debt, M/s KITCO has adopted the rates provided by GIAL, Mopa, Goa. The estimated Financing allowance worked out to be Rs. 306.76 crores as shown in the table below:

Table 52: Financing Allowance calculation proposed by M/s KITCO for the First Control Period

(Rs. in crores)

Particulars	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Total
Rate of interest	10.25%	10.25%	10.55%	10.78%	10.75%	10.75%	10.73%	
Opening WIP	-	13.01	27.80	169.45	356.08	725.96	1,673.56	
Capital Expenditure	12.38	12.80	131.77	159.75	314.69	825.20	1,691.49	3,148.08
Capital Receipts	-	-	-	-	-	-	-	
Commissioned Assets							3,365.05	
Closing WIP (before FA)	12.38	25.81	159.57	329.20	670.77	1,551.16	-	
Financing Allowance (FA)	0.63	1.99	9.88	26.88	55.19	122.40	89.79	306.76
Closing WIP (after FA)	13.01	27.80	169.45	356.08	725.96	1,673.56		

o) Debt Service Reserve Account (DSRA)

The Debt Service Reserve Account (DSRA) is a reserve account specifically set aside to make debt payments in the event of a disruption of cash flows to the extent that debt cannot be serviced. GIAL has submitted DSRA of Rs. 89 crores as part of capital expenditure for the First Control Period. M/s KITCO noted that DSRA is not a part of CAPEX and hence recommended not to consider the same.

p) The analysis and remarks on the variations in components of the Capital expenditure by M/s KITCO is summarized below in Table 53 together with detailing of reasons for other items not elaborated above.

Table 53: KITCO recommendations on Project wise capital expenditure

(Rs. in crores)

Sl. No	Particulars	As per Revised MYTP submitted by GIAL, Mopa, Goa	Cost assessed by M/s KITCO	Variations	Remarks
1	Airside Pavement (Runway, Taxiways and Apron)	631.70	528.18	103.52	Refer para 5.3.4 a)

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Sl. No	Particulars	As per Revised MYTP submitted by GIAL, Mopa, Goa	Cost assessed by M/s KITCO	Variations	Remarks
2	Passenger Terminal Building including Fit Outs (for 7.7 MPPA) (Phase I, II & III)	1,307.10	1,284.03	23.07	Refer para 5.3.4 b)
3	Airside buildings, Airside roads & Drainage System (Phase I & III)	359.45	346.65	12.80	Refer para 5.3.4 c)
4	Site Preparation/ Earthwork	646.41	628.43	17.98	Refer para 5.3.4 d)
5	Administrative building & Site office	52.59	50.37	2.22	Refer para 5.3.4 e)
6	ATC Technical Block and Tower	103.77	87.43	16.34	Refer para 5.3.4 f)
7	Main Access Road and Car park	108.97	104.71	4.24	Refer para 5.3.4 g)
8	Additional Works (Phase I & III)	70.00	63.59	6.41	Refer para 5.3.4 h)
9	Permanent Water & Electricity	20.00	20.00	-	Refer para 5.3.4 i)
10	ASDC	8.00	7.66	0.34	Refer para 5.3.4 j)
A	Sub Total (1 to 10)	3307.99	3121.05	186.92	
11	Design Consultancy & PMC Expenses	145.90	122.76	23.14	Refer para 5.3.4 k)
12	Independent Engineer Services	16.00	15.07	0.93	Refer para 5.3.4 k)
13	Pre-operative Expenses (Phase I, II & III)	265.77	251.36	14.41	Refer para 5.3.4 l)
14	Contingencies (Phase I & III)	32.05	18.38	13.66	Refer para 5.3.4 m)
B	Sub Total (11 to 14)	459.72	407.58	52.15	
15	Financing Allowance	448.00	306.76	141.24	Refer para 5.3.4 n)
16	DSRA	89.00	-	89.00	Refer para 5.3.4 o)
C	Sub Total (15 & 16)	537.00	306.76	230.24	
	Grand Total (A+B+C)	4,304.71	3,835.38	469.33	

Note: The soft costs will be apportioned among the projects based on the proportion of each project's hard costs to the total project cost.

5.3.5 The Authority proposes to consider the recommendation of the M/s KITCO report for the cost heads as above, together with making certain changes in the following cost heads as detailed below:

- Airside Pavement (Runway, Taxiways & Apron)
- Passenger Terminal Building including Fit Outs

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- Design Consultancy & PMC Expenses
- Contingencies
- Financing Allowance

Airside Pavement (Runway, Taxiways & Apron)

5.3.6 The Authority notes that M/s KITCO has computed the inflation adjusted normative cost for Pavement in FY 2021-22 (based on actual WPI inflation rates for period FY 2015-16 to FY 2020-21) including 6% adjustment for GST impact as shown in the Table 37 above. Further M/s KITCO has adjusted the final cost (per sq. m) of FY 2021-22 with the inflation rates as per the results of the 80th round of survey of professional forecasters on macroeconomic indicators (RBI) to arrive at the per sq. m cost for FY 2022-23 and FY 2025-26 capitalizations (Refer Table 38). However, for the inflation rates of FY 2022-23 and FY 2025-26, the Authority proposes to consider the recent Results of the Survey of Professional Forecasters on Macroeconomic Indicators i.e., the 82nd Round released on 8th June 2023 published by the RBI.

5.3.7 Thus, in order to determine the cost per sqm, the Authority proposes to consider the inflation rates as per Chapter 7 of this CP, as stated below:

Table 54: Inflation Indexed rate considered by the Authority for calculating cost for Airside Pavement (Runway, Taxiways and Apron)

Particulars	FY 23	FY 24	FY 25	FY 26
WPI Inflation	9.60%	1.90%	4.00%	4.00%
Per sqm cost Rs.	6,581	6,706	6,974	7,253

Table 55: Cost Proposed by Authority for Airside Pavement (Runway, Taxiways and Apron)

(Rs. in crores)

Particulars	Phase I and II	Phase III	Total
Total Sqm	793,241	35,000	
Rate per Sqm	6,581	7,253	
Cost	522.01	25.39	547.40
Less: Cost for area not put to use (Refer 5.3.4 a))	50.00	-	50.00
Net Cost	472.01	25.39	497.40
Prolongation cost due to restraints caused by NGT & SCI (Phase I)	28.77	-	28.77
Additional Overhead (OH) charges due to scope change (Phase I)	-	-	-
Total	500.78*	25.39	526.17

**Cost proposed by the Authority for Airside Pavement (Runway, Taxiway and Apron) for Phase I is Rs. 435.53 crores and Phase II is Rs. 65.25 crores.*

5.3.8 This has resulted in a decrease of Rs. 2.01 crores from the estimate approved by M/s KITCO.

Passenger Terminal Building including Fit Outs

5.3.9 The Authority on examination of cost for the PTB, proposes to adopt the same procedure that has been adopted to calculate the cost of Runways, Apron & Taxiways i.e., to consider the inflation rates as explained in Chapter 7 of this CP. Therefore, the revised calculation as per the Authority proposals are as follows:

Table 56: Inflation Indexed rate considered by the Authority for calculating cost for Passenger Terminal Building

Particulars	FY 23	FY 24	FY 25	FY 26
WPI Inflation	9.60%	1.90%	4.00%	4.00%
Per Sq.m cost Rs.	131,500	133,999	139,358	144,933

Table 57: Cost proposed by the Authority for PTB

(Rs. in crores)

Particulars	Unit Rate (Rs per Sq.m)	Quantity (Sq.m)	Amount
a) Cost for PTB	Phase- I & II	67,726.00	888.87
	Phase-III (FY26)	25,000.00	362.33
b) Prolongation cost due to restraints caused by NGT & SCI (Phase I)			32.78
c) Additional Overhead (OH) charges due to scope change (Phase I)			-
Total			1,283.98

5.3.10 This has resulted in a decrease of Rs. 0.05 crores from the estimate approved by M/s KITCO.

Design Consultancy & PMC Expenses

5.3.11 The Authority notes that, as detailed in KITCO's analysis on tendering process of Project Management Consultancy Services that while many reputed national agencies, having experience in carrying out similar services in other airports/ infrastructure projects are eligible, the criteria in the RFP was restrictive, resulting in very few participants being considered for evaluation. This has been suitably considered and the value of services proposed to be considered as part of RAB has been reduced appropriately (Refer para 5.3.4 k).

5.3.12 Further, the Authority on examination of the M/s KITCO report notes that the PMC expenses are calculated on the following basis:

- Phase-II PMC expense - 3% of CAPEX submitted by GIAL, Mopa, Goa for Phase II
- Phase-III PMC expense - 5% of CAPEX submitted by GIAL, Mopa, Goa for Phase III

5.3.13 The Authority notes that the Phase II works includes only additional fit outs required to attain 7.7 MPPA, and all items included are Supply, Installation, Testing and Commissioning (SITC) and Phase III includes increase in PTB area with fit outs and expansion in Apron area which is being an extension of already adopted procedures of contracting. Thus, the Authority proposes to consider 3% and 5% for Phase-II and Phase-III respectively, on the CAPEX amount allowed by the Authority for Phase-II and Phase-III as shown in the Table 55 and Table 57 above. Therefore, the revised Hard cost of Phase-II and Phase-III and the total PMC expenses proposed by the Authority for the First Control Period is detailed as follows:

Table 58: PMC expenses computed by the Authority

(Rs. in crores)

Phases	Particulars	Reference	Amount	PMC expenses
Phase-II	Airside Pavements	Table 55	65.25	
	PTB (Fit outs)	Table 32	108.81	
	Total		174.06	5.22
Phase-III	Airside Pavements	Table 55	25.39	
	PTB	Table 57	362.33	
	Airside Buildings	Table 32	4.50	
	Additional works	Table 32	2.00	
	Total		394.22	19.71

5.3.14 Based on the above, the Authority proposes to consider total cost for PMC expense as per Table 58 and for the other components of total Design Consultancy and PMC expenses, the Authority proposes to consider as per M/s KITCO's analysis mentioned in Table 49 above.

Table 59: Cost proposed by the Authority for Design Consultancy and PMC expenses

(Rs. in crores)

Particulars	Phase - I	Phase - II	Phase - III	Total
Design Consultancy Charges	14.00	-	-	14.00
PMC works	81.59	5.22	19.71	106.52
Independent Engineer Services	15.07	-	-	15.07
Total	110.66	5.22	19.71	135.59

Financing Allowance

5.3.15 As per Direction 5 of the AERA Act and the Authority's principles followed in the recent tariff orders, in case of Greenfield Airports the Authority proposes to provide for Financing Allowance. The Authority considers the capital projects that are being commissioned within the First Control Period to be initial phase of capital expenditure and accordingly financing allowance will be calculated for the Projects that are capitalized within the First Control Period of the airport.

5.3.16 The Authority has reviewed the calculations of the financing allowance for Phase-I as recommended by M/s KITCO in its report and has recomputed the financing allowance for Phase-II and Phase-III being considered within this control period.

5.3.17 The Authority vide email dated 13th June 2023 sought for certifications on Financing Allowance for Phase-I and the details of the Cost of Debt from GIAL, Mopa, Goa. Based on the details and certificates provided by GIAL, Mopa, Goa the financing allowance has been recomputed by the Independent Consultant (M/s PKF S&S LLP) as below:

Table 60: Cost of Debt considered by the Authority for calculating the Financing Allowance

Particulars	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Rate of interest	10.25%	10.25%	10.64%	10.81%	10.75%	10.73%	10.69%	9.00%

Table 61: Financing Allowance as proposed by the Authority for Phase I

(Rs. in crores)

Particulars	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	Total
Opening WIP	-	13.01	27.80	167.83	346.22	695.45	1,621.50	141.58	
Capital Expenditure	12.61	16.10	132.47	152.21	296.84	808.67	1,044.02	456.32	2,919.24
Capital Receipts	-	-	-	-	-	-	-	-	
Commissioned Assets	0.23	3.30	2.28	0.18	0.74	0.59	2,613.42	605.00	3,225.79
Financing Allowance	0.63	1.99	9.89	26.36	53.13	117.98	89.47	7.10	306.55
Closing WIP	13.01	27.80	167.83	346.22	695.45	1,621.50	141.58	0.00	-

5.3.18 Furthermore, GIAL, Mopa, Goa has submitted estimate of Financing Allowance for Phase-II and Phase-III as Rs. 15.44 crores and Rs. 52.25 crores respectively. Upon analysis and communication with GIAL, Mopa, Goa via mail dated 13th June 2023, GIAL, Mopa, Goa stated that Phase-II work will commence in early FY 2023-24. The Authority based on the GIAL, Mopa, Goa's submission notes that Phase-II work will start and get commissioned by end of this year. Therefore, the Authority notes that there is no requirement of Financing Allowance for Phase-II.

5.3.19 With respect to Phase-III, the Authority notes that the trigger for expansion for Phase-III is FY 2024-25 therefore, the Authority is of the view that the expenditure for Phase-III shall be incurred from FY 2024-25 and commissioned in FY 2025-26. The Authority assumes that 40% of the approved expenditure for Phase-III will be spent in FY 2024-25 and the remaining will be in FY 2025-26, based on which financing allowance for Phase-III is recalculated as Rs. 15.33 crores as against Rs. 52.25 crores submitted by GIAL, Mopa, Goa.

Other observations on Capital Expenditure

General Capex

5.3.20 The Authority notes that GIAL, Mopa, Goa had submitted Rs. 125 crores as General Capex to be incurred at a rate of Rs. 25 crores each year starting from FY 2023-24. The Authority notes that Manohar International Airport, Mopa, Goa is a newly constructed airport and additional expansion phases which have been included in the capital expenditure plan, as submitted by GIAL, Mopa, Goa and reviewed by M/S KITCO is considered by the Authority as part of Capital Expenditure for the First Control Period.

5.3.21 Upon seeking clarification from GIAL, Mopa, Goa vide email dated 5th July 2023, about the nature of General Capex proposed for the First Control Period, GIAL, Mopa, Goa stated that the General Capex is required for routine maintenance of the airport for various requirements which consists of the recurring expenditures required for a company to continue operating at current state. These requirements may include but not be limited to the following:

- Mandatory Security related expenditure resulting from directions of the regulatory authorities including BCAS and DGCA.
- Re-laying of roads for the airports, especially post the monsoon season
- Unplanned expenditure emerging from the passenger and other requirement
- Replacement requirement due to wear and tear of plant and equipment

5.3.22 Considering the above factors and clarification received from GIAL, Mopa, Goa, the Authority notes that there is no immediate need for significant Capex to be incurred by GIAL, Mopa, Goa. However, to account for any security related upgrades or any regulatory requirements, the Authority deems it appropriate to consider Rs. 10 crores each year as General Capex (Refer Table 62). These funds may only be utilized by GIAL, Mopa, Goa in cases of specific requirements or regulatory mandates related to security or other regulatory needs.

Debt Service Reserve Account (DSRA)

5.3.23 The Authority notes M/s KITCO comment on Debt Service Reserve Account (DSRA) as follows.

“An amount of Rs. 88.96 crores (out of total requirement of Rs.89.00 crores) has been transferred to DSRA after completion of Phase I and COD and progressively till 06th May 2023 by the AO. Further, AO is earning interest @ 7.19% p.a. (weighted average) on quarterly compounding on such deposit. Hence, the return to be provided on the amount in DSRA is to be computed on differential interest i.e., Weighted Average Cost of Capital (WACC) minus 7.19% p.a. (quarterly compounding), as per the applicable guidelines for the first control period up to FY 2027-28. Since DSRA is not a part of CAPEX, therefore same is not being reflected in the amount recommended by M/s KITCO for CAPEX.

5.3.24 While M/s KITCO has not considered this as part of the CAPEX cost, the Authority notes that M/s KITCO has indicated that a return equivalent to the difference between WACC and the interest earned on the deposit is to be given.

5.3.25 The Authority notes the following:

- a. The requirement of DSRA is from the Loan arrangement entered into by GIAL, Mopa, Goa for the purpose of financing the Airport Project. The Authority does not interfere in the manner of financing the airport construction. The Authority notes that different financing arrangements could have different pre-conditions which is primarily the responsibility of the GIAL, Mopa, Goa.
- b. The Authority further notes that GIAL, Mopa, Goa is earning Interest at the rate of 7.25% per annum approximately on Fixed Deposit kept as DSRA.

5.3.26 Hence, the Authority is not convinced of providing any additional return on the DSRA deposit.

Credits available with respect to Goods and Service Tax (GST)

5.3.27 The Authority notes that GIAL, Mopa, Goa would be eligible to claim GST Input Tax Credits on procurement of certain movable property. The Authority expects that the GIAL, Mopa, Goa would properly account for such credits in its submissions in accordance with Chapter V of The Central Goods and Services Tax Act, 2017 at the time of true up of the RAB for the First Control Period. The Authority may examine the accounting of input tax credits and make necessary adjustments in this regard at the time of determination of tariffs for the next Control Period.

5.3.28 Further, the Authority notes the following from the Audited Financial Statements submitted by GIAL, Mopa, Goa for the year ended March 2023.

“The Hon'ble Orissa High Court vide Judgement in W.P.No.20463/2018, in the case of Safari Retreats Private Limited, observed that the provisions of section 17(5)(d) of the CGST Act which put restrictions on claiming of input tax credit are not in line with the objective of the Act, and accordingly, held that if an

assessee is required to pay GST on the rental income arising out of investment on which it has paid GST, it is required to have input credit on the GST under section 17(5)(d) of the CGST Act.

GIAL (the company) will engage in rendering output supplies which are in the nature of letting out space/ facilities to various airline operators and other parties/ concessionaires, in return for consideration, known by different nomenclatures, and are leviable to GST. Hence, in view of the above judgement of the Hon'ble Orissa High Court, the Company is availing the GST ITC in respect of the costs for civil work incurred as part of the project progress. Further, department has filed an appeal in Hon'ble Supreme Court of India against the judgement of Hon'ble Orissa High Court. Pending outcome of judgement of Hon'ble Supreme Court of India, considering the judgement of Hon'ble Orissa High Court and based on the opinion obtained by the Company in this regard, the Management is of the view that GST ITC in respect of such civil work is eligible to be availed by the Company. Having regard to the same, GST ITC has been claimed in GST return and lying as balance to GST ITC unutilised kept in separate ledger in the books of accounts. Also, an intervention application has been filed by GIAL vide IA 139524 /2022 dated 19th September 2022 before Hon'ble Supreme Court of India in the matter of appeal filed by the department against Judgement of Orissa High Court in the matter.

Further a Writ Petition has also been filed by the Company before Hon'ble High Court of Bombay at Panaji, Goa on 18th December 2020, for ITC claim to be allowed of GST in respect of the civil works i.e. works contract service and goods and services received by the Company for construction of immovable property will be used for providing output taxable supplies. The writ was admitted, and numbered WP 99/2021. The matter is awaiting listing for final hearing. During the pendency of the Writ Petition, GIAL, filed a stay application seeking stay of the demand notice as issued under 73 of the CGST Act and on 15th March 2023, the Hon'ble High Court disposed off the stay application by recording that no final orders will be made without seeking leave of the Court.

Considering that, the final decision in the SLP No. 26696/2019 filed by Union of India and other connected matters, may take longer time, the management has taken a considered view for recognition of the project expenditure in terms of the prudent accounting principles and prevailing circumstances and also in view of the fact that various departmental activities under the project are partly completed and partly under completion recognized as CWIP including the value of Input Tax Credit pertaining to the Civil Works as part of cost under respective heads of asset instead of Input GST. However, the management reserves its right to claim ITC in case of favorable decision from the Hon'ble Supreme Court on the above issue. Accordingly, GST ITC on civil works amounting to Rs.36,824.07 lakhs accumulated till 31st March 2023 has been reversed from GST recoverable account and now capitalized against the respective assets/ capital work in progress in the books on accounts during financial year 2022-23."

- 5.3.29** The Authority notes from the above that GIAL, Mopa, Goa has claimed Input Tax credit on the cost of civil works also based on the order of Hon'ble Orissa High court and that this matter is pending before Hon'ble Supreme Court for a final decision. The Authority notes that while GIAL, Mopa, Goa has contended that this is recoverable as per the records maintained for GST purposes and also carried it as a GST recoverable asset in the financial statements till March 2022, the same has been added to Capital Expenditure and accordingly a significant portion of it would be also capitalized as RAB in FY 2022-23 and the remaining in FY 2023-24. The Authority notes that if the GST credit is allowed, considering it as part of RAB would be inappropriate.

However, clarity on this will be available only when a decision on this is pronounced by Hon'ble Supreme Court. Hence, the Authority proposes to consider this as part of Capital Expenditure and consequently RAB, which will be trued up/ adjusted based on the decision on the same. If the same is allowable as a GST credit, the same will be reduced from RAB from the year in which the addition was considered as part of RAB.

User Consultation

5.3.30 The Authority notes that GIAL, Mopa, Goa conducted Airport User Consultation Committee (AUCC) Meeting (refer **Appendix 2** for the Minutes of AUCC meeting) on 19th October 2021 with all the stakeholders and discussed about Capital Expenditure proposed to be undertaken during the First Control Period of FY 2023-24 to FY 2027- 28. The meeting was attended by various airport stakeholders such as Airlines (IndiGo, SpiceJet, Vistara and other airlines), International Air Traffic Association (IATA), Federation of Indian Airlines (FIA), Fuel Farm (BPCL, HPCL), Central Industrial Security Force (CISF), Glenmark Pharma, Celebi, Logistics (Broekman Logistics, Mega Freight) and others.

5.3.31 As per the minutes of the meeting, the Authority observed that GIAL, Mopa, Goa had broadly discussed the following with the stakeholders:

- Importance of Goa, its catchment area, attractiveness and GMR group's expertise in the airport sector
- Master/ Phase I development Plan and the construction progress update
- Present and future capex requirement and their respective means of Finance
- Cost comparison with AERA's benchmark cost

5.3.32 The Authority also notes that several stakeholders had provided feedback, some of which are summarized below:

- IATA raised concerns regarding the means of finance for security related investment, for which GIAL, Mopa, Goa stated that the cost relating to security equipment would become a part of RAB and accordingly recovered, however, CISF Capex and Opex would be recovered through Passenger Security Fee (PSF). IATA also enquired about the trigger point for the second runway.
- IndiGo and SpiceJet suggested incorporating a greater number of check-in counters and baggage claim carousels as the existing number of the same are less compared to the capacity of the airport.
- IndiGo raised concerns regarding project cost projected by GIAL, Mopa, Goa exceeding AERA's normative rates per sqm and its benchmarked cost. This was explained by GIAL, Mopa, Goa that AERA's normative rates are with reference to 2017 and if they are indexed to 2021 then GIAL, Mopa, Goa would be marginally above the benchmarked cost and the same is said to be justified to AERA as per the requirement.

CAPEX proposed by the Authority

5.3.33 Based on the above analysis, the adjustments between M/s KITCO's report and Authority's consideration of Capital Expenditure for the First Control Period is summarized below:

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Table 62: Capex comparison between M/s KITCO and the Authority's proposal for the First Control Period (includes Phase I, II &II)

(Rs. in crores)

S.No	Description	Amount
A	GIAL, Mopa, Goa's submission (Table 35)	4,497.39
B	Capex allowed as per M/s KITCO (Table 53)	3,835.38
C	Difference (A-B)	662.01
D	Adjustments by the Authority	
D.1	Adjustment to Runways	(2.01)
D.2	Adjustment to Terminal Building	(0.05)
D.3	Adjustment to PMC Costs	(2.24)
D.4	Adjustments to Financing allowance (including for Phase III)	15.12
D.5	General Capex estimate allowed (Refer para 5.3.22)	50.00
	Total (D.1 to D.5)	60.82
E	Total Capital Expenditure proposed by Authority (B+(D.1 to D.5))	3,896.20

5.3.34 Consequently, the details of capital expenditure proposed by the Authority for the First Control Period is given below:

Table 63: CAPEX proposed by the Authority for the First Control Period

(Rs. in crores)

S.No	Description	Amount
1	Runway, Taxiways and Apron - (Phase I, II & III)	526.17*
2	Passenger Terminal Building including Fit Outs (for 7.7 MPPA) (Phase I, II & III)	1,283.98
3	Airside buildings, Airside roads & Drainage System (Phase I & III)	346.65
4	Site Preparation/ Earthwork	628.43
5	Administrative building & Site office	50.37
6	ATC Technical Block and Tower	87.43
7	Main Access Road, Spine Road and Car park	104.71
8	Additional Works (Phase I & III)	63.59
9	Permanent Water & Electricity	20.00
10	ASDC	7.66

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S.No	Description	Amount
11	General Capex	50.00
A	Sub Total (1 to 10)	3,168.99
11	Design Consultancy & PMC Expenses	120.52
12	Independent Engineer Services	15.07
13	Pre-operative Expenses (Phase I, II & III)	251.36
14	Contingencies (Phase I & III)	18.38
B	Sub Total (11 to14)	405.33
15	Financing Allowance	321.88
16	DSRA	-
C	Sub Total (15 & 16)	321.88
	Grand Total (A+B+C)	3,896.20
17	Phase I	3,225.79
18	Phase II	179.28
19	Phase III	441.14
20	General Capex	50.00

** The above amount excludes the cost of Rs. 50 crores for extra width of 22 mtr for parallel taxiway (proposed by GIAL, Mopa, Goa) which is to be used as Emergency runway only after installation of all equipment and DGCA approval. Accordingly, the Authority proposes not to consider Rs. 50 crores at this stage and proposes the same to be allowed when asset is put to use (For detail refer para 5.3.4 a)).*

5.3.35 The Authority proposes to reduce (readjustment) 1% of the uncapitalized project cost from the ARR / target revenue as re-adjustment in case any particular capital project is not completed/ capitalized as per the approved capitalization schedule. It is further proposed that if the delay in completion of the project is beyond the timeline given in the capitalization schedule, due to any reason beyond the control of GIAL, Mopa, Goa or its contracting agency and is properly justified, the same would be considered by the Authority while truing up the actual cost at the time of determination of tariff for the next Control Period. The re-adjustment in the ARR/ Target Revenue is to protect the interest of the stakeholders who are paying for services provided by GIAL, Mopa, Goa and is also encouragement for GIAL, Mopa, Goa to commission/ capitalize the proposed assets as per the approved CAPEX plan/ schedule.

Year Wise Capital Additions

5.3.36 The Authority as per the proposal explained in para 3.2.7, proposes to consider the ratio of actual to total capital expenditure of GIAL, Mopa, Goa as base for capitalizing the cost proposed by the Authority for Phase I in FY 2022-23 and FY 2023-24. Accordingly, 81.24% (as calculated in Table 9) of the total Capital Expenditure (Table 63) for Phase I is capitalized in FY 2022-23 and the balance in FY 2023-24.

5.3.37 Considering above factors, the Authority proposes the following year wise capital expenditure for the period from COD to 31st March 2023 and First Control Period:

Table 64: Year Wise Capital Expenditure proposed by the Authority

(Rs. in crores)

Particulars	FY23*	FY24	FY25	FY26	FY27	FY28	Total (FY23 to FY28)	Total (FY24 to FY28)
Building	760.63	321.41	-	256.21	-	-	1,338.25	577.62
Roads	172.84	57.21	-	-	-	-	230.05	57.21
Runway	505.19	221.59	-	23.37	-	-	750.15	244.96
Plant & Machinery	300.49	140.42	-	150.66	-	-	591.57	291.08
Apron	78.79	38.91	-	5.51	-	-	123.21	44.42
Furniture & Fixtures- other than trolley	10.07	4.80	-	5.39	-	-	20.25	10.18
General Capex	-	10.00	10.00	10.00	10.00	10.00	50.00	50.00
Land Development	792.73	-	-	-	-	-	792.73	-
Total	2,620.74	794.33	10.00	451.14	10.00	10.00	3,896.20	1,275.47

* FY 23 capital additions presented in the table is considered in Chapter 3 – Tariff for period from COD to 31st March 2023.

5.4 Aeronautical Allocation of CAPEX for the First Control Period

GIAL, Mopa, Goa's Submission

5.4.1 GIAL, Mopa, Goa has provided the allocation of assets as follows into different asset categories.

Table 65: Category wise asset values of total additions as submitted by GIAL, Mopa, Goa

(Rs. in crores)

Category	Asset value
Aeronautical Assets	2,830.96
Non-Aeronautical Assets	-
Common Assets	1,656.84
Non-Regulatory Assets	6.85
Total	4,494.65

5.4.2 GIAL, Mopa, Goa has submitted that it has adopted the following methodology to allocate the assets between Aeronautical, Non-Aeronautical and Common assets:

- a) Aeronautical assets are assumed to be those assets which are necessary or required for providing the aeronautical services at the airport
- b) Non-aeronautical assets are those which are necessary for the performance of the non-aeronautical services at the airport.
- c) Common assets are those assets which are not identifiable/categorized into either aeronautical asset or non-aeronautical assets.
- d) Passenger Terminal Building has been considered as common asset and the asset related to terminal building are allocated in the ratio of the area of terminal building used for aeronautical and non-aeronautical services.

5.4.3 Further, GIAL, Mopa, Goa has submitted the terminal area ratio of 91.03%: 8.97%, considering 6,075 sqm as non-aero area out of total terminal area of 67,726 sqm.

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5.4.4 Based on the above allocation methodology, GIAL, Mopa, Goa has submitted the detailed package wise cost allocation for the First Control Period as table below:

Table 66: Detail of package wise cost and allocation as submitted by GIAL, Mopa, Goa

(Rs. in crores)

Package	Classification	Total Capex	Financing Allowance	Total	Aero	Non-Aero	Non-Airport
Apron	Aero	163.89	23.27	187.16	187.16	-	-
Runway	Aero	289.02	41.04	330.06	330.06	-	-
Taxiway	Aero	405.71	57.61	463.32	463.32	-	-
Drainage	Aero	236.55	33.59	270.14	270.14	-	-
Other Airside Building	Aero	395.72	56.19	451.91	451.91	-	-
Roads	Aero	280.44	39.82	320.26	320.26	-	-
P&M	Common	76.42	10.85	87.27	79.44	7.83	-
Fuel Hydrant System	Non-Aero	-	-	-	-	-	-
PTB	Common	765.06	108.64	873.70	795.33	78.37	-
ATC	Aero	127.90	18.16	146.07	146.07	-	-
Aeronautical Ground Lighting (AGL)	Aero	40.30	5.72	46.02	46.02	-	-
Heating, Ventilation and Air Conditioning (HVAC)	Aero	76.16	10.81	86.97	86.97	-	-
PH&E	Aero	159.07	22.59	181.66	181.66	-	-
Passenger Boarding Bridges (PBB) & VGDS	Aero	21.93	3.11	25.04	25.04	-	-
BHS	Aero	41.08	5.83	46.91	46.91	-	-
X-ray	Aero	52.53	7.46	59.99	59.99	-	-
Furniture	Common	16.31	2.32	18.62	16.95	1.67	-
City Side Development	Non-Regulatory	6.85	-	6.85	-	-	6.85
Phase II expansion	Aero	200.00	15.44	215.44	215.44	-	-
Phase III expansion	Common	500.00	52.25	552.25	497.03	55.22	-
General Capex	Common	125.00	-	125.00	122.00	3.00	-
Total		3,979.93	514.72	4,494.65	4,341.70	146.10	6.85

Authority's examination on Asset Categorization / Asset Allocation

5.4.5 The Authority has reviewed the asset categorization provided by GIAL, Mopa, Goa. The Authority also notes that GIAL, Mopa, Goa has submitted that the Fixed Asset Register is under preparation and is not completed. Hence, review of asset categorization and asset allocation carried out now, will be on an estimate basis which will be reviewed and updated at the time of true up in the next control period.

5.4.6 The Authority has obtained the area statement of the Terminal building and notes that GIAL, Mopa, Goa has considered 58,440.95 sqm as aeronautical out of total area of 67,726.02 due to which Terminal Building Ratio (TBLR) adopted by GIAL, Mopa, Goa is 91.03%:8.97%. The Authority examined the Terminal Area ratio

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submitted by GIAL, Mopa, Goa and analyzed that the non-aeronautical area allocation considered by GIAL, Mopa, Goa for computation of Terminal Area Ratio is low when compared to other PPP airports. Further, it was observed that the area allocation towards non-aeronautical activities at the other PPP airports such as DIAL, MIAL, BIAL and HIAL are much higher than 10%. Even the IMG norms on passenger terminals recommend the non-aeronautical area allocation to be between 8-12% for any airport, while for bigger airports, i.e., with passenger traffic exceeding 10 million, commercial area could be up to 20% of the overall area. Considering that Manohar International Airport, Mopa, Goa is a newly established greenfield airport situated in a prominent tourist destination, the Authority believes that it will attract a substantial amount of traffic. The Authority encourages GIAL, Mopa, Goa to allocate a larger portion of the terminal building for non-aeronautical activities which includes a wide range of amenities and services that cater to the needs and preferences of tourists visiting the region, together with ensuring meeting of all Aeronautical requirements. For the first control period, the Authority proposes a revised TBLR of 90%:10% for the First Control Period. This will be reviewed in the next Control Period.

5.4.7 The Authority in para 3.2.10 & 3.2.11 has explained in detail and proposed to consider land development as a separate line item. Further the Authority is of the view that land development is utilized commonly for aeronautical, non-aeronautical and other activities, thus Gross Block Asset ratio as computed in Table 87 will be applied to determine the aeronautical proportion of land development costs.

5.4.8 Based on the above, the aeronautical capital additions year wise for the First Control Period has been presented below:

Table 67: Aeronautical Capital Additions proposed by the Authority for the First Control Period

(Rs. in crores)

Asset Classification	Classification	FY 23*	FY24	FY25	FY26	FY27	FY28	Total (FY23 to FY28)	Total (FY24 to FY28)
Apron	Aero	78.79	38.91	-	5.51	-	-	123.21	44.42
Runway	Aero	183.88	83.49	-	9.72	-	-	277.09	93.21
Taxiway	Aero	195.04	96.31	-	13.65	-	-	305.01	109.96
Drainage	Aero	126.27	41.79	-	-	-	-	168.06	41.79
Other Airside Building	Aero	192.11	63.59	-	-	-	-	255.70	63.59
Roads	Aero	172.84	57.21	-	-	-	-	230.05	57.21
P&M	Common	59.50	25.87	-	22.71	-	-	108.09	48.58
PTB	Common	430.89	205.31	-	230.59	-	-	866.78	435.89
ATC	Aero	82.86	27.43	-	-	-	-	110.29	27.43
HVAC	Common	42.30	20.16	-	22.64	-	-	85.09	42.79
PH&E	Common	104.46	49.77	-	55.90	-	-	210.14	105.67
PBB & VGDS	Aero	13.53	6.45	-	7.24	-	-	27.22	13.69
BHS	Aero	25.35	12.08	-	13.57	-	-	51.00	25.65

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Asset Classification	Classification	FY 23*	FY24	FY25	FY26	FY27	FY28	Total (FY23 to FY28)	Total (FY24 to FY28)
X-ray	Aero	32.42	15.45	-	17.35	-	-	65.21	32.79
Furniture	Common	9.06	4.32	-	4.85	-	-	18.22	9.16
Land Development	Common	758.61	-	-	-	-	-	758.61	-
City Side Development	Non-Aero	-	-	-	-	-	-	-	-
General Capex	Common	-	9.00	9.00	9.00	9.00	9.00	45.00	45.00
Total		2,507.92	757.11	9.00	412.73	9.00	9.00	3,704.76	1,196.84

* FY 23 aeronautical capital additions presented in the table is considered in Chapter 3 – Tariff for period from COD to 31st March 2023.

5.4.9 Asset category wise aeronautical capital additions for the First Control Period has been presented below:

Table 68: Asset category wise Aeronautical additions proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY23*	FY24	FY25	FY26	FY27	FY28	Total (FY23 to FY28)	Total (FY24 to FY28)
Building	705.86	296.32	-	230.59	-	-	1,232.77	526.90
Roads	172.84	57.21	-	-	-	-	230.05	57.21
Runway	505.19	221.59	-	23.37	-	-	750.15	244.96
Plant & Machinery	277.57	129.77	-	139.41	-	-	546.76	269.18
Apron	78.79	38.91	-	5.51	-	-	123.21	44.42
Furniture & Fixtures- other than trolley	9.06	4.32	-	4.85	-	-	18.22	9.16
General Capex	-	9.00	9.00	9.00	9.00	9.00	45.00	45.00
Land Development (Refer para 5.4.7)	758.61	-	-	-	-	-	758.61	-
Total	2,507.92	757.11	9.00	412.73	9.00	9.00	3,704.76	1,196.84

* FY 23 aeronautical capital additions presented in the table is considered in Chapter 3 – Tariff for period from COD to 31st March 2023.

5.5 Depreciation for the First Control Period

GIAL, Mopa, Goa's submission regarding depreciation for the First Control Period

5.5.1 GIAL, Mopa, Goa in its submission has stated that it has considered the useful life of an asset in line with the AERA order No. 35/2017-18. Accordingly, the major asset heads for the purpose of capitalization and the useful life of asset along with the effective rate of depreciation considered by GIAL, Mopa, Goa in submission are as follows:

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Table 69: Useful life adopted by GIAL, Mopa, Goa

Asset	Dep. Rate as per MYTP
Building	3.33%
Roads	10.00%
Runway	3.33%
Plant & Machinery	6.67%
Apron	3.33%
Furniture & Fixtures other than trolley	14.29%
General Capex	6.00%
Phase II and Phase III	4.56%

5.5.2 The following table summarizes GIAL, Mopa, Goa’s estimation of aeronautical depreciation for all assets in First Control Period.

Table 70: Aeronautical Depreciation submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Particulars	FY23	FY24	FY25	FY26	FY27	FY28	Total
Building	14.51	46.46	46.46	46.46	46.46	46.46	246.80
Roads	10.01	32.04	32.04	32.04	32.04	32.04	170.19
Runway	11.08	35.46	35.46	35.46	35.46	35.46	188.39
Plant & Machinery	10.96	35.08	35.08	35.08	35.08	35.08	186.36
Apron	1.95	6.24	6.24	6.24	6.24	6.24	33.15
Furniture & Fixtures (other than trolley)	0.76	2.42	2.42	2.42	2.42	2.42	12.87
General Capex	-	0.73	2.20	3.66	5.12	6.59	18.29
Expansion	-	4.91	9.82	21.16	32.49	32.49	100.87
Total	49.25	163.34	169.72	182.51	195.31	196.77	956.91

Authority’s Examination regarding depreciation for the First Control Period

5.5.3 The Authority notes that GIAL, Mopa, Goa has computed depreciation for the First Control Period based on the rates prescribed by AERA vide Order No. 35/2017- 18 dated 12th January 2018, in the matter of determination of useful life of Airports Assets. The Authority proposes to consider the same. For land development costs, the Authority proposes to consider the useful life based on lease period available with GIAL, Mopa, Goa i.e. 36.50 years (For details refer para 3.2.10 and Table 10).

5.5.4 The Useful Life adopted by the Authority and GIAL, Mopa, Goa is presented below:

Table 71: Useful life adopted by the Authority

Asset	Useful Life adopted by GIAL, Mopa, Goa	Useful Life adopted by the Authority
Building	30	30
Roads	10	10
Runway	30	30
Plant & Machinery	15	15
Apron	30	30

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Asset	Useful Life adopted by GIAL, Mopa, Goa	Useful Life adopted by the Authority
F&F other than trolley	7	7
General Capex (Average rate)	17	17
Land Development	-	36.50
Phase II & Phase III *	22	-

* considered as per the relevant categories.

5.5.5 Considering the same and changes to the value of Capital Expenditure, allocation ratio and year of capitalization, the Authority has computed the depreciation of assets. The following table summarizes the revised depreciation proposed by the Authority:

Table 72: Total Aeronautical depreciation proposed by the Authority for the First Control Period

(Rs. in crores)

Asset Class	FY23	FY24	FY25	FY26	FY27	FY28	Total (FY23 to FY28)	Total (FY24 to FY28)
Building	7.34	28.44	33.37	37.21	41.05	41.05	188.47	181.13
Roads	5.40	20.14	23.00	23.00	23.00	23.00	117.56	112.16
Runway	5.25	20.51	24.20	24.59	24.98	24.98	124.52	119.27
Plant & Machinery	5.78	22.84	27.17	31.82	36.47	36.47	160.55	154.77
Apron	0.82	3.27	3.92	4.01	4.10	4.10	20.23	19.41
F&F other than trolley	0.40	1.60	1.91	2.26	2.60	2.60	11.38	10.98
General Capex	-	0.27	0.81	1.35	1.89	2.43	6.75	6.75
Land Development	6.49	20.78	20.78	20.78	20.78	20.78	110.40	103.91
Total	31.49	117.86	135.17	145.03	154.88	155.42	739.86	708.37

5.6 Regulatory Asset Base (RAB) for the First Control Period

GIAL, Mopa, Goa's submission regarding RAB for the First Control Period

5.6.1 As per GIAL, Mopa, Goa's submission, the RAB for First Control Period is as detailed below:

Table 73: RAB submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Opening RAB (a)	3,459.09	3,535.58	3,390.25	3,730.15	3,559.23	
Additions to RAB (b)	239.83	24.39	521.41	24.39	24.39	834.41
Deletions to RAB (c)	-	-	-	-	-	
Depreciation (d)	163.34	169.72	182.51	195.31	196.77	907.66
Closing RAB (e) = (a)+(b)-(c)-(d)	3,535.58	3,390.25	3,730.15	3,559.23	3,387.84	

Authority's examination regarding RAB for the First Control Period

5.6.2 The Authority has carefully examined the calculation of RAB and GIAL, Mopa, Goa's submissions in this regard. Considering the above, the RAB for the First Control Period as considered by the Authority is shown below:

Table 74: RAB proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Opening RAB (a)	2,476.43	3,115.68	2,989.51	3,257.21	3,111.33	
Additions to RAB (b)	757.11	9.00	412.73	9.00	9.00	1,196.84
Deletions to RAB (c)	-	-	-	-	-	
Depreciation (d)	117.86	135.17	145.03	154.88	155.42	708.37
Closing RAB (e) = (a)+(b)-(c)-(d)	3,115.68	2,989.51	3,257.21	3,111.33	2,964.90	
Average RAB =[(a)+(e)]/2	2,796.05	3,052.60	3,123.36	3,184.27	3,038.11	

**The significant difference in additions of FY24 between Table 73 and Table 74 is due to capitalization of Phase I remaining cost in FY24 by Authority (this has been fully considered as capitalized in FY23 by GIAL, Mopa, Goa (refer para 5.3.36 for detailed explanation)*

5.7 Authority's proposals regarding Capital Expenditure (CAPEX), Depreciation, and Regulatory Asset Base (RAB) for the First Control Period

Based on the materials before it and its analysis, the Authority proposes the following with regard to CAPEX, Depreciation, and RAB for the First Control Period

- 5.7.1** To consider the Terminal Building Ratio (TBLR) of 90:10 as mentioned in para 5.4.6 and in line with IMG norms and as approved for other similar Airports.
- 5.7.2** To allow financing allowance during the First Control Period as detailed in Table 61, para 5.3.18 and para 5.3.19.
- 5.7.3** To adopt the Capital Expenditure for the First Control Period in accordance with Table 64.
- 5.7.4** To adopt the aeronautical additions for the First Control Period in accordance with Table 68.
- 5.7.5** To examine the accounting of input tax credits in accordance with Chapter V of The Central Goods and Services Tax Act, 2017 and make necessary adjustments at the time of determination of tariffs for the next Control Period (as detailed in para 5.3.27 and para 5.3.29).
- 5.7.6** To reduce (adjust) 1% of the uncapitalized project cost from the ARR in case any particular capital project is not completed/ capitalized as per the approved capitalization schedule, as mentioned in para 5.3.35. The same will be examined during the true up of the First Control Period, at the time of determination of tariff for the next Control Period .
- 5.7.7** To true up the Aeronautical Capital expenditure based on actuals, cost efficiency and reasonableness, at the time of determination of tariff for Next Control Period.
- 5.7.8** To adopt Aeronautical Depreciation as per Table 72 for the First Control Period.
- 5.7.9** To true up the Depreciation of the First Control period based on the actual asset additions and actual date of capitalization during the tariff determination of the Next Control Period.
- 5.7.10** To consider average RAB for the First Control Period for Manohar International Airport, Mopa, Goa as per Table 74.
- 5.7.11** To true up the RAB based on actuals at the time of tariff determination for the Next Control period.

6. FAIR RATE OF RETURN FOR THE FIRST CONTROL PERIOD

6.1 GIAL's submission regarding Fair Rate of Return for the First Control Period

Cost of Equity

6.1.1 GIAL, Mopa, Goa had engaged the services of CRISIL to carry out a study on applicable Cost of equity. Based on this study, the Airport Operator has considered the Cost of equity range as between 20.92% to 24.04%.

6.1.2 GIAL, Mopa, Goa submitted the following assumptions for estimating the Cost of equity:

- The risk-free rate which is the 10-year average yield for 10-year government securities comes out to be 7.42%.
- The market return is 16.82% which is calculated using the 40 years data of Bombay Stock Exchange (BSE) Sensex, Geometric Mean method and adding Dividend Yield based on longest available data on BSE Sensex.
- The debt/equity ratio is taken to be at 1.38, as per the pre-defined debt-equity makeup.
- A range of beta is taken, with 5-year beta average for developed and developing countries and 5-year beta average for just the developing countries. This is then inflated to account for elevated risks associated with the GIAL, Mopa, Goa.
- Additional CoE Alpha has been considered to factor the risks associated with Greenfield Airports in Multiple Airport System.

6.1.3 GIAL, Mopa, Goa has submitted the following from CRISIL report relating to the risk profile of GIAL, Mopa, Goa:

Greenfield projects are inherently riskier, due to factors like delays in construction/project execution, subdued traffic as against projections, regulatory changes, inadequate liquidity, among others. These risks might result in delays or in substantial variations in cashflow as against the projections. Consequently, there is a view to account for these additional risks in the cost of equity calculations, by using a factor to appropriately allocate these risks.

The operational environment of GIAL, Mopa, Goa, and the greenfield nature of the project, makes the project riskier than the assets considered for beta calculation. Due to this, we project a higher level of systemic risk associated with GIAL, Mopa, Goa. Among these, the presence of a fully operational Goa International Airport in high proximity of the greenfield airport will ensure higher uncertainty in cashflows and revenue. The same have been highlighted in the cashflow projections. However, due to the elevated risks for GIAL, Mopa, Goa there is a strong case for adjustment of cost of equity for greenfield projects, due to the riskier nature of the asset. We recommend introducing these changes through inflating the beta used for cost of equity calculations, to reflect higher systemic risks.

While the concept of a peer group is a dominant way of determining the beta for unlisted companies, the airports considered under the category of both developed and developing country are operational for more than 10 -20 years and will not capture the risks associated to greenfield development. Hence,

considering a range of beta over various time horizons and capturing the maximum value and its deviation will help in capturing the maximum risk profile.

Several airport assets were considered for the most appropriate risk representation for the GIAL, Mopa, Goa. Consequently, Heathrow Airports Limited (HAL) showed an elevated risk level similar to those shown by the GIAL, Mopa, Goa. Heathrow airport, situated in London, is among five others in the city. This results in high risks to the revenues of the airport, similar to those faced by GIAL, Mopa, Goa due to the presence of an operational international airport in Goa in close proximity to the GIAL, Mopa, Goa. Consequently, we have approached beta inflation in a similar way as used by the HAL.

Since all the risks related to the development of this airport is subsumed in beta, to arrive at a reasonable beta, we see the entire available asset beta range, i.e., average beta values calculated from daily beta for a period of 1, 2, and 5 years, for both, developed and developing countries. The risks to GIAL, Mopa, Goa are higher than the comparator assets considered for beta calculation.

This deviation is used to inflate the unlevered beta. Further, this modified asset beta is then re-levered to arrive at the equity beta. Using the risk-free rate and market premium calculated earlier, we arrive at the modified cost of equity. This new cost of equity contains the additional risks to the GIAL, Mopa, Goa, which can be decomposed into an ‘alpha factor’. Difference between the modified cost of equity and initial cost of equity will give us the alpha factor for cost of equity calculation. Additionally, we further provide a range of this alpha factor, by using initial asset beta of (i) developed and developing countries; and (ii) only developing countries.

6.1.4 Based on the above, the Cost of Equity computed by CRISIL is as detailed below.

Table 75: Cost of equity computation as per GIAL, Mopa, Goa’s submission

Parameter	Value
Risk-Free Rate	7.42%
Total Market Return	16.82%
Debt-Equity ratio	1.38
Equity Beta	1.44
Initial Cost of Equity	19.49%
Modified Cost of Equity	20.92%
Additional CoE Alpha	1.42%

Cost of Debt

6.1.5 GIAL, Mopa, Goa has submitted that it has planned a Rupee Term Loan of Rs. 2227 crores for the first phase of the project totaling to Rs. 3603 crores resulting in a Debt: Equity ratio of 62:38.

6.1.6 GIAL, Mopa, Goa has submitted that in order to fund the project cost of Phase 1, GIAL, Mopa, Goa has tied up loan with consortium of banks with Axis Bank as the lead bank. The facility has been taken for 18 years which includes construction period of 3 years, 1 year moratorium and 14 years of repayment. As per the facility agreement, GIAL, Mopa, Goa shall repay the 80% of Facility in 55 structured quarterly instalments commencing from quarter ending 30th September 2023 with last instalment due on 31st March 2037. The remaining 20% of the Facility shall be due as a bullet instalment on 30th June 2037. The rate of interest shall be the sum of Axis Bank 1-Year Marginal Cost of Funds based Lending Rate (MCLR) and Spread per annum

plus applicable taxes and other statutory levy, if any. GIAL, Mopa, Goa has submitted that as on date, the A-MCLR is 8.45% and the spread is 2%.

- 6.1.7** Based on the above, GIAL, Mopa, Goa has considered the cost of debt facility of 10.45% as the cost of debt for the control period.

Weighted Average Cost of Capital

- 6.1.8** Based on the above Cost of Debt, Cost of Equity and normative gearing ratio of 48:52, the Weighted Average Cost of Capital has been computed by GIAL, Mopa, Goa as below.

Table 76 : Weighted average cost of capital computation submitted by GIAL, Mopa, Goa for FRoR

Parameter	Value
Cost of Equity	20.92%
Cost of Debt	10.45%
Weighted Average Gearing of Equity	52.00%
Weighted Average Gearing of Debt	48.00%
Weighted Average Cost of Capital	15.89%

6.2 Authority's examinations regarding Fair Rate of Return for the First Control Period

Cost of Equity

- 6.2.1** The Authority had commissioned independent studies for the evaluation of cost of capital separately in case of PPP Airports, namely DIAL, MIAL, HIAL, BIAL and Cochin International Airport Limited (CIAL) through a premier institute, namely Indian Institute of Management (IIM) Bangalore and proposes to use these study reports as a basis, to the extent applicable and relevant, to ascertain the Cost of equity of GIAL, Mopa, Goa for the First Control Period.
- 6.2.2** The independent study reports have drawn from the international experience of airports and their conclusions have been evaluated to the extent comparable with Manohar International Airport, Mopa, Goa in terms of hybrid till, ownership structure, size, scale of operations and regulatory framework. The average Cost of equity arrived at by the independent study reports is 15.18%.
- 6.2.3** The above independent study reports have used the Capital Asset Pricing Model (CAPM) and a notional gearing (Debt: Equity) ratio of 48:52 to determine the levered Equity beta and accordingly, derive the Cost of equity.
- 6.2.4** Based on the above reports, the Authority proposes the Cost of equity of 15.18% for GIAL, Mopa, Goa for the First Control Period.
- 6.2.5** The Authority has noted GIAL, Mopa, Goa's submission that *"One of the important aspect covered by CRISIL is the risk associated with Greenfield projects in multiple airport system. As per CRISIL the Greenfield Airport have inherent risk related to construction period, liquidity, project execution and traffic. Accordingly, there has to be some additional factor which needs to be factored in while arriving betas for such greenfield airports. The risk in case of Mopa, Airport further multiplies due to competition with existing airport. CRISIL has analyzed these scenarios and considered and alpha factor for such associated risk"*
- 6.2.6** The Authority notes CRISIL report based on which GIAL, Mopa, Goa has stressed on certain key factors specific to Greenfield Airports which include delays in construction/ project execution, subdued traffic, regulatory changes, liquidity etc.

- The Authority notes that risks of construction/ project execution could arise in other situations also, not necessarily due to multiple airports being located in the nearby vicinity. Also, the Authority provides for Financing allowance on the work in progress assets for Greenfield airports, mitigating the risk of funds being locked up.
- The Authority notes that traffic projections submitted by GIAL, Mopa, Goa in itself estimates additional traffic for Goa as a whole, instead of a linear growth in traffic. Based on the same and considering the positional advantage of Manohar International Airport, Mopa, Goa, the Authority perceives that inherent risk of subdued traffic, if any is minimum and transitional.
- As for the risks of regulatory changes, liquidity etc., these are factors that could impact any infrastructure development in general.

6.2.7 Hence, the Authority is not convinced that any specific risks that may arise due to two airports being present in the nearby vicinity could impact the Cost of Equity, considering the current Regulatory and other environment. Accordingly, the Authority proposes to consider Cost of Equity at 15.18% as detailed in para 6.2.4.

6.2.8 The Authority has noted the risk factors enumerated by GIAL, Mopa, Goa. However, the Authority notes that Airport Operators in India have certain inherent advantages and protections built into the tariff determination process that is being followed together with support being received from various Governments and Government agencies:

- There is a well-documented and publicly notified regulatory regime for tariff determination. Proceedings of tariff determination are conducted in a transparent and consultative manner, in compliance with AERA Act and other relevant guidelines.
- The tariff determination methodology incorporates adequate returns on the Investment made by the Airport Operator together with reimbursement of reasonable O&M expenses incurred for the management of airport.
- The current tariff determination methodology also ensures truing up of certain building blocks based on efficiency and reasonableness of the same.
- The Government of India, through the Ministry of Civil Aviation and various regulatory agencies, provides adequate support and guidance on all operational, safety, airline, connectivity and stakeholder related matters.
- The relevant State Governments help the Airport Operators by the way of allotment of land on concessional rates in many of the cases, together with providing an improved connectivity from the city to the airports with enhanced road/ rail infrastructure etc.

Cost of Debt

6.2.9 The Authority notes that the Airport Operator has considered Cost of debt at 10.45% for the First Control Period based on its rate of borrowing at MCLR + 2% spread.

6.2.10 The Authority notes that the cost of debt of the Airport, in the past years, has ranged from 10.25% to 10.81% in the years from FY 2017-18 to FY 2021-22, as per the certificates provided by the auditors of GIAL, Mopa, Goa. The cost of debt for FY 2022-23 has reduced from the previous years (10.81% to 10.69%) and was at

10.42%. In FY 2022-23 the Company has taken Inter Corporate Loans, loans from NBFCs in addition to raising convertible and non-convertible debentures from its group company.

- 6.2.11** The Authority recommends that the Airport shall bring in further efficiencies in its cost of borrowing in order to reduce the interest rates. This suggestion is also in keeping with the spirit of PPP whereby it is expected that the financial strength of PPP airports is maintained at an optimal level and their cost of capital is within reasonably allowable limits. GIAL, Mopa, Goa should avail the synergies and benefits owed to it by its strong shareholding and balance sheet of its Parent companies and therefore work towards bringing down the cost of debt to the same levels as other PPP airports.
- 6.2.12** The Authority believes that PPP airports have scope of bringing in better efficiencies in financial and operational management of an airport which would reflect in its overall cost of operations and lower FRoR.
- 6.2.13** Further the Authority has also noted that the Weighted Average Lending Rate (WALR) of public sector banks and scheduled commercial banks as per the Reserve Bank of India’s publication of December 2022 has been in the range of 8.92% to 9.52% p.a. The Authority has also noted that the average cost of debt of other five PPP airports viz., DIAL, MIAL, HIAL, BIAL and CIAL is 8.96%. Also, the rates of loan provided by Axis Bank range between 6.85% and 10.00% as per the information published by RBI for the period March 2023.
- 6.2.14** The Authority notes that the airport has already become operational with Commercial operations from 5th January 2023 which would provide comfort to the lenders on its operational capabilities, ability of repayment etc. which could also bring down the interest rates. With traffic flowing into the airport and revenues earned from Aeronautical and Non-Aeronautical sources yielding benefits, the debt profile of Manohar International Airport, Mopa, Goa is bound to improve and inherent financial risk as reflected in the Cost of Debt will reduce to the levels of other PPP airports.
- 6.2.15** Accordingly, the Authority proposes to consider the Cost of Debt of 9% for the computation of Fair Rate of Return.

Fair Rate of Return

- 6.2.16** Based on the above, the Authority proposes to consider the following FRoR for the First Control Period for GIAL, Mopa, Goa.

Table 77: Fair Rate of Return proposed by the Authority for the First Control Period

Parameter	Value
Cost of Equity (para 6.2.4)	15.18%
Cost of Debt (para 6.2.15)	9.00%
Weighted Average Gearing of Equity	52.00%
Weighted Average Gearing of Debt	48.00%
Weighted Average Cost of Capital	12.21%

6.3 Authority’s proposals regarding Fair Rate of Return for the First Control Period

Based on the materials before it and its analysis, the Authority proposes the following with regard to FRoR for the First Control Period:

- 6.3.1** To consider the Cost of equity at 15.18% as per CAPM formula.

- 6.3.2** To consider the notional debt to equity (gearing) ratio of 48%:52% in line with target gearing ratio being considered in case of other PPP airports.
- 6.3.3** To consider cost of debt of 9% for the First Control Period.
- 6.3.4** To consider FRoR of 12.21% for the First Control Period based on above mentioned Cost of equity, Cost of debt and gearing ratio.

7. INFLATION FOR THE FIRST CONTROL PERIOD

7.1 GIAL's submission regarding Inflation for the First Control Period

- 7.1.1** GIAL, Mopa, Goa has considered inflationary increase towards operating and maintenance expenses and non aeronautical revenues for Manohar International Airport, Mopa, Goa for the First Control Period
- 7.1.2** For the purpose of inflation, GIAL, Mopa, Goa has considered WPI of 5% from the RBI survey of professional forecasters on macroeconomic indicators – result of the 79th round released on 7th December 2022 for the First Control Period as summarized in the table below.

Table 78: Inflation rates submitted by GIAL, Mopa, Goa for the First control period

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28
WPI Inflation	5.00%	5.00%	5.00%	5.00%	5.00%

7.2 Authority's examination regarding Inflation for the First Control Period

- 7.2.1** The Authority has examined the submission made by GIAL, Mopa, Goa on inflation to be considered during the First Control Period and notes that GIAL, Mopa, Goa has considered WPI from the RBI's 79th round of survey. However, the Authority proposes to consider the recent "Results of the Survey of Professional Forecasters on Macroeconomic Indicators: Round 82nd released on 8th June 2023 published by the Reserve Bank of India (RBI).
- 7.2.2** Accordingly, the Authority proposes to consider the actual Wholesale Price Index (All commodities) for FY 2023-24 and the mean of WPI inflation forecast (All commodities) for FY 2024-25 and till FY 2027-28 as given in the 82nd round of professional forecasters on macroeconomic indicators.
- 7.2.3** Further the Authority assumes that the inflation rate would be stable and remain constant from FY 2024-25 till FY 2027-28. Accordingly, the following table shows the inflation rates as proposed by the Authority for the First control period.

Table 79: Inflation rates proposed by the Authority for the First control period

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28
WPI Inflation	1.90%	4.00%	4.00%	4.00%	4.00%

7.3 Authority's proposal regarding Inflation for the First Control period

Based on the materials before it and its analysis, the Authority proposes the following for the First Control Period:

- 7.3.1** To consider Inflation as per Table 79.

8. OPERATING & MAINTENANCE EXPENSES FOR THE FIRST CONTROL PERIOD

8.1 GIAL's submission regarding Operating and Maintenance Expenses for the First Control Period

8.1.1 As a greenfield airport, GIAL, Mopa, Goa does not have historical data, making it challenging to accurately determine Operating and Maintenance (O&M) expenses. GIAL, Mopa, Goa has analyzed each aspect of O&M expenses considering infrastructure requirements, personnel costs, equipment maintenance, utilities, security measures and other costs.

8.1.2 GIAL, Mopa, Goa has considered the following drivers as a basis to arrive at the projected O&M expenses for the First Control Period:

- **Inflationary increase** – GIAL, Mopa, Goa has considered WPI Inflation of 5% based on the 79th round of professional forecasters on macroeconomic indicators by RBI towards all expenses.
- **Real Increase** – Considering the current economic scenario and upcoming expansion, GIAL, Mopa, Goa has considered 7% year-on-year real increase. This is mainly for manpower cost and office rentals.
- **Upcoming expansion at Manohar International Airport, Mopa, Goa** – As explained in Chapter 1 of this Consultation Paper, Manohar International Airport, Mopa, Goa has to expand its capacity from currently 4.4 MPPA to 11.1 MPPA during the First Control Period. In case of Phase II expansion, GIAL, Mopa, Goa has assumed 10% incremental factor whereas in case of Phase III expansion i.e., from 7.7 Mn to 11.1 Mn the incremental factor is assumed to be 50% of the capacity increase, in projecting O&M expenses.

8.1.3 The broad heads under which GIAL, Mopa, Goa has classified its O&M expenses are as follows:

1. Manpower Expense
2. Admin and General Expense
3. Utility Expense
4. Operating Expense
5. Airport Operator Fee

8.1.4 Based on the above assumptions, GIAL, Mopa, Goa has submitted the following total operating and maintenance expenses for the First Control Period:

Table 80: Total Operating and Maintenance Expenses submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Manpower Expenses (A)	68.23	76.66	105.14	118.12	132.71	500.86
Admin and General Expenses						
Rates & Taxes	1.77	1.86	2.61	2.74	2.88	11.86
Corporate cost allocation	7.50	7.88	8.27	8.68	9.12	41.45
Corporate Social Responsibility (CSR)	-	-	0.30	3.24	6.61	10.15
Bank Charges	1.00	1.05	1.10	1.16	1.22	5.53
Consultancy & Legal	18.98	19.93	20.93	21.98	23.08	104.90

OPERATING & MAINTENANCE EXPENSES FOR THE FIRST CONTROL PERIOD

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Travel	3.87	1.56	2.00	2.10	2.21	11.74
Advertisement	13.64	14.33	15.04	15.79	16.58	75.38
Auditor & Director Fee	0.53	0.55	0.58	0.61	0.64	2.91
Office Maintenance etc.	14.64	17.53	22.52	29.03	34.44	118.16
Total Admin and General Expenses (B)	61.93	64.69	73.35	85.34	96.76	382.07
Utility Expenses						
Electricity*	37.69	39.43	49.72	52.06	54.53	233.43
Water	1.24	1.49	1.91	2.46	2.92	10.02
Total Utility Expenses (C)	38.93	40.92	51.63	54.53	57.45	243.46
Operating Expenses						
Repair and Maintenance	39.96	43.75	51.28	79.38	84.89	299.26
IT Operation related	0.36	-	-	-	-	0.36
Enterprise IT	3.89	4.09	5.24	5.50	5.78	24.50
Housekeeping expense	13.60	13.86	18.91	19.34	19.81	85.52
Insurance	3.72	3.93	4.74	5.01	5.29	22.69
Security expense	13.96	17.13	22.01	27.58	31.68	112.36
Misc. expense	33.79	36.54	40.53	46.60	49.75	207.21
Total Operating Expenses (D)	109.29	119.29	142.70	183.41	197.20	751.89
Airport Operator Fee (E)	0.76	18.37	34.43	44.13	56.92	154.61
Total O&M Expenses (A)+(B)+(C)+(D)+(E)	279.14	319.93	407.25	485.53	541.05	2,032.90

*Considered electricity expenses net of recoveries from the concessionaires providing non aeronautical services.

8.1.5 GIAL, Mopa, Goa has considered the following basis to calculate the estimated total O&M expenses for the First Control period:

Manpower Expense

8.1.6 GIAL, Mopa, Goa has estimated its manpower cost by analyzing the manpower requirements (based on internal estimations) for each department at the airport and determined the average cost per person. The average cost of manpower, including salaries, wages, bonus, contribution to Provident Fund (PF), and gratuity expenses was determined to Rs. 14.16 lakh per person considering year ending March 2023 i.e., FY 2022-23 as a base year. GIAL, Mopa, Goa submitted that the manpower cost related to Airport land development has been considered separately. The department wise manpower details submitted by GIAL, Mopa, Goa is presented below:

Table 81: Department wise manpower details submitted by GIAL, Mopa, Goa together with its classification

Department	Headcount	Classification
CEO's/ Dy. CEO's Office	4	Common
CDO's Office	2	Aeronautical
Planning & Business Intelligence	2	Common
Commercial & Business Development	17	Non-Aeronautical
Finance & Secretarial	12	Common
Procurement & Contracts	6	Common

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Department	Headcount	Classification
Human Resources & Flight Management System	10	Common
Project support function	15	Common
Corporate relation & Corp.Com.& Connectivity	12	Common
Legal	4	Common
Management Assurance Group (MAG)	3	Common
CSR	2	Common
IT	5	Common
Ethics & Intelligence	1	Common
COO's Office	3	Aeronautical
Airside Ops	26	Aeronautical
Airports Operations Control Centre (AOCC)	20	Aeronautical
Aviation Rescue and Fire Fighting (ARFF)	84	Aeronautical
Environment, health & Safety (EHS)	6	Aeronautical
Landside Ops	4	Aeronautical
Technical Services	35	Aeronautical
Security & Vigilance	73	Aeronautical
Terminal operation and customer facility (TOPS & CFL)	27	Aeronautical
Quality & Service Delivery	3	Aeronautical
Total Employees	376	

8.1.7 To calculate the initial manpower cost, GIAL, Mopa, Goa has multiplied the headcount with the average cost. The initial cost is then adjusted for inflation, real growth, and expansion triggers as mentioned in para 8.1.2.

Admin and General Expenses

8.1.8 The basis adopted by GIAL, Mopa, Goa for forecasting Admin and General expenses for the First Control Period in the MYTP submission are as follows:

Table 82: Breakup and basis of Admin and General expenses as submitted by GIAL, Mopa, Goa

SI No	Particulars	Expense basis
1	Rates & Taxes	The property tax rate for Manohar International Airport, Mopa, Goa has been determined according to the provisions outlined in the Goa Panchayat Raj Act (Goa Act No. 14 of 1994). Additionally, an extra increase has been factored into account for the expansion of the terminal building during Phase III.
2	Corporate Cost Allocation	GIAL, Mopa, Goa has received support from GAL (the Group Company) in areas like strategic finance, funding, legal matters and more. GAL has appointed a consultant (Deloitte) to develop an allocation framework for expense distribution. Based on revenue drivers or Gross Block ratios, GAL's corporate costs allocated to GIAL, Mopa, Goa has been estimated to be Rs. 7.5 crores for FY 2023-24, with expected inflationary increases in the future.
3	CSR	CSR spending is calculated in accordance with the regulation i.e., 2% of last 3-years PBT including cross subsidized non-aeronautical revenue.
4	Bank Charges	As per Article 9 of the Concession Agreement, GIAL, Mopa, Goa is required to maintain a performance bank guarantee (PBG) with the concessioning authority. The PBG held by GIAL, Mopa, Goa amounts to Rs. 62 crores, with an annual fee

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SI No	Particulars	Expense basis
		of Rs. 0.60 crores. The remaining Rs. 0.40 crores has been estimated as other bank fees relating to the loan.
5	Consultancy & Legal	Estimated based on department wise cost for the initial year and thereafter escalated by inflation.
6	Travel	The estimated average cost per passenger is derived from benchmarking the costs of two airports, HIAL and BIAL, and then adding an additional amount of Rs.1 crore for travel expenses related to initial business development. This estimated cost is further escalated with inflation and an expansion factor.
7	Auditor & Director Fee	Estimated Rs. 50 Lacs for 1 st year; thereafter escalated by inflation.
8	Advertisement	GIAL, Mopa, Goa estimated advertisement cost taking into account the expected expenses and considered inflationary escalation from FY 2024-25 to FY 2027-28.
9	Office Maintenance etc.	Includes vehicle hire charges, miscellaneous expenses & general admin expenses. Cost is estimated taking into account the expected expenses and thereafter increased by inflation and pax growth.

Utility Expense

- 8.1.9** GIAL, Mopa, Goa estimated the utility costs for power and water consumption at a gross level, subtracting recovery from airlines and concessionaires. Based on internal assessment, the power cost is estimated based on a procurement cost of Rs. 7.33 per kWh for variable costs and Rs. 250 per Kva / month for fixed costs. A 5 MW solar project is planned to meet a significant portion of the energy requirements at a cost of Rs. 4 per kWh.
- 8.1.10** For water consumption, GIAL, Mopa, Goa has an agreement with the water resource department guaranteeing a minimum uptake of 1,700 cubic meters per day, with a rate of Rs. 20 per MLD. The initial cost is then adjusted with inflation and pax growth from FY 2024-25 to FY 2027-28.

Operating Expense

a) Repairs and Maintenance

- 8.1.11** GIAL, Mopa, Goa has awarded the contract for repair and maintenance through a tendering process for the maintenance of existing facilities except for the IT facilities. The cost based on the contract has been considered for FY 2023-24. For further years of the First Control Period, GIAL, Mopa, Goa has used the existing contract as a benchmark and escalated with an increase in capacity from 7.7 MPPA to 11.1 MPPA i.e. Phase III expansion in order to forecast future costs.

b) IT related expenditure

- 8.1.12** In order to run the airport efficiently, GIAL, Mopa, Goa has outsourced all of its current and future IT requirements to a specialized service provider to carry out all the capex and O&M expenses towards Information and Communication Technology (ICT) services. In terms of the contract, GIAL, Mopa, Goa will provide subsistence level support to IT concessionaire till the time Manohar International Airport, Mopa, Goa achieves 6.6 Mn traffic for any financial year. After achieving the trigger traffic, the concessionaire will be on revenue share at the rate of 3.25% of gross revenue it earns. The expected revenue share from the IT concessionaire and subsistence level support are as follows:

Table 83: Details of IT service contract

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28
Contractual Payouts (A)	33.26	0.00	0.00	0.00	0.00
Estimated Revenue					
CUTE (B)	28.05	32.00	39.12	48.04	54.27
Non-CUTE (C)	4.83	5.60	6.19	6.89	9.21
Cost to Manohar International Airport, Mopa, Goa (D=C+B-A)	-0.36	0.00	0.00	0.00	0.00
Revenue Share to Manohar International Airport, Mopa, Goa (E)	0.04	1.22	1.47	1.79	2.06

c) Enterprise IT

8.1.13 GIAL, Mopa, Goa estimated enterprise related IT expenses (includes network in corporate offices, MS office licenses, Corporate IT solutions and support etc.) to be Rs. 2.27 crores for FY 2022-23 and Rs. 3.89 crores for FY 2023-24 and considered inflationary increase and expansion factor thereon for the future years.

d) Other Operating Expenses

8.1.14 The basis for forecasting other Operating expenses by GIAL, Mopa, Goa in its MYTP submission are as follows:

Table 84: Basis for Operating Expense as submitted by GIAL, Mopa, Goa

Sl No	Particulars	Expense basis
1	Housekeeping expense	Considered the cost based on the awarded contract of housekeeping for FY 2023-24 and further increased with inflation and the area increase.
2	Insurance	Estimated the cost of its insurance policies to be Rs. 2.65 crores based on the annual premium. This cost is further adjusted with inflation for the remaining years of the First Control Period. Additionally, anticipated a one-time increase of 25% in insurance premiums due to the potential rise in premiums related to airports.
3	Security expense	Considered the cost based on the awarded contract to M/s RAXA for deploying the security personnel for security related services apart from the CISF security personnels and further escalated based on the pax growth.
4	Misc. expenses	Includes expenses in relation to EHS, trolley management, other Airside O&M, lease rental of equipment, UDF collection charges etc. which are estimated based on the actual contract cost and best available estimates.

Airport Operator Fee

8.1.15 GIAL, Mopa, Goa estimated Airport operator fee of 3% based on the previous year revenue to be paid to the Airport Operator who will provide support in airport operation as well as maintenance and bring in relevant experience and advise to support airport operations.

Classification and Allocation of O&M expenses

8.1.16 GIAL, Mopa, Goa has categorized and assigned its O&M expenses into Aeronautical, Non-aeronautical, and Common categories as presented below:

Table 85: Classification and Allocation of O&M expenses submitted by GIAL, Mopa, Goa for the First Control Period

Particulars	Expense Classification	Allocation basis	Aeronautical	Non-aeronautical
Manpower	Common	Employee Head Count Ratio	94.41%	5.59%
Admin and General Expenses				
Rate & Taxes	Common	Area allocation ratio	91.95%	8.05%
Corporate Allocation Cost	Common	Employee Head Count Ratio	94.41%	5.59%
CSR	Aeronautical	-	100.00%	0.00%
Bank charges	Common	Gross Block ratio	97.56%	2.44%
Consultancy & Legal	Common	Gross Block ratio	97.56%	2.44%
Travel	Common	Employee Head Count Ratio	94.41%	5.59%
Advertisement	Common	Terminal Building Ratio	91.03%	8.97%
Auditor & Director fee	Common	Gross Block ratio	97.56%	2.44%
Office Maintenance etc.	Common	Gross Block ratio	97.56%	2.44%
Utility Expenses	Aeronautical	-	100.00%	0.00%
Operating Expense				
Repairs & Maintenance	Common	Gross Block ratio	97.56%	2.44%
IT cost-Airport operations	Common	Gross Block ratio	97.56%	2.44%
Enterprise IT	Common	Gross Block ratio	97.56%	2.44%
Housekeeping	Common	Terminal Building Ratio	91.03%	8.97%
Insurance	Common	Gross Block ratio	97.56%	2.44%
Security expense	Common	Terminal Building Ratio	91.03%	8.97%
Misc. expenses	Common	Gross Block ratio	97.56%	2.44%
AO fees	Aeronautical	-	100.00%	0.00%

8.1.17 Based on the above assumptions, GIAL, Mopa, Goa has submitted the following aeronautical Operating and Maintenance expenses for the First Control Period:

Table 86: GIAL, Mopa, Goa’s submission of Aeronautical Operating and Maintenance expenditure for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Manpower Expense (A)	63.99	71.90	98.61	110.79	124.47	469.75
Admin and General Expenses						
Rates & Taxes	1.63	1.71	2.40	2.52	2.65	10.91
Corporate cost allocation	7.08	7.44	7.81	8.20	8.61	39.13
CSR	-	-	0.30	3.24	6.61	10.15
Bank Charges	0.98	1.02	1.08	1.13	1.19	5.39
Consultancy & Legal	18.52	19.45	20.42	21.44	22.51	102.33
Travel	3.66	1.47	1.89	1.98	2.08	11.09
Advertisement	12.42	13.04	13.69	14.38	15.10	68.63

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Particulars	FY24	FY25	FY26	FY27	FY28	Total
Auditor & Director Fee	0.51	0.54	0.56	0.59	0.62	2.83
Office Maintenance etc.	14.28	17.11	21.97	28.32	33.60	115.27
Total Admin and General Expenses (B)	59.07	61.78	70.12	81.81	92.96	365.73
Utility Expense						
Electricity	37.69	39.43	49.72	52.06	54.53	233.42
Water	1.24	1.49	1.91	2.46	2.92	10.02
Total Utility Expense (C)	38.93	40.92	51.63	54.53	57.45	243.44
Operating Expenses						
Repair and Maintenance	38.98	42.68	50.02	77.44	82.82	291.94
IT Operation related	0.35	-	-	-	-	0.35
Enterprise IT	3.80	3.99	5.11	5.37	5.63	23.89
Housekeeping expense	12.38	12.62	17.21	17.60	18.03	77.84
Insurance	3.63	3.83	4.63	4.89	5.16	22.14
Security expense	12.71	15.59	20.04	25.11	28.84	102.29
Misc. expense	33.18	35.87	39.79	45.76	48.85	203.45
Total Operating Expenses (D)	105.03	114.58	136.80	176.16	189.34	721.91
Airport Operator Fee (E)	0.59	16.79	31.97	40.99	52.82	143.16
Total Aeronautical O&M expenses (A)+(B)+(C)+(D)+(E)	267.62	305.96	389.12	464.26	517.03	1,944.00

8.2 Authority’s examination regarding Operating and Maintenance Expenses for the First Control Period

8.2.1 The Authority has examined the basis and estimation of O&M expenses submitted by GIAL, Mopa, Goa for the First Control Period. The Authority notes that GIAL, Mopa, Goa has analyzed O&M expenses considering infrastructure requirements, personnel costs, equipment maintenance, utilities, security measures and other costs. The Authority has conducted a detailed analysis of O&M expenses submitted by GIAL, Mopa, Goa in the following order:

- I. Allocation ratios
- II. Examination of O&M expenses and its allocation into aeronautical and non-aeronautical expenses

I. Allocation Ratios

8.2.2 The following ratios have been analyzed and recomputed by the Authority for appropriate segregation of Common expenses between Aeronautical and Non-aeronautical for First Control Period.

Terminal Building ratio

8.2.3 The Authority observed that GIAL, Mopa, Goa has considered the terminal building ratio of 91.03%:8.97% based on the usage of area towards aeronautical and non-aeronautical activities considering 6,075 sqm as non-aero area out of total terminal area of 67,726 sqm.

8.2.4 The Authority examined in detail the Terminal Building ratio submitted by GIAL, Mopa, Goa in Chapter 5 of this Consultation Paper. The Authority proposes to consider Terminal Building Ratio of 90%:10% for the First Control Period (Refer para 5.4.6 for detailed explanation).

Gross Block ratio

- 8.2.5** The Authority notes that GIAL, Mopa, Goa has calculated the Gross Block ratio based on the classification of Gross Block of Assets capitalized for Phase I. Furthermore, the Authority observes that GIAL, Mopa, Goa has maintained the same Gross Block ratio throughout the entirety of the First Control Period, without revising it despite the capitalization of assets taking place each year during this period. The Authority, based on the proposed capital expenditure in Table 64 & Table 68, proposes the Gross Block ratio for the First Control Period as presented in the table below.

Table 87: Gross Block ratio proposed by the Authority for the First Control Period*(Rs. in crores)*

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Aeronautical Gross Block						
Opening Gross Block (A)	2,507.92	3,265.03	3,274.03	3,686.76	3,695.76	
Addition (B) (Table 68)	757.11	9.00	412.73	9.00	9.00	1,196.84
Sales/Transfers/Disposals (C)	-	-	-	-	-	
Closing of Aeronautical Gross Block (D=A+B-C)	3,265.03	3,274.03	3,686.76	3,695.76	3,704.76	
Total Gross Block						
Opening Gross Block (E)	2,620.74	3,415.07	3,425.07	3,876.20	3,886.20	
Addition (F) (Table 64)	794.33	10.00	451.14	10.00	10.00	1,275.47
Sales/Transfers/Disposals (G)	-	-	-	-	-	
Closing of Total Gross Block (H=E+F-G)	3,415.07	3,425.07	3,876.20	3,886.20	3,896.20	
<i>Aeronautical Gross Block Percentage (I=D ÷ H)</i>	95.61%	95.59%	95.11%	95.10%	95.09%	
Average of 5 year-Aeronautical Gross Block Ratio	95.30%					

Employee Head Count Ratio (EHCR)EHCR submitted by GIAL, Mopa, Goa

- 8.2.6** The Authority has reviewed the submission made by GIAL, Mopa, Goa and observed that GIAL, Mopa, Goa has submitted Employee Head Count ratio of 94.41%:5.59% (Aeronautical: Non-Aeronautical) based on the nature of services provided by each department, segregated as aero, non-aero, or common.

Actual Employee Head Count & Expansion Factors

- 8.2.7** The Authority notes that GIAL, Mopa, Goa, in response to the query, has provided the actual head count of employees working at Manohar International Airport, Mopa, Goa for the month of March 2023 department-wise. Upon reviewing, the Authority notes that using the actual head count figures will offer an accurate representation of the current number of employees and facilitate assessment of manpower expenses. Therefore, the Authority proposes to adopt the actual head count data from March 2023 as the base for assessing the Employee Head Count of the First Control Period for Manohar International Airport, Mopa, Goa.

Classification of Employees

8.2.8 After examining the functions of each department, the Authority has determined that the duties of employees listed below extend beyond aeronautical activities and encompass the overall operations of the airport. As a result, the Authority proposes reclassification of these departments as Common:

1. CDO's Office
2. COO's Office
3. Security Vigilance

8.2.9 Therefore, based on the above analysis, the Authority has recalculated the Employee Head Count Ratio (EHCR) as presented below and proposes a revised ratio of 95.73% : 4.27% (Aeronautical: Non-Aeronautical) for the allocation of expenses in the First Control Period.

Table 88: Employee Head Count Ratio proposed by the Authority for the First Control Period

Department	Classification	FY23
CEO's/ Dy. CEO's Office	Common	3
CDO's Office	Common	2
Planning & Business Intelligence	Common	2
Commercial & Business Development	Non-Aero	7
Finance & Secretarial	Common	10
Procurement & Contracts	Common	5
Human Resources & Flight Management System	Common	9
Project support function	Common	15
Corporate relation & Corp.Com.& Connectivity	Common	13
Legal	Common	2
Management Assurance Group (MAG)	Common	2
CSR	Common	1
IT	Common	3
Ethics & Intelligence	Common	1
COO's Office	Common	2
Airside Ops	Aero	23
AOCC	Aero	20
ARFF	Aero	81
EHS	Aero	5
Security & Vigil.	Common	88
Terminal operation and customer facility (TOPS & CFL)	Aero	30
Quality & Service Delivery	Aero	1
Passenger Exp	Aero	3
Total		328
Employee Head Count		
Aero		163
Non-Aero		7
Common		158
Common Employees to Aero & Non-Aero		
Aero		151
Non-Aero		7
Total Employee Head Count		

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Department	Classification	FY23
Aero		314
Non-Aero		14
Employee Head Count ratio (Aero : Non-Aero)		
Aero		95.73%
Non-Aero		4.27%

Summary of Allocation Ratios proposed by the Authority for the First Control Period

8.2.10 The Allocation ratios proposed by the Authority for Manohar International Airport, Mopa, Goa for the First Control Period are as follows:

Table 89: Allocation Ratios proposed by the Authority for the First Control Period

Particulars	FY24	FY25	FY26	FY27	FY28
TBLR (para 5.4.6)	90.00%	90.00%	90.00%	90.00%	90.00%
Gross Block Ratio (Table 87)	95.30%	95.30%	95.30%	95.30%	95.30%
EHCR (Table 88)	95.73%	95.73%	95.73%	95.73%	95.73%

Classification and Allocation of O&M expenses

8.2.11 The Authority has classified and assigned the projected O&M expenses into three distinct categories: Aeronautical, Non-aeronautical, and Common. Further, the common expenses have been allocated into aeronautical and non-aeronautical categories, based on the established methodology followed by the Authority across all airports. Presented below is the table illustrating the classification and allocation of O&M expenses proposed by the Authority in the subsequent paragraphs, into the aeronautical and non-aeronautical segments for the First Control Period:

Table 90: Classification and Allocation of O&M expenses proposed by the Authority for the First Control Period

Particulars	Expense Classification	Allocation basis	Aeronautical	Non-aeronautical
Manpower	Common	Employee Head Count Ratio	95.73%	4.27%
Admin and General Expenses				
Rate & Taxes	Common	Area allocation ratio (Table 95)	90.92%	9.08%
Corporate Allocation Cost	Common	Employee Head Count Ratio	95.73%	4.27%
CSR	Aeronautical	-	100.00%	0.00%
Bank charges	Common	Gross Block Asset ratio	95.30%	4.70%
Consultancy & Legal	Common	Gross Block Asset ratio	95.30%	4.70%
Travel	Common	Employee Head Count Ratio	95.73%	4.27%
Advertisement	Common	Terminal Building Ratio	90.00%	10.00%
Auditor & Director fee	Common	Gross Block Asset ratio	95.30%	4.70%

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Particulars	Expense Classification	Allocation basis	Aeronautical	Non-aeronautical
Office Maintenance etc.	Common	Gross Block Asset ratio	95.30%	4.70%
Utility Expenses	Aeronautical	After Net recoveries from the Non-Aeronautical Concessionaire	100.00%	0.00%
Operating Expense				
Repairs & Maintenance	Common	Gross Block Asset ratio	95.30%	4.70%
IT cost-Airport operations	Common	Gross Block Asset ratio	95.30%	4.70%
Enterprise IT	Common	Gross Block Asset ratio	95.30%	4.70%
Housekeeping expense	Common	Terminal Building Ratio	90.00%	10.00%
Insurance	Common	Gross Block Asset ratio	95.30%	4.70%
Security expense	Common	Terminal Building Ratio	90.00%	10.00%
Misc. expenses				
a. EHS	Aeronautical	-	100.00%	0.00%
b. Trolley Management	Aeronautical	-	100.00%	0.00%
c. Other Airside O&M	Aeronautical	-	100.00%	0.00%
d. Lease Rental	Common	Gross Block Asset ratio	95.30%	4.70%
e. UDF Collection Charges	Aeronautical	-	100.00%	0.00%
f. Other Tops	Common	Terminal Building Ratio	90.00%	10.00%
g. Other Misc. Expenses	Common	Terminal Building Ratio	90.00%	10.00%
AO fees	-	-	-	-

II. Examination of O&M expenses and its allocation into aeronautical and non-aeronautical expenses

8.2.12 The Authority has carefully examined GIAL, Mopa, Goa submission regarding various O&M expenses for the First Control Period. The Authority in the following paragraphs presents its analysis of each expense category and its corresponding allocation, organized in the following sequence:

- a) Inflationary Increase
- b) Expansion Increase
- c) Manpower Expense and its allocation
- d) Admin and General Expense and its allocation
- e) Utility Expense and its allocation
- f) Operating Expense and its allocation
- g) Airport Operator Fee

Inflationary Increase

8.2.13 The Authority, on examination of the submission made by GIAL, Mopa, Goa, notes that WPI inflation of 5% has been considered towards all expenses. However, the Authority in its analysis detailed in Chapter 7, proposes to consider WPI inflation of 4% Y-o-Y published in the results of the 82nd round of the Survey of Professional Forecasters on Macroeconomic Indicators released on 8th June 2023.

Expansion Increase

8.2.14 The Authority notes that GIAL, Mopa, Goa in its submission has projected various expenses by considering an incremental factor of 10% in FY 2023-24 and 22% in FY 2025-26. These increments were attributed to the capacity expansion in Phase II and Phase III, respectively. Upon analysing, the Authority notes that a more accurate representation of the impact of infrastructure development on expenses would be achieved by considering the increase in terminal building area instead of just capacity. Thus, the Authority proposes to use the area expansion in Phase II and III as the incremental factor.

The Authority also recognizes that the increase in expenses may not be directly proportional to the increase in the Terminal Building area due to factors such as technological innovations, advancements, and economies of scale. Hence, the Authority proposes to consider 2/3rd (66.67%) of the area increase i.e. 7% in FY 2023-24 and 25% in FY 2025-26 as computed below as expansion increase while projecting expenses for the First Control Period.

Table 91: Expansion Increase % proposed by the Authority for the First Control Period

Particulars	Reference	Amount
Phase-II Expansion Growth		
Cost of Terminal Building (Rs in Cr)		
Phase – I	A	637.46
Phase – II	B	69.65
Increase from Phase – I	C=B/A	11%
Phase-II Expansion Growth	D=C*2/3	7%
Phase-III Expansion Growth		
Terminal Area (In Sqm)		
Phase – II	E	67,726
Phase – III	F	92,726
Increase from Phase – II	G=(F/E)-1	37%
Phase-III Expansion Growth	H=G*2/3	25%

In respect of Manpower expenses, the Authority notes that GIAL, Mopa, Goa has claimed 22% expansion increase in FY 2025-26 which the Authority finds to be reasonable and justified. Hence, the Authority proposes to allow the same.

Manpower Expenses

8.2.15 The Authority notes that GIAL, Mopa, Goa has provided a weighted average employee cost of Rs. 14.16 lakh per annum for FY 2022-23, with a projected annual increase of 7% Y-o-Y for the years of the First Control Period. This average cost includes the salary expenses of all departments (refer to Table 81) and encompasses various grades, starting from the highest managerial grade M1 to A5 level.

8.2.16 The Authority observes that GIAL, Mopa, Goa has taken into account the salaries of employees across different roles and levels within the organization, resulting in a representative figure for the average cost. The Authority is of the view that the average cost proposed by GIAL, Mopa, Goa covers all the grades of employees. Therefore, the Authority proposes to accept the weighted average employee salary cost of Rs. 14.16 lakh per annum. However, aligning with the uniform approach taken for Manpower Expenses, the

Authority proposes to rationalize the growth rate to 6% year-on-year for all years of the First Control Period, starting from FY 2023-24.

8.2.17 Further, the Authority observes that GIAL, Mopa, Goa has factored in, the capacity expansion of 10% for Phase II in FY 2023-24 and 22% for Phase III in FY 2025-26 and an inflation increase of 5% Y-o-Y starting from FY 2023-24 onwards into the calculation of employee cost. The Authority after analysing the same, proposes the following adjustments:

- To not consider the inflationary increase, as 6% growth rate has already been proposed.
- To consider area expansion of Phase II and Phase III, by 7% in FY 2023-24 and 22% in FY 2025-26 respectively (refer para 8.2.14 and Table 91) as the expansion of the facility comes with the challenge of accommodating the corresponding increase in operations requiring additional manpower.

8.2.18 Additionally, the Authority notes that GIAL, Mopa, Goa in its calculation of manpower expenses considered staff welfare expenses at the rate of 3% of employee cost. The Authority notes this to be reasonable. Thus, the Authority proposes to consider staff welfare expenses at the rate of 3% on the employee cost proposed by the Authority in para 8.2.16 and 8.2.17.

8.2.19 Taking the above factors into consideration, the Authority proposes the following manpower expenses for the First Control Period:

Table 92: Manpower Expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Manpower Expenses	54.26	57.52	74.38	78.85	83.58	348.58

Allocation of Manpower Expenses

8.2.20 The Authority, taking into the account the EHCR as presented in Table 88, proposes the following aeronautical manpower expenses for determination of tariff of the First Control Period of Manohar International Airport, Mopa, Goa.

Table 93: Aeronautical Manpower Expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Manpower Expenses	51.95	55.06	71.21	75.48	80.01	333.71

Admin and General Expenses

8.2.21 The Authority notes that GIAL, Mopa, Goa has estimated Admin and General expenses for the First Control Period of Rs. 382.07 crores and has provided the basis for each component of Admin and General expense which is presented in Table 82. The Authority has analyzed each component of Admin and General expense and proposes the Admin and General expense for the First Control Period as detailed below.

Table 94: Admin and General expenses proposed by the Authority for the First Control Period*(Rs. in crores)*

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total	Basis considered by the Authority
Rates & Taxes	1.78	1.85	2.40	2.50	2.60	11.12	Proposes to consider the estimation base provided by GIAL, Mopa, Goa for FY 2023-24. To account for inflation, an annual increase of 4% (WPI) is applied for the remaining years of the First Control Period. Furthermore, in FY 2025-26, 25% (Refer Table 91) increase has been considered due to area expansion.
Corporate Cost Allocation	3.75	3.90	4.06	4.22	4.39	20.31	<p>The Authority has examined the proposal for the allocation of Corporate Cost amounting to Rs. 7.5 crores for FY 2023-24 submitted by GIAL, Mopa, Goa. After careful consideration, the Authority proposes to allow 50% of the expense proposed by GIAL for FY 2023-24 as Corporate Cost allocation and thereafter escalate with an inflationary increase of 4% Y-o-Y for the remaining years of the First Control Period.</p> <p>The proposal of Rs. 3.75 crores for FY 2023-24 is considered as a general estimate due to the lack of detailed computations or documentation provided by GIAL, Mopa, Goa to substantiate their submission. It is noted that the study for allocation for Corporate Cost was conducted by Deloitte, for three group companies, namely HIAL, DIAL and Manohar International Airport, Mopa, Goa. Despite continuous follow-ups till 6th July 2023, GIAL, Mopa, Goa has failed to provide a copy of the study conducted by Deloitte and the basis for estimating the expense. GIAL, Mopa, Goa responded that the allocation has not been finalized yet, as the current year marks the first year of full operations and the amount of Rs. 7.5 crores for FY 2023-24 is only an estimated figure that may undergo finalization during the year.</p>

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Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total	Basis considered by the Authority
							The Authority expects that the Corporate Cost allocation will be towards efficiently spent expenditure, backed by an appropriate methodology of allocation.
CSR	-	-	-	-	-	-	CSR is estimated based on Aeronautical P&L and the average of past 3 years' profit. As this is dependent on the profitability of the individual years of operation, the same will be evaluated and trued up at the time of next control period.
Bank Charges	0.60	0.62	0.65	0.67	0.70	3.25	Proposes to consider the estimation base provided by GIAL, Mopa, Goa for FY 2023-24 after excluding Rs.0.40 crores which has been estimated by GIAL, Mopa, Goa as other bank fees relating to the term loan. This exclusion is proposed because costs related to the term loan should be considered as part of the Regulated Asset Base (RAB) and not categorized as Operations & Maintenance (O&M) expenses. To account for inflation, an annual increase of 4% (WPI) is applied for the remaining years of the First Control Period.
Consultancy and Legal	10.00	10.40	10.82	11.25	11.70	54.16	GIAL, Mopa, Goa vide email dated 7 th July 2023 provided detailed breakup of Consultancy & legal charges estimated for FY 2023-24. The Authority upon detailed analysis of each head proposes to consider Rs. 10.00 crores for FY 2023-24 (refer Annexure 2 for Authority's observation and proposal for each item). For the remaining period of the First Control Period, it is proposed to increase the estimates by 4% annually, in line with the inflation rate (WPI) from FY 2024-25 onwards.

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Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total	Basis considered by the Authority
Travel	1.97	2.05	2.13	2.22	2.30	10.67	<p>Estimates made are based on benchmarks from other airports. Initial business development costs of Rs. 1 crore additional submitted by GIAL, Mopa, Goa is not considered as the basis and justification of the same was not provided.</p> <p>It is proposed to increase the estimates by 4% annually, in line with the inflation rate (WPI) from FY 2024-25.</p>
Advertisement	8.50	8.84	4.60	4.78	4.97	31.69	<p>Being a new airport, the Authority notes the need for Advertisement costs in the initial years. Accordingly, Rs. 8.50 Crores has been considered for FY 2023-24 together with an inflationary increase for the next year.</p> <p>However, Authority notes that, after the initial period of two years, Manohar International Airport, Mopa, Goa would have had sufficient traction and hence the cost of Advertising has been rationalized by 50% from the next year and estimated with the inflationary increase.</p> <p>The Authority urges GIAL, Mopa, Goa to ensure efficient and optimal spend of the same which will be reviewed in the next control period.</p>
Auditor & Director Fee	0.53	0.55	0.57	0.60	0.62	2.87	<p>Proposes to consider the estimation base provided by GIAL, Mopa, Goa for FY 2023-24. To account for inflation, an annual increase of 4% (WPI) is applied for the remaining years of the First Control Period.</p>

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Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total	Basis considered by the Authority
Office Maintenance, Vehicle charges etc.	17.55	18.25	23.73	24.67	25.66	109.86	For FY 2023-24, the Authority has assessed the actual data submitted by GIAL, Mopa, Goa for the three months starting from COD till 31 st March 2023 of FY 2022-23. This data is extrapolated to estimate the expenses for FY 2023-24 along with 7% increase due to area expansion (refer Table 91). Furthermore, for the remaining period of the First Control Period, it is proposed to increase the estimates by 4% annually, in line with the inflation rate (WPI) from FY 2024-25 and considering 25% (Refer Table 91) increase due to area expansion in FY 2025-26.
Total Admin and General Expenses	44.67	46.46	48.95	50.91	52.94	243.93	

Allocation of Admin and General Expenses

8.2.22 The Authority has examined the allocation of Admin and General costs into Aero and Non-Aero. The following breakdown provides a detailed account of the classification and allocation of each component within the Admin and General expense:

Rates & Taxes

8.2.23 The Authority notes GIAL, Mopa, Goa's classification of each area within the Manohar International Airport, Mopa, Goa for the purpose of calculating aeronautical rates and taxes and dividing them into aero, non-aero, and common categories. The Authority based on its analysis, reclassifies each area into aero, non-aero, and common and thereafter allocates common costs into aero and non-aero. The table presents the reclassification and reallocation of rates and taxes proposed by the Authority for both the First Control Period.

Table 95: Aeronautical Rates and Taxes for FY 2023-24 proposed by the Authority

(Rs. in crores)

Particulars	Area in Sqm	Property tax pa	Classification as per GIAL, Mopa, Goa	Classification as per Authority	Aero taxes as per GIAL, Mopa, Goa	Aero taxes as per Authority
Passenger Terminal Building (PTB) BLOCK 1	67,726	1.35	Common (TBLR)	Common (TBLR)	1.23	1.22
Air Traffic Control - Technical Building (ATC - TB)	2,250	0.04	Aero	Aero	0.04	0.04

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Particulars	Area in Sqm	Property tax pa	Classification as per GIAL, Mopa, Goa	Classification as per Authority	Aero taxes as per GIAL, Mopa, Goa	Aero taxes as per Authority
Air Traffic Control - Tower (ATC-T)	1,341	0.03	Aero	Aero	0.03	0.03
Crash Rescue Fire Station - Main (CRFS-M)	952	0.02	Aero	Aero	0.02	0.02
Crash Rescue Fire Station - Satellite (CRFS-S)	311	0.01	Aero	Aero	0.01	0.01
Utility Building	2,040	0.04	Aero	Common (TBLR)	0.04	0.04
AGL Sub Station	578	0.01	Aero	Aero	0.01	0.01
Airport surveillance radar (ASR) MSSR	416	0.01	Aero	Aero	0.01	0.01
ASDC Buildings (ASDC, Cafeteria & Workshop)	486	0.01	Common (TBLR)	Common (TBLR)	0.01	0.01
Administrative Block	4,844	0.10	Common (TBLR)	Common (TBLR)	0.09	0.09
Cafeteria	1,023	0.02	Common (TBLR)	Common (EHCR)	0.02	0.02
Airport Utility (Accommodation Centre)	1,226	0.02	Common (TBLR)	Common (TBLR)	0.02	0.02
Airline Engineering and Maintenance Building (AEMB) - Block	989	0.02	Aero	Aero	0.02	0.02
Doppler Very High Frequency Omni Range (DVOR)	73	0.00	Aero	Aero	0.00	0.00
Gate House -01	68	0.00	Aero	Aero	0.00	0.00
Sewage Treatment Plant (STP)	534	0.01	Common (TBLR)	Common (Asset ratio)	0.01	0.01
Gate House -02	68	0.00	Aero	Aero	0.00	0.00
Gilde Path	25	0.00	Aero	Aero	0.00	0.00
Localizer	25	0.00	Aero	Aero	0.00	0.00
Main Water Tank	2,012	0.04	Common (TBLR)	Common (Asset ratio)	0.04	0.04
MRSS Block	1,805	0.04	Common (TBLR)	Common (TBLR)	0.03	0.03
Total	88,793	1.78			1.63	1.61

8.2.24 Based on its analysis, the Authority notes that the allocation basis selected by GIAL, Mopa, Goa for the other components of Admin and General expenses is reasonable. As a result, the Authority proposes adopting the same allocation basis, taking into consideration the revised ratios calculated in para 8.2.1 (I) as mentioned earlier.

8.2.25 Based on the aforementioned proposals, the Authority proposes the following aeronautical Admin and General expenses for the First Control Period.

Table 96: Aeronautical Admin and General Expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Rates & Taxes	1.61	1.68	2.19	2.27	2.36	10.12
Corporate cost allocation	3.59	3.73	3.88	4.04	4.20	19.44
CSR	-	-	-	-	-	-
Bank Charges	0.57	0.59	0.62	0.64	0.67	3.10
Consultancy and Legal	9.53	9.91	10.31	10.72	11.15	51.62
Travel	1.89	1.96	2.04	2.12	2.21	10.21
Advertisement	7.65	7.96	4.14	4.30	4.47	28.52
Auditor & Director Fee	0.51	0.53	0.55	0.57	0.59	2.74
Office Maintenance etc.	16.72	17.39	22.61	23.51	24.46	104.70
Total Aeronautical Admin and General Expenses	42.07	43.76	46.33	48.18	50.11	230.44

Utility Expense

Power Cost

8.2.26 The Authority notes that GIA, Mopa, Goa has projected the power costs, factoring in the recoveries received from the Concessionaires, which are estimated to be an average of 24% of the total power cost. This recovery percentage is determined by considering a 20% recovery on the total units of power consumed and another 20% recovery on the Per unit rate of power from the concessionaires.

Upon careful assessment, the Authority finds this recovery percentage to be reasonable when compared to other airports in the region. However, the Authority notes that as GIAL, Mopa, Goa gradually expands its Non-aeronautical operations, it should also proportionately increase the power recovery.

8.2.27 The Authority notes that GIAL, Mopa, Goa has estimated a power consumption of 5.23 crores kilowatt-hours (KWH) with a procurement cost of Rs. 7.69 per kWh (increased from Rs. 7.33 per kWh for FY 2022-23, accounting for a 5% inflation) and fixed costs of Rs.250 per Kva/month for FY 2023-24. The Authority's analysis on the same is as follows:

- **Units Consumption:** The Authority, after reviewing the actual bills for the months of April 2023 and May 2023, noticed that the consumption of power units for a single month amounted to approximately 14.68 lakhs units. Extrapolating this figure, it is estimated that the total consumption for the entire year would be around 1.7 crores units.

Considering that Manohar International Airport, Mopa, Goa has recently initiated operations for domestic traffic and is yet to commence international traffic in July 2023, it is expected that the power unit consumption will increase in the future. Hence, the Authority proposes to consider double of the units calculated as above, i.e., 1.7 crores units, for FY 2023-24. Consequently, the Authority proposes considering the consumption at approximately 3.50 crores units for FY 2023-24, together with a 25% increase (as shown in Table 91), due to the anticipated area expansion in FY 2025-26.

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- **Procurement Cost:** GIAL, Mopa, Goa has provided the procurement cost of Rs. 7.33 per kWh and fixed costs of Rs. 250 per Kva/month based on the actual bill issued by the Electricity Department of the Government of Goa on 13th February 2023. However, the Authority considering the latest bill i.e. May 2023 proposes to consider average rate of Rs. 6.98 per kWh and fixed costs of Rs. 250 per Kva/month for FY 2023-24. For the remaining years of the First Control Period of Manohar International Airport, Mopa, Goa, an annual inflationary increase of 4% (WPI) will be applied to the power charges.

8.2.28 Additionally, GIAL, Mopa, Goa has installed a 5 MW Solar project on a Build-Own-Operate-Transfer (BOOT) basis. The project aims to meet 7 million kWh of the airport's energy requirement, with an assumed cost of Rs. 4 per kWh. The Authority has reviewed GIAL, Mopa, Goa's cost estimation for the solar project and finds it reasonable. Therefore, the Authority proposes to consider this cost estimation and adjust the 7 million kWh of energy generated from solar power from the total unit consumption mentioned in para 8.2.27 above.

8.2.29 Taking into account all the factors discussed above, the Authority proposes the power cost for the First Control Period as follows:

Table 97: Power Charges proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	Reference	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Energy unit in Mus	A	35.01	35.01	43.76	43.76	43.76	201.30
Solar Mus	B	7.00	7.00	7.00	7.00	7.00	35.00
Grid in KWH	C=A-B	28.01	28.01	36.76	36.76	36.76	166.30
Per unit cost	D	6.98	7.26	7.55	7.85	8.16	
Grid Variable cost	E=CxD/10	19.54	20.33	27.74	28.85	30.01	126.48
Grid Fixed cost	F	1.42	1.47	1.92	1.99	2.07	8.87
Solar Power cost	G	2.80	2.80	2.80	2.80	2.80	14.00
Total Electricity Cost	H=E+F+G	23.76	24.60	32.46	33.65	34.88	149.35
Expected recovery	I	4.69	4.88	6.66	6.92	7.20	30.35
Net Electricity Cost (Aeronautical)	J=H-I	19.07	19.72	25.80	26.72	27.68	118.99

Water Charges

8.2.30 The Authority notes that the water charges are based on the agreement with the water resource department of Goa which is fixed in terms of rate and the minimum water intake for FY 2023-24. The Authority proposes to adopt GIAL, Mopa, Goa's estimation for FY 2023-24 as the basis for water charges. For the subsequent years of the First Control Period, the Authority proposes applying a 4% inflationary increase to the water charges and adjusting the water intake based on the growth in airport traffic.

8.2.31 Further, the Authority notes that GIAL, Mopa, Goa has not considered recovery for water usage from the concessionaires. Upon seeking clarification, GIAL, Mopa, Goa informed that the water consumption is intended to be net of recoveries; however, it has inadvertently not been netted off from the expenses in the

model and requested to consider the same recovery % used for electricity. Thus, the Authority proposes to consider 24% of the total water cost as recoveries from the concessionaires.

8.2.32 Taking the above factors into consideration, the Authority proposes the following Utility expenses for First Control Period:

Table 98: Total Utility Expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Electricity Cost	23.76	24.60	32.46	33.65	34.88	149.35
Water Cost	1.24	1.47	1.87	2.39	2.81	9.78
Total Utility Expense	25.00	26.07	34.33	36.04	37.69	159.13

Allocation of Utility Expenses

8.2.33 In line with the discussion in para 8.2.26 and 8.2.31, the power and water charges has been considered as Aeronautical after making adjustments in recoveries from the concessionaires. Taking into account the recoveries from the concessionaires as adjustments from power and water charges, the Authority proposes to consider the following aeronautical utility expenses for the First Control Period.

Table 99: Aeronautical Utility Expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Electricity Cost	19.07	19.72	25.80	26.72	27.68	118.99
Water Cost	0.94	1.12	1.42	1.82	2.14	7.44
Total Aeronautical Utility Expense	20.01	20.84	27.22	28.54	29.81	126.43

Operating Expense

a) Repairs and Maintenance (R&M)

8.2.34 The following paragraphs summarize the findings and proposals made by the Authority regarding R&M expenses submitted by GIAL, Mopa, Goa for Manohar International Airport, Mopa, Goa:

- The Authority notes that GIAL, Mopa, Goa has entered into a engineering and maintenance contract with a related party through a tendering process. The Authority has sought confirmation from GIAL, Mopa, Goa that due process as mentioned in para 2.5.7 has been followed as per appropriate governance practices and that Probity audit reports have been submitted to GoG and approved by GoG. GIAL, Mopa, Goa has confirmed the same.
- The Authority analysed the percentage of R&M expenses in relation to the net block of assets for each tariff year, as submitted by GIAL, Mopa, Goa. The Authority observed that GIAL, Mopa, Goa's estimated R&M costs for the First Control Period fall in the range of 1.13% to 2.30% of the net block of assets. It is important to note that Manohar International Airport, Mopa, Goa is a newly constructed greenfield airport, hence, it will initially incur significant capital expenditure costs and will require minimal repairs and maintenance.
- GIAL, Mopa, Goa's contract for R&M expenses indicates that the airport facilities are covered under the defect liability period of two years from the EPC contractor and other project vendors. For monitoring that defect liability period is properly complied, the contract provides responsibility to the contractor. Along

with this, the contractor will be responsible for carrying out the necessary engineering and maintenance services to ensure the operational functionality of Manohar International Airport, Mopa, Goa from the Commercial Operation Date (COD).

- The Authority is of the view that Manohar International Airport, Mopa, Goa is a newly constructed infrastructure with several advantages, including guarantees, warranties, and a two-year defect liability period. However, certain operational and maintenance related expenses would be incurred to ensure smooth running of operation.
- Taking into account the benefits provided by guarantees, warranties, and the two-year defect liability period, the Authority proposes a revised approach for considering the Repair and Maintenance (R&M) expenses for the initial two years. Specifically, the proposed amounts for FY 2023-24 and FY 2024-25 are considered at Rs. 15 crores and Rs. 20 crores respectively. Thereafter, the R&M expenses will be considered at 70% of the expenses submitted by GIAL, Mopa, Goa for the subsequent years, noting that the values of Repair and Maintenance costs proposed by GIAL, Mopa, Goa as high and that it may take another couple of years in the control period for the operations at the airport to stabilize. By adopting this approach, the Authority aims to strike a fair balance between recognizing the advantages of the initial warranty and defect liability period while still accounting for the ongoing operational and maintenance requirements of the airport in the years to come. These will be reviewed at the time of true up to evaluate the reasonableness and optimum level of R&M costs, once the operations at the airport stabilize.

b) IT related expenditure

8.2.35 The Authority has taken note that GIAL, Mopa, Goa has awarded the license agreement for IT Services at Manohar International Airport, Mopa, Goa through an e-tendering process. As per the agreement, upon COD and until the Revenue Share Trigger Date, which is the date when the passenger traffic at the airport reaches 6.6 million, GIAL, Mopa, Goa has committed to providing subsistence level support to the IT concessionaire.

8.2.36 As part of this support, GIAL, Mopa, Goa will reimburse the IT concessionaire for the capital expenditure and operational expenditure incurred in providing the necessary IT assets, IT works, and IT services to GIAL, Mopa, Goa. The reimbursement will be calculated on a pro rata basis using the following formula:

“WACC return on Capex Incurred + Depreciation + Opex + 20% margin on Opex”

8.2.37 After the Revenue Share Trigger Date, GIAL, Mopa, Goa will receive a revenue share of 3.25% of the gross revenue, which includes the revenue generated from both Common Use Terminal Equipment (CUTE) and non-CUTE services.

8.2.38 GIAL, Mopa, Goa in its submission, has estimated the subsistence level support cost based on the values for capital and operational expenditure obtained from the IT concessionaire's records. The Authority has also observed that the estimated Revenue Share Trigger Date provided by GIAL, Mopa, Goa aligns with traffic estimated by the Authority in Table 31 which is expected to be triggered in FY 2023-24.

8.2.39 Based on these considerations, the Authority notes that GIAL, Mopa, Goa's estimation of the IT-related cost for subsistence level support and the revenue share calculation are reasonable. Therefore, the Authority proposes to accept GIAL, Mopa, Goa's estimation for IT-related costs as part of O&M expenses (Refer Table 83) and the revenue generated from CUTE and non-CUTE services as part of the Aeronautical Income which

will be analyzed and discussed under Aeronautical Revenues after receiving the tariff rate card from GIAL, Mopa, Goa during the Consultation Stage.

c) Enterprise IT

8.2.40 The Authority notes that GIAL, Mopa, Goa has estimated enterprise-related IT expenses for FY 2022-23 to be Rs. 2.27 crores and Rs. 3.89 crores for FY 2023-24. These expenses encompass various aspects such as network infrastructure in corporate offices, MS Office licenses, corporate IT solutions, and support.

The Authority is of the view that Enterprise IT is also important to meet the technological needs of the organization, enhance productivity, and ensure efficient communication and collaboration. It includes activities such as hardware and software maintenance, user support, system upgrades, and security measures. However, as detailed basis of the expenditure was not submitted by GIAL, Mopa, Goa, the Authority proposes to consider only 70% of the cost estimate submitted by GIAL, Mopa, Goa for FY 2023-24 and thereafter increase the same with 4% inflation Y-o-Y.

d) Other Operating Expenses

8.2.41 The Authority analysed the basis for forecasting each component of Other Operating expenses submitted by GIAL, Mopa, Goa. The analysis is as summarized below:

Housekeeping expense

8.2.42 GIAL, Mopa, Goa has awarded the contract of the housekeeping to various vendors and considered the contract value as the base for estimating the housekeeping expense for FY 2023-24 and thereafter considered expansion growth and inflationary increase. The Authority as part of its analysis had obtained the housekeeping contract from GIAL, Mopa, Goa vide email dated 29th December 2022. The Authority, upon reviewing the contract, proposes to consider the actual cost mentioned in the price schedule of the contract as the housekeeping expenses for FY 2023-24.

8.2.43 Further, the Authority proposes to consider 25% (refer Table 91) increase due to area expansion in FY 2025-26 and the inflation rate of 4% Y-o-Y for escalating the costs for the remaining period of the First Control Period.

Insurance Cost

8.2.44 The Authority observes that the insurance policies submitted by GIAL, Mopa, Goa are mandatory as per the requirements stated in the Concession Agreement between the Government of Goa (GOG) and GIAL, Mopa, Goa for the Manohar International Airport, Mopa, Goa project. The annual premium of Rs. 2.65 crores for all the policies submitted by GIAL, Mopa, Goa appear to be reasonable.

8.2.45 The Authority notes that GIAL, Mopa, Goa has claimed one time escalation of 25% in the Insurance cost due to the following reasons:

- The high inflation in Europe and UK pushing the premiums northwards.
- The capacities have been shrinking and due to shortage of capital for the risk acceptance especially the Aviation and the Terrorism (Stand Alone terrorism)
- The Nat Cat (Natural Catastrophic) losses have increase world over in US, UK, Japan & Europe as well as Asia and the recent Earthquake.

8.2.46 The Authority notes that insurance covers are meant to mitigate risks that may arise and Premiums are calculated based on these risk factors. Therefore, the Authority proposes not to consider GIAL, Mopa, Goa's requested one-time escalation.

8.2.47 Further the Authority notes that GIAL, Mopa, Goa has also claimed Insurance expense at the rate of 0.09% (GAL calculated it by considering 25% escalation on the annual premium) on the total gross block for each tariff year along with the inflation of 5% from FY 2023-24. The Authority has reviewed the same and proposes to consider the expense at the same rate of 0.09% on the revised gross block of assets (refer Table 87) along with the inflation of 4% from FY 2023-24.

Security Expense

8.2.48 The Authority notes that GIAL, Mopa, Goa has entered into a security contract with M/s RAXA a related party, to deploy security personnel in all three shifts at the airport. The Authority has sought confirmation from GIAL, Mopa, Goa that due process as mentioned in para 2.5.7 has been followed as per appropriate governance practices and that Probity audit reports have been submitted to GoG and approved by GoG. GIAL, Mopa, Goa has confirmed the same.

8.2.49 Further the Authority observes that GIAL, Mopa, Goa has estimated the cost for FY 2023-24 based on the contract cost. The Authority as part of its analysis has obtained the security contract from GIAL, Mopa, Goa vide email dated 29th December 2022. The Authority proposes to consider the actual cost mentioned in the price schedule of the contract as the security expenses for all the years of the First Control Period.

8.2.50 The Authority is of the view that the contract with the security vendor already accounts for the growth factor. Therefore, the Authority proposes not to consider the pax growth for escalating the security cost for the First Control Period. However, in line with decisions made in the recent tariff orders, the Authority notes that there shall be a proportionate increase in the security cost due to the expansion of the airport. Hence, the Authority proposes to consider 25% (refer Table 91) increase due to area expansion in FY 2025-26.

Misc. Expenses

8.2.51 The Authority's analysis and observations for the Misc. Expenses submitted by GIAL, Mopa, Goa are as follows:

Table 100: Misc. Expenses analysis and observations by the Authority

(Rs. in crores)

Particulars	FY 24	FY 25	FY 26	FY 27	FY28	Total	Basis adopted by the Authority
EHS	1.22	1.22	1.22	1.22	1.22	6.11	GIAL, Mopa, Goa has awarded the contract for Air monitoring and compliance management at Manohar International Airport, Mopa, Goa for Rs. 0.87 crores and Rs. 0.35 crore each year respectively and considered the contract value as the expense for First Control Period. The Authority proposes to consider the actual cost mentioned in the contract for each year of the First Control Period.

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Particulars	FY 24	FY 25	FY 26	FY 27	FY28	Total	Basis adopted by the Authority
Trolley Management	1.54	1.60	2.08	2.16	2.25	9.62	GIAL, Mopa, Goa has awarded the contract for trolley management and considered the contract value as the base for estimating the expense for FY 2023-24. The Authority proposes to consider the actual cost mentioned in the price schedule of the contract for FY 2023-24. Further, the Authority proposes to consider 25% (refer Table 91) increase due to area expansion in FY 2025-26 and the inflation rate of 4% Y-o-Y for escalating the costs for the remaining period of the First Control Period.
Other Airside O&M	1.48	1.54	2.00	2.08	2.16	9.26	GIAL, Mopa, Goa has awarded the contract for Other Airside O&M and considered the contract value as the base for estimating the expense for FY 2023-24. The Authority upon reviewing the contract, proposes to consider the actual cost mentioned in the price schedule of the contract for FY 2023-24. Further, the Authority proposes to consider 25% (refer Table 91) increase due to area expansion in FY 2025-26 and the inflation rate of 4% Y-o-Y for escalating the costs for the remaining period of the First Control Period.

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Particulars	FY 24	FY 25	FY 26	FY 27	FY28	Total	Basis adopted by the Authority
Other TOPS	4.55	4.73	6.15	6.39	6.65	28.46	<p>GIAL, Mopa, Goa has awarded the contract for Other Tops services (includes services like solid waste management, medical, passenger guidance staff and porters etc). The Authority upon reviewing the contract, proposes to consider the actual cost mentioned in the price schedule of the contract for FY 2023-24. Further, the Authority proposes to consider 25% (refer Table 91) increase due to area expansion in FY 2025-26 and the inflation rate of 4% Y-o-Y for escalating the costs for the remaining period of the First Control Period.</p> <p>Further, the Authority vide email dated 21st August 2023 asked GIAL, Mopa, Goa about recovery of porter charges from the passengers, based on the cost included in TOPS. In response, GIAL vide email dated 23rd August 2023, clarified that that no such revenue accrues to GIAL from other TOPS services.</p>
Lease Rental	14.49	14.76	14.76	14.76	14.76	73.53	<p>Lease rentals projected by GIAL, Mopa, Goa pertain to leased equipment (Airfield fire crash tenders, Runway Friction Machine, Self Baggage drop etc) worth ~ Rs. 80 crores for which there is a lease rent of Rs 14.76 crores per annum. GIAL, Mopa, Goa has communicated that the leasing contracts were awarded through a bidding process.</p> <p>The Authority proposes to consider the GIAL, Mopa, Goa estimate for lease rental amount submitted for the First Control Period and expects that GIAL, Mopa, Goa has carried out a detailed cost benefit analysis for such leasing decision.</p> <p>The Authority expects GIAL, Mopa, Goa to submit the cost benefit analysis as part of stakeholders' comments.</p>

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Particulars	FY 24	FY 25	FY 26	FY 27	FY28	Total	Basis adopted by the Authority
UDF Collection Charges	3.44	3.93	4.80	5.90	6.66	24.72	Upon analyzing the UDF (User Development Fee) collection charges based on passenger traffic, the Authority observes that GIAL, Mopa, Goa has considered the total number of passengers instead of embarking passengers while calculating UDF collections charges. Upon seeking clarification, GIAL, Mopa, Goa submitted that the UDF collection charges have been assumed to be Rs. 5 per Departing and Rs. 5 per Arriving passenger, as GIAL, Mopa, Goa intends to charge UDF for both Arriving and Departing passengers. The Authority proposes to consider the same for the purpose of computation in Consultation Paper. However, this will be decided based on the Stakeholder comments at time of Consultation and the final tariff order.
Other Misc. expenses	2.38	2.48	2.58	2.68	2.79	12.90	GIAL, Mopa, Goa did not provide any basis or contract details for the estimate of other expenses, as mentioned in their submission. The Authority notes that there may be misc. expenses which will be incurred day to day to run the operations efficiently as it is a new airport. The Authority proposes to consider 50% of the GIAL, Mopa, Goa estimate for FY 2023-24. Furthermore, for the remaining period of the First Control Period, it is proposed to increase the estimates by 4% annually, in line with the inflation rate (WPI) from FY 2024-25.
Total Misc. Expenses	29.10	30.25	33.58	35.19	36.49	164.60	

8.2.52 Taking into the above factors into consideration, the Authority proposes the following Operating expenses for the First Control Period:

Table 101: Operating Expenses proposed by the Authority for the First Control Period*(Rs. in crores)*

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Repair and Maintenance (para 8.2.34)	15.00	20.00	35.90	55.57	59.42	185.89
IT Operation related (para 8.2.39)	0.36	-	-	-	-	0.36
Enterprise IT (para 8.2.40)	2.72	2.83	2.95	3.06	3.19	14.75
Housekeeping expense (para 8.2.43)	10.77	11.20	14.56	15.14	15.75	67.41
Insurance (para 8.2.47)	3.20	3.34	3.93	4.09	4.27	18.82
Security expense (para 8.2.50)	13.96	15.56	19.92	22.40	23.46	95.31
Misc. expense (Table 100)	29.10	30.25	33.58	35.19	36.49	164.60
Total Operating Expenses	75.11	83.18	110.83	135.45	142.57	547.14

Allocation of Operating Expenses

- 8.2.53** Based on its analysis, the Authority observes that the allocation basis used by GIAL, Mopa, Goa for the components of Operating expenses is reasonable. As a result, the Authority proposes adopting the same allocation basis, taking into consideration the revised ratios detailed in para 8.2.1 (I).
- 8.2.54** Based on the aforementioned proposals the aeronautical Operating expenses proposed by the Authority for the First Control Period is as follows.

Table 102: Aeronautical Operating Expenses proposed by the Authority for the First Control Period*(Rs. in crores)*

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Repair and Maintenance	14.29	19.06	34.21	52.95	56.63	177.15
IT Operation related	0.34	-	-	-	-	0.34
Enterprise IT	2.59	2.70	2.81	2.92	3.04	14.06
Housekeeping expense	9.69	10.08	13.10	13.63	14.17	60.67
Insurance	3.05	3.18	3.74	3.90	4.07	17.93
Security expense	12.57	14.01	17.93	20.16	21.11	85.78
Misc. expense	27.72	28.83	32.02	33.59	34.85	157.01
Total Aeronautical Operating Expense	70.26	77.86	103.81	127.15	133.87	512.94

Airport Operator Fees

- 8.2.55** The Authority had sought details of the agreement entered into for the Airport Operator fee. In response to the Authority's request via email dated 12th January 2023, GIAL, Mopa, Goa stated that they have not yet entered into an agreement for Airport Operations with a service provider.
- 8.2.56** The Authority notes that the Request for Quote (RFQ) floated by the GoG for the Development of Greenfield International Airport at Mopa, Goa had included a clause stating that the bidders must possess relevant experience, which will be evaluated by the Authority to assess their Technical Capacity/ O&M capabilities and only then the bidder shall be eligible to bid for the Request for Proposal (RFP). The clause is reproduced below:

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“2.2.2 To be eligible for pre-qualification and shortlisting, an Applicant shall fulfill the following conditions of eligibility:

(A) Technical Capacity: For demonstrating technical capacity and experience (the “Technical Capacity”), the Applicant shall, have:

(i) Developed at least 1 (one) Eligible Project during the Development Period in Category 1(A) and/or Category 1(B) as specified in Clause 3.2.1 (“Development Experience”); and

(ii) Operated at least 1 (one) Eligible Project during the Operation Period in Category 2 as specified in Clause 3.2.1 (“Operation Experience”).”

8.2.57 Furthermore, the Authority notes that the holding company GAL (GMR Airports Limited), based on their successful management of airports such as DIAL and HIAL has the necessary experience and capability to operate Manohar International Airport, Mopa, Goa and the past experience is the reason rendering them technically competent.

8.2.58 Based on a combined reading of the above, the Authority proposes not to consider the Airport Operator Fee for the purpose of tariff determination for the First Control Period of Manohar International Airport, Mopa, Goa.

Total O&M Expenses proposed by the Authority

8.2.59 After incorporating the above observations by the Authority, the revised Total O&M expenses for Manohar International Airport, Mopa, Goa for the First Control Period has been presented in the table below:

Table 103: Total O&M expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	Authority’s Proposal							GIAL, Mopa, Goa’s Submission (B)	Diff = (C=B-A)
	Ref	FY24	FY25	FY26	FY27	FY28	Total (A)		
Manpower Expenses (A)	Table 92	54.26	57.52	74.38	78.85	83.58	348.58	500.86	152.28
Admin and General Expense							-	-	-
Rates & Taxes	Table 94	1.78	1.85	2.40	2.50	2.60	11.12	11.86	0.74
Corporate cost allocation		3.75	3.90	4.06	4.22	4.39	20.31	41.45	21.14
CSR		-	-	-	-	-	-	10.15	10.15
Bank Charges		0.60	0.62	0.65	0.67	0.70	3.25	5.53	2.28
Consultancy		10.00	10.40	10.82	11.25	11.70	54.16	104.90	50.74
Travel		1.97	2.05	2.13	2.22	2.30	10.67	11.74	1.07
Advertisement		8.50	8.84	4.60	4.78	4.97	31.69	75.38	43.69
Auditor & Director Fee		0.53	0.55	0.57	0.60	0.62	2.87	2.91	0.04
Office Maintenance etc.		17.55	18.25	23.73	24.67	25.66	109.86	118.16	8.30

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Particulars	Authority's Proposal							GIAL, Mopa, Goa's Submis sion (B)	Diff = (C=B- A)
	Ref	FY24	FY25	FY26	FY27	FY28	Total (A)		
Total Admin and General Expense (B)		44.67	46.46	48.95	50.91	52.94	243.93	382.07	138.14
Utility Expense							-	-	-
Electricity	Table 97	23.76	24.60	32.46	33.65	34.88	149.35	233.43	84.08
Water	8.2.30	1.24	1.47	1.87	2.39	2.81	9.78	10.02	0.24
Total Utility Expense (C)	Table 98	25.00	26.07	34.33	36.04	37.69	159.13	243.46	84.33
Operating Expenses							-	-	-
Repair and Maintenance	8.2.34	15.00	20.00	35.90	55.57	59.42	185.89	299.26	113.38
IT Operation related	8.2.39	0.36	-	-	-	-	0.36	0.36	-
Enterprise IT	8.2.40	2.72	2.83	2.95	3.06	3.19	14.75	24.50	9.75
Housekeeping expense	8.2.43	10.77	11.20	14.56	15.14	15.75	67.41	85.52	18.11
Insurance	8.2.47	3.20	3.34	3.93	4.09	4.27	18.82	22.69	3.87
Security expense	8.2.50	13.96	15.56	19.92	22.40	23.46	95.31	112.36	17.05
Misc. expense	Table 100	29.10	30.25	33.58	35.19	36.49	164.60	207.21	42.61
Total Operating Expense (D)	Table 101	75.11	83.18	110.83	135.45	142.57	547.14	751.89	204.75
Airport Operator Fee (E)	8.2.58	-	-	-	-	-	-	154.61	154.61
Total O&M expense (F)=(A)+(B)+(C) + (D)+(E)		199.05	213.23	268.49	301.24	316.77	1,298.78	2,032.90	734.12

8.2.59 The Authority notes that for most of the components of O&M expenses, the allocation basis adopted by GIAL, Mopa, Goa was in line. However, the ratios have been revised by the Authority due to which the distribution of expenses among different components has been adjusted accordingly. Thus, considering the revision in ratios and allocation basis, the Authority proposes the following aeronautical O&M expenses for the First Control Period of the Manohar International Airport, Mopa, Goa.

Table 104: Aeronautical O&M expenses proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	Authority's Proposal							GIAL, Mopa, Goa's Submission (B)	Diff (C=B-A)
	Reference	FY24	FY25	FY26	FY27	FY28	Total (A)		
Manpower Expenses (A)	Table 93	51.95	55.06	71.21	75.48	80.01	333.71	469.75	136.04
Admin and General Expense								-	-
Rates & Taxes	Table 96	1.61	1.68	2.19	2.27	2.36	10.12	10.91	0.79
Corporate cost allocation		3.59	3.73	3.88	4.04	4.20	19.44	39.13	19.68
CSR		-	-	-	-	-	-	10.15	10.15
Bank Charges		0.57	0.59	0.62	0.64	0.67	3.10	5.39	2.29
Consultancy		9.53	9.91	10.31	10.72	11.15	51.62	102.33	50.72
Travel		1.89	1.96	2.04	2.12	2.21	10.21	11.09	0.87
Advertisement		7.65	7.96	4.14	4.30	4.47	28.52	68.63	40.11
Auditor & Director Fee		0.51	0.53	0.55	0.57	0.59	2.74	2.83	0.09
Office Maintenance etc.		16.72	17.39	22.61	23.51	24.46	104.70	115.27	10.58
Total Admin and General Expense (B)			42.07	43.76	46.33	48.18	50.11	230.44	365.73
Utility Expense								-	-
Electricity	Table 97	19.07	19.72	25.80	26.72	27.68	118.99	233.42	114.43
Water	8.2.30	0.94	1.12	1.42	1.82	2.14	7.44	10.02	2.58
Total Utility Expense (C)	Table 99	20.01	20.84	27.22	28.54	29.81	126.43	243.44	117.01
Operating Expenses								-	-
Repair and Maintenance		14.29	19.06	34.21	52.95	56.63	177.15	291.94	114.80
IT Operation related		0.34	-	-	-	-	0.34	0.35	0.01
Enterprise IT		2.59	2.70	2.81	2.92	3.04	14.06	23.89	9.84
Housekeeping expense		9.69	10.08	13.10	13.63	14.17	60.67	77.84	17.17
Insurance		3.05	3.18	3.74	3.90	4.07	17.93	22.14	4.20
Security expense		12.57	14.01	17.93	20.16	21.11	85.78	102.29	16.51
Misc. expense		27.72	28.83	32.02	33.59	34.85	157.01	203.45	46.45
Total Operating Expense (D)	Table 102	70.26	77.86	103.81	127.15	133.87	512.94	721.91	208.97

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Particulars	Authority's Proposal							GIAL, Mopa, Goa's Submissi on (B)	Diff (C=B- A)
	Reference	FY24	FY25	FY26	FY27	FY28	Total (A)		
Airport Operator Fee (E)	8.2.58	-	-	-	-	-	-	143.16	143.16
Total O&M expense (F)=(A)+(B)+(C)+(D)+(E)		184.29	197.51	248.56	279.35	293.80	1,203.51	1,944.00	740.49

8.2.60 Key changes made by the Authority in Operation & Maintenance expenses relate to:

- Rationalisation of Employee Expenses – Rate of increase and headcount for expansion
- Rationalisation of Consultancy and Legal Costs.
- Rationalisation of Electricity Charges based on analysis of actual consumption trends.
- Reduction in estimate of Repairs & Maintenance Expenditures considering that the assets are newly commissioned and covered by Defects Liability for a couple of years.
- Non-consideration of Airport Operators Fee.

8.2.61 The Authority expects Airport Operator to bring in efficiencies in the incurrence of O&M expenses for the benefit of airport users and in line with AERA Act, AERA Guidelines and International Civil Aviation Organization (ICAO) Principles.

8.3 Authority's proposals regarding Operating and Maintenance Expenses for the First Control Period

Based on the material before it and on its examination, the Authority proposes the following with regard to O&M expenses for the First Control Period:

8.3.1 To consider aeronautical O&M Expenses for the First Control Period as per Table 104.

8.3.2 To consider the O&M expenses incurred by GIAL, Mopa, Goa during the First Control Period subject to reasonableness and efficiency, at the time of tariff determination for the next Control Period.

9. NON-AERONAUTICAL REVENUE FOR THE FIRST CONTROL PERIOD**9.1 GIAL's submission regarding Non-Aeronautical Revenue (NAR) for the First Control Period**

9.1.1 GIAL, Mopa, Goa has submitted the projections of the Non-Aeronautical revenue under the following heads:

- a) Direct Concession
- b) Retails Concession
- c) Land & Space

9.1.2 GIAL, Mopa, Goa has, in its revised MYTP dated 29th March 2023 submitted the following estimated revenue from Non-Aeronautical services for the First Control Period for Manohar International Airport, Mopa, Goa.

Table 105: Non-Aeronautical Revenue submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Direct Concession						
In Flight Kitchen- Concession Fee (A)	1.59	1.93	2.33	2.92	3.54	12.31
Retail Concession						
Food and Beverages (F&B)	42.86	51.43	65.66	92.93	110.09	
Lounge Income	5.74	6.88	8.80	12.47	14.77	
Retail Duty Paid	73.11	87.63	112.32	159.21	188.78	
Duty Free	45.90	57.34	62.77	82.86	94.00	
Car parking	3.18	3.81	4.89	6.93	8.22	
Advertisement	24.08	28.85	37.04	52.55	62.33	
Others	3.80	4.07	4.35	4.66	4.98	
Total	198.66	240.01	295.84	411.60	483.18	
Revenue Share to GIAL, Mopa, Goa (B)	40.23	48.60	59.91	83.35	97.84	329.93
Land & Space (C)	10.66	11.20	11.75	12.34	12.96	58.91
Total (D) = (A+B+C)	52.48	61.73	73.99	98.62	114.34	401.16

9.1.3 GIAL, Mopa, Goa has submitted that it has estimated the revenues by conducting benchmarking analyses with comparable airports and additionally considered Goa specific factors for discounting the estimates, taking into account actual contract awards etc. GIAL, Mopa, Goa has provided the following basis for estimating various revenues from non-aeronautical services:

a) Direct Concession

In-Flight Kitchen

9.1.4 GIAL, Mopa, Goa has awarded In-Flight Kitchen contract to M/s Taj SATS Air Catering Ltd. with the contract to pay 13% license fees till 5th year from COD and 15% from thereafter. GIAL, Mopa, Goa has

estimated earnings based on Average Ticket Value (ATV) of a passenger. The ATV is increased with inflation of 5% in following years.

b) Retail Concession

9.1.5 GIAL, Mopa, Goa submitted that it has outsourced all non-aeronautical businesses (listed below) to the Master Concessionaire, GMR Airports Limited (GAL), vide Master Services Agreement dated 15th December 2021:

- Food & Beverages
- Lounge Income
- Retail
- Duty Free shop
- Car Parking
- Advertisement
- Others (Space rent)

9.1.6 In accordance with the agreement, the scope of GAL at Manohar International Airport, Mopa, Goa is to undertake the design, development, operation, and management of the specified non-aeronautical facilities and services listed above. GAL is expected to adhere to best-in-class guidelines and ethical business standards, ensuring that the facilities provided are at par with those available at comparable airports. GAL shall make payments to GIAL, Mopa, Goa based on the higher of the following amounts:

- a) Revenue share percentage (20.25%) of the Gross Revenue of the Licensee for such License month or
- b) Minimum Guarantee amount for that License Month

“Gross Revenue” shall mean the aggregate of all revenue billed and/or accrued and/or received by the Licensee and by its direct sub-licenses and direct sub-contractors in relation to the Project from any source whatsoever, which shall include, without limitation the following:

- (a) the total revenue earned (excluding taxes) in respect of provision of Non-Aero Facilities and Services by the Licensee and by its direct sub-licenses and direct sub-contractors in connection with the provision on Non-Aero Facilities and Services;
- (b) all revenue generated from any promotional activities carried (with the prior written consent of GIAL, Mopa, Goa) at the Locations or from other activities permitted by GIAL, Mopa, Goa in accordance with the terms of the License Agreement; and
- (c) any other consideration received by the Licensee in relation to the provision of Non-Aero Facilities and Services.

9.1.7 Revenues from retail concession have been projected by GIAL, Mopa, Goa based on benchmarking analysis, the details of which are as follows:

Food and Beverages (F&B)

9.1.8 GIAL, Mopa, Goa has assumed Sales per passenger (SPP) of Rs. 60 per pax in case of domestic and Rs. 80 in case of international in line with Delhi and Hyderabad Airport. GIAL, Mopa, Goa has also evaluated the airport operator revenue of FY 2019-20 of Dabolim Airport and calculated that Income per pax (IPP) in the

hands of airport operator was Rs. 10. In case of GIAL, Mopa, Goa with higher F&B area and plenty of new brands and fine dining options, GIAL, Mopa, Goa expects to achieve around 20% higher IPP.

Lounge income

- 9.1.9** GIAL, Mopa, Goa has estimated ATV and penetration to arrive at SPP for lounge. The resultant SPP has been increased with inflation and pax growth to arrive at lounge income. In case of domestic, GIAL, Mopa, Goa estimated Rs. 750 ATV with 0.5% penetration for airport lounges and Rs.1250 ATV and 1% penetration in case of commercial lounge based on which the effective SPP is Rs. 16.25. In case of international, GIAL, Mopa, Goa estimated Rs.1000 ATV with 0.5% penetration for airport lounges and Rs.1500 ATV and 1% penetration in case of commercial lounge based on which the effective SPP is Rs. 20.

Retail

- 9.1.10** Considering the passenger profile and longer dwell time of passengers at Manohar International Airport, GIAL, Mopa, Goa has benchmarked the SPP mainly with Delhi Terminal 1. The SPP at Delhi Airport T1 is in the range of Rs. 105 - Rs. 110. Accordingly, GIAL, Mopa, Goa has assumed Rs. 105 SPP in case of domestic pax of Manohar International Airport, Mopa, Goa. In case of international, considering the lower volume, GIAL, Mopa, Goa has assumed 10% higher SPP i.e. Rs. 116. In line with other non-aero revenue forecasts, the retails SPP has been escalated with inflation.

Duty Free

- 9.1.11** GIAL, Mopa, Goa has considered benchmarks of Delhi and Hyderabad Airport. In case of Delhi the duty free SPP is USD 10 – USD 11 whereas in case of Hyderabad the SPP is in the range of USD 5- USD 7. Considering the passenger profile and lower penetration, GIAL, Mopa, Goa expects that the Mopa, Goa SPP should be mainly aligned to Hyderabad Airport, considering the tourist destination and passenger profile which majorly consists of Russian and UK residents, the SPP for Manohar International Airport, Mopa, Goa is considered towards higher band of Hyderabad Airport i.e. USD 7. Revenue from Duty free has been forecasted by considering the inflation increase in line with international passenger traffic growth.

Car Parking

- 9.1.12** According to GIAL, Mopa, Goa, the local unions have a significant impact on the Goa taxi business, and Dabolim airport encounters opposition from the regional taxi associations. The parking revenues at Manohar International Airport, Mopa, Goa are impacted by the powerful union of taxi operators. It is anticipated that there will be virtually little traffic in the Manohar International Airport, Mopa, Goa's parking lot. With a projected ATV of Rs. 171 and a car park penetration rate of 5.4%, the effective SPP comes to Rs. 9.23. The growth in SPP over the balance period is correlated with both passenger growth and inflation.

Advertisement

- 9.1.13** The SPP for Manohar International Airport, Mopa, Goa is benchmarked with Hyderabad which is around Rs. 35 per passenger. GIAL, Mopa, Goa has lower sites compared to Hyderabad as the approach road linking to highway is being built by the state government. However, GIAL, Mopa, Goa has still continued with the SPP of Hyderabad in terms of advertisement.

Others (Space Rent)

9.1.14 As per the master service agreement, space of 150 sqm has been provided to GAL at an average rent of Rs. 21,112 per sqm per month.

c) Land & Space**Others – Space rent**

9.1.15 GIAL, Mopa, Goa forecasted rent of Rs. 0.66 crores for FY 2023-24 on land space of 49,437 sqm. All spaces/land are expected to have 100% occupancy from FY 2023-24 and the space rental is assumed to grow by inflation rate of 7%.

9.2 Authority's examination regarding Non-Aeronautical Revenue for the First Control Period

9.2.1 The Authority has examined the basis and the projections of non-aeronautical revenue submitted by GIAL, Mopa, Goa for the First Control Period. The Authority notes that GIAL, Mopa, Goa has utilized benchmarking analyses, specific factors for discounting, actual contract awards and tentative business estimates to estimate their non-aeronautical revenues.

9.2.2 The Authority has conducted a detailed analysis of revenue streams submitted by GIAL, Mopa, Goa in the following order:

- a) Direct Concession
- b) Retails Concession
- c) Land & Space

Following are the observations and assessments by the Authority regarding GIAL, Mopa, Goa's projections for Non-aeronautical revenue.

a) Direct Concession**In Flight Kitchen (IFK)**

9.2.3 The Authority has taken note of the fact that GIAL, Mopa, Goa has awarded the In-Flight Kitchen contract to M/s Taj SATS Air Catering Ltd. (Licensee). The Authority notes the following from the agreement provided:

1. The Licensee has been granted an area of 4,046 sqm to carry out the services. For this area, the Licensee is required to pay a Land Licensee fee (Space rent) of Rs. 256 per sqm per month, which will be increased annually based on the notified CPI (IW) from the 2nd year of the contract. The revenue from this arrangement has been categorized by GIAL, Mopa, Goa under the Space rent head and is further discussed by the Authority in para 9.2.22.
2. As per the agreement, the Licensee is obligated to pay GIAL, Mopa, Goa a license fee of 13% of Gross Revenue until the 5th year from COD, and 15% thereafter. GIAL, Mopa, Goa has projected the gross revenue based on the assumption of an Average Ticket Value (ATV) and passengers opting for in-flight eatables for both domestic and international passengers.

9.2.4 The Authority has reviewed the assumptions made by GIAL, Mopa, Goa for calculating the gross revenue and has noted that the estimated ATV and percentage of passengers opting for the same, as indicated by

GIAL, Mopa, Goa are not available as a benchmark from other airports. Therefore, the Authority proposes to forecast the in-flight revenues based on the benchmark of the airports compared in terms of the regional area (i.e. Airports located specifically at Southern Areas) and for which data is available. Accordingly, the main regional airports where the inflight revenues are generated are HIAL and Chennai.

- 9.2.5 The revenues per passenger proposed by AERA for other airports comparable to Manohar International Airport, Mopa, Goa, has been presented below:

Table 106: Revenues per passenger of In-Flight Kitchen of Comparable Airports to Manohar International Airport, Mopa, Goa

Airport	Order No	Revenue (Rs. in crores) (FY 24)	Traffic (in MPPA) (FY 24)	Revenue Per Pax
HIAL	Order No_12_2021-22	15.42	23.36	6.60
Chennai	Order No_38_2021-22	9.21	23.92	3.85
Average Revenue Per Pax (RPP)				5.23

- 9.2.6 The Authority estimates the revenues for Manohar International Airport, Mopa, Goa, considering the average revenue per passenger of the two comparable airports as mentioned above of Rs. 5.23 per passenger applied on the passenger traffic proposed by the Authority in Table 31 for the first year of the control period, i.e., FY 2023-24. Further, considering that Manohar International Airport, Mopa, Goa is a new greenfield airport which commenced its commercial operations on 5th January 2023 and has to compete with another airport in close vicinity, the Authority proposes to moderate the estimated per passenger revenue by 30% from the average revenue per pax from the table above in order to provide a more realistic and reliable projection for the first year of the control period at Manohar International Airport, Mopa, Goa.

Table 107: In Flight Kitchen Revenue for FY 2023-24 for Manohar International Airport, Mopa, Goa proposed by the Authority

Particulars	Reference	FY 24
Traffic (A) (in MPPA)	Table 31	6.88
Average Revenue Per Pax adjusted by 30% (B) (Rs. Per Pax)	Table 106	3.66
In Flight Kitchen Revenue proposed by the Authority (C) = (A)x(B)/10 (Rs. in crores)		2.52

- 9.2.7 For the subsequent years, the Authority proposes to consider an inflation growth of 4% year-on-year (based on WPI as per Table 79) and passenger traffic growth as stated in Table 31 from FY 2024-25 for the remaining years. The total revenue from inflight kitchen as proposed by the Authority for the First Control Period for Manohar International Airport, Mopa, Goa is as follows:

Table 108: In Flight Kitchen Revenue proposed by the Authority for the First Control Period for Manohar International Airport, Mopa, Goa

(Rs. in crores)

Particulars	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Submitted by GIAL, Mopa, Goa (A) (Table 105)	1.59	1.93	2.33	2.92	3.54	12.31
In Flight Kitchen Revenue Proposed by the Authority (B)	2.52	2.99	3.80	4.85	5.70	19.85
Difference (C=B-A)	0.93	1.05	1.47	1.93	2.16	7.54

b) Retail Concession

9.2.8 The Authority notes that GIAL, Mopa, Goa has awarded the concession rights for six services i.e. F&B (Food and Beverage), Retail, Lounge, Duty Free, Car parking, and advertisements to GMR Airports Limited (GAL) through an e-tendering process. As per the terms of the agreement, GAL is required to make following payments to GIAL, Mopa, Goa:

1. Fees based on the higher amount of the below:
 - a) Revenue share percentage (20.25%) of the Gross Revenue of the Licensee for such License month or
 - b) Minimum Guarantee amount for that License Month
2. Rent for space: Space of 150 sqm has been provided to GAL at an average rent of Rs.21,112 per sqm per month. The same has been discussed by the Authority in para 9.2.22.

Cancellation of Master Service Agreement

9.2.9 Based on the information provided in the Audited Financial statements by GIAL, Mopa, Goa for the financial year ending in March 2023, following were noted:

- GIAL, Mopa, Goa issued an RFP for the design, development, operation, and management of Non-Aero Facilities and Services at the Airport. GMR Airports Limited (GAL) emerged as the successful bidder and a Master Services License Agreement was signed between GIAL, Mopa, Goa and GAL.
- However, the Government of Goa did not provide clearance for the master concession agreement, and they directed GIAL, Mopa, Goa to cancel the existing agreement and re-bid the contract which should be transparent and with due participation of Government representative in the selection process.
- In the event of early termination, GIAL, Mopa, Goa is liable to purchase the capital expenditure incurred by GAL at a fair value, as determined by the terms of the agreement.

9.2.10 Based on the disclosed information, the Authority is of the view that the contract of GIAL, Mopa, Goa with GAL will be null and void due to the government's directive.

9.2.11 In response to Authority's query, GIAL, Mopa, Goa has submitted that the re-tendering process is underway and is expected to be completed by September 2023.

9.2.12 The Authority proposes to evaluate the projected revenues from Retail concessions independently and will examine the specific details of the contract to be awarded and assess the revenues generated from Non-Aeronautical services during the true-up exercise in the next control period.

9.2.13 GIAL, Mopa, Goa has based its projections on a comparison of Sales per passenger (SPP) and Income per passenger (IPP) with other airport terminals, namely Delhi and Hyderabad. The Authority notes that these airports are not fully comparable to Manohar International Airport, Mopa, Goa in terms of various factors such as traffic volume, region etc. Further, the Authority notes that the data used by GIAL, Mopa, Goa is not a benchmark available in public domain.

9.2.14 The Authority proposes using the average Non-Aeronautical Revenue per passenger from similar services at the other comparable airports in the region i.e. HIAL, Dabolim and Chennai. These comparable airports have been identified as suitable benchmarks for projecting revenues from F&B, Retail, Lounge, Duty Free, Car parking, and advertisements at Manohar International Airport, Mopa, Goa for the FY 2023-24.

9.2.15 The revenues per passenger for the aforementioned six services proposed for other airports is as presented below:

Table 109: Revenues per passenger (FY 2022-24) for the six services of comparable Airports to Manohar International Airport, Mopa, Goa

Airports (FY 2023-24)	F&B	Lounge Income	Retail Outlets	Duty Free*	Car parking	Advertisement
Revenue (Rs. in crores)						
HIAL	42.71	33.70	71.37	66.11	71.54	40.05
Chennai	25.78	NA	76.37	82.84	20.71	67.26
Dabolim	12.84	NA	13.32	10.02	1.97	8.67
Traffic (In MPPA)						
HIAL	23.36	23.36	23.36	3.85	23.36	23.36
Chennai	23.92	23.92	23.92	5.80	23.92	23.92
Dabolim	8.02	8.02	8.02	NA**	8.02	8.02
Revenue Per Pax (RPP)						
HIAL	18.28	14.43	30.55	171.71	30.63	17.14
Chennai	10.78	NA	31.93	142.83	8.66	28.12
Dabolim	16.00	NA	16.60	NA**	2.46	10.81
Average RPP	15.02	14.43	26.36	157.27	13.91	18.69

*Average RPP of duty free is calculated by dividing the revenues by international passengers

**Duty Free Revenue Per Pax of Dabolim Airport amounts to Rs. 371.11 per pax. However, for the calculation of Average Revenue Per Pax for Manohar International Airport, Mopa, Goa, this value has been excluded as it appears inconsistent when compared to other major airports..

9.2.16 The Authority proposes to estimate the revenues for the services of Manohar International Airport, Mopa, Goa, considering the average revenue per passenger of the comparable airports as mentioned in Table 109 as a base and applying the passenger traffic proposed by the Authority in Table 31 for the first year of the control period, i.e., FY 2023-24. Further, for services such as lounge income, car parking and advertisement, the Authority proposes the following adjustments to ensure a fair and accurate estimation of revenues.

- i. **Lounge Income:** The Authority notes that the airport lounge will be mostly used by specific groups of passengers, such as business class flyers, frequent flyers, premium card holders or those who purchase access on a pay-per-use basis and that business class passengers make up about 10% to 12% of all airline passengers. Considering the possible differing profile of passengers in Manohar International Airport, Mopa, Goa, the Authority proposes to rationalize the Lounge revenue per passenger by 30% from the average estimated above.
- ii. **Car Parking:** The Authority has reviewed the Multi-Year Tariff Proposal (MYTP) submitted by GIAL, Mopa, Goa and has observed a significant influence from local taxi unions on the taxi market at Manohar International Airport, Mopa, Goa. This influence has led to opposition from regional taxi associations, as seen in the current situation at Goa's Dabolim Airport.

Additionally, the Authority has taken note that the average revenue per passenger of other airports, as indicated in the Table 109, is considerably higher compared to Dabolim Goa Airport. It is essential to consider these disparities in revenue when analyzing the MYTP.

Furthermore, Dabolim Goa Airport faces operational challenges in generating Parking revenue. In light of these factors, the Authority proposes using two times the revenue per passenger at Dabolim Airport

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as the baseline for estimating the parking revenue at Manohar International Airport, Mopa, Goa. This proposal aims to create a fair and reasonable projection, given the prevailing market conditions and challenges faced by both airports.

- iii. **Advertisements:** The Authority notes from the concession agreement between GIAL, Mopa, Goa and the state government that the government is responsible for constructing the approach road connecting the airport to the highway. As a result, GIAL, Mopa, Goa has fewer sites available for advertisements. In light of this, the Authority proposes to rationalize the revenue per passenger from advertisements by 30%.

9.2.17 Based on the above analysis, the Authority has estimated the revenues for these six services at Manohar International Airport, Mopa, Goa as follows:

Table 110: Revenue for Six services for FY 2023-24 of Manohar International Airport, Mopa, Goa

Particulars	F&B	Lounge Income	Retail Outlet	Duty Free	Car park	Advertisement	Total
Traffic (A)	6.88	6.88	6.88	0.79	6.88	6.88	
Average RPP (B)	15.02	10.10*	26.36	157.27	4.91	13.08*	
Total revenue for Six services proposed by the Authority (C) = (A)x(B)/10	10.33	6.95	18.14	12.42	3.38	9.00	60.22

* Average RPP for Lounge Income and Advertisement adjusted by 30% as explained in para 9.2.16 (i) & (iii) respectively.

9.2.18 For the subsequent years, the Authority proposes to consider an inflation growth of 4% year-on-year (based on WPI as per Table 79) and passenger traffic growth as stated in Table 31 starting from FY 2024-25 for the remaining years. The total revenue from six services as proposed by the Authority for the control period is as follows:

Table 111: Revenue for six services proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	FY 24*	FY 25	FY 26	FY 27	FY 28	Total
Submitted by GIAL, Mopa, Goa including Space rent (A)	40.23	48.60	59.91	83.35	97.84	329.93
Other-Land Space Rent (B) (Refer para 9.2.8 (2))	0.77	0.82	0.88	0.94	1.01	4.43
Revenue for Six services submitted by GIAL, Mopa, Goa (C=A-B)	39.46	47.78	59.03	82.41	96.84	325.51
F&B	10.33	12.26	15.60	19.92	23.41	81.52
Lounge Income	6.95	8.24	10.49	13.39	15.74	54.81
Retail Duty Paid	18.14	21.52	27.37	34.96	41.08	143.06
Duty Free	12.42	15.37	16.67	19.81	22.26	86.55
Car parking	3.38	4.01	5.10	6.51	7.65	26.65
Advertisement	9.00	10.68	13.58	17.35	20.39	71.00
Total revenue for Six services proposed by the Authority (D)	60.22	72.09	88.81	111.95	130.52	463.59
Difference (E=D-C)	20.76	24.31	29.78	29.54	33.68	138.08

*FY24 figures has been derived from Table 110

- 9.2.19** From the above, the Authority notes that GIAL, Mopa, Goa's estimation of revenue share is lower than the revenue projections made by the Authority. This indicates that GIAL, Mopa, Goa may not have fully explored the potential of generating revenue from these non-aeronautical services.
- 9.2.20** The Authority's projections, on the other hand, take into account the potential for growth in these non-aeronautical services. By considering comparable airports and their average revenues per passenger, the Authority's calculations provide a more realistic estimation of revenue from these services at Manohar International Airport, Mopa, Goa
- 9.2.21** Overall, there is a need for GIAL, Mopa, Goa to focus on growing revenues from non-aeronautical services at Manohar International Airport, Mopa, Goa by exploring innovative approaches and implementing best practices from comparable airports.

c) Land & Space

- 9.2.22** The Authority has taken note of GIAL, Mopa, Goa's revenue forecast for space rental in all areas designated for Non-Aeronautical services. The following table presents the details of the areas rented out by GIAL, Mopa, Goa, along with their purpose and monthly rent per square meter.

Table 112: Area Let out with purpose and rent per sqm per month

(Rs. in crores)

Particulars	Purpose	Area in sqm	Rate/Sqm/Month
Back of House (BOH) Area	Comm, Lounge, DF bonded Office, F&B Kitchen,	515	1,200
Ticket counter	Ticketing office, Forecourt	49	3,056
Office Space – Airlines	Office for Airlines	384	2,300
Office Space – Ramp Offices	Office for Airlines for Ramp Activities	139	2,300
AEMB & Others	AEMB for Self-Handling Airlines	565	2,042
IFK-Airside unpaved	IFK	4,046	256
GH unpaved land	GH	2,160	256
Cargo Land	Cargo	15,087	25
Fuel	Fuel	24,367	25
Ground Handling - Paved land	Ground Support Equipment (GSE) Parking for CELEBI	1,300	1,300
Self-Handling Airlines – Paved Land	GSE Parking for Self-Handling Airlines	825	1,300
Total		49,437	

- 9.2.23** The Authority has observed that the areas leased for Cargo, Ground handling, Fuel farm (CGF), and airlines have been categorized as Non-Aeronautical. However, the Authority notes that the revenue collected from aeronautical service providers, such as CGF and Airlines, should be classified as Aeronautical Revenues as the revenue generated from leasing land to CGF and airlines is closely tied to aeronautical services. CGF and Airlines are directly involved in providing essential services for aircraft operations, including fueling, cargo handling, and ground handling services. These activities are inherently a part of airport operations and are essential for the functioning of airlines and other aeronautical service providers. Accordingly, the Authority proposes to consider the rent received from CGF and Airlines for the allocated space as aeronautical revenues.

9.2.24 The Authority also proposes that the space rented out under the Master Service Agreement (refer para (9.2.8 (2))) should be included in the revenue from land and space, rather than being considered as revenue from the master services provided by GAL.

Table 113: Area let out for Master Services and rent per sqm per month

Nature	Area in Sq.m	Rate/Sq.m/Month
ATMs	15	28,259
Banks	25	11,412
Hotel Counters	50	28,529
Other Area	60	17,117
Total	150	

9.2.25 The Authority has noted that the revenue from space rent (excluding space let out for master services) has been increased by an annual inflation growth rate of 5% according to GIAL, Mopa, Goa's projections. Additionally, a real growth rate of 7% has been applied to the revenue from space let for master services. However, the Authority has observed that GIAL, Mopa, Goa has employed varying growth rates for estimating income from space rent, which lacks consistency when considering the airport as a whole. Therefore, the Authority proposes adopting a consistent real growth rate of 7% for all revenues from space rental, starting from FY 2024-25 until the end of the tariff period, i.e., FY 2027-28.

9.2.26 Furthermore, the Authority notes that GIAL, Mopa, Goa has projected expansion of Terminal Building in FY 2025-26 and the same has been considered by the Authority in Chapter 5 i.e., RAB. In line with the expansion in area, the Authority proposes a 25% (Refer Table 91) increase in revenue from space rental from FY 2025-26.

9.2.27 The proposed revenue from land and space, as proposed by the Authority for the First Control Period, is outlined in the following table:

Table 114: Revenue from Land and Space proposed by the Authority for the First Control Period

(Rs. in crores)

Particulars	Reference	FY 24	FY 25	FY 26	FY 27	FY 28	Total
GIAL, Mopa, Goa's Submission	A	10.66	11.20	11.75	12.34	12.96	58.91
Authority's Proposal							
Back of House (BOH) Area	a	0.74	0.79	1.06	1.14	1.22	4.95
Ticket counter	b	0.18	0.19	0.26	0.28	0.29	1.20
Office Space – Airlines	c	1.06	1.13	1.52	1.62	1.74	7.07
Office Space – Ramp Offices	d	0.38	0.41	0.55	0.59	0.63	2.56
AEMB & Others	e	1.38	1.48	1.98	2.12	2.27	9.24
IFK-Airside unpaved	f	1.24	1.33	1.78	1.90	2.04	8.29
GH unpaved land	g	0.66	0.71	0.95	1.02	1.09	4.43
Cargo Land	h	0.45	0.48	0.65	0.69	0.74	3.02
Fuel	i	0.73	0.78	1.05	1.12	1.20	4.88
Ground Handling - Paved land	j	2.03	2.17	2.90	3.11	3.32	13.53
Self-Handling Airlines – Paved Land	k	1.29	1.38	1.84	1.97	2.11	8.59
ATMs	l	0.51	0.54	0.73	0.78	0.83	3.39
Banks	m	0.34	0.37	0.49	0.52	0.56	2.28

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Particulars	Reference	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Hotel Counters	n	1.71	1.83	2.45	2.62	2.80	11.42
Other Area	o	1.23	1.32	1.76	1.89	2.02	8.22
Total Revenue from Land and Space proposed by the Authority	B=Sum of a to o	13.95	14.93	19.96	21.36	22.86	93.06
Revenue from Land and Space considered Aeronautical (Refer para 9.2.23)	C=c+d+g+h+i+j+k	6.61	7.07	9.45	10.12	10.82	44.07
Revenue from Land and Space considered Non-Aeronautical	D=B-C	7.34	7.86	10.51	11.25	12.03	48.99
Difference	E=D-A	(3.32)	(3.34)	(1.24)	(1.10)	(0.93)	(9.92)

Other Income

- 9.2.28** The Authority has observed that GIAL, Mopa, Goa has not provided the necessary estimates for Interest Income in order to calculate Non-Aeronautical Revenues. It is pertinent to note that Interest Income falls under the category of Non-Aeronautical Revenues. The calculation of Interest Income estimates depends on cash flows and surpluses, which are determined based on the projected revenue collection.
- 9.2.29** The Authority proposes including the actual Interest Income, along with any other Non-Aeronautical Revenues, in the subsequent Control period's true-up process. This will allow for a comprehensive adjustment and alignment of the financial figures to reflect the accurate revenue generated during the specified period.
- 9.2.30** Based on the aforementioned factors, the Authority has estimated the total Non-Aeronautical revenues for the First Control Period of Manohar International Airport, Mopa, Goa as follows:
- Revenue from the In-Flight Kitchen has been projected by considering the average revenue per passenger, based on the comparison with benchmark airports in the regional areas (HIAL and Chennai), for FY 2023-24. This estimate is further increased by an annual inflation rate of 4% and traffic growth for the remaining years of the Control Period.
 - Revenue from six services, namely F&B (Food and Beverage), Retail, Lounge, Duty-Free, Car parking, and advertisements, has been estimated by considering the average revenue per passenger based on benchmark airports in the regional areas (HIAL, Dabolim, and Chennai) for FY 2023-24. This estimate is further increased by an annual inflation rate of 4% and traffic growth for the remaining years of the Control Period.
 - For FY 2023-24, revenue from the leasing of space has been calculated based on the monthly rent per square meter, as stipulated in the executed contracts. However, land rent from CGF (Cargo and Ground Facilities) and airlines has been classified as aeronautical revenue. For subsequent years, a real growth rate of 7% has been considered year-on-year, and 25% increase in land area due to expansion in the Passenger Terminal Building (PTB) area is anticipated in FY 2025-26 and accordingly, revenue has been computed for the same.
- 9.2.31** Based on the analysis as detailed above, the Authority proposes the following estimates for Non-Aeronautical Revenue for the First Control Period:

Table 115: Non-Aeronautical Revenue proposed by the Authority for First Control Period*(Rs. in crores)*

Particulars	Reference	FY 24	FY 25	FY 26	FY 27	FY 28	Total
Direct Concession							
Flight Kitchen- Concession Fee	Table 108	2.52	2.99	3.80	4.85	5.70	19.85
Retail Concession							
F&B	Table 111	10.33	12.26	15.60	19.92	23.41	81.52
Lounge Income		6.95	8.24	10.49	13.39	15.74	54.81
Retail Duty Paid		18.14	21.52	27.37	34.96	41.08	143.06
Duty Free		12.42	15.37	16.67	19.81	22.26	86.55
Car park		3.38	4.01	5.10	6.51	7.65	26.65
Advertisement		9.00	10.68	13.58	17.35	20.39	71.00
Total Retail Concession		60.22	72.09	88.81	111.95	130.52	463.59
Contract linked Revenues							
Land & Space	Table 114	7.34	7.86	10.51	11.25	12.03	48.99
Total NAR as proposed by the Authority (A)		70.08	82.94	103.11	128.05	148.25	532.43
Lease rentals proposed by GIAL, Mopa, Goa as Non-Aero but considered as Aero by Authority (B)		6.61	7.07	9.45	10.12	10.82	44.07
GIAL, Mopa, Goa's Submission (C)	Table 105	52.48	61.73	73.99	98.62	114.34	401.16
Difference (D=A+B-C)		24.21	28.28	28.57	39.55	44.73	175.34

9.2.32 The Authority emphasizes the importance for GIAL, Mopa, Goa to generate and receive adequate amount of Non-Aeronautical Revenue comparable to other PPP airports in this aspect. This is necessary to effectively cross-subsidize the charges imposed on users and ensure efficient operations.

9.3 Authority's proposals regarding Non-Aeronautical Revenues for the First Control Period

Based on the material before it and based on its analysis, the Authority proposed the following with regard to non-aeronautical revenue for the First Control Period.

- 9.3.1** To consider non-aeronautical revenues for the First Control Period for Manohar International Airport, Mopa, Goa in accordance with Table 115.
- 9.3.2** GIAL, Mopa, Goa should make efforts to substantially increase the NAR of Manohar International Airport, Mopa, Goa for the First Control Period, in line with similar airports.

10. TAXATION FOR THE FIRST CONTROL PERIOD

10.1 GIAL's submission regarding Aeronautical Taxation for the First Control Period

10.1.1 GIAL, Mopa, Goa has submitted that it has opted for benefit provided under Section 115BAA of the Income Tax Act resulting in an effective tax rate of 25.17%. Consequently, the company need not pay tax under MAT (Minimum Alternate Tax) if they opt for Section 115BAA. Accordingly, GIAL, Mopa, Goa has not considered MAT in tax calculations.

10.1.2 While calculating tax, GIAL, Mopa, Goa has considered the following:

- Concession fee payable by GIAL, Mopa, Goa is not considered as an expense.
- 30% Non-Aeronautical Revenue has been considered for cross subsidization.

10.1.3 GIAL, Mopa, Goa has calculated tax based on standalone Aeronautical P&L arrived on the basis of aeronautical building blocks.

10.1.4 Estimated Tax proposed by GIAL, Mopa, Goa, based on building blocks as per MYTP submission is as detailed below:

Table 116: Aeronautical taxes submitted by GIAL, Mopa, Goa for First Control Period

(Rs. in crores)

Particulars	FY24	FY25	FY26	FY27	FY28	Total
Aero Revenue	559.62	1,065.72	1,366.20	1,760.62	2,087.57	6,839.73
Non-Aero cross subsidy	8.05	6.39	7.50	1.94	0.78	24.66
Total Aero Revenue	567.67	1,072.11	1,373.70	1,762.55	2,088.35	6,864.38
Aero Opex	(267.62)	(305.96)	(389.12)	(464.26)	(517.03)	(1,944.00)
Depreciation	(163.34)	(169.72)	(182.51)	(195.31)	(196.77)	(907.66)
Interest	(226.87)	(224.33)	(214.90)	(194.76)	(158.80)	(1,019.66)
Aero PBT	(90.16)	372.10	587.17	908.21	1,215.74	2,993.06
Add: Book Depreciation	163.34	169.72	182.51	195.31	196.77	907.65
Less: Tax depreciation	(347.61)	(338.55)	(300.20)	(332.22)	(292.46)	(1,611.04)
Taxable Profit	(274.42)	203.27	469.48	771.31	1,120.96	2,290.60
C/f loss adjusted		(203.27)	(400.83)			(604.10)
Net Taxable profit	-	-	68.65	771.31	1,120.96	1,960.92
Tax rate			25.17%	25.17%	25.17%	
Income Tax			17.28	194.12	281.90	493.30

10.2 Authority's examination regarding Aeronautical taxation for the First Control Period

10.2.1 The Authority notes that GIAL, Mopa, Goa has considered 30% Non-aeronautical Revenue in the estimation of Aeronautical Profit Before Tax (PBT), which was then used in the computation of aeronautical taxes. The fact that a part of Non-aeronautical Revenue is used for cross subsidization as per the Hybrid Till mechanism does not change the nature of such revenue to Aeronautical. Further, the cross subsidization as per the Hybrid till mechanism is done in order to reduce tariff pressure on passengers and to incentivize GIAL, Mopa, Goa to make effective investments in Non-aeronautical income generating sources.

10.2.2 Therefore, the Authority is of the view that:

- 30% Non-Aeronautical Revenue should not be treated as a subsidy for GIAL, Mopa, Goa as GIAL, Mopa, Goa has already earned it from non-aeronautical services and is meant as a cross subsidy to the airport user.
- The consideration of 30% Non-Aeronautical Revenue as part of revenue from aeronautical services would result in an unfair enrichment to GIAL, Mopa, Goa, effectively reducing the cross-subsidy benefit to the airport user from the present 30% non-aeronautical income.

10.2.3 Therefore, the Authority proposes to consider only aeronautical revenue and expenses in the calculation of aeronautical PBT.

10.2.4 The Authority notes that the Interest cost considered by GIAL, Mopa, Goa as a reduction to compute Aeronautical Profit is not reflective of the actual estimated Interest cost. GIAL, Mopa, Goa has computed the Interest cost for reduction from Profit as follows:

- Average Aeronautical RAB for the year is considered as the base value
- On this, the Debt: Equity ratio for the respective year is applied and a quantum of debt is arrived notionally.
- Cost of debt is applied on this notional value to compute the interest cost

10.2.5 This has resulted in considering lower interest cost, significantly for FY 2025-26 to FY 2027-28, which results in estimating higher Aeronautical Profit and consequently, higher Aeronautical taxes. This difference is explained in the below table.

Table 117: Interest cost as per MYTP submission and Interest cost considered in Aeronautical P&L by GIAL, Mopa, Goa

(Rs. in crores)

Particulars	Reference	FY24	FY25	FY26	FY27	FY28	Total
Interest cost to be							
Average Debt as per GIAL, Mopa, Goa	A	2,358.74	2,491.90	2,588.79	2,475.83	2,302.27	
Interest cost estimate at 9%	B=A*9%	212.29	224.27	232.99	222.82	207.20	1,099.58
Asset ratio as per GIAL, Mopa, Goa	C	97.60%	97.60%	97.60%	97.60%	97.60%	
Aero Interest cost as per above	D=B*C	207.19	218.89	227.40	217.48	202.23	1,073.19
Interest cost considered							
Average Aeronautical RAB	E	3,497.34	3,462.92	3,559.70	3,643.69	3,472.04	
Debt: equity ratio	F	62.07%	61.99%	57.77%	51.15%	43.77%	
Base value for Interest	G=E*F	2,170.96	2,146.70	2,056.41	1,863.77	1,519.58	
Aero Interest cost considered at 10.45%	H=G*10.45%	226.87	224.33	214.90	194.76	158.80	1,019.65

10.2.6 The Authority proposes to correct the methodology of estimating Interest cost for computing Profit, by aligning the same with the estimated interest cost for the relevant year.

10.2.7 Also, the Authority has recomputed Aeronautical Tax of GIAL, Mopa, Goa based on the changes proposed to the other building blocks and based on the proposal discussed above on exclusion of Non-aeronautical Revenue.

10.2.8 Based on the above, the following table summarizes the aeronautical taxes proposed by the Authority for the First Control Period.

Table 118: Aeronautical taxes proposed to be considered by the Authority for First Control Period*(Rs. in crores)*

Particulars	Reference	FY24	FY25	FY26	FY27	FY28	Total
Aero Revenue *	A	452.88	614.24	779.63	992.94	1,164.91	4,004.59
Aero Opex	B	184.29	197.51	248.56	279.35	293.79	1,203.51
Depreciation as per Income Tax **	C	291.72	302.10	294.28	287.05	256.70	1,431.85
Total	D=A-B-C	(23.13)	114.62	236.79	426.54	614.42	1,369.23
Interest cost estimate	E	207.19	218.89	227.40	217.48	202.23	1,073.19
Aero PBT	F=D-E	(230.33)	(104.27)	9.39	209.07	412.19	296.05
C/f loss of previous years		(215.68)	(446.00)	(550.27)	(540.88)	(331.82)	
Losses Added/Utilized		(230.33)	(104.27)	9.39	209.07	412.19	
PBT after set off of C/f losses		(446.00)	(550.27)	(540.88)	(331.82)	80.37	
Tax rate		25.17%	25.17%	25.17%	25.17%	25.17%	
Income Tax		-	-	-	-	20.23	

* Aero revenue is computed based on Net ARR per pax; this is subject to revision based on tariff rate card which is to be submitted by GIAL, Mopa, Goa.

**Computed using WDV method considering useful lives as per IT Act

10.3 Authority's proposals regarding Aeronautical taxation for the First Control Period

Based on the materials before it and its analysis, the Authority proposes the following with regard to taxation for the First Control Period:

10.3.1 To consider aeronautical tax as per Table 118 for the First Control Period.

10.3.2 To true up the aeronautical tax amount appropriately taking into consideration all relevant facts at the time of tariff determination for the next Control Period.

11. QUALITY OF SERVICE FOR THE FIRST CONTROL PERIOD

11.1 GIAL’s submission regarding Quality of Service for the First Control Period

11.1.1 GIAL, Mopa, Goa has not made any submissions related to Quality of Service as part of its MYTP submission for the First Control Period.

11.2 Authority’s examination regarding Quality of Service for the First Control Period

11.2.1 The Authority notes that:

- As per section 13 (1) (d) of the AERA Act, 2008, the Authority shall “monitor the set performance standards relating to quality, continuity and reliability of service as may be specified by the Central Government or any Authority authorized by it in this behalf.”
- As per section 13(1)(a)(ii), the Authority is required to determine the tariff for Aeronautical services taking into consideration “the service provided, its quality and other relevant factors.”

11.2.2 The Authority notes that Annexure 1 of Schedule L of the Concession Agreement for Manohar International Airport, Mopa, Goa, Goa lays down the following:

“The subjective quality of service shall be measured on the parameter of "Overall satisfaction with the airport" on the ACI ASQ survey to be conducted every quarter. The benchmark score for the parameter "Overall satisfaction with the airport" shall be at least equivalent to such score that the Airport is identified within top 20 (twenty) per centile of all airports in its category in the world. The Concessionaire shall also provide performance on all measured parameters of the ACI ASQ survey as part of the Statements being submitted as per the provisions of the Agreement.”

11.2.3 Also, clause 26.8.1 of the CA states that GIAL, Mopa, Goa should participate in the user survey of ASQ undertaken by ACI, conducted every quarter and ensure that the Airport achieves and maintains a rating of at least 4.2 out of 5.0 and / or shall appear within top 20 percentile of all airports, in its category in the world in such survey.

11.2.4 Further, the Authority noted from AAI's website that the ACI ASQ survey results for Goa International Airport of AAI at Dabolim for the 2021 to 2023-Q1 have been in the range of 4.74 to 4.89 (overall score), as against the average score of AAI Airports which ranges from 4.60 to 4.73.

Table 119: ASQ rating for Goa International Airport, Dabolim for the years 2021-2023 Q1

Year	ASQ rating
2021	4.89
2022	4.90
2023 - Q1	4.74

11.2.5 The Authority noted that the ASQ rating awarded to Goa International Airport of AAI, Dabolim is close to the average rating of the AAI airports.

11.2.6 As per the provisions outlined in the Concession Agreement and taking into consideration the ASQ rating maintained by the Airports Authority of India (AAI) at Dabolim Airport, it is expected that Manohar International Airport, Mopa, Goa will strive to achieve a similar or higher ASQ rating. The Authority sets this expectation based on the understanding that the Manohar International Airport, Mopa, Goa, being a new

airport, should aim to provide a level of service that is at least on par with the existing Dabolim Airport, if not surpass it.

11.3 Authority's proposals regarding Quality of Service for the First Control Period

Based on the material before it and its analysis, the Authority proposes the following with regard to Quality of service for the First Control Period:

- 11.3.1** GIAL, Mopa, Goa should ensure that service quality at Manohar International Airport, Mopa, Goa adheres to the performance standards outlined in the Concession Agreement throughout the control period.
- 11.3.2** In addition to meeting these standards, GIAL, Mopa, Goa is expected to meet and maintain the service quality provided at Dabolim Airport, which is operated by the Airports Authority of India (AAI).

12. AGGREGATE REVENUE REQUIREMENT FOR THE FIRST CONTROL PERIOD

12.1 GIAL's submission regarding ARR for the First Control Period

12.1.1 GIAL, Mopa, Goa has submitted ARR and Yield per Passenger (YPP) for the period from 7th December 2022 to 31st March 2023 and First Control Period as per the table below:

Table 120: Aggregate revenue requirement (ARR) submitted by GIAL, Mopa, Goa for the First Control Period

(Rs. in crores)

Particulars	Reference	FY23*	FY24	FY25	FY26	FY27	FY28	Total
RAB	A	3,483.72	3,497.34	3,462.92	3,559.70	3,643.69	3,472.04	
FRoR	B	15.89%	15.89%	15.89%	15.89%	15.89%	15.89%	
Return on RAB	C=A*B	175.34	555.88	550.41	565.79	579.14	551.86	2,978.43
Depreciation	D	49.25	163.34	169.72	182.51	195.31	196.77	956.91
Operating Expense	E	93.74	267.62	305.96	389.12	464.26	517.03	2,037.74
Taxation	F	-	-	-	17.28	194.12	281.90	493.30
30% of NAR	G	1.62	15.74	18.52	22.20	29.58	34.30	121.96
Aggregate Revenue Requirement	H=(C+D+E+F-G)	316.72	971.10	1,007.57	1,132.51	1,403.25	1,513.26	6,344.41
Total Pax	I	0.70	6.88	7.85	9.60	11.79	13.32	
PV Factor	J	1.05	0.86	0.74	0.64	0.55	0.48	
PV of ARR	K=H*J	331.87	837.92	750.16	727.53	777.83	723.77	4,149.08
Sum of PV of ARR	L							4,149.08
Projected Revenue	M	19.78	559.62	1,065.72	1,366.20	1,760.62	2,087.57	6,859.50
PV of Projected Revenue	N=M*J	20.73	482.87	793.45	877.66	975.92	998.45	4,149.08
Sum of PV of Projected Revenue	O							4,149.08
Effective YPP	P							1,271.32

*ARR submitted by GIAL, Mopa, Goa includes the period from 7th December 2022 to 31st March 2023

12.2 Authority's examination regarding ARR for the First Control Period

12.2.1 The observations and proposals of the Authority across the regulatory building blocks impact the computation of ARR and Yield. With respect to each element of the regulatory building blocks considered by GIAL, Mopa, Goa in computation of ARR and Yield in the table above, the Authority proposes to consider the regulatory building blocks as discussed in the previous chapters.

12.2.2 The following table shows the proposed ARR and YPP as per the Authority.

Table 121: Aggregate Revenue Requirement proposed by Authority for the First Control Period

(Rs. in crores)

Particulars	Table Ref	Reference	FY24	FY25	FY26	FY27	FY28	Total
Average RAB	Table 74	A	2,796.05	3,052.60	3,123.36	3,184.27	3,038.11	
Fair Rate of Return	Table 77	B	12.21%	12.21%	12.21%	12.21%	12.21%	
Return on average RAB		C=A*B	341.40	372.72	381.36	388.80	370.95	1,855.24

AGGREGATE REVENUE REQUIREMENT FOR THE FIRST CONTROL PERIOD

Particulars	Table Ref	Reference	FY24	FY25	FY26	FY27	FY28	Total
Operating Expense	Table 104	D	184.29	197.51	248.56	279.35	293.80	1,203.51
Depreciation	Table 72	E	117.86	135.17	145.03	154.88	155.42	708.37
Taxation	Table 118	F	-	-	-	-	20.23	20.23
Aggregate Revenue Requirement		G=C+D+E+F	643.55	705.41	774.95	823.03	840.40	3,787.34
PV of Under-recovery of the period from COD to 31 st March 2024	Table 18	H	179.75					179.75
Aggregate Revenue Requirement		I=G+H	823.30	705.41	774.95	823.03	840.40	3,967.10
NAR	Table 115	J	70.08	82.94	103.11	128.05	148.25	532.43
30% of NAR		K=J*30%	21.02	24.88	30.93	38.41	44.48	159.73
Net ARR		L=I-K	802.28	680.53	744.02	784.62	795.93	3,807.37
Discount factor (@12.21%)		M	1.00	0.89	0.79	0.71	0.63	
PV of ARR		N=L*M	802.28	606.48	590.91	555.34	502.05	3,057.06
Sum of ARR		O	3,057.06					
Total Traffic	Table 31	P	49.44					
YPP on total traffic		Q=O/P	618.34					

12.2.3 The Authority notes that, it is necessary to have the individual year wise tariff card laying down the different aeronautical charges and the workings for the aeronautical revenues, in order to have a constructive stakeholder discussion and hence GIAL, Mopa, Goa is directed to submit the detailed Annual Tariff proposals in line with the ARR and Yield arrived at by the Authority within 7 days of issue of the Consultation Paper.

12.2.4 The Authority for the purpose of calculating CSR and Tax has considered aeronautical revenue based on YPP computed in the ARR table above assuming all the revenues arrived from various services like UDF, parking and landing, CUTE, Lease rentals etc. The Authority proposes to evaluate the same based on the tariff rate card at the time of issue of Multi Year Tariff Order.

12.2.5 The Authority is of the view that when a new airport is constructed, it involves significant capital investment in infrastructure, facilities, and operational costs. These costs are typically recovered through tariffs imposed on airlines, passengers, and other users of the airport's services. However, setting tariffs at excessively high levels can potentially discourage airlines from operating at the airport and deter passengers from choosing it as their preferred gateway. Conversely, setting tariffs too low may result in inadequate revenue generation, making it challenging for the airport to cover its operating costs and debt obligations.

This requires a delicate balance between cost recovery and its potential impact on air traffic demand. This balance is crucial for the financial viability of the airport and its ability to sustain operations while also ensuring that the tariffs remain competitive enough to attract and retain airlines and passengers. Therefore,

the Authority, based on the tariff rate card to be submitted by GIAL, Mopa, Goa will decide the balance between cost recovery and its potential impact on air traffic demand.

12.3 Authority's proposal regarding ARR for the First Control Period

Based on the material before it and based on its analysis, the Authority proposes the following with regard to ARR for the First Control Period:

- 12.3.1** To consider the ARR and YPP for the First Control Period for Manohar International Airport, Mopa, Goa in accordance with Table 121.
- 12.3.2** To direct GIAL, Mopa, Goa to submit the Annual Tariff Proposal (Tariff Rate Card) within 7 days from issue of this Consultation Paper which will be reviewed and put up for stakeholder consultations.

13. SUMMARY OF AUTHORITY'S PROPOSALS PUT FORTH FOR STAKEHOLDER CONSULTATIONS

CHAPTER 3: DETERMINATION OF TARIFF FOR THE PERIOD FROM COD (5TH JANUARY) TO 31ST MARCH 2023

- 3.3.1 To consider Traffic as per Table 8
- 3.3.2 To consider RAB and depreciation as per Table 12.
- 3.3.3 To consider FRoR as per para 3.2.17.
- 3.3.4 To consider Aeronautical O&M expenses as per Table 13.
- 3.3.5 To consider Non-aeronautical revenue as per Table 14.
- 3.3.6 To consider the Aeronautical tax as per Table 15
- 3.3.7 To consider Aeronautical revenue as per Table 17.
- 3.3.8 To consider under recovery of Rs. 179.75 crores as per Table 18 and adjust the same in the ARR for the First Control Period.
- 3.3.9 To true up the additions to RAB and depreciation for the year based on the total completed cost for Phase I and the Fixed Asset Register to be submitted by GIAL in the next control period.

CHAPTER 4: TRAFFIC FOR THE FIRST CONTROL PERIOD

- 4.3.1 To consider Passenger Traffic, ATM and Cargo Traffic for the First Control Period for Manohar International Airport, Mopa, Goa as per Table 31.
- 4.3.2 To true up the traffic volumes (Passenger, ATM and Cargo) based on actual numbers for the First Control Period at the time of determination of tariff for the next control period.

CHAPTER 5: CAPITAL EXPENDITURE (CAPEX), DEPRECIATION AND REGULATORY ASSET BASE (RAB) FOR THE FIRST CONTROL PERIOD

- 5.7.1 To consider the Terminal Building Ratio (TBLR) of 90:10 as mentioned in para 5.4.6 and in line with IMG norms and as approved for other similar Airports.
- 5.7.2 To allow financing allowance during the First Control Period as detailed in Table 61, para 5.3.18 and para 5.3.19.
- 5.7.3 To adopt the Capital Expenditure for the First Control Period in accordance with Table 64.
- 5.7.4 To adopt the aeronautical additions for the First Control Period in accordance with Table 68.
- 5.7.5 To examine the accounting of input tax credits in accordance with Chapter V of The Central Goods and Services Tax Act, 2017 and make necessary adjustments at the time of determination of tariffs for the next Control Period (as detailed in para 5.3.27 and para 5.3.29).
- 5.7.6 To reduce (adjust) 1% of the uncapitalized project cost from the ARR in case any particular capital project is not completed/ capitalized as per the approved capitalization schedule, as mentioned in para 5.3.35. The same will be examined during the true up of the First Control Period, at the time of determination of tariff for the next Control Period .

5.7.7 To true up the Aeronautical Capital expenditure based on actuals, cost efficiency and reasonableness, at the time of determination of tariff for Next Control Period.

5.7.8 To adopt Aeronautical Depreciation as per Table 72 for the First Control Period.

5.7.9 To true up the Depreciation of the First Control period based on the actual asset additions and actual date of capitalization during the tariff determination of the Next Control Period.

5.7.10 To consider average RAB for the First Control Period for Manohar International Airport, Mopa, Goa as per Table 74.

5.7.11 To true up the RAB based on actuals at the time of tariff determination for the Next Control period.

CHAPTER 6: FAIR RATE OF RETURN FOR THE FIRST CONTROL PERIOD

6.3.1 To consider the Cost of equity at 15.18% as per CAPM formula.

6.3.2 To consider the notional debt to equity (gearing) ratio of 48%:52% in line with target gearing ratio being considered in case of other PPP airports.

6.3.3 To consider cost of debt of 9% for the First Control Period.

6.3.4 To consider FRoR of 12.21% for the First Control Period based on above mentioned Cost of equity, Cost of debt and gearing ratio.

CHAPTER 7: INFLATION FOR THE FIRST CONTROL PERIOD

7.3.1 To consider Inflation as per Table 79.

CHAPTER 8: OPERATING & MAINTENANCE EXPENSES FOR THE FIRST CONTROL PERIOD

8.3.1 To consider aeronautical O&M Expenses for the First Control Period as per Table 104.

8.3.2 To consider the O&M expenses incurred by GIAL, Mopa, Goa during the First Control Period subject to reasonableness and efficiency, at the time of tariff determination for the next Control Period.

CHAPTER 9: NON-AERONAUTICAL REVENUE FOR THE FIRST CONTROL PERIOD

9.3.1 To consider non-aeronautical revenues for the First Control Period for Manohar International Airport, Mopa, Goa in accordance with .

9.3.2 GIAL, Mopa, Goa should make efforts to substantially increase the NAR of Manohar International Airport, Mopa, Goa for the First Control Period, in line with similar airports.

CHAPTER 10: TAXATION FOR THE FIRST CONTROL PERIOD

10.3.1 To consider aeronautical tax as per Table 118 for the First Control Period.

10.3.2 To true up the aeronautical tax amount appropriately taking into consideration all relevant facts at the time of tariff determination for the next Control Period.

CHAPTER 11: QUALITY OF SERVICE FOR THE FIRST CONTROL PERIOD

11.3.1 GIAL, Mopa, Goa should ensure that service quality at Manohar International Airport, Mopa, Goa adheres to the performance standards outlined in the Concession Agreement throughout the control period.

11.3.2 In addition to meeting these standards, GIAL, Mopa, Goa is expected to meet and maintain the service quality provided at Dabolim Airport, which is operated by the Airports Authority of India (AAI).

CHAPTER 12: AGGREGATE REVENUE REQUIREMENT FOR THE FIRST CONTROL PERIOD

12.3.1 To consider the ARR and YPP for the First Control Period for Manohar International Airport, Mopa, Goa in accordance with Table 121

12.3.2 To direct GIAL, Mopa, Goa to submit the Annual Tariff Proposal (Tariff Rate Card) within 7 days from issue of this Consultation Paper which will be reviewed and put up for stakeholder consultations.

14. STAKEHOLDER CONSULTATION TIMELINE

- 14.1.1** In accordance with the provision of Section 13(4) of the AERA Act, 2008, the proposals contained in the Chapter 13 – Summary of the Authority’s proposals read with the relevant discussion in the other chapters of the Paper is hereby put forth for Stakeholders’ Consultation.
- 14.1.2** For removal of doubts, it is clarified and explained that the contents of this Consultation Paper may not be construed as any Order or Direction by the Authority. The Authority shall pass an order in the matter, only after considering the submissions of the stakeholders in response hereto and by making such decisions fully documented and explained in terms of the provisions of the Act.
- 14.1.3** The Authority welcomes written evidence-based feedback, comments and suggestions from stakeholders on the proposals made in this Consultation Paper, latest by 29th September 2023.

Secretary

**Airports Economic Regulatory Authority of India
AERA Building, Administrative Complex,
Safdarjung Airport, New Delhi- 110003
Tel: 011-24695044-47; Fax: 011-24695048**

(Chairperson)

15. ANNEXURES

15.1 Annexure 1: Key clauses of Concession Agreement

GIAL, Mopa, Goa entered into a Concession Agreement with Government of Goa (GoG) on 8th November, 2016 to develop Greenfield International Airport at Mopa, in Goa under the DBFOT (Design, Build, Finance, Operate and Transfer) model for an initial period of 40 years from the appointed date i.e. 4th September 2017, which is extendable by another 20 years (based on a bidding process) with the First Right of Refusal available to the Concessionaire, GIAL, Mopa, Goa.

Certain relevant Clauses of the Concession Agreement read as below:

5.6 Obligations relating to procurement of goods and services

- 5.6.1 *“The Concessionaire agrees and undertakes that it shall procure contracts, goods and services for the construction and operation of the Airport in a fair, transparent and efficient manner, and without any undue favour or discrimination in this behalf. In pursuance hereof, it shall frame a procurement policy specifying the principles and procedures that it shall follow in awarding contracts for supply of goods and services, and shall place the policy on its website for the information of general public and all interested parties. The policy shall also include the principles and procedures to be followed for leasing, licensing, sub-licensing, or grant or allocation of any space, building, rights or privileges to private entities.”*
- 5.6.2 *“For procurement of goods, works or services and for award of leases, licenses, sub-licenses or any other rights or privilege where the consideration exceeds Rs. 25,00,00,000 (Rupees twenty-five crores) in any Accounting Year (collectively the “Contracts”), the Concessionaire shall invite offers through open competitive bidding by means of e-tendering and shall select the awardees in accordance with the policy specified under Clause 5.6.1. For the avoidance of doubt, the Parties agree that the Concessionaire may, in its discretion, pre-qualify and short-list the applicants in a fair and transparent manner for ensuring that only experienced and qualified applicants are finally selected on arm's length in a manner that is commercially prudent and protects the interests of the Users. The Parties further agree that the Concessionaire shall not enter into any Related Party Transaction or Contract with any Related Party except with (a) with the prior written consent of the Authority, which consent shall not be unreasonably withheld as a reserved item/affirmative action in accordance with the terms of the Shareholders' Agreement; and (b) such transaction is on arm's length basis and is in compliance with the provisions of the Companies Act, 2013. The Parties also agree that before granting any consent hereunder, the Authority shall be entitled to seek such information as it may reasonably require in relation to the Contract and the Related Party with whom the Contract is proposed to be executed and in the event the Authority does not approve or reject the proposal within 30 (thirty) days of the date on which the required information has been provided, it shall be deemed that the Authority has no- objection to such Contract.”*
- 5.6.3 *“Notwithstanding anything contained contrary elsewhere, the Concessionaire shall adhere to the following contracting principles in respect of any of the Related Party Transactions:*
- (a) No shareholder of the Concessionaire, and/or Key Managerial Person that has an interest in the contract, can be involved in the design of the contract, or the contracting process or decision-making;*
 - (b) Where a shareholder of the Concessionaire, Key Managerial Person or any Related Party intends to tender for the contract, an independent probity auditor must be appointed to review and monitor the tender to ensure a complete arms' length arrangement. It is clarified that the independent probity auditor shall not be a Related*

Party of the Concessionaire or any of its shareholders. Concessionaire shall agree to the appropriate terms of reference and the selection procedure of the independent probity auditor as laid down by the Authority; and

(c) The Concessionaire shall constitute an audit committee headed by a nominee of the Authority which would be responsible for auditing all the Related Party Transactions. The Board of the Concessionaire shall provide the terms of reference of the audit committee at the time of its constitution. The Concessionaire shall enter into any Related Party Transaction only after obtaining approval of audit committee in writing. Any amendment / modification in the terms and conditions of the Related Party Transaction shall also require prior approval of the audit committee.”

12.2 Master Plan for the Site

12.2.1 “The Concessionaire shall at all times procure and ensure that the Airport is constructed and developed in accordance with the Master Plan set forth in Schedule-A.”

12.2.2 “The Concessionaire may, with prior written consent of the Authority, use any area earmarked for future expansion of the Airport, for other purposes incidental to or associated with the Airport, until the same is required for the expansion specified in the Master Plan, subject to the condition that only temporary structures may be constructed in such area and the use thereof shall at all times be in conformity with Applicable Laws and Good Industry Practice.”

12.2.3 “The Concessionaire may, at any time during the Concession Period, seek approval of the Authority for modifications in the Master Plan to improve or augment the Aeronautical Services and upon receipt of any request hereunder, the Authority may grant such approval to the extent reasonably required.”

12.9 Development of MRO Facilities

12.9.1 “Subject to the provisions of this Clause 12.9 and Clause 21.3, the Concessionaire shall undertake the development of the MRO Facilities and as specified in Schedule B together with provision of Project Facilities as specified in Schedule C, in conformity with the Specifications and Standards set forth in Schedule D and in accordance with the provisions of this Agreement, Applicable Laws, relevant ICAO Documents and Annexes, CAR Guidelines and Good Industry Practice.”

12.9.2 “The area earmarked for the MRO Facilities in the Master Plan, may not be used for any other purpose.”

12.9.3 “Any development, addition or modification to the MRO Facilities and its surrounding areas shall be in accordance with the Master Plan and in harmony with the overall design and environment of the Airport.”

18.2 Ground handling Services

18.2.1 “The Concessionaire shall provide or cause to be provided, the infrastructure required for operation of the ground handling services required at the Airport for and in respect of aircrafts, passengers and cargo, which shall include ramp handling, traffic handling, aircraft handling, aircraft cleaning, loading and unloading (the “Ground Handling Services”). Such infrastructure shall include luggage conveyor belts, computer terminals, IT backbone and associated facilities in accordance with the provisions of this Agreement, Applicable Laws and Good Industry Practice.”

18.3 Aircraft Fueling Services

18.3.1 “The Concessionaire shall provide, or cause to be provided, the infrastructure required for operation of fueling services for aircrafts at the Airport (the “Aircraft Fueling Services”). Such infrastructure shall include tank

farms, common hydrant fueling systems and associated facilities in accordance with the provisions of this Agreement, Applicable Laws and Good Industry Practice.”

21.3 Operation and Maintenance of MRO Facilities

“As and when developed, the Concessionaire shall operate and maintain or cause to be operated and maintained the MRO Facilities, subject to an independent study duly verified by the Independent Engineer. Such independent study including the Independent Engineer's recommendations, if any is to be commissioned by the Concessionaire at the Concessionaire's cost, within 2 (two) years of COD of the Airport. Such study shall be conducted every 2 (two) years till such time as MRO facilities are set up. The Concessionaire shall provide or cause to be provided, the associated services to airlines and consignors as per the requirements specified in Schedule B and in accordance with the provisions of this Agreement, Applicable Laws and Good Industry Practice”.

26.8 Target Rating and User Survey

26.8.1 *“The Concessionaire shall participate in the passenger survey of Airport Service Quality (the "ASQ") undertaken by Airports Council International (the "ACI") or any substitute thereof, conducted every quarter and shall ensure that the Airport achieves and maintains a rating of at least 4.2 (four point two) in such survey (the "Target Rating").*

30.2 Annual Premium

30.2.1 *“Concessionaire agrees to pay to the Authority for each year commencing from the 6th (sixth) year of the occurrence of the Appointed Date, a premium (the "Annual Premium") equal to 36.99 % of the Gross Revenue.”*

32.3 Principles of Determination and Revision of Aeronautical Charges

32.3.2 *“The GOI has, vide its letter no. F. No. AV.24011/12/2013-AD dated April 13, 2015, approved the 30% (thirty per cent) shared-till framework for the determination and regulation of the Aeronautical Charges at the Airport, and the same shall be accordingly considered by AERA. For avoidance of doubt, revenues of the Concessionaire from City Side Development shall be excluded from the Shared-Till framework for the determination and regulation of the Aeronautical Charges.”*

32.3.3 *“The Annual Premium shall not be considered as a part of the capital outlay for the Airport or the regulatory asset base or operating expense for the purpose of the determination of the Aeronautical Charges, and shall always be excluded from being considered as a part of the cost for the determination of the Aeronautical Charges.”*

Relevant extract of Annexure – II of Schedule – A of the Concession Agreement

2. *“It is proposed to develop the Airport in a phase-wise manner over the Concession Period. The concessionaire shall prepare and submit the Master Plan for all phases. The phases would be based on the achievement of traffic trigger mentioned in the table below.”*

Table 1: Design Capacity and Traffic for Phasing

Phasing	Traffic Design Capacity (Million Passengers Per Annum)	Trigger for Phasing
Phase I	4.4	
Phase II	5.8	80% of Phase I Capacity

Phasing	Traffic Design Capacity (Million Passengers Per Annum)	Trigger for Phasing
Phase III	9.4	80% of Phase II Capacity
Phase IV	13.1	80% of Phase III Capacity

3. *“The Concessionaire will prepare the Master Plan using the land use plan provided herewith (refer Map 1) as a guideline with the following provisions:*

- *The Concessionaire shall plan and construct the facilities as identified under the different land use provided in Map 1B of this Agreement. The concessionaire has flexibility to plan and design the facilities within the defined land use subject to provisions of this Agreement.*
- *The Master Plan should be in accordance with Civil Aviation Requirements (CAR) as prescribed by the DGCA, ICAO guidelines and conforming to Good Industry Practice.*
- *Level of service for Terminal Building - IATA Level of Service "C" (optimum standards) compliant. The total area of the Terminal Building should be based on 25-40 square meter per peak hour passenger for the design year.*
- *Terminal design must be capable of incremental expansion with minimum impact on current operations.*
- *The City Side development shall be as per provisions of this agreement, applicable development control regulations and Applicable Law.”*

Relevant extract from Schedule B of the Concession Agreement

3.1 Development of Airport shall include:

- (i) *“Construction and procurement of the Aeronautical Assets, including Runways, taxiways, apron, aircraft parking bays and other associated” facilities with following requirements;*
- a. *ICAO Aerodrome Reference Code: Airport to be designed for Code 4E at the minimum for Phase 1 and 2. Airport to be designed for Code 4F at the minimum for Phase 3. The Concessionaire can build a Code 4F airport at its discretion for Phase 1 and/or 2.*
 - b. *Location of Runway:*

<i>Runway Orientation</i>	<i>09 L</i>	<i>27 R</i>
<i>Direction</i>	<i>95^o</i>	<i>275^o</i>
<i>Easting</i>	<i>376154.703</i>	<i>379890.325</i>
<i>Northing</i>	<i>1741181.09</i>	<i>1740854.265</i>

- (ii) *construction and procurement of the Terminal Building as follows:*
- a. *Level of service for Terminal Building - IATA Level of Service "C" (optimum standards) compliant. The total area of the Terminal Building should be based on 25-40 square meter per peak hour passenger for the design year;*
 - b. *80% (eighty per cent) of each of the international and domestic aircrafts B737/ A320 or larger aircrafts shall be served by the boarding bridges;*
 - c. *Provide international standard range of retail and other passenger services; and*
 - d. *Terminal design must be capable of incremental expansion with minimum impact on current operations.”*

6. Defense Area

- 6.1 *“The Concessionaire shall, in the Master Plan, earmark and carve out an area of 5 acres for the use of the Defense Forces (“Defense Area”), which area shall be allocated by the Authority to the concerned Defense Forces.”*
- 6.2 *“The Defense Area preferably should be located as identified in the land use plan provided in Map 1b in this Agreement with a separate independent entry/exit to the defense facilities.”*
- 6.3 *“The Concessionaire shall provide adequate access and good surface connectivity of the Airport to the boundary of the Defense Area on the land side.”*
- 6.4 *“While preparing the Master Plan, the Concessionaire shall also take into consideration providing access to defense aircrafts apron from Runway with adequate taxiway system.”*

7. Cargo Facilities

- 7.1 *“The Concessionaire shall earmark land within the Site for the development of a Cargo Facility in the Airport”.*
- 7.2 *“The Cargo Facilities including apron, cargo terminal for international and domestic cargo and other allied facilities shall be developed in a Phase wise manner as per the applicable Standards and Specifications.”*

8. MRO Facilities

- 8.1 *“The Concessionaire shall earmark minimum 26 acres of land within the Site for the development of MRO Facility in the Airport as per the applicable Standards and Specifications.”*
- 8.2 *“The area earmarked for the MRO Facilities in the Master Plan, may not be used for any other facility until any inquiry comes and the Concessionaire enters into any arrangement with any third party or the Concessionaire itself decides for developing and operating the MRO Facilities and for associated activities.”*
- 8.3 *“The MRO Facility shall be developed, subject to the requirements specified in Clause 12.9 of the Concession Agreement, for serving aircrafts of type and size as per the demand established, which shall include the buildings, structures and equipment required by the aircraft as per the provisions in CAR 145 of DGCA. This will be built in accordance with the provisions of this Agreement, Applicable Laws, relevant ICAO Documents and Annexes, CAR Guidelines and Good Industry Practice.”*

Relevant extract of Annexure – I of Schedule – L of the Concession Agreement

“The subjective quality of service shall be measured on the parameter of “Overall satisfaction with the airport” on the ACI ASQ survey to be conducted every quarter. The benchmark score for the parameter “Overall satisfaction with the airport” shall be at least equivalent to such score that the Airport is identified within top 20 (twenty) per centile of all airports in its category in the world. The Concessionaire shall also provide performance on all measured parameters of the ACI ASQ survey as part of the Statements being submitted as per the provisions of the Agreement.”

15.2 Annexure 2: Consultancy and Legal Charges for FY 2023-24 submitted by GIAL, Mopa, Goa and proposed by the Authority

(Rs. in crores)

Heads	GIAL, Mopa, Goa Submission	Authority's Proposal	Details given by GIAL, Mopa, Goa	Authority's Observation
Passenger Exp	9.30	4.65	Road Signages, Brand Creative Agency, Digital Creative Agency, Hoi App, etc.	The Authority understands the importance of establishing a brand presence and enhancing the image of Manohar International Airport, Mopa, Goa. The Authority notes that however, the costs needs to be spent efficiently. The Authority proposes to rationalize the cost estimates submitted by GIAL, Mopa, Goa by 50% for these initiatives.
IT	2.60	1.30	ITO consultancy, Manpower for RF and Solar panel Closed Circuit Television (CCTV) Support, SAP Licensee Fee, etc.	Regarding IT-related expenses, the Authority notes that GIAL, Mopa, Goa has already considered the costs associated with implementing efficient and secure IT infrastructure, as well as the SAP Licensee fee, under IT related expenditure and Enterprise IT category respectively. While there are bound to be costs relating to Solar Panel, CCTV etc. the Authority proposes to rationalize these by 50% from the estimates provided as other costs are considered by the Authority.
Human Resource	2.70	1.35	Outsourced manpower; Consultants and specialists	During the initial stages of a new airport, it is common to outsource certain manpower requirements to achieve flexibility and benefit from specialized expertise across various functions. However, the Authority notes that GIAL, Mopa, Goa has already appointed employees to provide similar services for which outsourcing manpower costs are proposed. In light of this, the Authority proposes to rationalize the estimated outsourcing manpower cost submitted by GIAL, Mopa, Goa to 50%.
Commercial - Aero	0.80	0.80	Probity Auditor, technical support, cargo & warehousing study	The Authority notes the importance of ensuring transparency and fairness in commercial transactions related to aeronautical operations. The proposed cost by GIAL, Mopa, Goa for the probity audit aligns with this objective. Therefore, the Authority proposes to include the cost estimate.
ALD	0.70	-	Consultancy related to architectural design, market	These costs are related to City Side Development, which falls outside the scope of aeronautical operations, the Authority does not propose to include these costs as part of the estimate.

Heads	GIAL, Mopa, Goa Submission	Authority's' Proposal	Details given by GIAL, Mopa, Goa	Authority's' Observation
			research fees such as lagoon feasibility, golf course feasibility	
Finance	0.70	0.70	Secretarial Audit fee; Certification fees	In terms of legal and regulatory compliance, the Authority understands the necessity of allocating funds for relevant fees to meet these requirements. Thus, the Authority proposes to consider the cost estimate related to legal and regulatory compliance.
MAG	0.50	0.50	Operation Audit consultancy fees	Engaging an audit consultancy to assess operational efficiency, identify areas for improvement, and implement best practices is crucial for enhancing overall airport operations and service quality. Hence, the Authority proposes including the estimated cost.
Quality and BE	0.40	0.40	ACI membership, Audit fees, 5S training, audit, ACI ASQ survey, Skytrax audit	The Authority proposed to consider the estimate by GIAL, Mopa, Goa for these initiatives only related to passenger facilities.
Commercial - Non Aero	0.40	-	Passenger survey, Benchmarking study etc.	
CSR	0.30	0.30	Mobile Medical Unit ops through third party, Annual Maintenance Charges (AMC) for software for e-learning	The Authority proposes including the cost estimates for these initiatives.
Planning	0.20	-	Fees for Aconex software for document and communication management system	The Authority proposes not to consider the cost estimate submitted by GIAL, Mopa, Goa for Professional and Planning consultancy charges as the costs of planning are already part of the Capital costs.
Others	0.40	-	Professional charges	
Total	18.90	10.00		

15.3 Annexure 3: Operating & Maintenance Expense for the period from COD to 31st March 2023

Particulars	Operating expenditure as per the Financial Statement (A)	IND AS Adjustment (B)	Amount proposed by the Authority (C=A+B)
Employee Benefits Expense			
Salaries, wages and bonus (a)	9.06	0.00	9.06
Contribution to provident and other funds (b)	0.35	0.00	0.35
Total (c=a+b)	9.41	0.00	9.41
Bank Charges (d)	0.17	0.00	0.17
Other expenses			
Rent (e)	0.58	2.99	3.57
Operating and maintenance expenses (f)	25.26	0.00	25.26
Office maintenance (g)	1.15	0.00	1.15
Inauguration expenses (h)	10.53	0.00	10.53
Rates and taxes (i)	3.41	0.00	3.41
Legal and professional fees (j)	1.36	0.00	1.36
Vehicle hire charges (k)	1.24	0.00	1.24
Administrative and General Expenses (l)	1.56	0.00	1.56
Miscellaneous expenses (m)	1.14	0.00	1.14
Total (n=e to m)	46.21	2.99	49.20
Total Opex (o=c+d+n)	55.79	2.99	58.78

15.4 Annexure 4: Revenue from Operations for the period from COD to 31st March 2023

Particulars	Revenue as per the Financial Statement (A)	IND AS Adjustment (B)	Total (C=A+B)
Revenue from operations			
Aeronautical Revenue			
Landing and parking charges (a)	3.33	0.00	3.33
User Development Fee (UDF) (b)	15.06	0.00	15.06
Fuel farm (c)	1.39	(1.02)	0.38
Ground handling (d)	1.37	(0.52)	0.85
Cargo (e)	0.29	(0.22)	0.07
Land and space — Rentals (f)	1.05	-	1.05
Aeronautical Revenue (g=a to f)	22.49	(1.75)	20.74
Non-Aeronautical Revenue			
Retail revenue (h)	3.78	(0.74)	3.04
Land and space — Rentals (i)	0.20	(0.03)	0.17
Others (j)	0.31	-	0.31
Other income (k)	(0.96)	1.64	0.67
Non-Aeronautical Revenue (l=h to k)	3.33	0.86	4.19

16. APPENDICES

16.1 Appendix 1 - Independent Study on Capital Expenditure for Development of Greenfield Airport Facilities at Mopa, Goa

16.2 Appendix 2 - Minutes of AUCC meeting