

फ़ा. सं. ऐरा/20010/एमवाईटीपी/एमआईएएल-मंगलौर/सीपी-I/2020-21

F. No. AERA/20010/MYTP/MIAL-Mangalore/CP-I/2020-21

परामर्श पत्र संख्या 07/2022-23/Consultation Paper No. 07/2022-23



सत्यमेव जयते

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India

मंगलुरु अंतर्राष्ट्रीय हवाई अड्डे (आईएक्सई) के लिए प्रथम नियंत्रण अवधि
(01.04.2021 से 31.03.2026) के लिए वैमानिक टैरिफ निर्धारित करने के मामले में

IN THE MATTER OF
DETERMINATION OF AERONAUTICAL TARIFF FOR
MANGALURU INTERNATIONAL AIRPORT (IXE)

FOR THE FIRST CONTROL PERIOD
(01.04.2021 - 31.03.2026)

जारी करने की तारीख : 05 अगस्त, 2022

Date of Issue: 05 August, 2022

ऐरा भवन/AERA Building
प्रशासनिक कॉम्प्लेक्स/Administrative Complex
सफ्दरजंग हवाई अड्डा/Safdarjung Airport
नई दिल्ली/New Delhi – 110003

STAKEHOLDERS' COMMENTS

The Authority is aware of the fact that since the early months of 2020 the Aviation Sector has been faced with severe disruptions and uncertainty on account of the COVID-19 global pandemic. The Authority has taken cognisance of the recent trends of the third wave of infections and its impact on the industry on account of the prevailing restrictions in international air travel, across the world.

The Authority after considering all information currently available, the views of the Airport Operators, industry bodies such as IATA, ACI, and other Expert Agencies on this matter, and analysing various scenarios, has reviewed the necessary adjustments in traffic and other regulatory building blocks on account of the expected changes and uncertainties in the prevailing business scenario. Further, considering the Government of India's recent decision to resume commercial international passenger air travel from March 28, 2022 vide DGCA Circular No.4/1/2020-IR dated March 8, 2022 and termination of air bubble arrangements, the Authority is of the view that the domestic and international passenger traffic may revert to pre-COVID levels by FY 2022-23 and FY 2023-24 respectively. However, these adjustments would be finalised only after consideration of the comments from the stakeholders.

Mangaluru International Airport (MIA) was declared as a "Major Airport" after achieving the annual passenger throughput of 1.5 MPPA based on the actual traffic throughput achieved in FY 2015-16. Subsequent to the amendment in Airports Economic Regulatory Authority of India Act, 2008 (AERA Act) in 2019, MIA had become a non-Major Airport. Further, in the same FY 2019-20, MIA was notified as a "Major Airport" by the Ministry of Civil Aviation vide Order No. S.O. 206 (E) dated January 10, 2020. Hence, it is deemed that there is no disruption in MIA's status as a Major Airport, and MIA therefore, has continued to be a Major Airport since FY 2016-17. Since the Government of India was in the process to privatise the MIA along with other airports of AAI, AERA had not determined tariff for the period FY 2016-17 to FY 2020-21. Further, AERA also felt it would be prudent to give an opportunity to the new Airport Operator (to be selected by AAI through the RFP) to file its MYTP and till such time MIA may continue with the existing tariff as applicable for the non-Major Airport.

Mangaluru International Airport was operated by the Airports Authority of India (AAI), which had entered into a Concession Agreement with the current Airport Operator on February 14, 2020, for the Operation, Development, Maintenance and Management of the Airport for a period of 50 years from the Commercial Operation Date (COD) and the COD was achieved on October 31, 2020. The period from FY 2016-17 to October 30, 2020 (COD) has been considered as pre-COD period and the period from COD till March 31, 2021, has been considered as post-COD period. In this tariff determination exercise, as two Airport Operators are involved i.e. Airports Authority of India (pre-COD) and Mangaluru International Airport Limited (post-COD), for the sake of clarity in this Consultation Paper, AERA has used AAI for Airports Authority of India for pre-COD period and Airport Operator for Mangaluru International Airport Limited for the post-COD period. As per the provisions of the Concession Agreement, AAI and the Airport Operator have submitted their Multi Year Tariff Proposal (MYTP) as follows:

- True up submission of AAI for the pre-COD period from FY 2016-17 up to COD,
- True up submission of Airport Operator for the post-COD period from the COD up to March 31, 2021
- MYTP for the First Control Period from April 1, 2021 to March 31, 2026 submitted by the Airport Operator.

For this Consultation Paper, the Authority has considered the audited figures submitted by AAI for Mangaluru International Airport for the Pre-COD Period (FY 2017 to October 30, 2020) and the audited financials submitted by the Airport Operator from October 31, 2020 (COD) till March 31, 2021.

The Authority has released this Consultation Paper putting forward its proposals in the background of i) Government of India's recent decision to resume commercial flights and pick up in the passenger/ ATM traffic and ii) involvement of two Airport Operators in the tariff determination process.

The Authority shall consider written evidence-based feedback, comments and suggestions from all the stakeholders on the proposals made in the Consultation Paper and pass a suitable Order determining the tariff for aeronautical services. The Authority would like to emphasise that the consultation process timelines are sacrosanct and hereby requests the stakeholders to provide their comments/ inputs within the timelines specified in this Consultation Paper, beyond which the same will not be considered by the Authority.

Thus, in accordance with the provisions of Section 13(4) of the AERA Act, the written comments on Consultation Paper No. 07/2022-23 dated August 5, 2022 are invited from the stakeholders as per the template defined in Annexure 5, 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@aera.gov.in, rajan.gupta1@aera.gov.in, secretary@aera.gov.in

Stakeholder Consultation Meeting:	August 22, 2022
Last Date for submission of comments:	September 5, 2022
Last Date for submission of counter comments:	September 17, 2022

Comments will be posted on AERA's website: www.aera.gov.in.

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

LIST OF ABBREVIATIONS

Abbreviation	Full Form
AAI	Airports Authority of India
AAICLAS	AAI Cargo Logistics and Allied Services
ACI	Airport Council International
AERA / Authority	Airports Economic Regulatory Authority of India
AERA Act	Airports Economic Regulatory Authority of India Act, 2008
AEL	Adani Enterprises Limited
Airport Operator (AO)	Mangaluru International Airport Limited
ANS	Air Navigation Services
ARR	Aggregate Revenue Requirement
Asset Allocation Report	Study on allocation of assets between Aeronautical and Non-aeronautical assets for Mangaluru International Airport Limited
ATC	Air Traffic Control
ATM	Aircraft Traffic Movement
ATF	Aviation Turbine Fuel
AOCC	Airport Operations Control Centre
AUCC	Airport Users Consultative Committee
BCAS	Bureau of Civil Aviation Security
BDDS	Bomb Detection and Disposal Squad
BIAL	Bangalore International Airport Limited
BOQ	Bill of Quantities
CA	Concession Agreement
CAG	Comptroller and Auditor General of India
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CAR	Civil Aviation Regulations
CFT	Crash Fire Tender
CHQ	Corporate Headquarters
CIAL	Cochin International Airport Limited
CISF	Central Industrial Security Force
CNS	Communication, Navigation and Surveillance
COD	Commercial Operation Date
CSR	Corporate Social Responsibility
CUTE	Common User Terminal Equipment
CWIP	Capital Works in Progress
DGCA	Directorate General of Civil Aviation
DIAL	Delhi International Airport Limited
FA	Financing Allowance
FIDS	Flight Information Display System

Abbreviation	Full Form
FRoR	Fair Rate of Return
GHA	Ground Handling Agency
GHIAL	GMR Hyderabad International Airport Limited
GoI	Government of India
GST	Goods and Services Tax
IATA	International Air Transport Association
ICT	Integrated Cargo Terminal
IDC	Interest During Construction
IOCL	Indian Oil Corporation Limited
KL	Kilo Litres
KLD	Kilo Litres per day
KGWA	Karnataka Ground Water Authority
LDA	Landing Distance Available
MIA	Mangaluru International Airport
MoCA	Ministry of Civil Aviation
MoU	Memorandum of Understanding
MPPA	Million Passengers per Annum
MYTP	Multi-Year Tariff Proposal
MIAL	Mumbai International Airport Limited
NAR	Non-aeronautical revenue
OMCs	Oil Marketing Companies
PCN	Pavement Classification Number
PMC	Project Management Consultancy
PPP	Public Private Partnership
PSF	Passenger Service Fee
PTB	Passenger Terminal Building
PV	Present Value
RESA	Runway End Safety Area
RAB	Regulatory Asset Base
RFP	Request for Proposal
RHQ	Regional Headquarters
RWH	Rainwater Harvesting
SITC	Supply, Installation, Testing & Commissioning
Sq.m.	Square Metre
STP	Sewage Treatment Plant
TT	Tank Truck
UDF	User Development Fees
WPI	Wholesale Price Index
YPP	Yield per Passenger

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1. INTRODUCTION

1.1. Background

- 1.1.1. Mangaluru International Airport (MIA) situated about 15 km Northeast of Mangaluru City on top of a 100-metre-high hill, is an International Airport serving this coastal city and surrounding region. It is one of the two International Airports in Karnataka state, the other being Kempegowda International Airport, Bengaluru and was inaugurated on December 25, 1951 with the name as Bajpe Aerodrome. Since its establishment it has witnessed sustained growth in past seven decades in terms of air services as well as passenger traffic.
- 1.1.2. MIA is the first airport in Karnataka to have two runways. It is located on hilltop with two tabletop runways namely, 09/27 and 06/24, out of which only 06/24 is currently used for Commercial flights. The other runway i.e., 09/27 being shorter in length is not used. The operation of international flights started in 2006 and MIA offers several flights to major cities in the Middle East apart from multiple daily flights to all major cities in south and west part of India.
- 1.1.3. MIA is currently operated and managed by Mangaluru International Airport Limited (Airport Operator), a private company incorporated as a wholly owned subsidiary of Adani Enterprises Limited (AEL). Subsequently, Adani Airport Holdings Ltd (AAHL) acquired 49% shareholding in the Mangaluru International Airport Limited and therefore the Shareholding pattern of AEL has changed to 51%. The current shareholding pattern of the Airport Operator is shown in the table below:

Table 1: Shareholding pattern of the Airport Operator

S.no.	Name of Shareholder	% Shareholding
1	Adani Enterprises Limited (AEL)	51%
2	Adani Airport Holding Limited (AAHL)	49%
	TOTAL	100%

- 1.1.4. MIA is a tabletop, land constrained airport with only 236.35 hectares (583.77 acres) of land available for airport development which is further split in four parts. Apart from the limited quantum of total land area of airport, due to non-contiguous nature of airport land and steep variations in topography of the airport site, the net usable contiguous land available for airport development is reduced further. Moreover, as per Annex IV of Schedule A of the Concession Agreement (refer Chapter 17 of this Consultation Paper), out of the 236.35 hectares (583.77 acres) of airport site area of 7.03 hectares (17.37 acres) is Carved Out Asset and is retained by AAI with itself.
- 1.1.5. Technical and Terminal Building details of MIA submitted by the Airport Operator are provided in the table below:

Table 2: Technical and Terminal Building details of MIA submitted by the Airport Operator

Particulars	Details
Total airport area	583.77 acres
Total covered area of Terminal Building including other operational buildings	Existing area - 37,322 Sq.m.
Passenger Capacity	Existing 2 MPPA
Main Runway orientation and length (currently in use for all commercial flights)	Runway 06/24, dimension 2450m x 45m Category 4

Particulars	Details
Apron	15 nos. stands (Code C compliant 11 nos. on Terminal side + 4 nos. on old apron for international cargo use)
Taxiway	Parallel Taxi track construction is on-going
Boarding Bridges	4 Numbers
Security Gates	Domestic - 2 and International - 2

1.2. Profile of Mangaluru International Airport (MIA)

- 1.2.1. MIA was ranked the 25th busiest airport in India in the FY 2017-18 with its highest passenger traffic of 2.26 MPPA. It was 29th busiest airport for the FY 2019-20 (pre-COVID period) and 31st busiest airport for FY 2020-21¹, among the top 50 busiest airports in India by the passengers handled. The passenger traffic recorded for the period April 2021 to March 2022 is 1.01 MPPA. The domestic passengers for FY 2019-20 were 1.31 MPPA (70% of total passenger traffic) and international passengers for FY 2019-20 were 0.57 MPPA (30% of total passenger traffic).
- 1.2.2. MIA was declared as a “Major Airport” as per the clause 2(i) AERA Act, 2008 in the FY 2016-17 based on the actual passenger traffic throughput (i.e., in excess of one and half million) achieved in the FY 2015-16.
- 1.2.3. However, the amendment to the AERA Act 2008 was effected in FY 2019-20, wherein the passenger throughput limit was amended from ‘one and a half million’ to ‘three and a half million’ passengers, whereby MIA was declared as a non- Major Airport.
- 1.2.4. Further, in the same FY 2019-20, MIA was notified as a “Major Airport” by the Ministry of Civil Aviation vide Order No. S.O. 206 (E) dated January 10, 2020. As a result, MIA continues to be a Major Airport since FY 2016-17.

Transfer of MIA through PPP

- 1.2.5. The Airports Authority of India (AAI) entered into a Concession Agreement with Mangaluru International Airport Limited (Airport Operator) on February 14, 2020 for the Operation, Development, Maintenance and Management of Mangaluru International Airport for a period of 50 years from the Commercial Operation Date (COD) i.e., October 31, 2020 in accordance with the terms and conditions mentioned in the Concession Agreement. In consideration for the grant of such concession the Airport Operator shall pay the AAI a monthly concession fee during the concession period, namely, specified amount of ‘Per Passenger’ fee for both domestic and international passengers (refer to Para 17.3.2 of Annexure 3 in Chapter 17 for the relevant clause of the Concession Agreement).
- 1.2.6. However as per the terms of the Concession Agreement, only the AAI through the designated GoI agencies shall be authorised to undertake the ‘reserved services’ at the airport, namely, CNS/ATM services, Security services, Meteorological services, Mandatory health services, Customs control, Immigration services, Quarantine services and any other services as may be notified by GoI (refer to Para 17.3.2 of Annexure 3 of Chapter 17).
- 1.2.7. The expansion of existing Terminal Building on its western side, initiated by AAI in FY 2018-19

¹ As per data on top 50 busiest airports for FY 2019-20 and FY 2020-21, published by AAI

and handed over to the Airport Operator as part of the terms of Concession Agreement Terms, is in progress at Mangaluru International Airport. The expansion is expected to add approximately 10,142 Sq.m. to the existing area of 37,322 Sq.m.,(which includes the total covered area of Terminal Building and other operational buildings) and is expected to increase the capacity of passengers from current 2 MPPA to approx. 3 MPPA. Similarly, the construction of Parallel Taxi Track initiated by AAI and handed over to Airport Operator as part of the terms of Concession Agreement Terms and is expected to enhance peak hour runway capacity and operational safety. The relevant extract of the Schedule T and Schedule U of the Concession Agreement have been detailed in Para 17.3.3 of Annexure 3 of Chapter 17.

1.3. **Cargo Operations**

- 1.3.1. Currently the Cargo facility at Mangaluru International Airport is operated by AAI Cargo Logistics and Allied Services (AAICLAS), a wholly owned subsidiary of AAI. The area of the domestic cargo facility is 2785.059 Sq.m. and international facility is 1813.52 Sq.m. and the total area including proposed Integrated Cargo Terminal (ICT) complex is 15,598.48 Sq.m. and this facility is in the Carved-out area, i.e., ear-marked for AAICLAS as per Annexure IV of Schedule A to the Concession Agreement (refer to Para 0 of Annexure 3 of Chapter 17). Hence, under the Concession Agreement it is retained by AAI and not transferred to the Airport Operator.
- 1.3.2. However, Clause 19.4.1. of Concession Agreement clearly mentions about the obligations of the Airport Operator for upgrading, developing, operating and maintaining the Cargo Facilities in accordance with the provisions of the Concession Agreement, Applicable Laws, Permits and Good Industry Practices (refer to Para 17.3.5 of Annexure 3 of Chapter 17).
- 1.3.3. Pursuant to the terms of the Concession Agreement and in order to cater to the growing demands at the Mangaluru International Airport, the Airport Operator has planned to develop a new ICT area, which shall be a state-of-the art facility having an area of approximately 1,890 Sq.m. to an annual capacity of 9,000 tons in the initial phase.

1.4. **Ground handling operations**

- 1.4.1. The Clause 19.2 of the Concession Agreement clearly mentions the Airport Operator's obligations towards provision of infrastructure required for ground handling services at the Mangaluru International Airport and the extract of the relevant Clause has been provided in Para 17.3.6 of Annexure 3 of Chapter 17.
- 1.4.2. Further, subject to the provisions of the Concession Agreement the Airport Operator has the right to grant License to any entity for providing Ground Handling Services at Mangaluru International Airport on such terms and conditions as mentioned in the License Agreement between by the Airport Operator and the potential service providers.
- 1.4.3. Pursuant to above terms of the Concession Agreement the Airport Operator has engaged GSEC Bird Airport Services Private Limited and Air India SATS Airport Services PVT Limited for provision of such Ground Handling services at Mangaluru International Airport.

1.5. **Fuel Facility Operations**

- 1.5.1. The Clause 19.3. of the Concession Agreement clearly mentions the Airport Operator's obligations towards providing aircraft fueling services, which has been provided in Para 17.3.7 of Annexure 3 of Chapter 17.
- 1.5.2. Currently, the Indian Oil Corporation Ltd (IOCL) is the sole service provider, providing Aviation

Turbine Fuel (ATF) fuel facility at Mangaluru International Airport. The other Oil Marketing Companies (OMCs) providing services at the Airport namely, HPCL and Shell-MRPL have their facilities located outside Airport site area. The Airport Operator has planned to commence the Fuel facility operations by initially purchasing the existing assets of IOCL and subsequently build new assets to provide “Open access” fuel facility at the Airport for aircrafts.

2. TARIFF DETERMINATION OF MANGALURU INTERNATIONAL AIRPORT

2.1. Introduction

2.1.1. AERA was established by the Government of India vide notification No. GSR 317(E) dated May 12, 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 the 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 the Aeronautical services.
 - vi. the concession offered by the Central Government in any agreement or memorandum of understanding or otherwise; and
 - vii. any other factor which may be relevant for the purpose of the Act.
- b) To determine the amount of the development fees in respect of Major Airports.
- c) To determine the amount of the passengers' service fee levied under Rule 88 of the Aircraft Rules, 1937 made under the 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 authorised by it in this behalf.
- e) To call for any such information as may be necessary to determine the tariff for Aeronautical services; and
- 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 the Act, 2008.

2.1.2. As per the AERA Act, 2008 the following are the Aeronautical services for which tariff is determined by the Authority

- 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 Mangaluru International Airport. 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 the Country. Hence, AERA determines tariff for Aeronautical services of the Airport Operator, by excluding the assets, expenses and revenues from ANS.

2.2. Authority's orders applied in tariff proposals in this Consultation Paper

2.2.1. Detailed Guidelines laying down information requirements, periodicity and procedure for Tariff determination have been issued by the Authority. The details of Orders and Guidelines issued in this regard are as under:

- i. Order No. 13 dated 12.01.2011 (Regulatory philosophy and approach in Economic Regulation of Airport Operators) and Direction No. 5 dated 28.02.2011 (Terms and conditions for determination of tariff for Airport Operators); and
- ii. Order No. 05 dated 02.08.2010 ((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 10.01.2011 and Direction No. 4 dated 10.01.2011 (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 13.06.2016 (Normative Approach to Building Blocks in Economic Regulation of Major Airports).
- iv. Order No. 14/2016-17 dated 23.01.2017 (Aligning certain aspects of AERA's regulatory approach with the provisions of the National Civil Aviation Policy – 2016).
- v. Order No. 20/2016-17 dated 31.03.2017 (Allowing concession to RCS flights under Regional Connectivity Scheme (RCS)).
- vi. Order No. 35/2017-18 dated 12.01.2018 and Amendment No. 01 to Order No. 35/2017-18 dated 09.04.2018 (In the matter of determination of useful life of Airport assets).
- vii. Order No. 42/2018-19 dated 05.03.2019 (Determination of FRoR to be provided on the cost of Land incurred by various Airport Operators in India).

2.3. Background to tariff determination process of Mangaluru International Airport

- 2.3.1. MIA was declared as a "Major Airport" as per the clause 2(i) of AERA Act, 2008 in the FY 2016-17 based on the actual passenger traffic throughput (i.e., in excess of one and half million) achieved in the FY 2015-16.
- 2.3.2. The Authority had intimated AAI vide its letter dated July 19, 2018, to submit the Multi Year Tariff Proposal (MYTP) for the Period from April 1, 2018 to March 31, 2023 along with the actual figures for FYs 2016-17 and 2017-18. Subsequently, the Authority noted that AAI has floated RFP dated December 14, 2018, to concession out the Operation, Management and Development of MIA.
- 2.3.3. As a result, the Authority felt it would be prudent to give an opportunity to the new Airport Operator (to be selected by AAI through the RFP) to file its MYTP and that MIA may continue with the existing tariff as applicable for non-Major Airport until such time that the new tariff is determined by the Authority. Therefore, the tariff rate card of non-Major Airport (particularly UDF charges) has been applicable for MIA with effect from FY 2016-17.
- 2.3.4. Subsequent to the amendment of the AERA Act 2008 in the FY 2019-20, the annual passenger throughput limit was amended from 'one and a half million' to 'three and a half million' passengers, whereby MIA was declared as a non- Major Airport. However, in the same FY 2019-20, MIA was notified as a "Major Airport" by the Ministry of Civil Aviation vide Order No. S.O. 206 (E) dated January 10, 2020. As a result, MIA continues to be a Major Airport since FY 2016-17
- 2.3.5. AAI and the Airport Operator had entered into a Concession Agreement on February 14, 2020, for the

Operation, Development, Maintenance and Management of Mangaluru International Airport for a period of 50 years from the Commercial Operation Date (COD) i.e., October 31, 2020.

- 2.3.6. As per the Concession Agreement between AAI and the Airport Operator (clause 28.11.3), the Estimated Deemed Initial RAB as on March 31, 2018, was determined to be ₹ 71 Crores. Further, it is stated in the Concession Agreement that the amount which was due and payable by the Concessionaire to AAI, subject to reconciliation, true up and final determination by AERA. *The extract of the relevant clauses 28.11.3, 28.11.4 and 28.11.5 from the Concession Agreement have been provided in Para 17.3.8 of Annexure 3 under Chapter 17.*
- 2.3.7. In compliance with the above terms in the Concession Agreement, AAI and the Airport Operator have submitted MYTP to the Authority for the following period:
- Submission by AAI for true up of the period from FY 2016-17 up to COD.
 - Submission by the Airport Operator for true up of the period from COD up to March 31, 2021.

Tariff determination for Pre- COD and Post-COD period

i. Pre-COD period

- 2.3.8. AAI had submitted initial true up for the pre-COD period from April 1, 2016 to October 30, 2020 vide letter dated September 13, 2021. The Authority based on its preliminary scrutiny of the true up figures submitted by AAI, observed various discrepancies and upon enquiry, AAI provided information from time to time till February 2022 and submitted a revised true up statement on February 14, 2022. The Authority noted variances between the assets transferred by AAI as on COD and that recorded by the Airport Operator. In order to resolve such differences, the Authority intervened and convened a meeting on March 24, 2022 with AAI and the Airport Operator for a joint reconciliation of the assets handed over by AAI and taken over by the Airport Operator. Subsequent to this meeting, AAI and the Airport Operator submitted a Joint Asset Reconciliation statement on March 31, 2022 of the assets handed over by AAI on October 30, 2021 and taken over by the Airport Operator as on COD. The same has been discussed in detail in the Asset Allocation report (refer Appendix 1 to Chapter 17 of this Consultation Paper). AAI also submitted a revised true up statement for the pre-COD period on March 31, 2022 incorporating the revised RAB jointly reconciled with the Airport Operator. Further, AAI has revised the true up statement and submitted the same on July 3, 2022. The sequential timeline of the above events has been presented in the table below:

Table 3: MYTP and True up submission of AAI and Airport Operator

Event	Date
Submission of original MYTP by AO	May 31, 2021
Submission of original true up by AAI	September 13, 2021
Submission of revised MYTP by AO	December 10, 2021
Submission of revised true up by AAI	February 14, 2022
Meeting convened by the Authority with AAI and Airport Operator for joint reconciliation of assets transferred as on COD	March 24, 2022
Submission of Joint Asset Reconciliation statement by AAI and Airport Operator	March 31, 2022
Submission of revised true up by AAI incorporating the revised RAB as on COD jointly reconciled with the Airport Operator	March 31, 2022

Event	Date
Submission of revised true up by AAI with changes to Operation and Maintenance expenses claimed for the pre-COD period	July 3, 2022

ii. Post COD period

2.3.9. The tariff determination for the post-COD period has been considered for the Airport Operator under the following categories:

- True up of the period from COD till March 31, 2021
- Tariff determination for the First Control Period i.e. from April 1, 2021 to March 31, 2026.

2.3.10. As the Mangaluru International Airport was taken over and operated by the Airport Operator from the COD i.e. October 31, 2020, the Authority has considered to true up the necessary building blocks of the Airport Operator for the five month period commencing from October 31, 2020 up to March 31, 2021. Accordingly, the Authority has considered the First Control Period of five years for the Airport Operator i.e. Mangaluru International Airport from April 1, 2021 to March 31, 2026.

2.3.11. The Airport Operator had submitted an initial MYTP on May 31, 2021 and a revised MYTP (after incorporating changes to certain building blocks) on December 10, 2021, for the First Control Period. The document is available on the AERA's website along with the Consultation Paper.

2.3.12. The Authority has appointed an Independent Consultant, M/s R. Subramanian and Company LLP to assess the MYTP submitted by the Airport Operator for the First Control period. Accordingly, M/s R. Subramanian and Company LLP has assisted the Authority in examining true up submission of AAI and the Airport Operator for the pre and post COD period respectively, the MYTP of Airport Operator, including verifying the data from various supporting documents such as audited financials, Fixed Asset Register (FAR) submitted by the Airport Operator, examining the building blocks in tariff determination, and ensuring that the treatment given to it is consistent with the Authority's methodology and approach.

2.3.13. The Authority through its Independent Consultant has examined the revised MYTP submitted by Airport Operator and verified the data and the projections for the First Control Period including CAPEX and obtained clarifications on the information provided by Airport Operator from time to time, for finalizing this Consultation Paper.

2.3.14. This Consultation Paper has been developed in the order of the events as explained above. Chapter-wise details have been summarised as follows:

- The background of the Authority's tariff determination process is explained in this Chapter and in Chapter 3, wherein the framework for determination of tariff is discussed.
- Chapter 4 lists out the submissions of AAI for true up of the Pre- COD period which is from FY 2016-17 to October 30, 2020 and Chapter 5 lists out submission of the Airport Operator for true up of the period from October 31, 2020 (COD) up to March 31, 2021. This is followed by the Authority's examination and proposals on the specific issues regarding the true up for the Period FY 2016-17 to March 31, 2021 (Pre and Post COD). This chapter also discusses the assessment and the outcome of the studies conducted by the Authority regarding asset allocation ratios between aeronautical and non-aeronautical assets and efficient cost segregation between aeronautical and non-aeronautical operating expenses. The summary of these reports is given

under Annexures to this Consultation Paper and the reports have been appended separately to the Consultation Paper.

- iii. Chapters 6 to 13 discuss Airport Operator's submissions and the Authority's examination of the same along with its proposals with respect to various building blocks pertaining to the First Control Period.
- iv. Chapter 14 presents the revised Aggregate Revenue Requirement as determined by the Authority based on the proposals for the First Control Period.
- v. Chapter 15 summarizes the Authority's proposals regarding each of the building blocks.
- vi. In Chapter 16 the Authority invites views of all the stakeholders regarding proposals put forward for tariff determination for the First Control Period in the Consultation Paper.
- vii. Chapter 17 contains the list of Annexures.
- viii. Chapter 18 contains the list of Appendices.

2.4. Studies commissioned by the Authority

- 2.4.1 The Authority commissioned the following studies through its Independent Consultant for the purpose of tariff determination and the resultant recommendations have been used in this Consultation paper:
 - a) Study on allocation of Assets between Aeronautical and Non-Aeronautical Assets
 - b) Study on efficient Operation and Maintenance Expenses

3. FRAMEWORK FOR TARIFF DETERMINATION FOR THE FIRST CONTROL PERIOD FOR MANGALURU INTERNATIONAL AIRPORT

3.1. Methodology

3.1.1. 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.

3.1.2. As per the guidelines, 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-subsidising the Aeronautical charges. The Authority has considered the same methodology in the analysis of true up submission of the Pre and Post COD Period.

3.1.3. The ARR under hybrid till for the Control Period (ARR) shall be expressed as under:

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

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'.

3.1.4. 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 for all the tariff years. 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'.

3.1.5. All the figures presented in this Consultation Paper have been rounded off up to two decimals.

3.2. Revenues from Air Navigation Services (ANS)

- 3.2.1 The Airport Operator shall be performing Aeronautical services like landing, parking, ground handling, cargo and fuel farm supply services at Mangaluru International Airport and has submitted revenue projections for the same in the First Control Period in its MYTP. However, AAI shall be handling the Air Navigation Systems (ANS) at Mangaluru International Airport and hence the MYTP submitted by Airport Operator does not consider revenues, expenditure, and assets on account of ANS.
- 3.2.2 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 the Country. Hence, AERA determines tariff for Aeronautical services of the Airport Operator, by excluding the assets, expenses and revenues from ANS.

4. TRUE UP OF AAI FOR THE PERIOD FROM FY 2017 TILL COD

4.1 Background

- 4.1.1 AAI had entered into a Concession Agreement dated February 14, 2020, with Mangaluru International Airport Limited (the 'Concessionaire') for the operation and maintenance of Mangaluru International Airport for a period of 50 years from the COD, i.e. October 31, 2020.
- 4.1.2 As per the Concession Agreement between AAI and the Airport Operator (clause 28.11.3), the amount which was due and payable by the Concessionaire to AAI, is subject to reconciliation, true up and final determination by AERA.
- 4.1.3 Pursuant to the above Concession Agreement, AAI has submitted True up workings for the period April 1, 2016 up to October 30, 2020
- 4.1.4 The true up workings submitted by AAI covers the following building blocks:
 - i. Regulatory Asset Base
 - ii. Fair Rate of Return
 - iii. Aeronautical Depreciation
 - iv. Aeronautical Operation and Maintenance Expenses
 - v. Non-aeronautical Revenue
 - vi. Aeronautical Taxes
- 4.1.5 The Authority has analysed the AAI's true up submission in detail. Analysis of the Authority, has been organized as follows:
 - i. Recorded AAI's submissions for true up under different Regulatory building blocks.
 - ii. Provided Authority's examination through its Independent Consultant of each regulatory building block and put forth its proposals.
- 4.1.6 AERA has not issued any Tariff Order for Mangaluru International Airport for the Pre-COD Period, however, the Authority has considered the following documents for determining True up for the Pre-COD Period:
 - i. Audited Financial results of AAI for the Pre-COD Period
 - ii. AERA Guidelines and Orders and
 - iii. Authority's decisions on the Regulatory building blocks as per previously issued Tariff Orders of other similar airports.

4.2 AAI's submission of True up for the Pre-COD Period (from FY 2016-17 to COD)

- 4.2.1 As mentioned in Para No. 2.3.8 of this Consultation Paper, AAI has submitted a revised True Up submission on July 3, 2022. The details of the same have been provided below:

Table 4: Submission of True up of Pre-COD Period by AAI for the period from FY 2016-17 to October 30, 2020

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Opening RAB	73.58	104.51	99.18	114.15	133.50	
Closing RAB	104.51	99.18	114.15	133.50	129.86	
Average Regulatory Asset Base (RAB)	89.05	101.85	106.67	123.83	131.68	
Fair Rate of Return (FRoR)	14%	14%	14%	14%	14%	
Return on Average RAB	12.47	14.26	14.93	17.34	18.43	77.43
Depreciation	9.06	9.30	8.23	9.35	6.09	42.02
Operating Expenditure	39.29	52.38	52.65	64.48	28.54	237.33
Return on Land	0.48	0.48	0.48	0.48	0.48	2.38
Unamortised portion of Land - Balance of Land Value	0.00	0.00	0.00	0.00	3.94	3.94
Corporate Tax	0.00	0.00	0.00	0.00	43.14	43.14
Less: Deductions for Non-aeronautical Revenues	(4.58)	(4.99)	(5.60)	(5.21)	(1.38)	(21.75)
Total Gross ARR	56.71	71.42	70.69	86.42	99.24	384.49
Revenue earned from Aeronautical Services	52.68	62.98	60.08	48.85	3.76	228.34
(Excess) / Shortfall	4.03	8.44	10.61	37.57	95.49	156.14
PV Factor	1.69	1.48	1.30	1.14	1	
PV of (Excess) / Shortfall	6.81	12.51	13.79	42.83	95.49	171.43

4.3 Authority's examination of True up submitted by AAI for the period from FY 2016-17 to October 30, 2020

The Authority while examining the pre-COD submission of AAI has taken the cognizance of the relevant provisions of the Concession Agreement, which may be read as under:

4.3.1 Deemed Initial RAB

4.3.1.1 The extract of the Concession Agreement with respect to determination of "Deemed Initial RAB" has been provided hereunder:

Clause 28.11.3 states that:

- "It is agreed by the Parties that the Concessionaire shall be liable to pay to the Authority an amount equivalent to the investments made by the Authority in the Aeronautical assets as of the COD and considered by the Regulator as part of the Regulatory Asset Base, subject to requisite reconciliation, true-up and final determination by the Regulator of the quantum of such investment ("Deemed Initial RAB")."*
- The estimated depreciated value of investments made by the Authority in the Aeronautical assets at the Airport as on March 31, 2018, is Rs. 71,00,00,000 (Rupees Seventy-One Crore) ("Estimated Deemed Initial RAB"). It is agreed by the Parties that the Estimated Deemed Initial*

RAB shall be due and payable by the Concessionaire to the Authority within 90 (ninety) days of COD."

Clause 28.11.4 states that:

"Pursuant to the payment of the Estimated Deemed Initial RAB, and upon the reconciliation, true-up and final determination by the Regulator of the quantum of the investment under 28.11.3(a), any surplus or deficit in the Estimated Deemed Initial RAB with respect to the Deemed Initial RAB shall be adjusted as part of the Balancing Payment that becomes due and payable as per Clause 31.4 after the expiry of 15 (fifteen) days from such final determination by the Regulator, with due adjustment for the following ("Adjusted Deemed Initial RAB"):

- (a) reduced to the extent of over-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as a downward adjustment while determining Aeronautical Charges for the next Control Period; or*
- (b) increased to the extent of under-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as an upward adjustment while determining Aeronautical Charges for the next Control Period.*

The amount(s) to be paid by the Authority or Concessionaire shall be the present value of Adjusted Deemed Initial RAB calculated using the fair rate of return as determined by the Regulator for the time period from the COD to the date of actual payment of the Adjusted Deemed Initial RAB."

Clause 28.11.5 states that:

"Upon reimbursement of such amount by the Concessionaire to the Authority, the Deemed Initial RAB will, in addition to the investments made by the Concessionaire, be considered for the purpose of determination of Aeronautical Charges by the Regulator.

- (a) The Authority undertakes to make any required supporting submissions to the Regulator towards such consideration and determination by the Regulator.*
- (b) The Parties shall submit to and request the Regulator to separately identify the Deemed Initial RAB in future determinations of Aeronautical Charges with regard to consideration of depreciation, required returns, etc."*

4.3.1.2 Taking cognizance of the above clauses in the Concession Agreement, the Authority has determined the Deemed Initial RAB as on COD and the same is shown in Table 9 of this Consultation Paper.

4.3.1.3 The Authority has reviewed the RAB submitted by AAI for True up of the Pre-COD Period (FY 2016-17 till FY 2020-21 (up to October 30, 2020)), which is as follows:

Table 5: RAB submitted by AAI as part of true up of the Pre-COD period

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (up to COD)	Total
Opening RAB (1)	73.58 [#]	104.51	99.18	114.15	133.50	NA
Additions (2)	40.00	4.78	23.78	29.03	2.69	100.28
Deletions (3)	(0.01)	(0.81)	(0.58)	(0.34)	(0.24)	(1.98)
Depreciation (4)	(9.06)	(9.30)	(8.23)	(9.34)	(6.09)	(42.02)
Closing RAB = (1) + (2) - (3) - (4)	104.51	99.18	114.15	133.50	129.86	NA

[#] *The opening RAB as on April 1, 2016 was provided by AAI as part of its True Up submission and the same was cross checked with the FAR by AERA's Consultant.*

4.3.1.4 Further the Authority as part of its review noted the following with respect to the RAB submitted by AAI:

- a. The RAB submitted by AAI as on October 30, 2020, is based on the extract of its audited trial balance.
- b. The RAB as of October 30, 2020, submitted by AAI included Financing Allowance of ₹ 2.52 Crores. Since AAI has not disclosed any borrowings in the True up submission, the Authority proposes not to allow the same for the determination of RAB.
- c. Certain assets related to ANS activities of ₹ 1.21 crores (such as ATC Tower) had been included in the RAB as per AAI's submission. Since AERA does not determine the regulatory tariff for ANS-related activities, the ANS related assets have been excluded from the Adjusted RAB (as also explained in para 3.5.4 of the *Asset Allocation report*).

4.3.1.5 **Reclassification of assets transferred by AAI to Airport Operator**

The Authority has conducted an independent study on allocation of assets for the period FY 2016-17 till FY 2020-21 and used the outcome of the study to true up the RAB as on pre-COD (October 30, 2020) for AAI.

The Authority has considered the opening RAB submitted by AAI, Capital additions and corresponding depreciation based on the results of the Asset Allocation report (refer Annexure 1 for the Summary of the report) and Appendix 1 for the detailed report on *Study on allocation of assets between Aeronautical and Non-aeronautical assets for Mangaluru International Airport*.

The asset allocation study reviewed the various asset categories and developed a basis for segregation of various assets into Aeronautical, Non-aeronautical and Common. Based on the same, the Authority has reclassified some portion of assets submitted by AAI for true up of the Pre-COD Period, which has been detailed hereunder:

(i) Terminal buildings and related works:

Details of asset: Expansion of Terminal Building in Lower Ground Floor and other areas

Allocation proposed by AAI: Aeronautical

Observation: The assets pertaining to the expansion of the terminal building in the lower ground floor and other related works have been considered as Aeronautical assets by AAI. However, as these are within the Terminal Building, wherein both Aeronautical and Non-aeronautical activities are carried out, the same is reclassified as Common asset and segregated in the ratio of the Terminal Building (92:8). The Authority has also identified an asset, viz., covering for car park pertaining to Non-aeronautical activities, which had been classified as Aeronautical by AAI. The Authority has reclassified this asset as Non-aeronautical.

Allocation proposed by the Authority: Common / Non-aeronautical

Impact: Reclassifying these assets from Aeronautical to Common/ Non-aeronautical reduces the RAB to the extent of ₹ 0.19 Crores.

Reference: Para 4.5.1.2 of the *Asset Allocation report*.

(ii) Staff Quarters:

Details of Asset: Construction of quarters and other assets around the quarters

Allocation proposed by AAI: Aeronautical

Observation: The construction of staff quarters and other assets in and around the Quarters have been classified as Aeronautical assets by AAI. As these assets are used by both Aeronautical and ANS staff, these are reclassified by the Authority as Common assets and have been reallocated in the ratio of the occupancy of the staff quarters between Aeronautical and ANS (77.21: 22.79).

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of ₹ 0.09 Crores.

Reference: Para 4.5.1.3 of the *Asset Allocation report*.

(iii) Plumbing and Electrical works for Airport:

Details of Asset: Assets related to Augmentation of water supply, pumping and building for sub-station

Allocation proposed by AAI: Aeronautical

Observation: The assets pertaining to supply of water, including drilling of borewells, rainwater harvesting and building for sub-station have been considered as Aeronautical assets by AAI. However, since these assets cater to the need of both Aeronautical and Non-aeronautical activities, these assets are reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of ₹ 0.01 Crores.

Reference: Para 4.5.1.4 of the *Asset Allocation report*.

(iv) Artwork:

Details of Asset: Artwork within the Airport

Allocation proposed by AAI: Aeronautical

Observation: Artwork related assets have been classified as Aeronautical assets by AAI. However, since these assets are for the common use within the terminal building, they have been reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common decreases the RAB to the extent of ₹ 0.06 Crores.

Reference: Para 4.5.1.5 of the *Asset Allocation report*.

(v) Equipment for utilities:

Details of Asset: Assets related to sub-station, including earthing and wiring, generators, rainwater harvesting and water supply

Allocation proposed by AAI: Aeronautical

Observation: The equipment related to sub-station, including earthing and wiring, generators, rainwater harvesting and water supply have been considered as Aeronautical assets by AAI.

However, since these assets cater to the need of both Aeronautical and Non-aeronautical activities, these assets are reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of ₹ 0.27 Crores.

Reference: Para 4.5.1.6 of the *Asset Allocation report*.

(vi) CCTV:

Details of Asset: CCTV cameras and storage system

Allocation proposed by AAI: Aeronautical

Observation: The assets pertaining to the installation of CCTV cameras across the airport, including those at entry, exit, parking and expansion of its storage medium have been considered as Aeronautical assets by AAI. In the absence of specific identification as to the location of the assets, the Authority finds it prudent to consider such assets as Common assets and has segregate these in the ratio of the Terminal Building (92:8).

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of ₹ 0.11 Crores.

Reference: Para 4.5.1.7 of the *Asset Allocation report*.

(vii) Air Conditioning:

Details of Asset: Air Conditioning at terminal building and other areas

Allocation proposed by AAI: Aeronautical

Observation: Replacement of air conditioners have been classified as Aeronautical assets by AAI. As these assets are used for servicing both Aeronautical and Non-aeronautical activities within the Terminal Building, these are reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of ₹ 0.02 Crores.

Reference: Para 4.5.1.8 of the *Asset Allocation report*.

(viii) Other assets:

Details of Asset: Other miscellaneous assets of buildings, furniture, office appliances and plant and equipment

Allocation proposed by AAI: Aeronautical

Observation: Certain miscellaneous assets (such as streetlights, furniture, computers etc.) have been classified as Aeronautical assets by AAI. However, since these assets are for the common use, they have been reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8) or in the ratio of the Employee Head Count (89.60:10.40) depending on the nature of such individual assets.

Allocation proposed by the Authority: Common

Impact: Reclassifying these assets from Aeronautical to Common decreases the RAB to the extent of ₹ 0.03 Crores.

Reference: Para 4.5.1.9 of the *Asset Allocation report*.

4.3.1.6 Subsequent to the above reclassifications, the adjusted RAB has been derived by the Authority as under:

Table 6: Adjusted RAB derived by the Authority post reclassifications

(₹ Crores)

Particulars		Ref.	Amount
RAB as on October 30, 2020, as submitted by AAI	A	Table 4	129.86
Financing allowance	B	4.3.1.4 (b)	(2.52)
ANS assets excluded from RAB	C	4.3.1.4.(c)	(1.21)
<u>Reclassification adjustments:</u>			
Terminal building	D	4.3.1.5 (i)	(0.19)
Staff Quarters	E	4.3.1.5 (ii)	(0.09)
Plumbing and Electrical works for Airport	F	4.3.1.5 (iii)	(0.01)
Artwork	G	4.3.1.5 (iv)	(0.06)
Equipment for utilities	H	4.3.1.5 (v)	(0.27)
CCTV	I	4.3.1.5 (vi)	(0.11)
Air Conditioner	J	4.3.1.5 (vii)	(0.02)
Other assets	K	4.3.1.5 (viii)	(0.03)
Total reclassification Sum (D:K)	L		(0.78)
Adjusted RAB post reclassifications as on October 30, 2020 [(A- (B+C+L))]			125.35

4.3.1.7 **Revision of Terminal Building ratio:** The Authority noted that AAI, in its submission of True up for the period up to October 30, 2020 has considered the ratio of Non-aeronautical area as 10.42% of the total terminal building area. On further analysis, the Authority noted that AAI had excluded 8,959 Sq.m. of the lower ground floor in its computation of the total Terminal Building area. Including this lower ground floor area resulted in a revised five-year average Terminal Building ratio of 93.33:6.67 (Aeronautical: Non-aeronautical area). It is noted that the Airport Operator has already considered the lower ground floor area in its computation of total terminal building area. The Authority is of the view that MIA being a small airport with a passenger throughput of less than 10 MPPA, its Terminal Building ratio should be 92:8 (Aeronautical: Non-aeronautical), in line with the IMG report, which has recommended that the Non-aeronautical area within the terminal building for airports having passenger traffic less than 10 MPPA to be in the range of 8% to 12% of the total terminal area. The application of the above revised ratio (92:8) for segregating the common assets of AAI within the

Terminal Building results in an increase in closing RAB as on October 31, 2020, by ₹ 0.92 crores. The same has been explained in para 4.5.3.2 of the *Asset Allocation report*.

4.3.1.8 Changes in Employee Headcount ratio: The Authority proposes to consider the five-year average Employee Head Count Ratio of AAI, i.e. 89.60:10.40 (Aeronautical: Non-aeronautical) for the purpose of allocation of assets during the period from FY 2016-17 up to COD, as the Authority considers the same to be a reasonable basis for allocation of assets. This has resulted in the increase in RAB by ₹ 0.003 Crores and has been explained in para 4.5.4 of the *Asset Allocation report*.

4.3.1.9 The Adjusted RAB derived by the Authority post the above adjustments to Terminal Building ratio and Employee Headcount ratio is as follows:

Table 7: Adjusted RAB derived by the Authority post adjustments on allocation ratios

(₹ Crores)

Particulars		Ref.	Amount
Adjusted RAB post reclassifications as on October 30, 2020	A	Table 6	125.35
Impact of revision in the Terminal Building ratio	B	4.3.1.7	0.92
Impact of revision in the Employee Head Count ratio	C	4.3.1.8	0.003
Adjusted RAB post adjustments to allocation ratios as on October 30, 2020 (D= A+B+C)	D		126.27

4.3.1.10 Adjusted RAB (year-wise) of AAI derived by the Authority

The Authority has derived year-wise adjusted RAB for the pre-COD period as shown in the table below:

Table 8: Year-wise impact of re-classifications and other adjustments on RAB

(₹ Crores)

Particulars	Ref.	Up to 31 Mar 16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*	Total
Opening RAB (A)		73.58 [#]	74.21	101.42	96.00	110.78	129.80	NA
Additions (B)	Table 5	-	40.00	4.78	23.78	29.03	2.69	100.28
Financing allowance and assets related to ANS activities excluded from RAB (C)		(0.35)	(3.56)	(0.03)	(0.36)	(0.28)	(0.07)	(4.65)
Deletions (D)	Table 5	-	(0.01)	(0.81)	(0.58)	(0.34)	(0.24)	(1.98)
Depreciation as per AAI (E)		-	(9.06)	(9.30)	(8.23)	(9.34)	(6.09)	(42.02)
Depreciation impact on financing		-	0.04	0.18	0.25	0.28	0.17	0.92

Particulars	Ref.	Up to 31 Mar 16	FY 2016- 17	FY 2017- 18	FY 2018- 19	FY 2019- 20	FY 2020- 21*	Total
allowance and assets related to ANS activities excluded from RAB (F)								
Sub-total (G)		73.23	101.62	96.24	110.86	130.13	126.26	
Reclassification adjustments								
Reclassification impact (other than depreciation) (H)		0.98	(0.12)	(0.18)	(0.07)	(0.33)	(0.01)	0.27
Depreciation impact on reclassification of assets (I)		-	(0.08)	(0.06)	(0.01)	-	0.02	(0.13)
Total reclassification impact (J = H + I)		0.98	(0.20)	(0.24)	(0.08)	(0.33)	0.01	0.14
Closing RAB (G + J)		74.21	101.42	96.00	110.78	129.80	126.27	NA

* up to October 30, 2020

Refer Table 5

4.3.1.11 Determination of Deemed Initial RAB

Based on the outcome of the independent study conducted by the Independent Consultant appointed by AERA on allocation of assets for MIA, the Authority has determined the Deemed Initial RAB which is as follows:

Table 9: Determination of Deemed Initial RAB by the Authority

(₹ Crores)

Particulars	Ref.	RAB
Total assets of AAI as on October 30, 2020 (Net block) as per True up submission	Table 6	129.86
Adjustments (Financing Allowance and ANS assets excluded from RAB)		(3.73)
Reclassification of assets	Table 8	0.14
Total assets of AAI as on October 30, 2020 (Net block), after reclassification and other adjustments		126.27
Less assets retained by AAI		(0.63)

Particulars	Ref.	RAB
Net assets transferred by AAI to the Airport Operator as on October 31, 2020 (Deemed Initial RAB)*		125.64

* Reference: Table 13 of the Study on Allocation of assets between Aeronautical and Non-aeronautical assets for MIA.

4.3.2 True up of RAB for the period FY 2016-17 up to COD

The Authority has derived the Opening, Closing and Average RAB of AAI for the period from FY 2016-17 to October 30, 2020, after giving effect to the above adjustments and the same is as follows:

Table 10: Adjusted RAB of AAI considered by the Authority for True up of Pre-COD Period

(₹ Crores)

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020
Opening RAB	Table 8	74.21	101.42	96.00	110.78	129.80
Closing RAB		101.42	96.00	110.78	129.80	126.27
Average Regulatory Asset Base (RAB)		87.82	98.71	103.39	120.29	128.04

4.3.3 True up of Fair Rate of Return

4.3.3.1 The Authority notes that AAI had not availed any debt during the Pre-COD period. Also, AAI has claimed 14% as Fair Rate of Return on equity, as part of its True up submission for the Pre-COD period.

4.3.3.2 The Authority further notes that AAI has claimed the return on Average RAB @ 14% (mentioned above) for the entire FY 2020-21, instead of the period up to COD. Hence, the Authority has re-computed Return on Average RAB for the FY 2020-21 for the period only up to COD, which is for a period of 7 months commencing from April 1, 2020 up to October 30, 2020.

4.3.4 True up of Depreciation

4.3.4.1 The Authority notes that while submitting the True up for the Pre-COD period for the Mangaluru International Airport, AAI has taken cognizance of the rates of depreciation approved by the Authority in previous tariff orders (Order No. 35 dated January 12, 2018 and Amendment No. 01 to Order No. 35 on 'Determination of Useful Life on Airport Assets'). Accordingly, the rates of depreciation approved by AERA have been applied by AAI for MIA from FY 2018-19 onwards. For the FY 2016-17 and FY 2017-18, AAI has computed depreciation as per its Accounting Policy. The Authority considers the same to be reasonable.

4.3.4.2 For the additions to RAB, AAI has calculated the depreciation during year of capitalization based on number of days, the asset was put to use. The Authority proposes to consider the same.

4.3.4.3 The Authority has computed depreciation for the Pre-COD period, after making necessary adjustments to the assets excluded from RAB and the same is presented as follow

Table 11: Depreciation considered by the Authority for True up of Pre-COD Period

(₹ Crores)

Particulars	Ref.	FY 2016- 17	FY 2017- 18	FY 2018- 19	FY 2019- 20	FY 2020-21 up to October 30, 2020	Total
Depreciation as submitted by AAI (A)	Table 4	9.06	9.30	8.23	9.34	6.09	42.02
Depreciation impact on financing allowance and assets related to ANS activities excluded from RAB (B)	Table 8	(0.04)	(0.18)	(0.25)	(0.28)	(0.17)	(0.92)
Depreciation impact on reclassification of assets (C)		0.08	0.06	0.01	-	(0.02)	0.13
Depreciation* considered by the Authority after reclassification and other adjustments = Sum (A: C)		9.10	9.18	7.99	9.06	5.90	41.23

* Reference: Table 10 of the Study on Allocation of assets between Aeronautical and Non-aeronautical assets for MIA.

4.3.5 True up of Aeronautical Operation and Maintenance (O&M) expenses

4.3.5.1 The component wise break up of Aeronautical Operation and Maintenance expenses submitted by AAI for the Pre-COD period is as follows:

Table 12: O&M expenses submitted by AAI for True up of Pre-COD Period

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Employee Benefit	11.86	17.06	20.88	21.91	11.50	83.20
Administrative & Other Expenses (including CHQ/ RHQ expenses)	12.92	14.97	11.70	12.45	4.64	56.67
Operating Expenses	8.43	11.80	12.26	13.01	6.15	51.65
Repairs & Maintenance	6.08	8.55	7.80	17.00	6.27	45.70
Finance Cost	0.00	0.00	0.00	0.11	0.00	0.11
Total	39.29	52.38	52.64	64.48	28.55	237.33

4.3.5.2 Reallocation of common O&M expenses by the Authority

The Authority has commissioned an independent study through the Consultant appointed by AERA to determine efficient Aeronautical Operation and Maintenance costs for the period FY 2016-17 till FY 2020-21 (up to COD) and used the outcome of the study to true up the O&M expenses for the pre-COD period for AAI.

The common O&M expenses have been segregated by AAI between Aeronautical and Non-aeronautical expenses based on a suitable ratio. This ratio has been determined based on the underlying proportion of their expected utilisation for Aeronautical and Non-aeronautical services and activities at the Airport.

The Authority has analysed the submission made by AAI on allocation of Common expenses into Aeronautical and Non-aeronautical on a case-to-case basis and applied appropriate re-classification and re-allocation of the expenses, wherever it noted any discrepancies in the allocation of expenses by AAI (*refer Table 6 for basis for allocation of O&M expenses of AAI as per the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport*). Accordingly, the following common expenses have been re-allocated by the Authority by using appropriate ratios such as Employee Head Count ratio, Terminal Building ratio, Gross Fixed Assets ratio and Electricity ratio (*Refer para 4.5.1 to para 4.5.4 of the Study report on Efficient Operation and Maintenance Expenses for Mangaluru International Airport regarding the ratios used by the Authority for allocation of common expenses.*)

- a) Employee benefit expenses
- b) Administrative and other expenses
- c) Operating expenses
- d) Repairs and Maintenance expenses

The re-allocation of each of the above expenses have been explained in the following paragraphs.

a) Employee Benefit expenses

Observation: The Authority noted that in the case of AAI, the costs directly pertaining to ANS employees have been excluded from the O&M expenses, but the ANS employees are considered in the allocation of Common expenses. Accordingly, the Authority has considered the common expenses allocated to ANS employees as deemed Non-aeronautical employees and has re-worked the Employee Head Count ratio as shown in *para 4.5.3.2 and Table 9 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport*.

Impact: The impact of the reallocation of Employee Benefit expenses based on revised Employee Headcount ratio results in reduction of the aforementioned expenses by ₹ 6.96 Crores for the Pre-COD period.

Reference: Para 4.6.2 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

b) Administrative and other expenses

Observation: The Authority notes that the Administrative and other expenses submitted by AAI include certain expenses such as tender, rent and rates and taxes which directly relate to the airport premises and certain expenses such as meeting and seminar expenses which are relatable to employees. AAI has allocated the entire Administrative and other expenses in the Employee Head Count ratio. However, the Authority proposes to re-allocate the components of the Administrative and other expenses related to the entire airport in the ratio of Gross Fixed Assets and that pertaining to employees in the ratio of Employee Head Count.

Impact: The impact of the reallocation results in reduction of Administrative and other expenses by ₹ 0.36 Crores for the Pre- COD period.

Reference: Para 4.6.3 of the Study on Efficient Operation and Maintenance Expenses for

Mangaluru International Airport.

c) Operating expenses

Observation: The Authority notes that expenses such as license fees are relatable to the airport premises, upkeep expenses are relatable to the terminal building and vehicle fuel are relatable to all employees. AAI has considered the above expenses as Aeronautical. The Authority proposes to reallocate such expenses in the ratio of Gross Fixed Assets / Terminal Building/ Employee Head Count ratio depending on the nature of each expense.

Impact: The impact of the reallocation results in reduction of Operating expenses by ₹ 0.82 Crores for the Pre- COD period.

Reference: Para 4.6.4 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

d) Repairs and Maintenance expenses

Observation: The Authority notes that certain repair expenses such as repairs for vehicles are relatable to employees, expenses such as electrical installation are relatable to the terminal building and certain other expenses which are relatable to the airport premises. AAI has considered such expenses as Aeronautical. The Authority proposes to reallocate such expenses in the ratio of Gross Fixed Assets / Terminal Building/ Employee Head Count ratio depending on the nature of each expense, subject to the allowable limit of 6% of opening RAB (net block) of each FY.

Impact: The impact of the reallocation results in reduction of Repairs and Maintenance expenses by ₹ 2.35 Crores for the period FY 2016-17 till COD.

Reference: Para 4.6.5 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

Impact of the above re-allocation of O&M expenses have been summarised in the following table:

Table 13: Impact of re-allocation of O&M expenses submitted by AAI for True up of Pre-COD Period

(₹ Crores)

O&M expenses	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (up to October 30, 2020)	Total
Employee benefit expenses	0.93	1.37	1.48	2.11	1.07	6.96
Administrative and other expenses (incl. CHQ/ RHQ expenses)	0.05	0.09	0.09	0.08	0.05	0.36
Operating expenses	0.09	0.15	0.21	0.23	0.14	0.82
Repairs and maintenance	0.33	0.46	0.45	0.84	0.27	2.35
Total	1.40	2.07	2.23	3.26	1.53	10.49

4.3.5.3 Based on the above reclassification and change in allocation ratio, the Authority has proposed the following revised Aeronautical O&M expenses (prior to rationalisation) for the Pre-COD period:

Table 14: Revised Aeronautical O&M expenses of AAI for the Pre-COD period post reclassification and re-allocation

(₹ Crores)

O&M expenses*	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (up to October 30, 2020)	Total
Employee benefit expenses	10.93	15.68	19.40	19.80	10.43	76.24
Administrative and other expenses (including CHQ/ RHQ expenses)	12.87	14.87	11.61	12.37	4.59	56.31
Operating expenses	8.34	11.66	12.05	12.78	6.00	50.83
Repairs and Maintenance	5.75	8.09	7.35	16.16	6.00	43.35
Finance cost	0.00	0.00	0.00	0.11	0.00	0.11
Total	37.89	50.30	50.41	61.22	27.02	226.84

* Reference Table 12 and Table 13 of this Consultation Paper

4.3.5.4 Rationalisation of Aeronautical O&M expenses

Based on the Internal benchmarking analysis performed for O&M expenses through the *Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport*, the Authority proposes to rationalise the following expenses for the period FY 2017 to FY 2021 (up to October 30, 2020).

- a. CHQ/ RHQ expense allocation (included under Administrative and other expenses)
- b. Repairs and Maintenance expenses

a. CHQ/ RHQ expense allocation (included under Administrative and other expenses)

- The Authority reviewed the basis adopted by AAI for allocation of CHQ and RHQ expenses to Mangaluru International Airport and other airports and noted the following:
 - All expenses incurred by CHQ and RHQ (like staff costs, Admin and Gen. expenses, Repairs and Maintenance, utilities, outsourcing expenses etc.) is allocated to all the AAI airports, in the ratio of revenues earned by each Airport.
 - Expenses such as legal costs, interest/ penalties are related to some specific airports. However, these have been allocated to the common pool and apportioned to all the AAI airports.

The Authority is of the view that the above process followed by AAI for allocating the expenses is not transparent and necessitates adoption of a scientific/ rational approach for justifiable allocation of expenses to the Airports. Towards this objective, the Authority has examined the major expense components of CHQ and RHQ for the FY 2016-17, FY 2017-18,

FY 2018-19, FY 2019-20 and FY 2020-21 submitted by AAI in November 2021 and December 2021 and has proposed the following views on allocation of CHQ/ RHQ expenses:

i. Pay and Allowances of CHQ and RHQ:

- AAI has considered pay and allowances of Commercial department at CHQ and RHQ as Aeronautical expenses, whereas such expenses are Non-aeronautical in nature.
- AAI has excluded pay and allowances of employees involved in ATM, CNS and Cargo departments at CHQ and RHQ while working out the allocation to the airport. However, no exclusion has been done for support services of the departments relating to HR, Finance, Civil, Terminal Management (Housekeeping), etc.
- Manpower of CHQ and RHQ also provide services to Non-aeronautical activities, ATC, and CNS cadres at respective airports. Hence, pay and allowances need to be adjusted accordingly.

Considering all the facts and figures as stated above, the Authority is of the view that 20% of pay and allowances of CHQ and RHQ is to be excluded towards the following:

- Support services to ANS, Cargo and Commercial at CHQ, RHQ and Airports
- Officials of Directorate and Commercial

Balance 80% of pay and allowances of CHQ and RHQ can be allocated to Airports.

ii. Administration & General Expenses of CHQ and RHQ:

- AAI has incurred Legal & Arbitration Expenses at both CHQ and RHQ level. The Authority is of the view that this expense should be analysed and distributed to stations on a case-to-case basis. As the above details have not been provided by AAI, the same has not been allocated to the stations. Further, the Authority is of the view that considering the present scenario where the COVID-19 pandemic has significantly impacted the Aviation sector, it is imperative for the Airport Operators to rationalise their costs and plan the operations in an efficient manner.
- AAI has paid interest/penalties to Government of India at both CHQ and RHQ levels. The Authority is of the view that the stakeholders should not be burdened with interest/penalties paid to Government of India, due to various lapses/delays on the part of the Airport Operator. Hence such expenses have not been allocated to the airports.

Based on the above methodology, the Authority has derived the revised CHQ and RHQ expenses for the Pre-COD period, which is proposed to be allocated to Mangaluru International Airport, as part of True up of the Pre-COD period.

Table 15: Adjusted CHQ/ RHQ – Admin and Gen expenses proposed by the Authority as part of True up of O&M expenses

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
CHQ/ RHQ – Admin & General expenses (allocation done by AAI) – A	11.82	12.63	9.54	10.92	3.84	48.75

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Revised allocation of CHQ/ RHQ expenses by the Authority – B	9.88	10.06	6.89	9.02	1.93	37.78
Variance (A-B)	1.94	2.57	2.65	1.90	1.91	10.97

Reference: Para 6.2 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

The Authority is of the view that the users should pay only for the services availed by them. Further, in line with section 13 of the AERA Act, 2008 the Authority has a scope of determining tariff in respect of Aeronautical services provided/ capital expenditure incurred only by that particular airport. This view is also consistent with ICAO's principle of 'Cost-relatedness'. Based on the above principles, the Authority had tried to rationalise the CHQ/ RHQ expenses being allocated to Mangaluru International Airport. The Authority feels that the allocation of CHQ & RHQ expenses by AAI on the basis of revenue is non-transparent and an inefficient method, as it brings large variation in such expenses Year on Year, due to change in revenue and is against the basic principle of cost relatedness in tariff determination. Further, as the revenue from these airports goes up due to higher tariffs, it further leads to higher allocation of CHQ/RHQ expenses with chain of cascading effect. The Authority, therefore, expects AAI to examine these issues in detail and devise an effective and efficient method for allocation of CHQ & RHQ expenses on priority.

Further, the Authority feels that AAI should exploit the potential of its non-traffic avenues fully so that 30% of the same, by cross subsidisation can be used to cover Aeronautical expenses.

b. Repairs and Maintenance expenses

- The Authority noted that Repairs and Maintenance expenses submitted by AAI for True up of the Pre-COD period are in the range of 8% for each tariff year and 14% in the FY 2019-20, which is on account of incurrence of one-time expense towards construction of storm water drains around the airport premises for ₹ 6.75 crores in the FY 2019-20.
- The Authority is of the view that during the period FY 2016-17 to FY 2019-20, Mangaluru International Airport has made significant capital expenditure of ₹ 136 Crores. These newly constructed and installed assets are generally covered under warranty clauses and hence, their Repairs and Maintenance expenses are expected to be minimal. Accordingly, the Authority proposes to consider the Repairs and maintenance expenses for the Pre-COD period to the extent of 6% of the opening RAB (net block) of each tariff year (as shown in Table 8).
- Further, the Authority notes that the one-time expense incurred towards construction of storm water drain around the airport premises for ₹ 6.75 crores relates to a specific one-time project and hence, is an allowable expense, over and above the allowable expense of 6% of opening RAB (net block) of FY 2019-20.

Reference: Para 6.3 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

Table 16: Adjusted Repairs and Maintenance expense proposed by the Authority for True up of the Pre-COD period

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Aeronautical repairs and maintenance expenses (post re-allocation of expenses as per Table 14)	5.75	8.09	7.35	16.16	6.00	43.35
Repairs and maintenance expenses proposed to be allowed as per Study	4.45	6.09	5.76	13.40	4.54*	34.24
Amount proposed not to be allowed by the Authority	1.30	2.00	1.59	2.76	1.46	9.11

* Repairs and Maintenance expenses for FY 2020-21 has been derived proportionately for the period up to COD.

4.3.5.5 Based on the above analysis, the Authority proposes to consider the following Aeronautical O&M expenses for True up of the Pre-COD period.

Table 17: Aeronautical O&M expenses proposed to be considered by the Authority for True up of the Pre-COD period

(₹ Crores)

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
A. Reallocated O&M expenses of AAI							
Employee benefit expenses	Table 14	10.93	15.68	19.40	19.80	10.43	76.24
Administrative and other expenses (incl. CHQ/ RHQ expenses)		12.87	14.87	11.61	12.37	4.59	56.31
Operating expenses		8.34	11.66	12.05	12.78	6.00	50.83
Repairs and maintenance expenses		5.75	8.09	7.35	16.16	6.00	43.35
Finance cost		0.00	0.00	0.00	0.11	0.00	0.11
Total		37.89	50.30	50.41	61.22	27.02	226.84
B. Rationalisation of O&M expenses (proposed not to be allowed by the Authority)							
Employee benefit expenses		-	-	-	-	-	-

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Administrative and other expenses, including CHQ/ RHQ expenses	Table 15	1.94	2.57	2.65	1.90	1.91	10.97
Operating expenses		-	-	-	-	-	-
Repairs and maintenance expenses	Table 16	1.30	2.00	1.59	2.76	1.46	9.11
Finance cost		-	-	-	-	-	-
Total		3.24	4.57	4.24	4.66	3.37	20.08
C. O&M expenses of AAI proposed to be considered by the Authority for true up of Pre-COD period (A-B)							
Employee benefit expenses		10.93	15.68	19.40	19.80	10.43	76.24
Administrative and other expenses		10.93	12.30	8.96	10.47	2.68	45.34
Operating expenses		8.34	11.66	12.05	12.78	6.00	50.83
Repairs and maintenance expenses		4.45	6.09	5.76	13.40	4.54	34.24
Finance cost		0.00	0.00	0.00	0.11	0.00	0.11
Total		34.65	45.73	46.17	56.56	23.65	206.76

4.3.6 True up of Return on Land

4.3.6.1 The Authority notes that AAI has claimed return on land for ₹ 2.38 crores as part of its true up submission for the Pre-COD Period. The Authority would like to draw reference to the following clauses prescribed in its Order No. 42/ 2018-19 dated March 5, 2019, regarding determination of FRoR on the Cost of Land:

- As per para 4.1.1 of the aforementioned order, the Authority decides that in case the land is provided to the airport free of cost, no return shall be given on the land.
- As per para 4.1.2, the Authority states that return on land shall be provided on the cost if (provided it is not free of cost) it is used for aeronautical purposes only.
- As per clause 4.1.8. of the aforementioned order, return on land may be allowed on a prospective basis only.

4.3.6.2 As return on land should be sought prospectively and not retrospectively (as per clause 4.1.8 of the aforementioned Order), the Authority is of the opinion that return on land will not be included in the true up calculation. Hence, the Authority proposes not to allow Return on Land claimed by AAI as part of True up of the Pre-COD period.

4.3.7 True up of Unamortised value of Land

- 4.3.7.1 The Authority notes that AAI has invested in the Land of Mangaluru International Airport for ₹ 4.05 crores during the period FY 2003-04 to FY 2009-10. This includes cost of land acquired for Secondary Runway (₹ 0.50 crores) and cost incurred (₹ 3.51 crores) towards improvement of the land at Northeast corner of NITB, which includes Grading, Concrete and Stone pitching of the land area. AAI has claimed the balance cost of Land (which is ₹ 3.94 crores) after deducting EMIs towards principal cost of Land (computed as per the methodology prescribed under Order No.42/ 2018-19 dated March 5, 2019) for the Pre-COD period. The Authority notes that the Land has not been transferred by AAI to the Airport Operator. The Authority would like to highlight the following clauses in the Order No. 42/ 2018-19 dated March 5, 2019:

“4.1.4 In case land is purchased by the airport operating company either from private parties or from government, the compensation shall be in the form of equated annual instalments computed at actual cost of debt or SBI, base rate plus 2% whichever is lower over a period of thirty years.

4.1.8 This order of the Authority will take effect from the next control period.”

- 4.3.7.2 From the perusal of the above Order, it is evident that the benefit of compensation is available to the Airport Operator (AAI)

- (i) over a period of thirty years; and
- (ii) from the Control Period subsequent to the date of the Order i.e. March 5, 2019.

Further, the Order envisages return on land over a period of thirty years and it does not contemplate providing cumulative return on land as proposed by AAI in its submission for true up of Pre-COD period. Hence, the Authority proposes not to consider the amortization of the balance cost of Land claimed by AAI (₹ 3.94 crores), as part of its true up submission for the pre-COD period.

4.3.8 True up of Non-aeronautical revenue

- 4.3.8.1 AAI has submitted the actual Non-aeronautical revenue for the Pre-COD period for MIA as follows:

Table 18: Non-aeronautical revenue submitted by AAI for the Pre-COD period

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Revenue from Trading Concessions						
Restaurant / Snack Bar	2.25	2.23	2.03	1.86	0.11	8.48
T.R. Stall	3.39	3.94	6.14	6.41	0.18	20.07
Hoarding & Display	0.00	0.00	0.00	0.00	0.00	0.00
Other Trading Concessions	0.05	0.04	0.04	0.04	0.00	0.17
Rent and other revenues						
Rent & Space	1.52	1.65	2.06	2.47	1.56	9.26
Land rent & Lease	0.20	0.06	0.02	0.03	0.02	0.33
Building Residential	1.04	0.84	1.04	0.65	0.41	3.98
Building Non-Residential	0.00	0.12	0.00	0.00	0.00	0.12
Duty Free Shops	3.17	3.36	2.93	2.93	0.07	12.46
Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Car Rentals	2.15	2.91	2.40	1.27	0.04	8.77
Car Parking	0.00	0.00	0.00	0.00	0.00	0.00
Admission Tickets	0.25	0.12	0.15	0.12	0.05	0.67
Profit on Sale of Fixed Assets	0.03	0.00	0.22	0.14	-0.02	0.36
Other Misc. Income	1.22	1.38	1.62	1.44	2.18	7.84
Total	15.26	16.64	18.65	17.36	4.60	72.51

4.3.8.2 The Authority reviewed the Non-aeronautical revenue submitted by AAI with the Audited figures for the Financial Years (FY 2017 up to COD) and proposes to consider the Non-aeronautical revenue as per Table 18 for True up of the Pre-COD period.

4.3.9 True up of Aeronautical Revenue

4.3.9.1 AAI has submitted the actual Aeronautical revenue for the Pre-COD period for MIA as follows:

Table 19: Aeronautical revenue submitted by AAI for the Pre-COD period

(₹ Crores)						
Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Landing charges						
Landing Domestic	3.50	5.65	5.01	4.77	0.60	19.53
Landing International	6.43	6.67	6.08	4.80	0.34	24.33
Parking charges						
Parking Domestic	0.02	0.01	0.02	0.02	0.01	0.08
Parking International	0.07	0.10	0.09	0.09	0.17	0.53
PSF and UDF charges						
PSF Domestic	5.87	7.20	9.35	7.76	0.43	30.61
PSF International	1.40	2.16	0.01	0.00	0.00	3.57
UDF Domestic	6.31	9.43	9.49	8.24	0.51	33.98
UDF International	25.55	26.14	24.74	19.59	0.94	96.96
Other revenue						
Extension of Watch Hours	0.00	0.00	0.00	0.00	0.29	0.29
CUTE charges	1.49	2.15	2.17	1.88	0.10	7.80
Throughput Revenue	0.67	0.86	0.77	0.48	0.00	2.77
Ground Handling Revenue	0.87	2.24	1.80	0.76	0.15	5.82
Cargo Revenue	0.32	0.00	0.00	0.00	0.00	0.32
Concession Fees from AAICLAS	0.00	0.23	0.35	0.33	0.13	1.04
Land lease to Ground Handling Agency	0.10	0.06	0.09	0.06	0.04	0.35
Land lease to Oil companies	0.08	0.07	0.10	0.08	0.04	0.37
Total	52.68	62.98	60.08	48.85	3.76	228.34

4.3.9.2 The Authority reviewed the Aeronautical revenue submitted by AAI with the Audited figures for the Financial Years (FY 2017 up to COD) and proposes to consider the Aeronautical revenue as per Table 19 for True up of the Pre-COD period. The Authority notes the actual Aeronautical revenue achieved by MIA for the period FY 2016-17 till COD is based on the actual traffic data available in AAI's website.

4.3.10 True up of Taxation

4.3.10.1 AAI has submitted taxation for the Pre-COD period as follows:

Table 20: Taxation submitted by AAI for the Pre-COD period

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020
Revenue (A)					
Aeronautical Revenue	52.68	62.98	60.08	48.85	3.76
Return on Land	0.46	0.45	0.45	0.45	0.45
Total (A)	53.14	63.44	60.53	49.30	4.20
Shortfall/ under recovery proposed to be collected (Refer Table 4)					171.43
Expenses (B)					
O&M expenses (Refer Table 12)	39.29	52.38	52.64	64.48	28.55
Depreciation (as per Income Tax Act, 1961)	33.99	36.36	36.62	42.85	23.81
Total (B)	73.28	88.73	89.26	107.32	52.36
Profit /Loss (A-B)	(20.14)	(25.30)	(28.73)	(58.03)	(48.15)
Shortfall/ under recovery proposed to be collected (C)					171.43
Tax Rates (D)	34.61%	34.61%	34.94%	25.17%	25.17%
Tax (C*D)	0.00	0.00	0.00	0.00	43.14

4.3.10.2 The Authority notes that AAI has computed tax of ₹ 43.14 crores on the shortfall amount (difference between Target Revenue and Actual Aeronautical revenue) of ₹ 171.43 crores, which is present value of the shortfall of the Pre-COD period, that is proposed to be collected from the Airport Operator.

4.3.10.3 However, the Authority is of the view that AAI should set off its prior period losses incurred in the Pre-COD period against the Shortfall amount that is proposed to be collected from the Airport Operator.

4.3.10.4 The Authority has re-computed taxation amount based on its analysis of O&M expenses, RAB and the same is presented in the table below:

Table 21: Taxation proposed to be considered by the Authority for the Pre-COD period

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Revenue (A)						
Aeronautical Revenue (refer Table 19)	52.68	62.98	60.08	48.85	3.76	228.34
Return on Land	0.00	0.00	0.00	0.00	0.00	0.00
Total (A)	52.68	62.98	60.08	48.85	3.76	228.34
Shortfall/ under recovery proposed to be collected (B) - (refer Table 22)						
					81.14	81.14
Expenses (C)						
O&M expenses (refer Table 17)	34.65	45.73	46.17	56.56	23.65	206.76
Depreciation (as per Income Tax Act, 1961)	33.99	36.36	36.62	42.85	23.81	173.62
Total (C)	68.64	82.09	82.79	99.41	47.46	380.38
Profit /Loss D= (A-C)	(15.96)	(19.11)	(22.71)	(50.56)	(43.70)	(152.04)
Set off of prior period loss* (B-D)						(70.90)
Tax Rates	34.61%	34.61%	34.94%	25.17%	25.17%	25.17%
Tax	0.00	0.00	0.00	0.00	0.00	0.00

* The set off of prior period loss has been computed only for the purpose of determining taxes. The net loss of ₹ 70.90 crores will not be considered for true up for the Pre-COD period.

4.3.10.5 The Authority proposes to consider tax as per Table 21 for True up of Pre-COD period. Also, the Authority has adjusted the losses incurred by AAI (₹ 152.04 crores as per Table 21) in the previous Financial Years against the Shortfall amount of ₹ 81.14 crores derived by the Authority (as per Table 22), which is proposed to be collected by AAI from the Airport Operator.

4.3.11 True up of Aggregate Revenue Requirement (ARR) for the Pre-COD period

4.3.11.1 Based on its analysis of the various building blocks, the Authority has determined the ARR and Shortfall (Under recovery) for True up of the Pre-COD period and same is presented in the table below:

Table 22: ARR and Under-recovery proposed to be considered by the Authority for the Pre-COD period

(₹ Crores)

Particulars	Ref.	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 up to October 30, 2020	Total
Average RAB (Refer Table 10)		87.82	98.71	103.39	120.29	128.04	
Fair Rate of Return (FRoR)		14%	14%	14%	14%	14%	
Return on Average RAB @ 14%	A	12.29	13.82	14.47	16.84	10.46	67.89
Depreciation (refer Table 11)	B	9.10	9.18	7.99	9.06	5.90	41.23
Operating Expenditure (Table 17)	C	34.65	45.73	46.17	56.56	23.65	206.76
Return on Land	D	0.00	0.00	0.00	0.00	0.00	0.00
Unamortised portion of Land - Balance of Land Value	E	0.00	0.00	0.00	0.00	0.00	0.00
Corporate Tax (Refer Table 21)	F	0.00	0.00	0.00	0.00	0.00	0.00
ARR (Sum A: F)	G	56.04	68.73	68.63	82.46	40.01	315.87
Non-aeronautical revenue (NAR) (Refer Table 18)	H	15.26	16.64	18.65	17.36	4.60	72.51
Less: 30% of NAR	I	(4.58)	(4.99)	(5.60)	(5.21)	(1.38)	(21.75)
Net ARR (G-I)	J	51.46	63.74	63.03	77.25	38.63	294.12
Revenue earned from Aeronautical Services (refer Table 19)	K	52.68	62.98	60.08	48.85	3.76	228.34
(Over recovery) / Under recovery (J-K)	L	(1.22)	0.76	2.95	28.40	34.87	65.76
Discount factor (@ 14%) as on October 30, 2020	M	1.60	1.40	1.23	1.08	1.00	
PV of (Over recovery) / Under recovery as on October 30, 2020 (L*M)	N	(1.95)	1.07	3.63	30.73	34.87	68.35
Discount factor @ 14% as on March 31, 2021	O						1.0579
PV of (Over recovery) / Under recovery as on March 31, 2021 (N*O)	P						72.31
Discount factor @ 12.21% as on March 31, 2022*	Q						1.1221
PV of (Over recovery) / Under recovery as on March 31, 2022 (P*Q)							81.14

* PV factor has been derived for the FYs from FY 2016-17 till COD, by assuming the discount factor as 1 for the FY 2021-22.

4.3.11.2 Adjusted Deemed Initial RAB

Clause 28.11.4 of the CA states the following with respect to Adjusted Deemed Initial RAB:

“Pursuant to the payment of the Estimated Deemed Initial RAB, and upon the reconciliation, true-up and final determination by the Regulator of the quantum of the investment under 28.11.3(a), any surplus or deficit in the Estimated Deemed Initial RAB with respect to the Deemed Initial RAB shall be adjusted as part of the Balancing Payment that becomes due and payable as per Clause 31.4 after the expiry of 15 (fifteen) days from such final determination by the Regulator, with due adjustment for the following ("Adjusted Deemed Initial RAB"):

- (a) reduced to the extent of over-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as a downward adjustment while determining Aeronautical Charges for the next Control Period; or*
- (b) increased to the extent of under-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as an upward adjustment while determining Aeronautical Charges for the next Control Period.*

The amount(s) to be paid by the Authority or Concessionaire shall be the present value of Adjusted Deemed Initial RAB calculated using the fair rate of return as determined by the Regulator for the time period from the COD to the date of actual payment of the Adjusted Deemed Initial RAB.”

The Authority has derived the Adjusted Deemed Initial RAB as on COD which is as follows:

Table 23: Determination of Adjusted Deemed Initial RAB as on COD by the Authority

(₹ Crores)		
Particulars	Ref.	Amount
A. Deemed Initial RAB	Table 9	125.64
B. Less: Estimated Deemed Initial RAB	Clause 28.11.3 (b) of CA	(71.00)
C. A-B		54.64
D. Add: PV of Under-recovery of AAI as on COD	Table 22	68.35
E. Adjusted Deemed Initial RAB as on COD = (C+D)		122.99

4.3.11.3 In accordance with the provisions of clause 28.11.4 of the CA, AERA has computed the Adjusted Deemed Initial RAB as on COD i.e. ₹ 122.99 crores (shown in Table 23) and derived the future value of such Adjusted Deemed Initial RAB by applying the compounding factor of FRoR and assuming a future expected date of payment by the Concessionaire (Airport Operator) to the Airports Authority of India as follows:

- i. The Authority has assumed future expected date of payment of Adjusted Deemed Initial RAB as December 31, 2022, based on the assumption that the Tariff Order for Mangaluru International Airport (wherein the Deemed Initial RAB is finally determined by the Regulator) is issued on or before December 15, 2022.
- ii. The Authority has applied a compounding factor to determine future value of the Under-recovery as on COD by applying:
 - FRoR @ 14% from COD up to March 31, 2021 and
 - FRoR @ 12.21% from April 1, 2022 up to December 31, 2022 (based on the FRoR determined by AERA for the First Control Period for Mangaluru International Airport, as discussed under Chapter 8 of this Consultation Paper).

- iii. The Adjusted Deemed Initial RAB computed as on COD, March 31, 2021, March 31, 2022 and December 31, 2022 has been presented in the table below:

Table 24: Determination of Adjusted Deemed Initial RAB as on COD, March 31, 2021, March 31, 2022 and future expected date of payment

(₹ Crores)

Particulars	As on COD	Mar 31, 2021*	Mar 31, 2022 [#]	Dec 31, 2022 [#]
Adjusted Deemed Initial RAB	122.99	130.12	146.00	159.44

* Compounding for the period from COD up to March 31, 2021 has been done using FRoR of 14%.

[#] Compounding for period beyond March 31, 2021 has been done using FRoR of 12.21%, determined by AERA for MIA for the First Control Period.

- 4.3.11.4 It is likely that the actual date of payment is different from December 31, 2022 as presented in the above table. In that scenario, following formula may be used for determining the Adjusted Deemed Initial RAB on a particular payment date:

$$\text{Adjusted Deemed Initial RAB} = A \times \left(1 + r \times \frac{t}{365}\right)$$

where, A = Adjusted Deemed Initial RAB computed as on March 31, 2022

r = FRoR for First Control Period, computed as 12.21% (refer Chapter 8).

t = Number of days elapsed between actual date of payment and March 31, 2022

The projection of Adjusted Deemed Initial RAB on a particular payment date is illustrated through the following example:

Assuming that the actual date of payment is February 6, 2023, then

A = ₹ 146 crores

r = 12.21% or 0.1221

t = 312 days (Number of days between March 31, 2022 and February 6, 2023)

The Adjusted Deemed Initial RAB based on the above example is:

$$\text{₹ } 146 \times (1 + 0.1221 \times 312 / 365) = \text{₹ } 161.24 \text{ Crores.}$$

- 4.3.11.5 The Authority has proposed the Adjusted Deemed Initial RAB as explained above and requests the Stakeholders to provide their comments on the same.

- 4.3.11.6 The Authority proposes to consider Under recovery of ₹ 81.14 crores (as per Table 22) for True up of AAI for the Pre-COD period and readjust the same in the ARR computation of MIA for the First Control Period. The under-recovery has arisen mainly on account of the following factors:

- Reduction in traffic due to COVID-19 pandemic in FY 2020-21.
- Lower Aeronautical revenues on account of application of tariff rates of non-Major Airport (which is less as compared to other similar airports) since FY 2016-17.

4.4 Authority's proposals regarding true up for the period from FY 2016-17 up to COD

Based on the material before it and its examination, the Authority proposes the following with respect to True up of the Pre-COD period for Mangaluru International Airport:

- 4.4.1 To consider Deemed Initial RAB as on October 31, 2020, as ₹ 125.64 crores as per Table 9.

- 4.4.2 To consider true up of RAB for the pre-COD period as per Table 10.
- 4.4.3 To consider true up of depreciation for the pre-COD period as per Table 11.
- 4.4.4 To consider true up of Aeronautical O&M expenses for the pre-COD period as per Table 17.
- 4.4.5 To consider true up of Non-aeronautical revenue for the pre-COD period as per Table 18.
- 4.4.6 To consider true up of Aeronautical revenue for the pre-COD period as per Table 19.
- 4.4.7 To consider true up of Aeronautical Taxation for the pre-COD period as per Table 21.
- 4.4.8 To consider true up of FRoR for the pre-COD period as per Table 22.
- 4.4.9 To consider Adjusted Deemed Initial RAB as per Table 24 or based on formula provided in paragraph 4.3.11.4, as appropriate for actual date of payment
- 4.4.10 To consider Under recovery of ₹ 81.14 crores for True up of AAI for the Pre-COD period as per Table 22 and readjust the same in the ARR for the First Control Period.

5. TRUE UP OF AIRPORT OPERATOR FOR THE PERIOD FROM COD TILL MARCH 31, 2021

5.1 Background

- 5.1.1 AAI had entered into a Concession Agreement dated February 14, 2020, with Mangaluru International Airport Limited (the 'Concessionaire') for the operation and maintenance of Mangaluru International Airport for a period of 50 years from the COD, i.e. October 31, 2020. As per the Concession Agreement between AAI and the Airport Operator (clause 28.11.3), the amount which was due and payable by the Concessionaire to AAI, is subject to subject to reconciliation, true up and final determination by AERA.
- 5.1.2 Pursuant to the above Concession Agreement, the Airport Operator has submitted True up workings for the period from COD up to March 31, 2021.
- 5.1.3 The true up workings submitted by the Airport Operator covers the following building blocks:
- Regulatory Asset Base
 - Fair Rate of Return
 - Aeronautical Depreciation
 - Aeronautical Operation and Maintenance Expenses
 - Non-aeronautical Revenue
 - Aeronautical Taxes
- 5.1.4 The Authority has examined the Airport Operator's true up submission in detail and has performed the following analysis:
- Recorded Airport Operator's submissions for True up under different Regulatory building blocks.
 - Provided the Authority's examination and proposals regarding the True up calculation of each regulatory block of the Airport Operator.
- 5.1.5 As AERA has not issued any Tariff Order for Mangaluru International Airport for the Pre-COD Period, the Authority has considered the following documents for determining True up for the period from COD up to March 31, 2021
- Audited Financial results of the Airport Operator for the FY 2020-21.
 - AERA Guidelines and Orders and
 - Authority's decisions on the Regulatory building blocks as per previously issued Tariff Orders of other similar airports.

5.2 Airport Operator's submission of True up for the period from COD till March 31, 2021

- 5.2.1 The Airport Operator has submitted true up for the period from COD till March 31, 2021 as follows:

Table 25: True Up submitted by the Airport Operator from COD till March 31, 2021

(₹ Crores)

Particulars	Amount
Average RAB	110.46
FRoR on Average RAB (@ 14.86% for 5 months) (A)	6.81
Operating expenses (B)*	26.59
Depreciation (C)	7.26
Tax (D)	0.00

Particulars	Amount
Gross ARR (Sum A:D) = (E)	40.68
Non-aeronautical Revenue	4.26
Less: 30% of Non-aeronautical revenue (F)	(1.30)
Net ARR (E-F) = G	39.38
Actual Aero Revenues earned (H)	11.28
Shortfall/ under-recovery (G-H)	28.10
PV of Under-recovery	29.76

** The Airport Operator has submitted subsequently bank charges of ₹ 0.41 crores to be considered as part of O&M expenses. The Authority has considered the same in its examination of true up of O&M expenses for the period from COD up to March 31, 2021.*

5.3 Authority's examination of True up submitted by Airport Operator for the period from COD till March 31, 2021

5.3.1 True up of RAB

5.3.1.1 As per Clause 28.11.3 of the Concession Agreement (as mentioned in Para 17.3.8 of Chapter 17) entered into between AAI and the Airport Operator, the value as determined by the AERA must be considered as the basis for updating the FAR of Mangaluru International Airport Limited as on October 30, 2020 and for computing depreciation.

Accordingly, the Authority proposes to consider the True up submission made by AAI up to October 30, 2020 as the basis for determining the value of assets as on COD for the Airport Operator

5.3.1.2 Based on the adjusted RAB of AAI for the Pre-COD period, the Authority has derived the adjusted RAB of the Airport Operator as on COD as ₹ 125.64 crores. Refer para 4.5.9 and Table 13 of the *Study on Allocation of assets between Aeronautical and Non-aeronautical assets for Mangaluru International Airport*.

5.3.1.3 The Authority notes that the Airport Operator has included following additional items in RAB amounting to ₹ 16.89 crores during the period COD till March 31, 2021:

Table 26: Additional items included in the RAB by the Airport Operator from COD till March 31, 2021

(₹ Crores)	
Details	Amount
Software	0.08
Computers	0.44
Intangible asset	16.37
Total	16.89

5.3.1.4 Reclassification of assets of the Airport Operator

The Authority has conducted an independent study on allocation of assets for the period FY 2016-17 till FY 2020-21 and used the outcome of the study to true up the RAB for the post COD period i.e. as on March 31, 2021 for the AO.

The Authority has considered the adjusted RAB of the Airport Operator as on COD (which is ₹ 125.64 crores), Capital additions and corresponding depreciation based on the results of the Asset Allocation report (refer Annexure 1 for the Summary of the report and Appendix 1 for the detailed report on *Study on allocation of assets between Aeronautical and Non-aeronautical assets for Mangaluru International Airport*).

The asset allocation study reviewed the various asset categories and developed a basis for segregation of various assets into Aeronautical, Non-aeronautical and Common assets. Based on the same, the Authority has reclassified some portion of assets submitted by the AO for true up of the period from COD till March 31, 2021 which has been detailed hereunder:

i. Computers and Software

Details of Asset: Desktops, Laptops and Software

Allocation proposed by Airport Operator: Common

Observation: The assets pertaining to Computers and Software have been classified as Common assets by the Airport Operator and have been allocated in the ratio of Terminal Building as had been determined by the Airport Operator (95:5). However, since these assets are for the use of employees of the Airport Operator, the same have been reallocated in the ratio of Employee Head Count of the Airport Operator (94.44:5.56).

Allocation proposed by the Authority: Employee Head Count Ratio

Impact: Reclassifying these assets from Aeronautical to Common decreases the RAB to the extent of ₹ 0.003 Crores.

Reference: Para 4.9.1.1 of the *Asset Allocation report*.

ii. Intangible asset

Details of Asset: Salary cost and consulting fees incurred by Adani-group entities prior to COD on costs related to planning for takeover and management of Mangaluru International Airport Limited.

Allocation proposed by Airport Operator: Common

Observation: It is determined from Clause 5.1.1 of the Concession Agreement that the capitalisation of Intangible asset and its allocation may not be a subject matter to be considered as part of this Consultation Paper. Accordingly, the Intangible asset have been excluded from the Adjusted RAB computed by the Study as of March 31, 2021. Further, the Authority noted that as per clause 6.5.3 of the Concession Agreement, the senior management staff of AAI of the rank of deputy General Manager and above (Senior Personnel) shall remain deputed at the Airport for a period not exceeding 3 months from the COD and that their costs will be borne by AAI. Hence, considering that Senior Personnel of AAI were deputed at the Airport for a period of 3 months from the COD, the Authority proposes not to consider the salary costs and consulting fees shown by the AO as Intangible assets.

Allocation proposed by the Authority: Exclude Intangible asset from RAB.

Impact: Excluding Intangible asset from Common assets decreases the RAB to the extent of ₹ 16.37 Crores.

Reference: Para 4.9.1.2 of the *Asset Allocation report*

iii. Impact of differential Employee Head Count ratio as per the Study on Allocation of assets between Aeronautical and Non-aeronautical assets for MIA

As mentioned in para 4.9.3.1 of the *Asset Allocation report*, the Employee Head Count ratio used for reallocation of assets for AAI is 89.60:10.40 (Aeronautical: Non-aeronautical), while the ratio proposed for reallocation of assets for the Airport Operator is 94.44:5.56. The impact of this difference on the value of RAB transferred by AAI to the Airport Operator is an upward

adjustment of ₹ 0.01 Crores.

iv. **Concessionaire Equipment as per Schedule 1 to Schedule Q (CNS/ ATM Agreement) of the Concession Agreement between AAI and AO**

Part 1 to Schedule 1 of Schedule Q (CNS/ ATM Agreement) of the Concession Agreement states about Concessionaire Equipment which includes “Buildings for navigational aids/ radar installations” (serial no. 21 to Part 1 of Schedule Q to the CA). The Authority notes that the building/ civil structure of the AO used for ANS activities should be treated as part of RAB of the AO, in line with the approach followed by the Authority for other PPP airports. The Authority has derived the net value of the building/ civil structure used for ANS activities as on COD as ₹ 1.78 crores and included the same for deriving the adjusted RAB of the AO as on March 31, 2021, which is shown in Table 27.

5.3.2 True up of Depreciation

5.3.2.1 For the purposes of True up submission, the Airport Operator had calculated depreciation for the period from COD up to March 31, 2021, based on their determination of remaining useful life.

5.3.2.2 The Authority has proposed to consider the same rates of depreciation as applied by AAI for the period up to COD, on the assets transferred by AAI to the Airport Operator for the period from COD to March 31, 2021. Further, the assets added by the Airport Operator have been depreciated based on the useful life prescribed under Order No. 35/ 2017-18 dated January 12, 2018, of AERA.

5.3.2.3 Depreciation has not been computed on the Intangible asset as the same is excluded from the RAB.

5.3.2.4 Accordingly, the depreciation on Aeronautical assets of ₹ 7.26 Crores as submitted by the Airport Operator has been revised by the Authority (post reclassification and other adjustments) to ₹ 4.26 Crores, thereby resulting in a reduction in depreciation of ₹ 3.00 Crores.

5.3.2.5 The Authority has computed depreciation for the period of 5 months from COD to March 31, 2021, on the net value of the building/ civil structure of the AO used for ANS activities (as explained in para 5.3.1.4 (iv)) as ₹0.02 crores. The total depreciation for the period from COD to March 31, 2021, amounts to ₹ 4.28 crores.

5.3.2.6 The Average RAB and Depreciation determined by the Authority for the period from COD till March 31, 2021, post reclassifications and other adjustments are as follows:

Table 27: Average RAB considered by the Authority from COD till March 31, 2021

(₹ Crores)

Particulars		Ref.	Amount
Adjusted RAB as on October 31, 2020 transferred to Mangaluru International Airport Limited	A		125.64
Additions to RAB from COD to March 31, 2021 as per Airport Operator's True up submission	B		16.89
Sub-total (A + B)	C		142.53
Reclassifications on asset additions			
Computers and Software – reclassification	D	5.3.1.4 (i)	(0.003)
Exclusion of Intangible asset	E	5.3.1.4 (ii)	(16.37)

Particulars		Ref.	Amount
Impact of differential Employee Head Count ratio	F	5.3.1.4 (iii)	0.01
Inclusion of Building/ Civil structure used for ANS activities	G	5.3.1.4 (iv)	1.78
Total reclassifications on asset additions Sum (D: G)	H		(14.58)
Adjusted RAB post reclassifications and adjustments (C + H)	I		127.95
Depreciation for the period from COD to March 31, 2021	J	5.3.2.5	(4.28)
Adjusted RAB as on March 31, 2021, i.e., opening RAB for First Control Period (I + J)*	K		123.67
Average RAB = (A+K)/2	L		124.66

* Reference: Table 15 of the Study on Allocation of assets between Aeronautical and Non-aeronautical assets for MIA.

5.3.3 True up of FRoR

5.3.3.1 The AO has submitted FRoR as 14.9% for true up of the period from COD till March 31, 2021. However, the Authority proposes to consider FRoR @ 14% as against 14.9% considered by the Airport Operator, as there had been no borrowings availed by Airport Operator for the period from COD till March 31, 2021 and in line with the Authority's proposal for true up of AAI from FY 2017 to FY 2020 (up to October 30, 2020) and also as approved for other similar airports. From the next Control Period for the AO, AERA will consider FRoR, in line with other PPP airports.

5.3.4 True up of Aeronautical O&M expenses

5.3.4.1 The component-wise break up of Aeronautical Operation and Maintenance expenses submitted by the Airport Operator for the period from COD till March 31, 2021 is as follows:

Table 28: O&M expenses submitted by Airport Operator for the period from COD till March 31, 2021

(₹ Crores)

Particulars	Amount
Manpower expenses	9.83
Utility expenses	3.93
IT expenses	1.67
Security expenses	0.86
Allocation of Corporate expenses	2.20
Administration and General expenses	2.00
Insurance expenses	0.31
Repairs and maintenance expenses	3.40
Other expenses	2.39
Bank charges	0.41
Total	27.00

5.3.4.2 Reallocation of O&M expenses

The Authority has conducted an independent study to determine efficient Aeronautical Operation and Maintenance costs for the period FY 2016-17 till FY 2020-21 and used the outcome of the study to true up the O&M expenses for the period from COD till March 31, 2021 for the AO.

The common O&M expenses have been segregated by Airport operator between Aeronautical and Non-aeronautical expenses based on a suitable ratio. This ratio has been determined based on the underlying proportion of their expected utilisation for Aeronautical and Non-aeronautical services and activities at the Airport.

The Authority has analysed the submission made by the Airport Operator on allocation of Common expenses into Aeronautical and Non-aeronautical on a case-to-case basis and applied appropriate re-classification and re-allocation of the expenses, wherever it noted any discrepancies in the allocation of expenses by the Airport Operator (*refer Table 19 for basis for allocation of O&M expenses of Airport Operator as per the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport*). Accordingly, the following common expenses have been re-allocated by the Authority by using appropriate ratios such as Terminal Building ratio, Gross Fixed Assets ratio, Employee Head Count ratio and Electricity ratio (*Refer para 4.10.1 to para 4.10.4 of the Study report on Efficient Operation and Maintenance Expenses for Mangaluru International Airport regarding the ratios used by the Authority for allocation of common expenses.*)

- i. Manpower expenses
 - ii. Utilities
- i. **Manpower expenses**

Manpower expenses - AAI

Observation: The Authority notes that pursuant to Clause 6.5 of the Concession Agreement read with Clause 28.4.3 entered into between AAI and Mangaluru International Airport Limited, the cost of AAI employees deputed at the Mangaluru International Airport shall be eligible for pass-through in the determination of Aeronautical charges. The Authority notes that the Airport Operator has considered the Manpower expenses as 100% Aeronautical. However, the Authority proposes to re-allocate the same in the ratio of Employee Head Count of AAI employees (98.84:1.16), resulting in a downward adjustment of ₹ 0.07 Crores.

Impact: The impact of the re-allocation results in reduction of Manpower expenses by ₹ 0.07 Crores for the period from COD till March 31, 2021.

Reference: Para 4.11.2 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

Manpower expenses – Airport Operator

Observation: The Authority notes that the Airport Operator has apportioned its Manpower expenses in the Employee Head Count ratio of 97:3, instead of actual Employee Head Count ratio of 94.44:5.56 (*refer para 4.10.3.1 and Table 20 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport*). The Authority proposes to re-allocate the same in the ratio of Employee Head Count of the Airport Operator (94.44:5.56), resulting in a downward adjustment of ₹ 0.09 Crores.

Impact: The impact of the re-allocation results in reduction of Manpower expenses by ₹ 0.09

Crores for the period from COD till March 31, 2021.

Reference: Para 4.11.3 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

ii. **Utilities**

Observation: The Utility expenses have been considered by the Airport Operator as Aeronautical since the expenses are net-off recoveries from Concessionaires. The Authority proposes to consider 1% of the net Utility expenses as costs towards other common areas.

Impact: The impact of the reallocation results in reduction of Utility expenses by ₹ 0.04 Crores for the period from COD till March 31, 2021.

Reference: Para 4.11.4 of the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport.

5.3.4.3 The impact on the Aeronautical O&M expenses of the Airport Operator on account of the proposed reallocation of expenses is as follows:

Table 29: Impact of proposed reallocation of Airport Operator's Aeronautical O&M expenses (₹ Crores)

O&M expenses	October 31, 2020 to March 31, 2021
Manpower expenses	0.16
Utility expenses	0.04
Total	0.20

5.3.4.4 Based on the above adjustments and reclassification, the revised Aeronautical O&M expenses for the period from COD to March 31, 2021 as summarised in the table below:

Table 30: Reallocated Aeronautical O&M expenses of the Airport Operator for the period from COD to March 31, 2021

Particulars	October 31, 2020 to March 31, 2021
Manpower expenses	9.67
Utility expenses	3.89
IT expenses	1.67
Security expenses	0.86
Allocation of Corporate expenses	2.20
Administration and General expenses	2.00
Insurance expenses	0.31
Repairs and Maintenance expenses	3.40
Bank charges	0.41
Other expenses	2.39

Particulars	October 31, 2020 to March 31, 2021
Total	26.80

5.3.4.5 Rationalisation of O&M expenses

Based on the Internal benchmarking analysis performed for O&M expenses through *the Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport Limited*, the Authority proposes to rationalise the following expenses for the period from COD till March 31, 2021.

a. Manpower expenses – Airport Operator

- The Authority notes that the reallocated Manpower expenses of the Airport Operator (₹ 9.67 crores shown in Table 30) includes the following:
 - i. Salary Cost of AAI employees - ₹ 6.33 crores
 - ii. Salary cost of AO employees (27 employees) - ₹ 3.34 crores.
- The Authority notes that there were about 107 Select employees of AAI, who were already deployed at the Airport. As these employees are expected to continue serving the Airport until the Deemed Deputation Period (which is 3 years from COD), the deployment of 27 employees by the AO for the period from COD till March 31, 2021, over and above the AAI employees, seems to be on the higher side. The Authority has rationalised the Manpower expenses of AO on the following basis:
 - i. Salary costs of Legal department is excluded from the determination of Aeronautical charges as per Clause 28.3.8 of the Concession agreement. Hence, the same is considered as Non-aeronautical costs.
 - ii. Headcount of departments such as Operations, HR have been rationalised (by reducing the Headcount by 2 employees each) based on the Select employees of AAI available and also considering the existing level of size, scale and related operations at the Airport.

The revised Manpower costs of AO derived by the Authority is as follows:

Table 31: Revised Manpower costs of AO derived by the Authority for True up from COD till March 31, 2021

(₹ Crores)

Particulars	Amount
A. Total reallocated Manpower costs of AO for the period from COD till March 31, 2021	9.67
B. Less: Costs rationalised by the Authority	0.62
C. Adjusted Manpower costs of AO for the period from COD till March 31, 2021	9.05

b. Repairs and Maintenance

- The Authority notes that the Repairs and maintenance expenses submitted by the Airport Operator (₹ 3.40 crores) is higher than 6% opening net block of RAB, as approved for other similar Airports such as Calicut International Airport. The Authority proposes to rationalise the Repairs and Maintenance expenses to the extent of 6% of the opening Net block as on October 31, 2020. The same is presented below:

Table 32: Repairs and Maintenance expenses of the Airport Operator considered by the Authority for True up from COD till March 31, 2021

(₹ Crores)

Particulars	Ref.	Amount
Aeronautical Repairs and maintenance expenses proposed by the Airport Operator	A	3.40
Opening RAB as on COD (refer Table 27)	B	125.64
Repairs and maintenance as % of RAB ($C = (A * 12/5)/B$)	C	6.77%
Repairs and maintenance expenses proposed to be allowed by the Authority ($B * 6\% * 5/12$)	D	3.14
Amount proposed not to be allowed by the Authority	(A-D)	0.26

5.3.4.6 Based on the above analysis, the Authority has derived the O&M expenses that it proposes to consider for True up for the Airport Operator from COD till March 31, 2021 and the same is as follows:

Table 33: Adjusted Aeronautical O&M expenses proposed to be considered by the Authority for True up from COD till March 31, 2021

(₹ Crores)

Particulars	Ref.	Amount
Reallocated O&M expenses of the Airport Operator = (A)		
Manpower expenses	Table 30	9.67
Utility expenses		3.89
IT expenses		1.67
Security expenses		0.86
Allocation of Corporate expenses		2.20
Administration and General expenses		2.00
Insurance expenses		0.31
Repairs and Maintenance expenses		3.40
Bank charges		0.41
Other expenses		2.39
Total		26.80
Rationalisation of O&M expenses (proposed not to be allowed by the Authority) = (B)		
Manpower expenses	Table 31	0.62
Utility expenses		-
IT expenses		-
Security expenses		-

Particulars	Ref.	Amount
Allocation of Corporate expenses		-
Administration and General expenses		-
Insurance expenses		-
Repairs and Maintenance expenses	Table 32	0.26
Bank charges		-
Other expenses		-
Total		0.88
Adjusted Aeronautical O&M expenses proposed by the Authority for True up = (A-B)		
Manpower expenses		9.05
Utility expenses		3.89
IT expenses		1.67
Security expenses		0.86
Allocation of Corporate expenses		2.20
Administration and General expenses		2.00
Insurance expenses		0.31
Repairs and Maintenance expenses		3.14
Bank charges		0.41
Other expenses		2.39
Total		25.92

5.3.5 True up of Non-aeronautical revenue (NAR)

- 5.3.5.1 The Airport Operator has submitted the following components of NAR for the period from COD till March 31, 2021. The Authority has noted as part of its review that certain categories of Aeronautical revenue (such as CUTE counter charges, Airport Security Fee, Charges for Vehicle permit for Airside operations etc. of ₹ 0.39 crores) has been incorrectly shown under NAR. The Authority has reclassified the same and is presented in the Table below:

Table 34: NAR reclassified and proposed to be considered by the Authority for True up from COD till March 31, 2021

(₹ Crores)

Particulars	NAR submitted by the Airport Operator	NAR reclassified by the Authority	NAR proposed to be considered by the Authority
Food & beverages	0.26	-	0.26
Retail	0.11	-	0.11
Duty free	0.43	-	0.43
Advertising	0.23	-	0.23

Particulars	NAR submitted by the Airport Operator	NAR reclassified by the Authority	NAR proposed to be considered by the Authority
Car parking	0.48	-	0.48
Lounge	0.08	-	0.08
Building rent	1.25	-	1.25
Other income	1.43	(0.39)	1.04
Total	4.26	(0.39)	3.88

5.3.5.2 The Authority proposes to consider NAR for the period from COD till March 31, 2021 as per Table 34.

5.3.6 True up of Aeronautical Revenue

5.3.6.1 The Airport Operator has submitted the following components of Aeronautical Revenue for the period from COD till March 31, 2021. As mentioned in para 5.3.5.1, the Authority has reclassified categories of revenue (such as CUTE counter charges, Airport Security Fee, Charges for Vehicle permit for Airside operations etc. of ₹ 0.39 crores) incorrectly shown under NAR to Aeronautical Revenue. The same is presented in the Table below:

Table 35: Aeronautical Revenue reclassified and proposed to be considered by the Authority for True up from COD till March 31, 2021

(₹ Crores)

Particulars	Aeronautical Revenue submitted by the Airport Operator	Aeronautical Revenue reclassified by the Authority	Aeronautical Revenue proposed to be considered by the Authority
Landing revenue	2.90		2.90
Parking & Housing revenue	0.04		0.04
Ground Handling charges	0.27	0.02	0.29
Passenger UDF revenue	7.62	0.00	7.62
CUTE Revenue	0.45	0.37	0.82
Total	11.28	0.39	11.66

5.3.6.2 The Authority proposes to consider Aeronautical Revenue for the period from COD till March 31, 2021 as per Table 35.

5.3.7 True up of ARR of Airport Operator

5.3.7.1 Based on its analysis of the various building blocks, the Authority has determined the ARR and Shortfall (Under recovery) for True up of the Pre-COD period and same is presented in the table below:

Table 36: ARR and Shortfall proposed to be considered by the Authority from COD till March 31, 2021

(₹ Crores)

Particulars	Ref.	Amount
Average RAB (refer Table 27)		124.66
FRoR on Average RAB (@ 14% for 151 days)	A	7.22
Operating expenses (Refer Table 33)	B	25.92
Depreciation (refer Table 27)	C	4.28

Particulars	Ref.	Amount
Tax	D	0
ARR (Sum A:D)	E	37.42
Non-aeronautical revenue (refer Table 34)		3.88
Less: 30% of Non-aeronautical revenue	F	1.16
Net ARR (E-F)	G	36.26
Actual Aeronautical Revenue (refer Table 35)	H	11.66
Shortfall/ under-recovery (G-H)	I	24.60
Discount factor (@ 12.21%) as on March 31, 2022*	J	1.1221
PV of Under-recovery as on March 31, 2022= I*J		27.60

* PV factor has been derived for FY 2020-21 (as on March 31, 2021) by assuming the discount factor as 1 for the FY 2021-22.

5.3.7.2 The Authority proposes to consider Under recovery of ₹ 27.60 crores for True up of Airport Operator for the period from COD up to March 31, 2021 and readjust the same in the ARR computation of MIA for the First Control Period.

5.4 Authority's proposal regarding True up for the period from COD till March 31, 2021

Based on the material before it and its examination, the Authority proposes the following with respect to True up of the period from COD till March 31, 2021 for Mangaluru International Airport:

- 5.4.1 To consider true up of RAB and depreciation for the period from COD till March 31, 2021 as per Table 27.
- 5.4.2 To consider true up of FRoR for the period from COD till March 31, 2021 @ 14%.
- 5.4.3 To consider true up of Aeronautical O&M expenses for the period from COD till March 31, 2021 as per Table 33.
- 5.4.4 To consider true up of Non-aeronautical revenue for the period from COD till March 31, 2021 as per Table 34.
- 5.4.5 To consider true up of Aeronautical revenue for the period from COD till March 31, 2021 as per Table 35.
- 5.4.6 To consider Under recovery of ₹ 27.60 crores for True up of Airport Operator as per Table 36 for the period from COD till March 31, 2021 and readjust the same in the ARR for the First Control Period.

6. TRAFFIC PROJECTIONS FOR THE FIRST CONTROL PERIOD

6.1. Mangaluru International Airport's submission regarding Traffic projections for the First Control Period

6.1.1. The historical passenger traffic² and ATM at the Airport has been shown in the table below:

Table 37: Historical passenger and ATM traffic at Mangaluru Airport

Year	Domestic Passengers	International Passengers	Total Passenger traffic	Domestic ATM	International ATM	Total ATM
2010-11	5,91,029	2,54,671	8,45,700	6,926	2,505	9,431
2011-12	6,28,801	2,64,622	8,93,423	6,811	2,552	9,363
2012-13	7,64,338	2,79,048	10,43,386	7,264	2,642	9,906
2013-14	8,41,376	4,42,291	12,83,667	8,607	4,169	12,776
2014-15	8,29,367	4,77,716	13,07,083	8,406	3,095	11,501
2015-16	10,07,391	6,66,860	16,74,251	9,337	4,468	13,805
2016-17	1,026,897	707,913	1,734,810	10,294	5,111	15,405
2017-18	1,500,002	769,947	2,269,949	14,383	5,253	19,636
2018-19	1,518,411	722,253	2,240,664	14,597	4,768	19,365
2019-20	1,305,068	571,226	1,876,294	11,903	3,782	15,685
2020-21	462,411	152,434	614,845	5,539	1,125	6,664

6.1.2. The traffic growth (%) as submitted by MIA for the First Control Period are as follows:

Table 38: Traffic and growth (%) Y-o-Y proposed by MIA

Year	Passenger			ATM		
	Domestic	International	Combined	Domestic	International	Combined
Traffic						
2021-22	8,00,000	3,30,000	11,30,000	6,995	2,178	9,173
2022-23	12,30,000	5,00,000	17,30,000	10,537	3,295	13,832
2023-24	15,37,500	7,02,500	22,40,000	12,911	4,622	17,533
2024-25	18,45,000	8,81,638	27,26,638	15,192	5,791	20,983
2025-26	21,77,100	10,62,373	32,39,472	17,585	6,967	24,552
Total	75,89,600	34,76,511	1,10,66,110	63,220	22,853	86,073
Growth rates						
2021-22*	73.01%	116.49 %	83.79%	26.29%	93.60%	37.65%
2022-23	53.75%	51.52%	53.10%	50.64%	51.29%	50.79%
2023-24	25.00%	40.50%	29.48%	22.53%	40.27%	26.76%
2024-25	20.00%	25.50%	21.72%	17.67%	25.29%	19.68%
2025-26	18.00%	20.50%	18.81%	15.75%	20.31%	17.01%

* Growth rates are computed based on FY 2020-21.

6.1.3. MIA had engaged an independent agency – CAPA India in August 2020 for assessing passenger traffic,

² Source: Traffic News from AAI website

aircraft movement and cargo traffic for Mangaluru Airport. Based on its analysis, CAPA India has provided high, medium and low estimate scenarios of projected traffic for the First Control Period. The traffic projections submitted by MIA in Table 38 is adopted from CAPA India's 'high scenario'.

- 6.1.4. The passenger traffic and ATM projected above has been adjusted by the Airport Operator to account for billable domestic ATMs (other than those covered under the Regional Connectivity scheme (RCS) scheme initiated by the Government) billable passenger traffic (excluding certain categories of passengers such as infants for whom UDF charges are not leviable). The adjusted passenger traffic and ATM submitted by MIA are as follows:

Table 39: Traffic growth rates (Y-o-Y) submitted by MIA, after adjustment of exempt traffic

Year	Passenger			ATM		
	Domestic	International	Combined	Domestic	International	Combined
Growth rates						
2021-22	69.55%	112.16%	80.11%	-24.23%	93.60%	-4.34%
2022-23	53.75%	51.52%	53.10%	63.21%	51.29%	59.12%
2023-24	25.00%	40.50%	29.48%	31.94%	40.27%	34.66%
2024-25	20.00%	25.50%	21.72%	17.67%	25.29%	20.25%
2025-26	18.00%	20.50%	18.81%	15.75%	20.31%	17.36%
Traffic						
2021-22	7,84,000	3,23,400	11,07,400	4,197	2,178	6,375
2022-23	12,05,400	4,90,000	16,95,400	6,850	3,295	10,144
2023-24	15,06,750	6,88,450	21,95,200	9,038	4,622	13,660
2024-25	18,08,100	8,64,005	26,72,105	10,635	5,791	16,426
2025-26	21,33,558	10,41,126	31,74,684	12,310	6,967	19,277
Total	74,37,808	34,06,981	1,08,44,789	43,030	22,853	65,882

- 6.1.5. MIA has submitted that the cargo facility is likely to be commissioned at the Airport by October 1, 2022, with annual cargo handling capacity of 9,000 tons. MIA has submitted the cargo volume proposed to be handled for the First Control Period in the table below:

Table 40: Cargo traffic proposed by MIA for the First Control Period

Volume (MT)	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Domestic cargo	-	720	1,740	2,104	2,545	7,109
International cargo	-	1,681	4,060	4,908	5,938	16,587
Total cargo	-	2,401	5,800	7,012	8,483	23,696

6.2. Authority's examination regarding Mangaluru International Airport's submission of Traffic for the First Control Period

- 6.2.1. The Authority notes that Airport Operator appointed CAPA India as its Consultant who has derived traffic forecast based on Regression forecast methodology, developed through econometric analysis of historical data combined with projections of key demand drivers as given below:

- Projections of GDP (Urban area and State level) and population were derived to assess domestic and international passenger forecasts.
- The aircraft movement forecasts for the Airport were derived based on average number of passenger

movements per aircraft movement (based on historical data). Further, the data on type of aircraft and load factors achieved have been used to derive aircraft movements.

- For cargo forecasts, the historical data was not used, as freight volumes follow a volatile growth pattern. As the cargo base at Mangaluru is low, CAPA India has identified other comparable airports for predicting the domestic and international cargo traffic growth.

6.2.2. The Authority notes that Mangaluru International Airport has assumed the ‘high scenario’ estimates of traffic forecasts submitted by CAPA India for projecting passenger traffic, ATM and cargo (both domestic and international).

6.2.3. The Authority notes that the Airport Operator has considered only billable ATM, after excluding ATM traffic covered under the RCS scheme. However, the Authority is of the view that RCS scheme is promoted by the GoI with the objective of making regional air connectivity affordable by supporting airline operators through concessions offered by Central Government, State Government and the Airport Operators. As this scheme is promoted to encourage small aircrafts, the flights operating under this scheme are not eligible to be claimed as a passthrough/ exemption. Hence, the Authority has considered the total traffic projections (passenger and ATM) of Mangaluru International Airport, which is a consistent approach being followed in this regard in line with all Major Airports.

Similarly, Government of India has allowed exemption of UDF to certain categories of passengers through Order No. AIC 14/ 2019 read with AIC 20/ 2019. The AO cannot claim any passthrough regarding UDF on such categories and this is followed by AERA across at all Major Airports.

6.2.4. As part of its examination of traffic forecast submitted by the Airport Operator, the Authority has calculated Compounded Annual Growth Rate, or CAGR, for passenger traffic and ATM from FY 2010-11 to FY 2019-20 (10-year CAGR), FY 2015-16 to FY 2019-20 (5-year CAGR) and FY 2017-18 to FY 2019-20 (3-year CAGR), FY 2010-11 to FY 2018-19 (9-year CAGR).

6.2.5. The 10-year, 5-year and 3-year CAGRs have been computed for the respective periods up to FY 2019-20, as FY 2020-21 being an exceptional event year, may not provide an appropriate basis for arriving at CAGR. However, the computation of 9-year CAGR is based on the periods FY 2010-11 to FY 2018-19, in order to remove certain extraneous events of FY 2019-20 as detailed in para 6.2.7 below. The table below provides the details of the CAGR for passenger traffic and ATM:

Table 41: CAGR for passenger traffic and ATM

Particulars	10-year CAGR	5-year CAGR	3-year CAGR	9-year CAGR*
Passengers:				
Domestic	8.24%	5.31%	-4.53%	11.05%
International	8.41%	-3.05%	-9.47%	12.28%
Total Passenger Traffic	8.30%	2.30%	-6.15%	11.43%
ATM:				
Domestic	5.56%	4.98%	-6.11%	8.64%
International	4.21%	-3.28%	-10.37%	7.41%
Total ATM	5.22%	2.59%	-7.22%	8.32%

* For the period FY 2010-11 to FY 2018-19

6.2.6. The Authority has noted that there is a variation in traffic and volatility in data, which causes the CAGR for 5-year and 3-year period to be inappropriate for future traffic projections.

6.2.7. The Authority notes that there has been a decrease in the traffic particularly in the FY 2019-20, which is

a pre-COVID year, due to the following reasons such as:

- The closure of operations by Jet Airways with no replacement of those slots from other airlines.
- The opening of Kannur airport, about 165 kilometres from MIA, resulting in diversion of certain northern Kerala traffic to the Kannur airport.

6.2.8. It was observed that there was a de-growth of 64.57% and 73.31% in domestic passenger traffic and international passenger traffic respectively for FY 2020-21 (compared to FY 2019-20), due to the adverse impact of COVID-19 pandemic on the domestic and international travels. Similarly, it was observed that there was a de-growth of 53.47% and 70.25%, respectively in domestic ATM and international ATM for FY 2020-21 (compared to FY 2019-20).

Computation of traffic forecasts by the Authority, considering the impact of COVID-19 pandemic

The traffic forecasts have been computed by the Authority, after taking into account the analysis by the following agencies regarding the impact of COVID-19 pandemic on the Aviation sector, apart from the study report provided by CAPA India for Mangaluru International Airport.

6.2.9. Airports Council International (ACI)

ACI in its report on February 24, 2022 has projected the following air passenger traffic outlook:

- *Over 2021, the crisis is forecast to have removed 5.4 billion passengers compared to the projected baseline (the pre-COVID-19 forecast for 2021), representing a loss of 55% of global passenger traffic. This represents less than half of what it was in 2019, with traffic for 2021 totaling only 4.4 billion (48.3%) of the 9.2 billion passengers served two years ago.*
- *Domestic traffic continued to drive recovery, reaching close to 3.4 billion passengers corresponding to 63.4% of 2019 levels. International passenger traffic volume lagged significantly behind domestic traffic recovery in 2021 and is estimated to total only 1.05 billion passengers for the year, or 27.8% of the 2019 level.*
- *Domestic traffic volume is projected to recover faster in 2022 than international passenger traffic, reaching a total of 4.46 billion passengers in 2022, or 84% of 2019 volume. While some improvements are expected, especially in the second half of 2022, international passenger volume is forecast to be only slightly above 2 billion passengers for the year, corresponding to 53.8% of 2019 volume.*

6.2.10. International Air Transport Association (IATA)

IATA in its report as on March 1, 2022 has reported the following air passenger traffic projection:

- *The International Air Transport Association (IATA) expects overall traveller numbers to reach 4.0 billion in 2024 (counting multi-sector connecting trips as one passenger), exceeding pre-COVID-19 levels (103% of the 2019 total).*
- *In 2021, international traveller numbers were 27% of 2019 levels. This is expected to improve to 69% in 2022, 82% in 2023, 92% in 2024 and 101% in 2025.*
- *In 2021, domestic traveller numbers were 61% of 2019 levels. This is expected to improve to 93% in 2022, 103% in 2023, 111% in 2024 and 118% in 2025.*

Conclusion on traffic forecasts based on the above assumptions

6.2.11. Considering the extraordinary adverse impact of COVID-19 pandemic on domestic and international air travel, the Authority has taken into consideration the forecasted data published by ACI and IATA cited

in para 6.2.9 and 6.2.10 for arriving at the revised traffic projections.

- 6.2.12. The Authority notes that the domestic traffic (PAX and ATM) of MIA for the month of April 2022 and May 2022 has already surpassed the pre-COVID levels of April 2019 and May 2019, as shown in the table below:

Table 42: PAX and ATM of April & May 22 vis-à-vis April & May 2019

Particulars	Apr-19	Apr-22	% of April 19 traffic	May-19	May-22	% of May 19 traffic
Domestic PAX (in Nos.)	95,717	1,06,783	112%	1,13,011	1,20,598	107%
International PAX (in Nos.)	54,668	40,797	75%	52,701	47,621	90 %
Domestic ATM (in Nos.)	860	827	96%	929	955	103%
International ATM (in Nos.)	316	309	98%	335	334	100%

- 6.2.13. Considering the positive outlook of the GDP growth predicted by the GoI and relatively better revival of the domestic aviation market, the Authority is of the view that domestic passenger traffic and ATM will revert to pre-Covid levels (of FY 2019-20) by FY 2022-23.
- 6.2.14. Further, considering the predictions done by the above agencies (as cited in para 6.2.9 and 6.2.10), the Authority is of the view that international passenger traffic and ATM will revert to pre COVID-19 levels (of FY 2019-20) by FY 2023-24.
- 6.2.15. The Authority notes that the traffic forecasts provided by the Airport Operator (based on CAPA India Study report) corresponds to the above views of the Authority that the domestic and international passenger traffic will reach pre-COVID levels of FY 2019-20 by FY 2022-23 and FY 2023-24, respectively.
- 6.2.16. The Authority has noted the actual passenger traffic and ATM data for FY 2021-22 from AAI's website (as shown in the table below) and has considered the same for estimating traffic for the First Control Period:

Table 43: Passenger traffic and ATM for the period April 21 to March 22

Particulars	Domestic	International	Total
Actual traffic data from April 21 to March 22			
PAX	7,69,652	2,43,801	10,13,453
ATM	7,933	2,047	9,980

- 6.2.17. The Authority reviewed the CAGR (10-year, 9-year, 5-year and 3-year) derived by it as per Table 41. However, considering the positive outlook provided by the Expert Agencies and the GoI's recent decision to resume commercial flights, the Authority proposes to consider the passenger traffic and ATM proposed by the Airport Operator for the last three (3) tariff years (FY 2023-24 and FY 2025-26).
- 6.2.18. The Authority reviewed the physical progress of the construction of Cargo Terminal through its independent Consultant and is of the view that the Cargo Terminal will become operational only in the FY 2023-24 (as also explained in Chapter 7). Accordingly, the Authority has shifted the cargo traffic projections of FY 2022-23 to FY 2023-24 and so on till FY 2025-26.
- 6.2.19. Based on the above analysis, the traffic growth rates and the corresponding traffic for passengers and ATM as considered by the Authority for the First Control Period are given in the table below:

Table 44: Traffic proposed to be considered by the Authority for the First Control Period

Domestic Passengers (Lacs)	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Domestic PAX submitted by MIA	13.05	8.00	12.30	15.37	18.45	21.77	75.89
Domestic PAX proposed by the Authority		7.69	13.05	15.37	18.45	21.77	76.33
MIA's submission as a % of FY 2019-20 traffic		61%	94%	118%	141%	167%	
Proposed traffic as per Authority as a % of FY 2019-20 traffic		59%	100%	118%	141%	167%	
International Passengers (Lacs)	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
International PAX submitted by MIA	5.71	3.30	5.00	7.03	8.82	10.62	34.77
International PAX proposed by the Authority		2.44	5.00	7.03	8.82	10.62	33.91
MIA's submission as a % of FY 2019-20 traffic		58%	88%	123%	154%	186%	
Proposed traffic as per Authority as a % of FY 2019-20 traffic		43%	88%	123%	154%	186%	
Total passengers (Lacs)	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Total PAX as per MIA's submission	18.76	11.30	17.30	22.40	27.27	32.39	110.66
Total PAX (Domestic and International) proposed by the Authority		10.13	18.05	22.40	27.27	32.39	110.24
Proposed total PAX as per MIA's submission as a % of FY 2019-20 traffic		60%	92%	119%	145%	173%	
Proposed total PAX as per Authority as a % of FY 2019-20 traffic		54%	96%	119%	145%	173%	
Domestic ATM (in '000)	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Domestic ATM submitted by MIA	11.90	6.96	10.54	12.91	15.19	17.59	63.19
Domestic ATM proposed by the Authority		7.93	11.90	12.91	15.19	17.59	65.52
MIA's submission as a % of FY 2019-20 total ATM		58%	89%	108%	128%	148%	
Proposed ATM traffic as per Authority as a % of FY 2019-20 ATM		67%	100%	108%	128%	148%	
International ATM (in '000)	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total

TRAFFIC PROJECTIONS FOR THE FIRST CONTROL PERIOD

International ATM submitted by MIA	3.78	2.18	3.29	4.62	5.79	6.97	22.85
International ATM proposed by the Authority		2.05	3.29	4.62	5.79	6.97	22.72
MIA's submission as a % of FY 2019-20 ATM		58%	87%	122%	153%	184%	
Proposed ATM traffic as per Authority as a % of FY 2019-20 ATM		54%	87%	122%	153%	184%	
Total ATM	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Total ATM (Domestic and International) as per MIA's submission	15.68	9.14	13.83	17.53	20.98	24.56	86.04
Total ATM (Domestic and International) proposed by the Authority		9.98	15.19	17.53	20.98	24.56	88.24
MIA's submission as a % of FY 2019-20 total ATM		58%	88%	112%	134%	157%	
Proposed total ATM as per Authority as a % of FY 2019-20 ATM		64%	97%	112%	134%	157%	
Cargo traffic (in MT) *	FY 2019-20	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Domestic cargo submitted by MIA		-	720	1,740	2,104	2,545	7,109
Domestic cargo proposed by the Authority		-	-	720	1,740	2,104	4,564
International cargo submitted by MIA		-	1,681	4,060	4,908	5,938	16,587
International cargo proposed by the Authority		-	-	1,681	4,060	4,908	10,649
Total cargo submitted by MIA		-	2,401	5,800	7,012	8,483	23,696
Total cargo proposed by the Authority		-	-	2,401	5,800	7,012	15,213

* As stated in para 6.2.18, the Authority has shifted the cargo traffic projections of FY 2022-23 to FY 2023-24 and so on till FY 2025-26.

6.2.20. Based on the traffic proposed for the First Control Period (as shown in Table 44), the Authority has rationalised CAPEX submitted by the AO for the First Control Period for MIA.

6.3. Authority's Proposal regarding Traffic for the First Control Period

Based on the available facts and analysis thereupon, the Authority proposes the following with regard to traffic forecast for the First Control Period:

6.3.1. To consider the ATM, Passenger traffic and Cargo traffic for the First Control Period for Mangaluru International Airport as per Table 44.

6.3.2. To true up the traffic volume (ATM, Passengers and Cargo) on the basis of actual traffic in the First Control Period while determining tariffs for the Second Control Period.

7. REGULATORY ASSET BASE (RAB) AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

7.1. Background

- 7.1.1. 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 an Airport Operator. 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.
- 7.1.2. The Authority notes that as part of the Concession Agreement (CA), the AO has proposed to plan and develop MIA in a phased manner during the Concession period, as well as cater to the annual passenger throughput capacity (domestic and international) and annual cargo handling capacity, along with ancillary facilities as per its demand projections. Further, 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, air traffic control tower, Cargo facilities, Parking, flight kitchens, MRO facilities, warehousing facilities, airline offices, administrative offices and associated facilities.
 - Construction and procurement of Terminal Building and facilities and
 - Construction of required approach roads.
- 7.1.3. The Authority also notes that the AO 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 23.7.1 of the CA, the AO 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 4.5 out of 5.0 and/ or shall appear within top 20 percentile of all airports, in its category in the World in such survey within five (5) years from the COD and maintain the same throughout the rest of the Concession Period.
- 7.1.4. The Independent Consultant appointed by the Authority has performed an in-depth analysis of the submissions made by the Airport Operator towards Aeronautical Capital Additions, Depreciation and RAB. In this respect, the Independent Consultant has performed the following functions:
- i. Conducted Site visit on December 13, 2021 and December 14, 2021 to witness the physical progress of the projects.
 - ii. Sought and verified various technical and study reports of the Consultant appointed by the AO, Drawings and Plans, BOQs, Cost estimates and break-up, Detailed justification and explanation, Deviation statement, Demand vs Requirement statement, Copies of Letter of Intent (LOI), Letter of Award (LOA), Purchase Orders and Work Orders, etc., provided by the Airport Operator and
 - iii. Sought documentary evidence and verified the process of approval of capital addition projects including competitive bidding process for award of various work orders to the contractors for such projects.

Based on the review of documents as stated above, the Authority has rationalized the capital additions projects based on the essentiality, necessity for Airport operations, submitted by the Airport Operator by shifting the capitalisation of some of the projects within the First Control Period and deferring certain

others to the next Control Period.

- 7.1.5. While doing so, 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. In this regard, the Authority has also relied upon the assessment of Independent Engineers and their roles and responsibility as stated under Schedule L of the Concession Agreement and in the MYTP submission made by the AO. The relevant Clauses of the Concession Agreement relating to the appointment, duties, functions, remuneration etc. are mentioned in para 17.3.12 and para 17.3.13 under Chapter 17 of this Consultation Paper. The Authority notes that there is provision available in the Concession Agreement (Clause 24.1.7) for passthrough of the remuneration and other expenses paid to the Independent Engineer to ensure providing efficient, justified and reasonable CAPEX for the Airport.
- 7.1.6. In the background of the facts stated above, the Authority has examined the entire CAPEX plan in detail including CWIP projects and the New CAPEX for Mangaluru Airport, considering the historical traffic trends 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 Airport Operator 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.
- 7.1.7. Towards this objective, the Authority has examined in detail the Aeronautical Capital Expenditure and RAB submitted by the Airport Operator and has presented its views in the following order:
- i. Aeronautical Capital expenditure proposed for First Control Period
 - Capital Additions initiated by AAI during the pre-COD period and transferred to AO as part of the Concession Agreement.
 - New Capital additions proposed by the AO
 - ii. Aeronautical Depreciation for the First Control Period
 - iii. Regulatory Asset Base for the First Control Period
- 7.1.8. While analysing the MYTP regarding capitalization of Aeronautical Expenditure for the First Control Period, the Authority has considered the lower traffic caused by the COVID-19 pandemic and the resultant stress on the financials of all the stakeholders of civil aviation sector. In this background, the Authority has sought and examined the Airport Operator'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 both at present and projected for the First Control period
 - Terminal Capacity both at present and projected for the First Control period
 - Other short-term and long-term plans of the Airport Operator
 - Sustainability of the airport operations
 - Passenger consideration

- Safety and security of the airport
- Process of approval and sanction for various work orders / purchase orders
- Site visit conducted through the Authority's Independent Consultant to witness the physical progress (between December 13, 2021 to December 14, 2021).

Based on the above, the Authority has rationalised the capital expenditure for all the projects and accordingly proposed capital additions for the First Control Period.

7.2. Mangaluru International Airport's submission of RAB and Depreciation proposed for the First Control Period

- 7.2.1. Mangaluru International Airport submitted Aeronautical Capital Expenditure of ₹ 881.67 Crores in the revised MYTP dated December 10, 2021, for the First Control period as given below:

Table 45: Asset-wise Aeronautical Capital Expenditure submitted by the Airport Operator for the First Control Period

(₹ Crores)

Asset Category	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	Total
Runway, Taxiway & Apron	22.37	224.12	0.92	0.56	8.46	256.43
Runway Recarpeting	-	89.60	-	-	-	89.60
Terminal Building	113.28	100.12	7.38	4.52	-	225.30
Cargo	0.00	19.53	-	-	-	19.53
Fuel	10.00	12.73	-	-	-	22.73
Security Equipment	-	3.73	4.10	2.51	-	10.34
Plant & Machinery	19.45	18.06	7.11	4.36	22.54	71.52
Roads	17.03	-	-	-	47.52	64.55
Boundary walls	12.67	-	-	-	2.17	14.84
Information Technology	13.30	3.82	4.19	2.57	-	23.88
Other Buildings	17.42	0.27	0.29	0.18	29.34	47.49
Total	225.51	471.97	23.99	4.71	110.03	846.22
Add: Financing Allowance (FA)	19.47	9.41	0.61	3.29	2.68	35.45
Total Aero CAPEX including FA	244.98	481.38	24.60	17.99	112.71	881.67

- 7.2.2. The Authority as part of its examination of the Aeronautical Capital Expenditure submitted by the Airport Operator for the First Control Period, had raised queries and sought clarification on the essentiality of the capital expenditure and enquired for necessary documents such as project cost estimates, Technical Consultant's report, design, drawings, plans, inspection report issued by various authorities etc., substantiating the capital expenditure proposed by the Airport Operator in the MYTP.

The aforementioned documents and clarifications were provided in a phased manner by the AO.

Upon review of all the necessary details and documents, the Authority had convened a meeting on April 26, 2022 with the representatives of the Airport Operator along with AERA's Consultant to obtain clarification regarding its queries on the ongoing and new projects proposed by the Airport Operator.

In response to the Authority's queries on the essentiality of certain capital expenditure projects and the basis for estimation of project costs, the Airport Operator had submitted a revised CAPEX schedule along with the justification for revision of project costs/ re-scheduling of CAPEX on May 7, 2022.

- 7.2.3. A comparison of Aeronautical Capital Expenditure submitted by the Airport Operator during three different time periods, namely, the original MYTP as on May 31, 2021, followed by revised MYTP on December 10, 2021 and finally, the revised CAPEX schedule submitted on May 7, 2022, is shown as follows:

Table 46: Comparison of Asset-wise Aeronautical Capital Expenditure submitted by the Airport Operator during different time periods for the First Control Period

(₹ Crores)

Asset Category	CAPEX as per Initial MYTP as on May 31, 2021	CAPEX as per Revised MYTP as on December 10, 2021	Revised Capex submission as on May 7, 2022
Runway, Taxiway & Apron	237.54	256.43	187.52
Runway Recarpeting and Center lighting	--	89.60	90.64
Terminal Building (Aero)	227.35	225.30	209.19
Cargo facility	21.67	19.53	23.36
Fuel facility	22.24	22.73	27.83
Security Equipment	11.66	10.34	3.19
Plant & Machinery	78.68	71.52	63.77
Roads	76.01	64.55	41.12
Boundary walls	12.79	14.84	10.55
Information Technology	21.81	23.88	22.40
Other Buildings	75.57	47.49	29.24
Total Project Cost	785.31	846.22	708.81
Add: Cost of PMC, Design, Contingencies, Preliminary & pre-operatives, Insurance, Labour cess, Site preparation, Statutory approvals, etc	--	--	75.98
Add: Financing Allowance (FA) / IDC	27.85	35.45	58.62
Aero Capex (including PMC, Design, Contingencies, etc and FA / IDC)	813.16	881.67	843.41

The Aeronautical Capital Addition projects submitted by Mangaluru International Airport for the First Control Period have been divided into the following categories:

- A. Capital Addition projects initiated by AAI in the Pre-COD Period and mandated to be executed by the Airport Operator as per the terms of the Concession Agreement along with Enabling Capital

Projects integral to operationalize the mandated projects

B. New Capital Expenditure projected by the Airport Operator for the First Control Period.

- 7.2.4. Capital projects mentioned in 'A' above consist of projects initiated by AAI during the Pre-COD period and subsequently handed over to the Airport Operator as part of the Concession Agreement (Schedule T and U of the Concession Agreement) and certain enabling projects such as Plant and Machinery items and Information Technology works integral to execution of the expansion of Terminal Building. Schedules T and U of the Concession Agreement provide a list of works proposed by AAI in execution stage and / or planning stage and the Airport Operator is obligated to complete those works proposed by AAI.
- 7.2.5. Clause 6.4.5 of the Concession Agreement relating to the Airport Operator's obligation regarding CWIP handed over by AAI as on COD and as set forth in Schedule T, has been provided in Para 17.3.10 of Annexure 3 under Chapter 17 of this Consultation Paper.
- 7.2.6. Clause 4.1.3. (h) of the Concession Agreement relating to the Airport Operator's obligation regarding Conditions Precedent required to be satisfied within 180 days of the agreement relating to works proposed by AAI and as set forth in Schedule U, has been provided in Para 17.3.11 of Annexure 3 under Chapter 17 of this Consultation Paper.
- 7.2.7. The Intangible Assets proposed by the Airport Operator have not been considered for capitalisation of Aeronautical Capital Expenditure for the First Control period in accordance with the methodology proposed in Clause 3.5.3. of the *Asset Allocation Report (Refer Appendix I to this Consultation Paper)*.

7.3. Authority's examination of RAB and Depreciation for the First Control Period

- 7.3.1. The Authority has analysed the Aeronautical Capital expenditure proposed for the First Control Period in the following sequence for evaluation

- i. CWIP projects initiated in the Pre-COD period by AAI and handed over to the AO as part of the CA along with Enabling Capital Projects integral to operationalize the mandated projects.
- ii. New Capital Expenditure projected by the Airport Operator for the First Control Period

The Authority has noted that MIA while its MYTP submission on May 31, 2021, Dec 10, 2021 and May 7, 2022 has revised CAPEX for the First Control Period. Out of total Aeronautical CAPEX submitted by AO as on May 7, 2022, 36% pertains to CWIP projects taken over from AAI and the balance 64% pertains to the new CAPEX proposed by the AO for the First Control Period. While analysing the MYTP of MIA regarding Capital Expenditure for the First Control Period, the Authority has taken into consideration the traffic as per Table 44 which has been rationalised based on various factors including the impact of COVID 19 pandemic and has appropriately rationalised CAPEX which has been explained in the following paragraphs

- 7.3.2. The capital additions stated in A and B above have been explained project-wise in the same sequence in the table below. For the ease of reference, the project wise details of Aeronautical Capital Expenditure submitted by the Airport Operator in its MYTP on December 10, 2021 has been shown in Annexure 4 under Chapter 17 and the revised CAPEX schedule submitted on May 7, 2022 is shown as follows.

Table 47: Project wise revised Capital Expenditure submitted by the Airport Operator for the First Control Period

(₹ Crores)

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total CAPEX (incl. FA)
A. Projects initiated in Pre-COD Period and mandated to be executed in First Control Period along with Enabling Capital Projects integral to completion of the mandated Projects					
A1.	Runways, Taxiway & Aprons				
	Joint Filling work at Runway / taxiway	2022-23	1.25	-	1.25
	Construction of Link Parallel taxi track (Phase II) and Grading of basic strip at south side	2022-23	126.00	-	126.00
	Runways, Taxiway – Financing Allowance and IDC		-	12.20	12.20
	Total – Runways, Taxiways & Apron		127.25	12.20	139.45
A2.	Terminal Building Expansion				
	Expansion / modification of Existing Terminal Building on its western side (arrival side)	2021-22	24.16	-	24.16
		2022-23	85.67	-	85.67
	Post Award Project Management Consultancy for supervision of Expansion / Modification of Existing Integrated Terminal Building	2022-23	3.45	-	3.45
	Buildings- Financial Allowance and IDC		-	13.30	13.30
	Cost of Terminal Building expansion including post award PMC – A2. (i)		113.28	13.30	126.58
	Plant and Machinery (enabling capital projects)				
	Expansion of Baggage Conveyor	2022-23	7.86	-	7.86
	Substation equipment	2022-23	2.03	-	2.03
	Lift & Travellator	2022-23	1.58	-	1.58
	PA system	2022-23	0.90	-	0.90
	Engineering Consultancy	2022-23	0.83	-	0.83
	VDGS	2022-23	1.98	-	1.98
	Expansion of Passenger Boarding Bridge	2022-23	7.41	-	7.41
	Plant & Machinery – Financial Allowance and IDC	2022-23	-	0.48	0.48
	Cost of Plant and Machinery (enabling capital projects) – A2. (ii)		22.58	0.48	23.06
	Information Technology (IT) works (enabling capital projects)				
	Work related to IT for NITB	2022-23	9.86	-	9.86
	Facelift work for NITB	2022-23	0.16	-	0.16
	Aluminium Roof Gutter for NITB	2022-23	0.02	-	0.02
	SITC of RC CCTV	2022-23	1.21	-	1.21
	Flight Information Display System	2022-23	1.31	-	1.31
	Network & Pen Tablet	2022-23	0.01	-	0.01

REGULATORY ASSET BASE AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total CAPEX (incl. FA)
	Supply of Bullet Proof Helmet	2022-23	0.02	-	0.02
	Electrical Materials	2022-23	0.71	-	0.71
	Information Technology (IT) works – Financing allowance and IDC		-	0.59	0.59
	Cost of Information Technology (IT) works (enabling capital projects) – A2. (iii)		13.30	0.59	13.89
	Total – Terminal Building Expansion including costs = A2. ((i) + (ii) + (iii))		149.16	14.37	163.53
A3.	Roads				
	Widening and strengthening of existing perimeter road	2022-23	4.36	0.15	4.51
	Total – Roads		4.36	0.15	4.51
Total CAPEX initiated in the Pre-COD Period and mandated to be executed in the First Control Period along with Enabling Capital Projects (A)			280.77	26.72	307.49
B. New Capital expenditure projected for the First Control Period					
B1.	Runways, Taxiway & Aprons				
	Runway recarpeting and Centre-lighting	2023-24	90.64	-	90.64
	Construction of New taxiway	2023-24	36.47	-	36.47
	Construction of new portion RESA	2023-24	7.85	-	7.85
	Apron improvement works	2022-23	1.62	-	1.62
		2025-26	5.39	-	5.39
	Miscellaneous Airside improvement works	2022-23	2.14	-	2.14
		2023-24	2.14	-	2.14
		2024-25	1.39	-	1.39
		2025-26	3.27	-	3.27
	Runways, Taxiways & Aprons – Financing Allowance and IDC		-	20.04	20.04
	Total – Runways, Taxiways & Apron		150.91	20.04	170.95
B2.	Terminal Building				
	Modification / Expansion of existing Terminal Building	2022-23	79.88	-	79.88
	Miscellaneous works / interiors / finishes / kerbside of existing Terminal	2022-23	6.05	-	102.37
		2023-24	6.05	-	7.38
		2024-25	3.93	-	4.52
	Terminal Building- Financing Allowance and IDC		-	3.64	3.64
	Total – Terminal Building		95.91	3.64	99.55
B3.	Cargo Assets				
	Cargo Buildings	2022-23	18.90	-	18.90
	Cargo equipment	2022-23	4.45	-	4.45
	Cargo Assets- Financing Allowance and IDC		-	0.14	0.14
	Total – Cargo Assets		23.36	0.14	23.50
B4.	Fuel Facility				

REGULATORY ASSET BASE AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total CAPEX (incl. FA)
	Purchase of assets of existing Oil Marketing Companies (OMC)	2022-23	10.00	-	10.00
	Building of new assets for Open Access Fuel Facility operations	2022-23	17.83	-	17.83
	Total – Fuel Facility		27.83	-	27.83
B5.	Security equipment				
	Equipment for ARFF – runway mechanical sweeper, rubber removal and other equipment	2022-23	1.20	-	1.20
		2023-24	1.20	-	1.20
		2024-25	0.78	-	0.78
	Total – Security equipment		3.19	-	3.19
B6.	Plant and Machinery				
	Trans installation of Navaid systems	2022-23	1.98	-	1.98
	Bomb Detection and Disposal Equipment (BDDS)	2022-23	4.03	-	4.03
		2023-24	4.03	-	4.03
		2024-25	2.62	-	2.62
	Electrical Sub-station equipment	2025-26	4.63	-	4.63
	Triturator	2025-26	6.06	-	6.06
	Water tank, STP and storage tank, Pump house Building	2025-26	5.45	-	5.45
	Various other miscellaneous projects	2022-23	4.39	-	4.39
		2023-24	2.49	-	2.49
		2024-25	1.62	-	1.62
		2025-26	3.88	-	3.88
	Plant and Machinery- Financing Allowance and IDC		-	2.37	2.37
	Total – Plant & Machinery		41.19	2.37	43.56
B7.	Roads				
	Vehicle Access roadway and allied features	2025-26	20.95	-	20.95
	Road entry and exit works	2022-23	2.85	-	2.85
	Miscellaneous Enabling works	2025-26	12.96	-	12.96
	Roads- Financing Allowance and IDC		-	2.77	2.77
	Total – Roads		36.76	2.77	39.53
B8.	Boundary walls				
	Construction of property boundary wall of 11 kms	2022-23	2.87	-	2.87
		2023-24	2.87	-	2.87
		2024-25	1.86	-	1.86
	Airside Operational Boundary wall	2025-26	2.95	-	2.95
	Boundary Walls- Financing Allowance and IDC		-	0.20	0.20
	Total – Boundary walls		10.55	0.20	10.75
B9.	Information Technology (IT)				
	IT Infrastructure, AOCC and various other systems	2022-23	3.43	-	3.43
		2023-24	3.43	-	3.43
		2024-25	2.23	-	2.23
	Information Technologies- Financing Allowance and IDC		-	1.24	1.24

REGULATORY ASSET BASE AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total CAPEX (incl. FA)
	Total – Information Technology		9.10	1.24	10.34
B10.	Other Associated Works				
	Storm water		-	-	-
	Water disposal and supply	2022-23	5.70	-	5.70
	Miscellaneous works – others	2022-23	0.24	-	0.24
		2023-24	0.24	-	0.24
		2024-25	0.16	-	0.16
		2025-26	9.22	-	9.22
	Airside security gate	2025-26	4.15	-	4.15
	Rainwater Harvesting	2025-26	9.53	-	9.53
	Water tank (airside)		-	-	-
	Other Buildings- Financing Allowance and IDC		-	1.50	1.50
	Total – Other Buildings		29.24	1.50	30.74
Total Project Cost of New Capital Expenditure Projects			428.04	31.90	459.94
Add: Cost towards Proportionate Technical Services like PMC & Design, Preliminaries, Insurances / Statutory Approvals, Contingencies, Pre-Operatives, etc claimed on the above New Capital Expenditure Projects			75.98	-	75.98
Total of New Capital expenditure projected for the First Control Period (B)			504.02	31.90	535.92
GRAND TOTAL (A+B)			784.73	58.62	843.41

7.3.3. The Authority notes that the Airport Operator conducted its first Airport User Consultation Committee (AUCC) Meeting on May 28, 2021 with all the stakeholders and discussed about Capital Expenditure proposed to be undertaken during the First Control Period of FY 2021-22 to FY 2025- 26. The meeting was attended by various airport stakeholders such as International Air Traffic Association (IATA), Federation of Indian Airlines (FIA), Indigo, SpiceJet, Go Air, Air India, AAI, CISF, Association of Private Airport Operators (APAO), Federation of Indian Chambers of Commerce and Industry (FICCI), Karnataka Chamber of Commerce and Industry (KCCI) and Customs. As per the ‘minutes’ of the meeting, the Authority observed that the Airport Operator had broadly discussed the following points with the stakeholders:

- History, current and future growth forecast of Passenger traffic at MIA as well as the existing facilities.
- Details of on-going expansion activities initiated by AAI and transitioned to the Airport Operator as per the agreed terms of the Concession Agreement and the current progress of such projects.
- Detailed presentation and justification for the new capital expenditure planned by the Airport Operator with reference to the existing challenges in MIA pertaining to its location, topography, weather conditions, limited availability of land, etc.
- Master plan for the Airport covering 50 years of the Concession period and planned to be executed in six phases with Phase 1 and 2 being undertaken in the First Control period.

The Authority also noted that various observations were made by some of the stakeholders relating to the aspects of normative costing, cost estimates projected for the capex projects, evaluation of EMAS option for design of RESA, mitigation strategy and measures planned for handling wildlife threat / bird menace on account of construction of new rainwater harvesting ponds, issues relating to cargo processes, tariff mechanism due to ongoing and newly planned projects, importance of including runway recarpeting and centre lighting project during the First Control period, deferment of Fuel farm open access to next control period and improving security equipment / infrastructure at the airport including handling of drone attacks. The Airport Operator had addressed all the above observations of the stakeholders after which a presentation was made by Indigo Airlines wherein, they had requested for various enhancements / improvements at MIA including but not limited to Parallel taxiway, more parking bay, sheltered parking for ground staff, more travellers, boarding pass re-printing machines, ramp style walkalators, self-bag drop facility, fuel storage facility, cargo operations facility, etc. The Airport Operator responded by assuring Indigo Airlines and other stakeholders that some of the requirements were already part of their development plan for MIA and others would be considered during the next phase of development of MIA.

7.3.4. The Authority's examination of the Capital Expenditure projected for the First Control Period has been explained in detail in the ensuing paragraphs:

A. Projects initiated during Pre-COD Period and mandated to be executed in the First Control Period along with Enabling Projects integral to completion of such mandated projects.

The Authority notes that there are capital projects initiated by AAI during the Pre-COD period and subsequently handed over to the Airport Operator as part of the Concession Agreement (Schedule T and U of the Concession Agreement). Project-wise capital additions under Category 'A', have been explained as follows:

Table 48: Project wise revised Capital Expenditure submitted by the Airport Operator for the First Control Period for projects under 'Category A'

(₹ Crores)

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total Capex (incl. FA)
A. Projects initiated in Pre-COD Period and mandated to be executed in First Control Period along with Enabling Capital Projects integral to completion of the mandated Projects					
A1.	Runways, Taxiway & Aprons				
	Joint Filling work at Runway / taxiway	2022-23	1.25	-	1.25
	Construction of Link Parallel taxi track (Phase II) and Grading of basic strip at south side	2022-23	126.00	-	126.00
	Runways, Taxiway – Financing Allowance and IDC		-	12.20	12.20
	Total – Runways, Taxiways & Apron		127.25	12.20	139.45
A2.	Terminal Building Expansion				
	Expansion / modification of Existing Terminal Building on its western side (arrival side)	2021-22	24.16	-	24.16
		2022-23	85.67	-	85.67
	Post Award Project Management Consultancy for supervision of Expansion / Modification of Existing Integrated Terminal Building	2022-23	3.45	-	3.45

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S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total Capex (incl. FA)
	Buildings- Financial Allowance and IDC		-	13.30	13.30
	Cost of Terminal Building expansion including post award PMC – A2. (i)		113.28	13.30	126.58
	Plant and Machinery (enabling capital projects)				
	Expansion of Baggage Conveyor	2022-23	7.86	-	7.86
	Substation equipment	2022-23	2.03	-	2.03
	Lift & Travellator	2022-23	1.58	-	1.58
	PA system	2022-23	0.90	-	0.90
	Engineering Consultancy	2022-23	0.83	-	0.83
	VDGS	2022-23	1.98	-	1.98
	Expansion of Passenger Boarding Bridge	2022-23	7.41	-	7.41
	Plant & Machinery – Financial Allowance and IDC	2022-23	-	0.48	0.48
	Cost of Plant and Machinery (enabling capital projects) – A2. (ii)		22.58	0.48	23.06
	Information Technology (IT) works (enabling capital projects)				
	Work related to IT for NITB	2022-23	9.86	-	9.86
	Facelift work for NITB	2022-23	0.16	-	0.16
	Aluminium Roof Gutter for NITB	2022-23	0.02	-	0.02
	SITC of RC CCTV	2022-23	1.21	-	1.21
	Flight Information Display System	2022-23	1.31	-	1.31
	Network & Pen Tablet	2022-23	0.01	-	0.01
	Supply of Bullet Proof Helmet	2022-23	0.02	-	0.02
	Electrical Materials	2022-23	0.71	-	0.71
	Information Technology (IT) works – Financing allowance and IDC		-	0.59	0.59
	Cost of Information Technology (IT) works (enabling capital projects) – A2. (iii)		13.30	0.59	13.89
	Total – Terminal Building Expansion including enabling capital projects = (A2. (i) + (ii) + (iii))		149.16	14.37	163.53
A3.	Roads				
	Widening and strengthening of existing perimeter road	2022-23	4.36	0.15	4.51
	Total – Roads		4.36	0.15	4.51
Total Capex initiated in the Pre-COD Period and mandated to be executed in the First Control Period along with Enabling Capital Projects (A)			280.77	26.72	307.49

A1: Runway, Taxiway and Apron – (i) Construction of Link Parallel taxi track (Phase II) and Grading of basic strip at south side and (ii) Joint Filling works at Runway / Taxiway

a. In respect of Construction of Link Parallel taxi track, the Authority notes that this Project is

part of CWIP taken over by the Airport Operator (AO) from AAI under Schedule T of the Concession Agreement between AAI and Airport Operator and thus it is binding on the AO to execute it as part of the terms agreed in the Concession Agreement. Further, the Authority notes that AAI had granted Administrative Approval and Expenditure Sanction (A/A & E/S) for this project in June 2016 (i.e., FY 2016-17) amounting to ₹ 106.40 Crores, which includes costs of Civil, Electrical works, Contingencies, Taxes etc. and subsequently, awarded the Contract for ₹ 97.71 Crores in February 2017, which is currently under progress.

- b. Considering the background that this project was initiated by AAI in FY 2016-17 and subsequently handed over to the Airport Operator as a fallout of the Concession Agreement, the Authority feels that applying normative approach on such projects may not be appropriate. As the Airport has been concessioned out for 50 years, therefore, applying normative approach may not be prudent for such projects. The Authority, therefore, proposes to consider the inflation-adjusted Contract cost, as the basis for deriving the Aero CAPEX costs allowable for this project.
- c. The Authority has applied WPI inflation on the Contract cost of ₹ 97.71 Crores from FY 2017-18 up to FY 2020-21 considering FY 2016-17 as the base year (as it was the year in which the Contract was awarded by AAI) and same is shown in the table below:

Table 49: WPI Inflation adjusted Contract cost for Construction of Parallel taxi Track Project

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
WPI *	100.00	102.96	107.35	109.14	110.57	124.91
AAI awarded Contract Cost (₹ in Crores)	97.71	100.60	104.89	106.64	108.04	122.05

* Source: Office of The Economic Adviser, Government of India (<https://eaindstry.nic.in>)

- d. Further, the Authority observed from the detailed BOQ and Deviation Statement submitted by the Airport Operator for the period up to March 2022 that an amount of ₹ 4.71 Crores has already been incurred towards escalation costs and an additional amount of ₹ 2 Crores is anticipated to be incurred by the Airport Operator towards escalation for completion of this project. The Authority proposes to include the total escalation costs of ₹ 6.71 Crores to the inflation adjusted Contract cost of ₹ 122.05 Crores derived by it, thus resulting in the total estimated project cost of ₹ 128.76 Crores.
- e. As a result, the Authority notes that the total CAPEX submitted by the Airport Operator (₹ 126 Crores) for this project is within a reasonable range of the inflation adjusted contract cost of ₹ 128.76 Crores derived by it and hence, proposes to allow ₹ 126 Crores for this project.
- f. In respect of Joint filling works which is related to the Construction of Parallel Taxi Track, the Authority notes that, the AO has claimed ₹ 1.25 Crores for this project which is also part of AAI handover under Schedule T of the Concession Agreement. As explained above, the Authority proposes to allow the same.
- g. The Authority reviewed the progress of the work through its Independent Consultant and noted that approximately 80% of the work has been completed. Therefore, the Authority is of the view that the entire work may be completed by November 2022 and proposes to consider capitalisation of the above projects amounting to ₹ 127.25 Crores in the FY 2022-23.

A2: Expansion and modification of existing Terminal Building:

- a. The existing Terminal Building area is of 37,322 Sq.m including other operational buildings and after the expansion of the Terminal building by 10,142 Sq.m, the total area will be 47,464 Sq.m which will correspondingly increase the passenger capacity of the Terminal Building from 2 MPPA to 3 MPPA. The AO has submitted total estimated cost of ₹ 149.16 Crores (refer A2 in Table 48) for this project on the western side (i.e., arrivals side) of the Terminal Building. Further, the project costs include the post award project management consultancy cost and certain enabling capital projects integral to execution of the expansion of Terminal Building such as Plant and machinery and works pertaining to Information Technology.
- b. The Authority notes that this project is part of CWIP taken over by the Airport Operator (AO) from AAI under Schedule T of the Concession Agreement between AAI and the Airport Operator and thus it is binding on the AO to execute it as part of the terms agreed in the Concession Agreement.
- c. Further, the Authority notes that AAI had sanctioned ₹132.24 crores for this project in FY 2016-17, which includes the cost of Civil, Electrical, enabling works of Plant and Machinery, and IT, Engineering design, Consultancy, Contingencies, Taxes etc. The Authority notes that the designed capacity of the Airport at the time of initiation of this project by AAI was for 2 MPPA and the expected passenger capacity of the Airport upon execution of this project was 3MPPA, with the ability to handle higher Peak Hour Passengers (PHP) i.e., from existing 730 PHP to the expected level of 1,038 PHP and also to overcome the heavy congestion that was being experienced in the arrival area and on flyover on the city side.
- d. However, based on sanctioned costs, AAI had issued contract only for Civil and Internal Electrical works in April 2018. Subsequent to the handover, the AO had awarded contracts for various enabling Electrical & Mechanical projects and has also planned to award contracts for certain IT related works in future. Thus, the contracts have been awarded by the two Airport Operators (AAI and the Airport Operator) under different time period.
- e. Considering the peculiar kind of the situation where the Airport has been handed over to the Airport Operator during the middle of the Control Period, as a fallout of the Concession Agreement, the Authority feels that applying normative approach on such projects for rationalizing the costs may not ensure consistency in the evaluation of costs and hence, may not be a prudent approach. Further, as AAI and the Airport Operator have awarded contracts in a phased manner, the Authority proposes to consider the inflation adjusted sanctioned costs (as it includes all the related works) as the basis for deriving the allowable project cost for the First Control Period.
- f. The Authority has applied WPI inflation on the sanctioned cost of ₹ 132.24 Crores from FY 2017-18 (as the A/A & E/S was granted in FY 2016-17) up to FY 2020-21. As a result, the Authority derived the inflation adjusted sanctioned cost of ₹ 165.18 Crores as shown below:

Table 50: WPI Inflation adjusted Sanctioned Cost for Expansion of Terminal Building Project

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
WPI *	100.00	102.96	107.35	109.14	110.57	124.91
AAI awarded AAES Cost (₹ in Crores)	132.24	136.15	141.96	144.33	146.22	165.18

* Source: Office of The Economic Adviser, Government of India (<https://eaindstry.nic.in>)

- g. The Authority notes that the total estimated cost of this project submitted by the AO i.e., ₹ 149.16 Crores is within a reasonable range of the inflation adjusted sanctioned costs derived by the Authority and hence it proposes to allow the same.
- h. The Authority further reviewed the progress of the work through its Independent Consultant and notes that only 60% of the work has been completed, as there had been some delays in the execution of work due to COVID-19 pandemic. Further, during the visit by the Authority's Independent Consultant, the Airport Operator had provided a revised timeline of FY 2022-23 for capitalization of this project. The Authority is of the view that the entire work may be completed by FY 2022-23 and proposes to consider the capitalisation of this project in the FY 2022-23.
- i. The Authority would also like to emphasize that it has applied the normative guidelines while assessing the costs of the new CAPEX projects submitted by the Airport Operator and the same has been explained in the subsequent sections.
- j. Further, the Authority notes that the Total CAPEX has been allocated to Aeronautical services by the Airport Operator in the Terminal Building ratio of 95:5 which the Authority proposes to re-allocate in the revised Terminal Building ratio of 92:8 for the following assets in line with the Asset Allocation Report and the Inter-Ministerial Group (IMG) norms and as approved for other similar PPP Airports:
 - Terminal Building including Post award PMC cost (refer A2 in Table 48 above) - ₹ 113.28 crores revised to ₹ 109.59 Crores
 - Lift and Travellator forming part of enabling capital addition projects under Plant and machinery (refer A2 in Table 48 above) - ₹ 1.58 Crores revised to ₹ 1.53 Crores.

However, the Authority proposes to reallocate all the other capital items of the enabling projects included under Plant and machinery and Information Technology works as 100% Aeronautical, in line with the *Asset Allocation Report* and as approved for other PPP airports.

- k. Accordingly, the Authority has derived Aero CAPEX of the cost of expansion of Terminal Building including cost of enabling capital projects, as ₹ 147.23 Crores and the same is shown in the table below:

Table 51: Aeronautical CAPEX proposed by Authority for Expansion of Terminal Building Project

(₹ in Crores)		
Particulars	CWIP project submitted by AO	CAPEX Proposed by Authority
Terminal Building Project including Post award PMC cost	113.28	109.59
Lift & travellator	1.58	1.53
All other items of Enabling Capital addition projects, included in Plant and Machinery and Information Technology works	34.30	36.11
Total	149.16	147.23

- A3: Roads:** The Airport Operator has submitted ₹ 4.36 Crores towards the work on widening and strengthening of the existing perimeter road to be completed by FY 2022-23. The Authority notes

that this Project is also part of the CWIP taken over by the Airport Operator from AAI under Schedule T of the Concession Agreement and thus it is binding on the Airport Operator to execute it as part of the terms agreed in the Concession Agreement. The Authority further, observes that AAI had already issued a contract for this project in November 2018, which is currently under progress. Also, the Authority notes that this amount has been claimed by the Airport Operator based on Terminal Building ratio of 95:5 allocated by them. However, the Authority proposes to revise and re-allocate the amount as 100% Aeronautical, as the roads are on the airside and in line with its classification of assets stipulated in the *Asset Allocation Report (refer Appendix I to this Consultation Paper)*. Therefore, the Authority proposes to allow the estimated cost of ₹ 4.59 Crores for this project and consider its capitalization in the FY 2022-23.

Financing Allowance on CWIP projects

- 7.3.5. The Airport Operator had initially claimed Financing allowance of ₹ 9.45 Crores for AAI handed-over projects in its MYTP submitted on December 10, 2021 which had been calculated on the average Capital Work in Progress (CWIP) of the entire project funds (funded out of debt and equity), at the rate of 12% (which is cost of debt). As against this, the Airport Operator in its revised CAPEX submission dated May 7, 2022 has claimed both Financing allowance and Interest During Construction (IDC) amounting to ₹ 26.72 Crores, on the average Capital Work in Progress (CWIP). In this respect, the Authority notes that the Financing allowance has been calculated on 35% equity portion and IDC on 65% debt portion of the entire project funds, with the cost of debt being considered as 12% for both.

In this respect, the Authority notes that the Airport Operator had initially confirmed regarding the amount of Financing allowance claimed by them on Aeronautical CAPEX in the MYTP submitted on December 10, 2021 vide email dated January 25, 2022. Subsequently, the Airport Operator had revised their claim vide another email dated April 11, 2022 and sought both Financing allowance on equity funding and Interest During Construction (IDC) on debt funding. Based on the same, the Airport Operator has claimed both Financing allowance and IDC as part the revised Capex submission made on May 7, 2022.

However, the Authority is of the view that Mangaluru International Airport being one of the oldest Airports in India, would not be eligible for Financing allowance, as it is only a notional allowance and is different from the actual investment incurred by airport operators which includes interest during construction, amongst other things. Therefore, the provision of financing allowance on the average capital work in progress would lead to a difference between the projected capitalisation and actual cost incurred, especially when the airport operator funds the projects through a mix of equity and debt.

Further, the Authority notes that in case of greenfield developments, the Airport Operator would have to wait for a considerable length of time before getting the return on the large capital outlay incurred by it as these projects take longer durations to commission and operationalise. It was with this consideration that the Authority had earlier provided financing allowance in the initial stages to such Airports. The Authority notes that Mangaluru International Airport is a brownfield Airport and has lower construction and traffic risk for new construction at the Airport and Financing Allowance has never been provided in case of other Airports such as DIAL, MIAL and KIAL. Thus, the locked-up equity in the CWIP assets cannot be given the assured return of cost of debt.

In respect of IDC, the Authority is inclined to allow the same and accordingly, the Authority has considered IDC to be provided on the debt portion of the total value of proposed aeronautical capital expenditure (as shown in Table 53 below) based on the notional gearing ratio (debt-equity ratio of 48:52) followed for other PPP airports and cost of debt @ 9% (refer Table 72 of Chapter 8) for the First Control Period. Considering the same, the Authority has arrived at an amount of ₹ 12.05 Crores and proposes

to allow the same as against ₹ 26.72 Crores claimed by the Airport Operator for the First Control Period.

- 7.3.6. The value of CWIP projects as per Schedule T of the CA, the Sanctioned costs, CWIP invoice up to Pre-COD and the Estimated Cost claimed by the Airport Operator for such projects in the revised CAPEX schedule submitted as on May 7, 2022 have been tabulated as follows:

Table 52: Value of CWIP Projects as per Schedule T, Sanctioned Cost, CWIP invoice and cost claimed by the AO in revised CAPEX schedule

(₹ Crores)

Particulars	CWIP projects – Awarded Value as per Schedule T (A)	CWIP project – Value as per Sanctioned Cost (B)	CWIP Invoice Value I	Claimed by Airport Operator in revised CAPEX schedule (D)	Variance (E = D-B)
Construction of Link Parallel Taxi Track (Phase-II) and Grading of Basic Strip at South Side	97.71	106.40	83.15	126.00	19.60
Joint filling work (based on Contract awarded by AAI to the vendor)	-	-	-	1.25	1.25
Expansion of Terminal Building including Post award PMC charges (Col B – Sanctioned Cost includes ₹ 5 Crores for Airport systems & IT works – shown separately below)	98.22	127.24	56.44	113.28	(13.96)
Airport Systems & IT works – as per Sanctioned Cost for Terminal Building expansion – shown in Col (B) // Enabling capital addition projects relating to P&M items and IT works as per AO in Col (D)	-	5.00	-	35.88	30.88
Perimeter Road widening and strengthening (based on Contract already awarded by AAI to the vendor)	4.59	-	0.27	4.36	4.36
Total Value	200.52	238.64	146.93	280.77	42.13
Add : IDC / Financing allowance claimed by AO	-	-	-	26.72	26.72
Grand Total	200.52	238.64	146.93	307.49	68.85

- 7.3.7. The Authority notes that the costs of CWIP projects have increased from the Sanctioned costs of

₹ 238.64 Crores (as shown in Table 52) to ₹ 307.49 Crores due to the following factors:

- i. increase in the costs of CWIP project relating to Construction of Parallel Taxi Track.
- ii. inclusion of enabling capital addition projects, such as Plant and Machinery items and IT works that are integral to the completion of the Terminal Building expansion project, by the Airport Operator and
- iii. IDC / Financing allowance of ₹ 26.72 Crores claimed by the Airport Operator.

7.3.8. Based on the above proposals by the Authority, the revised Summary of Capital Expenditure Projects initiated in the pre-COD period by AAI and transferred to AO and proposed to be considered by the Authority is as follows:

Table 53: Summary of Capital Expenditure Projects initiated in Pre-COD by AAI and proposed by the Authority for the First Control Period

(₹ Crores)

Reference		Project Group	Description of the Project	Year of Capitalisation		Submitted by Mangaluru International Airport (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)	
				Submitted by Mangaluru International Airport	Proposed by Authority				
A. Projects initiated in Pre-COD Period and mandated to be executed in First Control Period along with Enabling Capital Addition Projects integral to completion of the mandated projects									
A.	A1	Capital Addition projects	Runways, Taxiway & Apron	2022-23 2022-23	2022-23 2022-23	1.25 126.00	1.25 126.00	- -	
	A2	initiated by AAI in Pre-Control Period and being executed in First Control Period along with Enabling Capital Projects integral to such mandated projects	Expansion and Modification of Existing Terminal Building including Enabling Capital Projects integral to completion of Expansion project						-
			Terminal Building expansion including post award PMC	2021-22	2022-23	113.28	109.59	(3.69)	
			Plant and machinery items (enabling capital project)						
			Expansion of Baggage Conveyor	2022-23	2022-23	7.86	8.27	0.41	
			Substation equipment	2022-23	2022-23	2.03	2.14	0.11	
			Lift & Travellator	2022-23	2022-23	1.58	1.53	(0.05)	
			PA system	2022-23	2022-23	0.90	0.95	0.05	
			Engineering Consultancy	2022-23	2022-23	0.83	0.87	0.04	
			VDGS	2022-23	2022-23	1.98	2.08	0.10	
			Expansion of Passenger Boarding Bridge	2022-23	2022-23	7.41	7.80	0.39	
			Information Technology (IT) works (enabling capital projects)						
			Work related to IT for NITB	2022-23	2022-23	9.86	10.38	0.52	
			Facelift work for NITB	2022-23	2022-23	0.16	0.17	0.01	

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Reference	Project Group	Description of the Project	Year of Capitalisation		Submitted by Mangaluru International Airport (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)
			Submitted by Mangaluru International Airport	Proposed by Authority			
		Aluminium Roof Gutter for NITB	2022-23	2022-23	0.02	0.02	-
		SITC of RC CCTV	2022-23	2022-23	1.21	1.27	0.06
		Flight Information Display System	2022-23	2022-23	1.31	1.38	0.07
		Network & Pen Tablet	2022-23	2022-23	0.01	0.01	-
		Supply of Bullet Proof Helmet	2022-23	2022-23	0.02	0.02	-
		Electrical Materials	2022-23	2022-23	0.71	0.75	0.04
	A3	Roads – widening and strengthening of existing perimeter road	2022-23	2022-23	4.36	4.59	0.23
		Financing Allowance / IDC – AAI initiated Capital Addition Projects			26.72	12.05	(14.67)
		Total – AAI initiated projects including enabling capital addition projects and IDC – A			307.49	291.12	(16.37)

7.3.9. The Authority has proposed to consider CWIP projects as per Table 53 for ₹ 291.12 Crores.

B. New Capital Expenditure projects submitted by the Airport operator for the First Control Period

- The Authority notes that the Airport Operator is mandated to plan and develop Phase I of the Airport in the manner set out in the Concession Agreement as well as cater to the annual passenger throughput capacity (domestic and international) and annual cargo handling capacity, along with ancillary facilities as per its demand projections (as mentioned in para 7.1.2 of this Consultation Paper). In this background, the Authority has examined the new capital expenditure projects submitted by the Airport Operator and has rationalized it based on traffic forecasts, present and future designed capacity of the Airport and also with the perspective of keeping the tariff rates at a reasonable level.
- The Authority notes that the Airport Operator has applied the Terminal Building ratio of 95:5 for all the capital additions for determining the aeronautical portion, except the following assets which have been treated as 100% aeronautical.
 - Runways, Taxiways and Apron works
 - Cargo assets and
 - Fuel farm facility assets
- The Authority is of the view that except for the following assets which are commonly used for both aeronautical and non-aeronautical activities, the other assets should be treated as 100% aeronautical. Further, the below mentioned common assets have been re-allocated by the Authority in the revised Terminal Building ratio of 92:8 in line with the *Asset Allocation Report (Refer Appendix I to this*

Consultation Paper).

- i. Water tank/Sub-station/STP works at landside shown under 'Plant and machinery' and
 - ii. Water disposal and supply shown under 'Other buildings'
- Project-wise capital additions under Category 'B', have been explained as follows:

Table 54: Project wise revised Capital Expenditure submitted by the Airport Operator for the First Control Period as on May 7, 2022 for projects under 'Category B'

(₹ Crores)

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total Capex (incl. FA)
B. New Capital expenditure projected for the First Control Period					
B1.	Runways, Taxiway & Aprons				
	Runway recarpeting and Centre-lighting	2023-24	90.64	-	90.64
	Construction of New taxiway	2023-24	36.47	-	36.47
	Construction of new portion RESA	2023-24	7.85	-	7.85
	Apron improvement works	2022-23	1.62	-	1.62
		2025-26	5.39	-	5.39
	Miscellaneous Airside improvement works	2022-23	2.14	-	2.14
		2023-24	2.14	-	2.14
		2024-25	1.39	-	1.39
		2025-26	3.27	-	3.27
	Runways, Taxiways & Aprons – Financing Allowance and IDC		-	20.04	20.04
	Total – Runways, Taxiways & Apron		150.91	20.04	170.95
B2.	Terminal Building				
	Modification / Expansion of existing Terminal Building	2022-23	79.88	-	79.88
	Miscellaneous works / interiors / finishes / kerbside of existing Terminal	2022-23	6.05	-	6.05
		2023-24	6.05	-	6.05
		2024-25	3.93	-	3.93
	Terminal Building- Financing Allowance and IDC		-	3.64	3.64
	Total – Terminal Building		95.91	3.64	99.55
B3.	Cargo Assets				
	Cargo Buildings	2022-23	18.90	-	18.90
	Cargo equipment	2022-23	4.45	-	4.45
	Cargo Assets- Financing Allowance and IDC		-	0.14	0.14
	Total – Cargo Assets		23.36	0.14	23.50
B4.	Fuel Facility				
	Purchase of assets of existing Oil Marketing Companies (OMC)	2022-23	10.00	-	10.00
	Building of new assets for Open Access Fuel Facility operations	2022-23	17.83	-	17.83
	Total – Fuel Facility		27.83	-	27.83
B5.	Security equipment				

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S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total Capex (incl. FA)
	Equipment for ARFF – runway mechanical sweeper, rubber removal and other equipment	2022-23	1.20	-	1.20
		2023-24	1.20	-	1.20
		2024-25	0.78	-	0.78
	Total – Security equipment		3.19	-	3.19
B6.	Plant and Machinery				
	Shifting of Navaid systems	2022-23	1.98	-	1.98
	Bomb Detection and Disposal Equipment (BDDS)	2022-23	4.03	-	4.03
		2023-24	4.03	-	4.03
		2024-25	2.62	-	2.62
	Electrical Sub-station equipment	2025-26	4.63	-	4.63
	Triturator	2025-26	6.06	-	6.06
	Water tank, STP and storage tank, Pump house Building	2025-26	5.45	-	5.45
	Various other miscellaneous projects	2022-23	4.39	-	4.39
		2023-24	2.49	-	2.49
		2024-25	1.62	-	1.62
		2025-26	3.88	-	3.88
	Plant and Machinery- Financing Allowance and IDC		-	2.37	2.37
	Total – Plant & Machinery		41.19	2.37	43.56
B7.	Roads				
	Vehicle Access roadway and allied features	2025-26	20.95	-	20.95
	Road entry and exit works	2022-23	2.85	-	2.85
	Miscellaneous Enabling works	2025-26	12.96	-	12.96
	Roads- Financing Allowance and IDC		-	2.77	2.77
	Total – Roads		36.76	2.77	39.53
B8.	Boundary walls				
	Construction of property boundary wall of 11 kms	2022-23	2.87	-	2.87
		2023-24	2.87	-	2.87
		2024-25	1.86	-	1.86
	Airside Operational Boundary wall	2025-26	2.95	-	2.95
	Boundary Walls- Financing Allowance and IDC		-	0.20	0.20
	Total – Boundary walls		10.55	0.20	10.75
B9.	Information Technology (IT)				
	IT Infrastructure, AOCC and various other systems	2022-23	3.43	-	3.43
		2023-24	3.43	-	3.43
		2024-25	2.23	-	2.23
	Information Technologies- Financing Allowance and IDC		-	1.24	1.24
	Total – Information Technology		9.10	1.24	10.34
B10.	Other Associated Works				
	Storm water		-	-	-
	Water disposal and supply	2022-23	5.70	-	5.70
	Miscellaneous works – others	2022-23	0.24	-	0.24

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost	Financing allowance (FA)	Total Capex (incl. FA)
		2023-24	0.24	-	0.24
		2024-25	0.16	-	0.16
		2025-26	9.22	-	9.22
	Airside security gate	2025-26	4.15	-	4.15
	Rainwater Harvesting	2025-26	9.53	-	9.53
	Water tank (airside)		-	-	-
	Other Buildings- Financing Allowance and IDC		-	1.50	1.50
	Total – Other Buildings		29.24	1.50	30.74
Total Project Cost of New Capital Expenditure Projects			428.04	31.90	459.94
Add: Cost towards Proportionate Technical Services like PMC & Design, Preliminaries, Insurances / Statutory Approvals, Contingencies, Pre-Operatives, etc claimed on the above New Capital Expenditure Projects			75.98	-	75.98
Total of New Capital expenditure projected for the First Control Period (B)			504.02	31.90	535.92

The Authority's analysis on the above projects is given project-wise in the following paras:

B1: Runways, Taxiway and Apron – The work towards Runway, Taxiway and Apron along with its status of completion are as follows:

- a. **Installation of Centre lighting and Runway recarpeting** has been projected by the Airport Operator for a revised cost estimate of ₹ 90.64 Crores in FY 2023-24, as against ₹ 80.60 Crores submitted by the AO in the MYTP.

The Authority notes that MIA is a table-top airport surrounded by deep valley on all sides and the Runway 06-24 (built in FY 2005-06) currently is a concrete runway with a rigid pavement and has slope issues at multiple sections. Further, it was highlighted in the DGCA's Special Inspection report published in December 2021 that the transverse slope is less than 1% and not the same throughout the length of the runway and hence does not meet the regulatory requirements.

The Authority also notes that, MIA experiences very heavy rainfall (average of 3,800 – 4,100 mm per annum) during the year and due to this unique topographical and climatic conditions, the Pilots have cited difficulty in sighting the Center line of the Runway (painted marking) during rain and heavy fog. Hence, based on the request of the airport users, namely, Pilots and Airlines, the Airport Operator has planned for Centre lighting as an additional safety measure at MIA. However, the Airport Operator has submitted based on Consultant's study report (refer Appendix III of this Consultation Paper) that this project work cannot be carried out on the existing rigid pavement without damaging the condition and strength of the Runway 06-24. Therefore, to implement the Centre lighting work in a safe and hassle-free manner and improve the transverse slope to 1.4%, the AO has proposed to provide a Flexible (bituminous) overlay with 4 layers of recarpeting, with 2 layers each measuring 75mm thickness and 2 others measuring 50mm thickness. The projected 4 layers are expected to cover the essential requirement of 250 mm thickness at the center of the

runway with at least 125 mm remaining at the edge of the runway and shall result in an increase in the PCN value.

The Authority obtained and reviewed the Consultant's (KITCO) study report (which is annexed as Appendix III to this Consultation Paper), detailed BOQ and necessary explanation along with a detailed note provided by the Airport Operator.

The Authority examined the revised cost estimate of ₹ 90.64 and notes that the same includes ₹ 65.18 Crores towards 4 layers of recarpeting and ₹ 25.12 Crores towards Center lighting work (including airfield ground lighting and civil work). The total cost estimate has increased from earlier ₹ 80.60 Crores to ₹ 90.64 Crores primarily due to the increase in the number of layers of recarpeting from 2 to 4. However, the cost of Center lighting remains the same.

Based on the above analysis and considering the regulatory and safety requirements, the Authority proposes to allow the revised cost estimate of ₹ 90.64 Crores for this project and consider capitalisation of the same in the FY 2023-24.

- b. **Construction of New Taxiways** has been proposed by the Airport Operator for a revised cost estimate of ₹ 36.47 Crores in FY 2023-24 as compared with its earlier estimate of ₹ 57.54 Crores (excluding technical services, PMC and design cost) submitted as part of its MYTP on December 10, 2021.

The Authority notes that the Airport Operator has planned to construct: i) Two taxiways each on East side and West side and ii) Taxiway – Code C along with west apron after demolition of existing pavement. The Airport Operator has submitted that it has planned for 2 new taxiways on each side namely, one for staging and the other one for take-off in order to improve the runway capacity and also since they had not planned for any Rapid Entry Taxiways (RET) during the First Control Period. Airport Operator has further explained that Construction of Taxiway – Code C is required for aircraft to approach west apron and for segregation of the arriving and departing aircrafts. This new Code C taxiway is expected to mainly enhance the operational flexibility and allow for better aircraft sequencing.

The Authority reviewed the justification and detailed BOQ furnished by the Airport Operator through its Independent Consultant. Although one taxiway on each side can suffice for the time being, however, to avoid closure of runway as well as escalation of costs, the Authority proposes to approve the construction of 4 taxiways (two at each end).

Further, the Authority compared the per Sq.m. estimated cost submitted by the Airport Operator for Main Pavement and Shoulders (after excluding the cost of Earthwork and Airfield Ground lighting (AGL)) with the Inflation adjusted Normative cost of ₹ 5,287 per Sq.m, which has been derived by the Authority as shown in the table below:

Table 55: WPI Inflation adjusted Normative cost (per Sq.m.) for Construction of Taxiway Project

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
WPI *	100.00	101.73	104.74	109.21	111.03	112.49	127.07
Per Sq.m. Cost (in ₹)	4,700	4,781	4,923	5,133	5,218	5,287	5,972

* Source: Office of The Economic Adviser, Government of India (<https://eaindustry.nic.in>)

The Authority, vide its Order no. 07/2016-17 issued on June 13, 2016 had prescribed an overall cost ceiling of ₹ 4,700 Per Sq.m. for construction of Runway / Taxiway. Since the work on new Taxiway

projected by the Airport Operator would be carried out over the first 3 FYs of the First Control Period, the Authority has proposed to calculate inflation adjusted normative cost up to FY 2020-21 (using WPI inflation index) to address the time value of money. Based on the same, the Authority has derived the revised normative cost of ₹ 5,972 per Sq.m.

The Authority notes that the per Sq.m. cost of main pavement (flexible pavement), claimed by the Airport Operator amounts to ₹ 5,025 and this cost is within above inflation adjusted normative cost derived by the Authority. Hence the Authority proposes to allow the total estimated cost of ₹ 36.47 crores submitted by the Airport Operator for this project, to be capitalized in the FY 2023-24.

- c. **Construction of new portion Runway End Safety Area (RESA)** has been projected by the Airport Operator for a revised cost estimate of ₹ 7.85 Crores in the FY 2023-24 as against the earlier estimate of ₹ 17.16 Crores submitted as part of its MYTP.

The Authority notes that the length of the main Runway 06/24 is 2,449m and the landing threshold of RWY 06 is displaced by 120 m to the east leading to a reduced Landing Distance Available (LDA) of 2,329 m. The Runway beyond the threshold 06 is used as a Taxiway for leaving aircraft which has landed on RWY 24 and as take-off run surface for RWY 06. Further, the RESA at Runway end 24 is not compliant with ICAO Annex 14 and Civil Aviation Regulations (CAR) and this is leading to Runway excursion as, the landing aircraft on Runway 24 must 'overrun' the dedicated end of Runway 24 to leave the Runway via Taxiway F. This has also been highlighted in the Special Inspection Report issued by DGCA in December 2021 and even earlier during inspection in July 2019. Hence, in order to comply with the above and to implement the recommended 240 x 90m sized RESA on both runway ends, the Airport Operator has planned for – i) Relocation of threshold RWY 24, by 70m after extending the Runway, to the east and associated works, including demolition of existing pavement, ii) Retainment of threshold RWY 06, with relocation of connecting taxiway to address the issue stated above and iii) RESA compliance of 240m X 90m on both RWY 06 & 24 ends.

The Authority reviewed the detailed note with justification, Consultant's report (refer Appendix III of this Consultation paper) furnished by the Airport Operator for this project and is of the view that this project is mandatorily required for compliance with the prescribed safety norms. Further, the Authority compared the average Per Sq.m. estimated cost of ₹ 5,205 submitted by the Airport Operator for Runway Pavement, Runway Shoulders and Runway Blast pads (after excluding the cost of Earthwork and Airfield and Ground lighting (AGL) with the Inflation adjusted Normative cost of ₹ 5,972 and found the same to be within the Inflation adjusted Normative cost. Hence, the Authority proposes to consider the estimated cost of ₹7.85 crores submitted by the Airport Operator for this project. The Authority reviewed progress of this work through its Independent Consultant and noted that technical assessment study is in progress and there is some delay in the execution of work due to COVID-19 Pandemic. Post visit by the Independent Consultant, the date of completion of this project has been revised to November 2023 by the Airport Operator. The Authority proposes to consider the capitalisation of this project in the FY 2023-24.

- d. **Apron improvement works** have been projected to be capitalized by the Airport Operator for ₹ 1.62 Crores in FY 2022-23 and ₹ 5.39 Crores in FY 2025-26 totaling to ₹ 7.01 Crores.

The Authority notes that the current Ground Support Equipment (GSE) area is inadequate and Hard Standing area, which is a safety requirement is presently not existing and in order to comply with the same, the Airport Operator has planned certain improvement works. Considering that this project work is essential for ensuring the safety of airside vehicle movement without any conflict with Apron operations, the Authority is inclined to allow the same.

In this respect, the Authority reviewed the detailed BOQ submitted by Airport Operator through its Independent Consultant and observed that the estimated cost only works out to ₹ 6.89 Crores as against ₹ 7.01 crores claimed by the Airport Operator in its revised CAPEX submission. Based on the same, the Authority proposes to consider the overall amount of ₹ 6.89 Crores for this project. The Authority reviewed the progress through its Independent Consultant and notes that the project will be initiated only after the study report is obtained from the Consultant appointed by the Airport Operator. Therefore, the Authority proposes to shift the capitalization of ₹ 1.62 Crores to FY 2023-24 and consider ₹ 5.27 Crores in FY 2025-26.

- e. **Miscellaneous Airside improvement works** for an estimated cost of ₹ 8.94 Crores has been submitted by the Airport Operator.

The Authority reviewed the detailed break-up of items provided by the Airport Operator and observed that some of the miscellaneous items mentioned in the list are forming part of Schedule U of the Concession Agreement amounting to approximately ₹4.53 crores and hence mandated to be carried out by the Airport Operator as part of the terms of the Concession Agreement.

The balance CAPEX of approximately ₹4.41 Crores has been proposed towards certain new Capital items by the Airport Operator, such as Bomb cooling pit, other infrastructure for GHA – office, paved area, demolition of various existing structures and buildings, EV charging of airside vehicles, etc. In this respect, the Authority observed that, bomb cooling pit is already available at the airport as it is mandatory for obtaining DGCA license and certain other CAPEX such as demolition of existing structures, infra for GHA – office etc., are not required currently and also not properly justified. Hence the Authority proposes not to consider the same during the current Control Period.

Based on the above, the Authority proposes to consider the CAPEX amount of ₹ 4.53 Crores (mandated as per Schedule U) distributed equally over 3 FYs of the First Control period, i.e., ₹ 1.51 Crores each in FY 2022-23, FY 2023-24 and FY 2024-25.

B2: Terminal Building – The work towards modification of existing Terminal Building is as follows:

- a. **Modification of existing Terminal Building** for ₹ 79.88 Crores has been projected by the Airport Operator for capitalisation in the FY 2022-23.

This project has been proposed by Airport Operator in addition to the ongoing expansion project, primarily to enhance passenger facilitation and to ensure smoother passenger flow, as the passenger traffic is expected to reach pre-COVID level in FY 2023-24 and grow further by FY 2025-26. The Authority notes that the Airport Operator has claimed the estimated cost towards – In line baggage system, Security screening, Civil and interior modification and additional IT works in line with certain requirements stipulated for development of the Terminal Building as per Annexure II of Schedule A and Annexure I of Schedule B of the Concession Agreement.

In this respect, the Authority examined the clauses mentioned in Annexure II of Schedule A and Annexure I of Schedule B which stipulate development of the Terminal Building that is efficient (which allows for direct and efficient means of passenger and baggage flow for all passengers arriving and departing at the airport), flexible for phase wise development, sustainable, economical and has facilities such as Inline X-Ray based baggage system, CUPPS, CUSS, Check-in concourses, self-baggage drop system etc. The Authority also verified the Consultant's report, Drawings, detailed BOQ and justification provided by the Airport Operator for this project and has the following views:

- i. The PAX traffic of MIA grew from 0.85 MPPA in FY 2010-11 to 2.2 MPPA in FY 2018-19 (its highest number over the years). Based on such growth, AAI had initiated the expansion

and modification of Terminal Building project which would help increase the Passenger capacity from 2 MPPA to 3 MPPA. This project was handed over by AAI to the Airport Operator as part of terms of Concession Agreement and is already in progress. Further, as already explained in Para 7.3.4 (A2), the Authority has proposed to allow in full, the CAPEX projected for the project on expansion of Terminal Building, which has been handed over to the Airport Operator by AAI as part of the Concession Agreement.

- ii. The Authority observed that the Passenger traffic has considerably slowed down due to COVID-19 (1.01 MPPA in FY 2021-22) and traffic growth has been projected by the Airport Operator to reach pre-COVID level during FY 2023-24 and cross 3 MPPA only by the end of the Control period. Based on the same, the Authority feels that the current Terminal Building expansion project, which is already in progress will sufficiently address the growth in the passenger traffic projected during the First Control period.
- iii. The Authority also observed that the current expansion project meets most of the requirements stipulated under Schedule A and B of the Concession Agreement for the development of Terminal Building.
- iv. The Authority notes that MIA has achieved an Airport Service Quality (ASQ) rating of 4.87 to 4.91 out of 5, during the first 3 quarters of FY 2021-22 which is higher than the target rating of 4.5 stipulated in the Concession Agreement.
- v. Further, the Authority takes cognizance of the fact that this is the first Tariff Order being determined for MIA and if, any excessive CAPEX is allowed in this Control Period which is not properly justified, it may result in levy of exorbitant tariffs for the First Control period.

Based on the above analysis, the Authority proposes not to consider the estimated cost of ₹ 79.88 Crores for this Control Period. However, if the Airport Operator executes modification of Terminal Building considering it of absolute necessity for efficient operations at the Airport, the same shall be considered by the Authority on actual incurrence basis subject to efficiency and reasonableness of the project, at the time of true up of the next Control period.

- b. **Miscellaneous works / interiors / finishes / kerbside** works related to existing Terminal Building expansion for ₹ 16.04 Crores have been proposed by the Airport Operator for capitalisation in FY 2022-23, FY 2023-24 and FY 2024-25.

The Authority reviewed the detailed project note, item wise list with cost break-up and explanation provided by the Airport Operator through its Independent Consultant and is of the view that the works mentioned in the item wise CAPEX list are not essential for passenger movement facilitation or safety or security but mostly to enhance ambience of the Airport. Therefore, the Authority proposes not to consider this CAPEX in the First Control Period.

However, if any work or project relating to safety and security aspect of the airport is carried out by the Airport Operator the same will be considered based on actual CAPEX incurred by the Airport Operator at the time of true up of the Second Control period.

B3: Cargo Terminal Building and Equipment – The work towards Cargo Terminal Building and Equipment and the status of its completion is as follows:

- a. **Cargo Terminal Building-** The AO has projected development of a new Integrated Cargo Terminal Building at a revised estimated cost of ₹ 18.90 Crores to be capitalized in FY 2022-23 as against ₹ 14.46 Crores submitted in their revised MYTP dated December 10, 2021 (refer Annexure 4 of this Consultation Paper)
- The Authority notes that as per Clause 19.4 of the Concession Agreement the AO is mandated

to develop a new Cargo Terminal Complex since the current Cargo facility is retained by AAICLAS (a subsidiary of AAI) in the Carved-out area, i.e., ear-marked for AAICLAS as per Annexure IV of Schedule A to the Concession Agreement (refer Para 17.3.5 of Annexure 3 in Chapter 17 of this Consultation Paper). Hence the Airport Operator has planned for construction of a new Integrated Cargo Terminal in the south-western part of the Airport, near the existing Passenger Terminal, to handle both domestic and international cargo operations in FY 2022-23. The Authority also notes that the Airport Operator had conducted the Cargo AUCC Meeting with all the stakeholders on May 28, 2021.

Considering this background, the Authority examined the Cargo traffic volume for the past five (5) years and observed that the Airport Operator has projected the development of new Cargo Terminal Building in order to reach the pre-COVID level by FY 2023-24 and handle the Cargo operations in a smooth and efficient manner as mandated by the terms of the Concession Agreement. The cargo traffic volume for the past five (5) years is given in the table below:

Table 56: Cargo Traffic Volume of MIA for the past 5 FYs

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Cargo Traffic (in MT)	1,242	2,527	3,287	4,605	2,186

The Authority examined the revised cost estimate of ₹ 18.90 Crores submitted by the AO (as against ₹ 14.46 Crores submitted earlier) and notes that the increase in cost estimate is primarily on account of increase in the built-up area of the Cargo building from 1,890 Sq.m to approx. 2,600 Sq.m based on final design received from consultants, change in specification for structure and increased cost of various materials like, steel, enforcement, cement, etc.

Further, the Authority notes that the Airport Operator has undertaken competitive bidding for this project and issued the Letter of Intent (LOI) to the selected vendor for the total costs of ₹ 18.90 Crores. However, considering the delay in construction work, the project is expected to be completed only in FY 2023-24. Based on the above factors, the Authority proposes to consider the costs ₹ 18.90 Crores for capitalisation of this asset in the FY 2023-24.

- b. **Cargo Equipment** for ₹ 4.45 Crores has been projected by the Airport Operator for capitalization in FY 2022-23. The Authority notes that these equipment are integral to the development and operation of Cargo Terminal Building and hence proposes to capitalize the same along with the Cargo Terminal Building in FY 2023-24.

B4: Fuel Facility – The work towards Fuel facility and the status of its completion is as follows:

- a. **Purchase of assets of existing Oil Marketing Company (OMC)**, namely, IOCL has been proposed by the Airport Operator for ₹ 10.00 Crores in FY 2022-23.

The Authority notes that Clause 19.3. of the Concession Agreement clearly mentions about the Airport Operator's obligations towards providing aircraft fueling services and hence, Airport Operator is obligated to provide the same (refer Para 17.3.7 of Annexure 3 in Chapter 17 of this Consultation Paper). In this respect, the Authority also notes that the Airport Operator had conducted the Fuel Farm AUCC Meeting with all the stakeholders on May 28, 2021.

Currently, the Indian Oil Corporation Ltd (IOCL) is the sole ATF fuel facility provider at Mangaluru International Airport, located in eastern part of Airport (Old Airport) on land area of 1,250 Sq.m. with storage capacity of approx. 500 KL as compared to the required through put demand of around 4,200 KL per month for the Airport during the Pre-COVID period. The other Oil Marketing Companies (OMCs) present at the Airport namely, HPCL and Shell-MRPL have

their facilities located outside Airport site area. Therefore, the Airport Operator has planned to commence the Fuel facility operations by initially purchasing the existing assets of IOCL and subsequently build new assets to provide Open access fuel facility for the aircrafts.

Considering this background, the Authority examined the MoU entered between Airport Operator and IOCL and notes that assets worth ₹ 3.61 Crores have been purchased from IOCL and another ₹ 6 crores have been projected by Airport Operator for purchase of 6 numbers of refuellers thereby totalling to ₹10.00 crores.

The list of assets (duly depreciated) being purchased by the Airport Operator from IOCL have been given in the table below:

Table 57: Details of Assets purchased from IOCL by the Airport Operator

Particulars	Amount (₹ Crores)
Tanks and Accessories	1.31
Pumps and Compressors	0.00
Fire Fighting System and accessories	0.25
Road, Building, Sheds, driveway	1.81
Furniture & Fixtures, Office Equipment	0.02
Electrification & DG Set	0.14
Station Vehicle	0.08
Total	3.61

The Authority upon review of all the above and considering that the MoU has been signed between the parties (towards the end of FY 2021-22), proposes to allow the CAPEX of ₹ 10.00 crores, submitted by the Airport Operator in the FY 2022-23.

- b. **Building of new assets** i.e., development of an integrated fuel farm facility for a revised cost estimate of ₹17.83 Crores (as against ₹ 12.73 Crores submitted in the revised MYTP dated December 10, 2021) in the FY 2022-23.

The Authority notes that apart from the above purchase of assets of existing OMC, the Airport Operator has also planned in the long term, to develop an integrated Fuel farm facility to consolidate the fuel operations in a single location and provide open access fuel facility operations, as mandated by Clause 19.3 of the Concession Agreement.

Further, the Airport Operator has submitted in support of its claim that the current facility of IOCL, which is the only facility available inside the airport, has tankage of just 470 KL and only 1 point for Tank Truck (TT) decantation and this facility may not be sufficient to handle the volume of whole airport. Hence, the Airport Operator has planned for additional storage of 500 KL along with 5-bay gantry which is expected to cater to the whole airport's current and future requirements.

The Authority examined the revised cost estimate of ₹17.83 Crores (as against ₹ 12.73 Crores earlier) and notes that the increase in cost estimate is primarily due to increase in the cost of various materials like, steel, enforcement, cement, etc. Further, the Authority notes that the Airport Operator has undertaken competitive bidding for this project and issued the Letter of Award (LOA) to the selected vendor for total cost of ₹ 17.14 Crores. However, considering the delays in the progress of work due to COVID-19 pandemic and the fact that ATM traffic is expected to reach pre-COVID level only by FY 2023-24, the Authority proposes to consider

capitalisation of this project for ₹ 17.14 Crores in the FY 2023-24.

B5: Security equipment – the work towards Security equipment and the status of its completion is as follows:

- a. **Various equipment for Airport Rescue and Firefighting (ARFF)** costing ₹ 3.19 Crores have been projected for capitalization by the Airport Operator in FY 2022-23, FY 2023-24 and FY 2024-25.

The Authority reviewed the detailed break-up of the list of equipment submitted by the Airport Operator and noted that these CAPEX items are essential for ensuring proper security at the Airport and hence the Authority proposes to allow the same in the FYs as claimed by the Airport Operator.

B6: Plant and machinery – the work towards Plant and machinery and the status of its completion is as follows:

- a. **Infrastructure cost of Trans-installation of Nav aids** due to runway improvement works has been proposed by the Airport Operator for ₹ 1.98 Crores with the capitalisation in FY 2022-23.

The Authority notes that the Airport Operator has projected this CAPEX towards infrastructure cost of trans-installation of Nav aids for runway improvement works and hence, it's a mandatory requirement. The Authority reviewed the progress of this work and notes that there is delay in initiating the work and hence, proposes to shift the capitalisation of this project to the next FY i.e., FY 2023-24.

- b. **Bomb Detection and Disposal Squad (BDDS)** cost has been estimated by the Airport Operator for ₹ 10.69 Crores distributed over 3 FYs, i.e., ₹ 4.03 Crores each in FY 2022-23 and FY 2023-24 apart from ₹ 2.62 Crores in FY 2024-25.

The Authority notes that the inspection report issued by BCAS in February 2022 states that the State Police BDDS, Mangalore, did not have a disposal team and the staffs were not provided with any BDDS equipment, to which the AO had submitted an action-taken report in early March 2022 and projected the CAPEX for ₹ 10.69 crores towards purchase of various BDDS equipment.

Considering the safety and security requirements, the Authority proposes to allow this CAPEX in the FYs as submitted by the Airport Operator.

- c. **Electrical Substation equipment (airside)** for ₹ 4.63 Crores has been estimated by the Airport Operator for capitalisation in FY 2025-26.

The Airport Operator has submitted that currently the certified utilization is approx. 2,000 KVA as against the available capacity of 2,250 KVA from two connections, namely, HT 181 and HT 79. However, the Airport Operator has projected a Further, demand of approx. 1,000 KVA towards upgrading of CCR, AGL and Perimeter lighting and also for the upcoming New Cargo Terminal and hence there is a need for an additional Sub-station.

The Authority reviewed the detailed justification provided by the Airport Operator but observed that the Airport Operator has not submitted any BOQ or Cost break-up, detailed plan etc., for the same. Hence, the Authority proposes to allow only 50% of the above estimated cost towards this capital expenditure in this Control Period. Further, the Airport Operator has considered this asset as Common and apportioned it to Aeronautical services in the Terminal Building ratio of 95:5. However, the Authority is of the view that as this asset is on the Airside, the same should be considered as 100% aeronautical.

- d. **Triturator-** for ₹ 6.06 Crores has been estimated by the Airport Operator for capitalisation in FY 2025-26 towards treatment of liquid waste from aircraft. AO has proposed such projects to be executed in the last FY of the Control Period. The Authority feels that this project may or may not be commissioned in the First Control Period and proposes to shift the CAPEX proposed by the AO in the last tariff year of this Control Period to the next Control Period. However, if this project is initiated in this Control Period, the same may be trued up on actual incurrence basis.
- e. **Water tank, Substation, STP** projects for ₹ 5.25 Crores have been proposed by the Airport Operator for capitalization in FY 2025-26.

The Authority has reviewed the detailed BOQ, Demand vs Requirement Statement and explanation provided by the Airport Operator for Water tanks and STP projects. The Airport Operator has submitted that, currently there are two water tanks at MIA and based on consumption pattern, the existing storage capacity of water tanks is close to 1 days' requirement. However, considering the projected growth in passengers during the First Control period, the Airport Operator has planned for additional water tanks in order to increase the water storage capacity to 3 days' requirement.

Further, in respect of Sewage Treatment Plant (STP), there is already one functioning with 150 Kilo Litres per Day (KLD) capacity and another with 500 KLD capacity is under construction along with the expansion of the Terminal Building. The Authority considers the same to be sufficient to handle the growth in passenger traffic. Based on the above, the Authority proposes to allow 50% of the estimated cost for the First Control period.

Also, the Authority notes that the CAPEX has been allocated to Aeronautical services in the Terminal Building ratio of 95:5 which the Authority proposes to re-allocate in the revised Terminal Building ratio of 92:8 in line with the *Asset Allocation Report (refer Appendix I of this Consultation Paper)* and the Inter-Ministerial Group (IMG) norms and as approved for other similar Airports and hence the CAPEX allowed is revised to ₹ 2.64 Crores in FY 2025-26.

- f. **Miscellaneous items** of Plant and machinery have been proposed by the Airport Operator for an overall cost estimate of ₹ 12.39 Crores spread over 4 FYs, i.e., from FY 2022-23 to FY 2025-26.

The Authority has reviewed the item wise list provided by the Airport Operator for the projected amount of ₹12.39 crores and observed that it includes various Plant and machinery items for police outpost, site development for STP, solid waste facility, landscaping and irrigation system, fuel station, grass cutting machine, repairs of existing electrical substation, chemical suit, PPE, washroom fittings, etc. The Authority is of the opinion that certain items appear to be Operational in nature (such as repairs of existing electrical substation) and there are redundancies in the capital items (such as site development for STP, solid waste facility which may be included under STP as well) proposed by the Airport Operator. Hence, the Authority proposes not to consider the same during this Control period.

B7: Roads – the work towards improvement of Roads is as follows:

- a. **Road entry and exit - improvement works** for ₹ 2.85 Crores has been proposed by the AO in its revised CAPEX schedule for capitalisation in FY 2022-23, as against ₹ 12.67 Crores proposed by it in the MYTP submitted on December 10, 2021 (refer Annexure 4).

The Authority examined the BOQ and explanation provided by the Airport Operator for this project and observed that the present road connecting Old Terminal Building and eastern part of the Airport to Bajpe Town is frequently used by important airport stakeholders, namely, ATC, CNS, NATS, CSF, Fuel farm browsers, AAICLAS Cargo, Coast Guards etc., but has only 2 lanes without shoulder and is not in good condition. Therefore, the Airport Operator has projected this cost during the First Control period towards widening, strengthening and reconstruction of this important road to improve the connectivity and services to this area which forms part of the Airport property. On the above considerations, the Authority has proposed to allow this CAPEX in FY 2022-23, as submitted by the Airport Operator.

- b. **Vehicle access roadway and related works** for ₹ 20.95 Crores has been proposed by the Airport Operator for capitalisation in FY 2025-26 in its revised CAPEX schedule (refer Table 54– B7) towards demolishing, grading, drainage, construction of at-grade roads and landscaping, as against ₹ 32.44 Crores proposed by it in its MYTP submission on December 10, 2021 (refer Annexure 4).

The Authority examined the BOQ, drawings and explanation provided by the Airport Operator for this project. The AO has submitted that the present entry road is steep and on the uphill, coming from northeast corner whereas the exit road is on the western corner containing easier downward slopes. Also, currently the passengers going to 'Departure' area have to come through the entry road and travel down to the 'Arrival' area and car park before departing and this is causing some congestion in vehicular movement traffic. Therefore, in order to reduce vehicular congestion, the Airport Operator has planned to convert the existing exit road on the western side into two-way vehicular traffic road and utilise the present 'entry' road on north-eastern side exclusively for Cargo vehicle entry.

The Authority upon review of all the details and explanation provided by Airport Operator, understands that this project has been planned primarily to de-congest the vehicular traffic. However, in the current Pandemic scenario, the passenger traffic is less and expected to reach pre-COVID levels only by end of the First Control Period. Hence, considering the slow growth in passenger traffic, the Authority proposes not to consider this project for the First Control Period.

- c. **Miscellaneous road works** involving earth work, construction of temporary roads, retaining walls, temporary barricading, sign boards, light Pole, removal & relocation of Existing utilities, shifting of trees, etc., for ₹ 12.96 Crores has been proposed by the Airport Operator for capitalisation in FY 2025-26.

The Authority examined the BOQ and explanation provided by the Airport Operator for this project and notes that this forms an integral part for completion of the Vehicular access roadway works project. Hence, the Authority proposes not to consider this CAPEX in the First Control Period in line with its proposal mentioned above for the Vehicular access roadway works.

B8: Construction of Boundary walls – the work towards Construction of boundary walls is as follows:

- a. **Construction of Boundary wall** for ₹ 7.60 Crores has been proposed by the Airport Operator for capitalisation in FYs 2022-23, 2023-24 and 2024-25.

The Authority understands from the submission of the Airport Operator that this project includes replacement of small sections of the wall (11 km length wall) since frequent falling-down of certain vulnerable sections of the boundary wall has been noticed, due to the topology of the Airport and inherent weather conditions. However, the Authority observes that there is an existing Property Boundary Wall at the airport and the projected expense is mostly in the nature

of repairs and maintenance and hence is of the view that same may be considered under Operational expenses. The Authority, therefore, proposes to exclude this capital expenditure from RAB.

- b. **Airside operational boundary wall** for ₹ 2.95 Crores has been proposed by the Airport Operator in its revised CAPEX schedule for capitalisation in FY 2025-26 (refer Table 54 – B8), as against ₹ 2.17 Crores proposed by the Airport Operator in its MYTP submission (refer Annexure 4).

The Authority examined the details submitted by the Airport Operator and notes that this project has been undertaken by the Airport Operator to improve operational efficiency, as certain sections of the Operational Boundary wall need to be rebuilt for the security of the Airport. The Authority, therefore, proposes to allow this CAPEX in the FY 2025-26 for ₹ 2.17 Crores, submitted by the AO as part of its MYTP on December 10, 2021. Further, the Airport Operator has considered this asset as Common and apportioned it to Aeronautical services in the Terminal Building ratio of 95:5. However, the Authority is of the view that as this asset is on the Airside, the same should be considered as 100% aeronautical. Accordingly, the Authority has derived the CAPEX as ₹ 2.29 Crores for capitalisation in the FY 2025-26.

B9: Information Technology works – the work towards Information Technology is as follows:

- a. **IT Infrastructure, AOCC and various other items** have been projected by the Airport Operator for total cost estimate of ₹ 9.10 Crores distributed over 3 FYs, namely, ₹ 3.43 Crores each in FY 2022-23 and FY 2023-24 apart from ₹ 2.23 Crores in FY 2024-25.

The Authority has reviewed the detailed list provided by the AO for the projected amount of ₹ 9.10 crores and notes that the list includes:

- (i) IT Infra related items namely, SAP license, Laptops, CXO dashboard, PAX Wi-Fi system etc. and
- (ii) AOCC and Automation related items, namely, Installation & Commissioning of AOCC, Command Post, Voice Infra, Data Center, Printers, Scanners etc.

The Authority is of the view that this project may be taken up by the Airport Operator in a phased manner such that the essential CAPEX is implemented in this Control Period. The Authority, therefore, proposes to allow 50% of the amount claimed by the AO for the First Control Period to be capitalised over the 3 FYs such as FY 2022-23 to FY 2024-25.

B10: Other Associated Works – the work towards other associated works is as follows:

- a. **Storm water drain** – the Authority observes that the Airport Operator has withdrawn this CAPEX in the revised CAPEX schedule submitted on May 7, 2022 and is in agreement with the same.
- b. **Water disposal and supply works** for ₹ 5.70 Crores has been claimed by the Airport Operator for capitalisation in the FY 2022-23.

The Authority examined the explanation and supporting documents provided by the Airport Operator for estimating the cost of ₹ 5.70 crores towards Water supply and disposal scheme and observed that, MIA does not possess a direct or dedicated water supply system for its daily usage and has been managing with various borewells, whose operations are also being restricted by the local Govt authority, namely, KGWA (Karnataka Ground Water Authority).

The Airport Operator has further, explained that MIA has maximum peak water demand of 2 lac litres per day and is currently facing water scarcity during December - May months and

hence dependent on water brought in by water-tankers i.e., the external sources. In order to have dedicated water supply from the perennial river flowing near the airport, the AO has projected CAPEX for a Pump house and dedicated water supply line to the Terminal Building inside the airport premises. On the above considerations, the Authority proposes to allow this CAPEX in FY 2022-23 for this project.

Further, the Authority notes that the CAPEX has been allocated to Aeronautical services in the Terminal Building ratio of 95:5 which the Authority proposes to re-allocate in the revised Terminal Building ratio of 92:8 in line with the *Asset Allocation Report* and the Inter-Ministerial Group (IMG) norms and as approved for other similar Airports and hence the CAPEX allowed is revised to ₹ 5.52 Crores in FY 2022-23.

- c. **Airside Security gate** has been projected by the Airport Operator for ₹ 4.15 Crores in the FY 2025-26.

The Authority examined the detailed BOQ and necessary explanation from the Airport Operator for this project and understands that the current Airside Gates come in the footprint of proposed airport development and therefore, the Airport Operator has planned to build these gates at a new location with required upgrades, as this is part of safety requirement. Upon such review, the Authority feels that the estimated cost of ₹ 4.15 Crores for this project is on the higher side and it proposes to allow ₹ 0.50 Crores for capitalization of this project in the FY 2025-26.

- d. **Rainwater Harvesting (RWH)** for ₹ 9.53 Crores has been projected by the Airport Operator in the FY 2025-26.

The Authority reviewed the BOQ and explanation provided by the AO for the estimated amount of ₹ 9.53 crores and observed that the Airport Operator has projected the cost for 2 RWH ponds, i.e., one each in Airside and Landside in order to comply with the Government's initiative on Environment sustainability and also handle the challenges faced in water conservation due to inherent topography of the airport. The Authority appreciates the energy, efficiency and environmentally friendly projects and is also cognizant of the fact that the AO is mandated by the CA (Annex I to Schedule B) to integrate sustainable strategies into the planning and architecture of the Terminal Building (such as exploring renewable energy production like solar panels, landscaping with green strategies like RWH etc.). However, the Authority is of the view that this project may be implemented by the Airport Operator in a phased manner, such that one RWH pond is constructed in this Control Period. On the above considerations, the Authority proposes to consider only 50% of the amount claimed by the Airport Operator for this project in the FY 2025-26.

- e. **Water Tank** – the Authority observed that the Airport Operator has withdrawn this CAPEX in the revised CAPEX schedule submitted on May 7, 2022 and is in agreement with the same.
- f. **Miscellaneous works** have been proposed by the Airport Operator for a total cost estimate of ₹ 9.86 Crores to be capitalized over 4 FYs, i.e., ₹ 0.24 Crores each in FY 2022-23 and FY 2023-24 apart from ₹ 0.16 Crores in FY 2024-25 and the major portion of ₹ 9.22 Crores in FY 2025-26.

The Authority has reviewed the detailed cost break-up provided by the Airport Operator for the above estimated amount of ₹ 9.86 Crores and notes that it includes items such as Nursery plot, into plane facility, laying of pipes, cables etc. for all utilities, hazardous waste storage, eating place, etc. The Authority is of the opinion that some of the Capital items included under this project are redundant, such as Into Plane facility may have been included under the project on Fuel Facility and hazardous waste storage under STP etc. Further, these capital items are also

not sufficiently justified in terms of essentiality for this Control period. Hence the Authority proposes not to consider the same during this Control period.

7.3.10. Cost claimed towards technical services, PMC, Preliminaries and Pre-operatives, Contingencies, Statutory approvals, Labour cess, Site-preparation, Insurance etc.,

The Authority observes that the Airport Operator has claimed ₹ 75.98 Crores towards Technical services, PMC, Pre-operatives, Contingencies etc., distributed across all the CAPEX items submitted in the revised CAPEX schedule. Broadly, this cost has been claimed under the following sub-heads such as:

- a) Consultancy charges of ₹ 4.02 Crores towards Concept Land use planning and Master planning
- b) Cost of Independent Engineer appointed by AAI for three (3) years and projected by Airport Operator for five (5) years amounting to ₹ 7.89 Crores and
- c) Cost of technical services, PMC, Pre-operatives, Contingencies, Statutory approvals, Insurance etc. computed @ 15% of the revised Aero CAPEX for new projects submitted by the Airport Operator amounting to ₹ 64.07 Crores.

The Authority upon review of relevant documents has the following views:

- i. The cost of Concept Land use planning & Master planning ₹ 4.02 Crores already awarded by the Airport Operator - As per Clause 12.2 of the Concession Agreement, all the construction and development of the Airport should be in conformity with Master Plan and the Airport Operator is required to update the Master Plan every five (5) years or earlier as the case may be. The Airport Operator has conducted the land use planning and Master Planning through engagement of renowned Airport consultants. However, the Authority has proposed to include the aforementioned cost of Land use planning and Master Planning of ₹ 4.02 Crores under the overall cost of technical services, PMC, Pre-operatives, Contingencies, Statutory approvals, Insurance etc. specified under S.no. (iii) below.
- ii. The cost of Independent Engineer appointed by AAI - As per Clause 24 of the Concession Agreement, Independent Engineer has to be appointed by AAI and remuneration shall be paid by AAI which in turn shall be reimbursed by the Airport Operator to AAI such Independent Engineer is required to be engaged throughout the period of the Concession Agreement. Further, as per Clause 24.3.1 of the Concession Agreement, this cost has to be considered as a pass-through by the Regulator. Clause 24.3.1 states that:

“The remuneration, cost and expenses of the Independent Engineer shall be paid by the Authority, and all such remuneration, cost and expenses shall be reimbursed by the Concessionaire to the Authority within 15 (fifteen) days of receiving a statement of expenditure from the Authority. Any amounts paid to the Independent Engineer shall be considered for a pass-through for the determination of the Aeronautical Charges by the Regulator”.

The relevant Clauses of the CA pertaining to appointment, duties of the Independent Engineer as well as their ‘Role and functions’ under Schedule L are provided in paras 17.3.12 and 17.3.13 under Chapter 17 of this Consultation Paper.

The Authority notes that AAI had appointed Engineering Projects India Limited as the Independent Engineer from date of COD with the responsibility of reviewing the projects being carried out by the Airport Operator on site and submitting necessary reports to the Airport Operator. The Authority had convened a meeting with the Independent Engineer to review the work performed by them.

The Authority also notes that as per Clause 24 and Schedule K, AAI is required to appoint the Independent Engineer initially for a period of 3 years and thereafter for every 3 years. AAI has executed the contract with the Independent Engineer for which a fee of ₹ 7.89 Crores has been projected for the First Control period by the Airport Operator.

The Authority proposes to allow the cost of ₹ 7.89 Crores towards Independent Engineer's consultancy charges and consider the same while determining the Aggregate Revenue Requirement (ARR) of Mangaluru International Airport for the First Control Period.

- iii. Apart from the above mandated costs, the Airport Operator has projected approximately 15% of the Aero CAPEX amount for new projects submitted by the AO as part of the revised CAPEX Schedule as on May 7, 2022, towards PMC & Design - 5%, Pre-operatives - 3.3%, Contingencies - 4%, Insurance/Statutory approvals/labour cess/site preparation etc., - 3% amounting to ₹ 64.07 Crores.

In this respect, the Authority notes that for other PPP airports such as HIAL, BIAL, DIAL etc, the above-mentioned costs had been considered in the past in the range of 8% - 11% of the project costs. The Authority is of the view that 15% claimed by the Airport Operator is on the higher side, as compared to other PPP Airports and hence not justified. Accordingly, the Authority proposes to consider the aforementioned costs (inclusive of the Consultant's cost for Concept planning and Master planning as mentioned in S.no. (i) above) to the extent 8% of the Aero costs of the CAPEX allowed by the Authority in respect of new projects proposed by the AO for the current Control Period. The Authority has thus derived the amount proposed to be allowed towards the aforementioned costs as ₹ 19.24 Crores (i.e., 8% of the Aero costs of the CAPEX allowed for this Control Period).

- iv. Based on all the above, the Authority notes that the total amount proposed to be considered towards aforementioned costs is ₹ 27.13 Crores i.e., ₹ 19.24 Crores towards 8% of allowable Aero New Capex and ₹ 7.89 Crores towards Independent Engineer's charges (included in computation of ARR) as against ₹ 75.98 Crores claimed by the Airport Operator. The downward adjustment in such costs is mainly on account of applying 8% on the 'allowable' Aero New Capex as against 15% claimed by AO and the reduction in Aero New Capex considered by the Authority due to deferring/ disallowance of some projects such as Rainwater Harvesting, Triturator, Miscellaneous works under Other Buildings, as well as rationalization of certain others during the First Control Period such as Terminal Building modification, Miscellaneous works relating to interiors and finishes, Vehicular access roadways, Airside Security gate, etc.

7.3.11. The Authority proposes to reduce 1% of the project cost from the ARR / target revenue as re-adjustment in case any particular capital project is not completed/capitalised as per the approved capitalisation schedule. It is further proposed that if the delay in completion of the project is beyond the timeline given in the capitalisation schedule, due to any reason beyond the control of the Airport Operator 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 Second 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 the AO and is also encouragement for MIA to commission/ capitalize the proposed assets as per the approved CAPEX plan/ schedule.

7.3.12. The Airport Operator had initially claimed Financing allowance of ₹ 26.00 Crores (for new CAPEX projects) in their MYTP dated December 10, 2021 which had been calculated on the average Capital Work in Progress (CWIP) of the entire project funds (funded out of debt and equity), at the rate of 12% (which is cost of debt). As against this, the Airport Operator in the revised CAPEX submission dated May 7, 2022 has claimed both Financing allowance and Interest During Construction (IDC) for an

amount of ₹ 31.90 Crores, on the average Capital Work in Progress (CWIP). In this respect, the Authority notes that the Financing allowance has been calculated on 35% equity portion and IDC on 65% debt portion of the entire project funds, with the cost of debt being considered as 12% for both.

As already explained in para 7.3.5 the Authority proposes not to consider Financing allowance but allow IDC on the debt portion of the total value of proposed aeronautical capital expenditure (as shown in Table 58 below) based on the notional gearing considered (debt-equity ratio of 48:52) and cost of debt @ 9%, for the First Control Period. Considering the same, the Authority has arrived at an amount of ₹ 11.20 Crores and proposes to allow the same as against ₹ 31.90 Crores claimed by the Airport Operator for the First Control Period.

- 7.3.13. The Authority notes that as per terms of the Concession Agreement, the Airport Operator is required to make payment of Estimated Deemed Initial RAB, Initial Non-Aeronautical Investment and CWIP to AAI. In this respect, AAI had initially raised an Invoice for RAB and CWIP inclusive of Goods and Services Tax (GST) but the same was contested by the Airport operator that GST was not applicable on RAB and CWIP amount. This was based on various opinions obtained from independent tax consultants by the Airport Operator. Subsequently, AAI also obtained legal opinion and based on the same, requested the Airport Operator to provide necessary indemnity bond which would indemnify AAI in case of any future liability on account of such GST amount on RAB and CWIP invoices. Airport Operator submitted the necessary indemnity bonds and accordingly, AAI raised revised invoices after excluding GST, which were paid by the Airport Operator.

The Authority further notes that, till date the Airport Operator has not paid any amount relating to GST to AAI. If in future, AAI is required to bear the GST, then based on indemnity bond, the same will be recovered by AAI from Airport Operator. As the GST amount has not been paid by the Airport Operator, the Authority has not considered the same as part of RAB for the First Control Period.

- 7.3.14. In respect of stamp duty and registration charges on the CA, the Authority notes that as per the terms of the CA, the Airport operator is required to pay the applicable duty and charges and has applied to the State Authority for assessment of the stamp duty amount. However, the Authority notes that Airport Operator has not paid the amount, as the assessment order has not been received from State Authority. Hence, the Authority has not considered the same as part of RAB for the First Control Period.
- 7.3.15. The Authority further notes that within a span of 6 months (between submission of revised MYTP by AO on Dec 10, 2021 and revised CAPEX schedule as on May 7, 2022), there has been several changes to the CAPEX projects, wherein some projects have been dropped and the value of some projects have increased. Many capital projects were shown as new capital expenditure, whereas major part of the same already exist at the Airport, including procurement. The trend of revisions to the capital projects and projecting factually incorrect capital projections, inconclusive design reports does not instill confidence in the Authority about the near-term and long-term project planning process.
- 7.3.16. Based on the above proposals, the summary of New Capital Expenditure projects proposed by the Authority for the First Control Period is as follows:

Table 58: Summary of New Capital Expenditure projects proposed by the Authority for the First Control Period

(₹ Crores)

Reference	Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)	
			Submitted by MIA	Proposed by Authority				
B. New Capital expenditure proposed for the First Control Period								
B.	B1.	New Capital expenditure proposed for the First Control Period	Runways, Taxiway and Apron					
			Runway recarpeting and Centre-lighting	2023-24	2023-24	90.64	90.64	
			Construction of new taxiway	2023-24	2023-24	36.47	36.47	-
			Construction of new portion RESA	2023-24	2023-24	7.85	7.85	-
			Apron improvement works	2022-23 2025-26	2023-24 2025-26	1.62 5.39	1.62 5.27	- (0.12)
			Miscellaneous Airside improvement works	2022-23 2023-24 2024-25 2025-26	2022-23 2023-24 2024-25 2025-26	2.14 2.14 1.39 3.27	1.51 1.51 1.51 0.00	(0.63) (0.63) 0.12 (3.27)
	B2.		Terminal Building					
			Modification / Expansion of existing Terminal Building	2022-23	-	79.88	-	(79.88)
			Miscellaneous works / interiors / finishes / kerbside of existing Terminal	2022-23 2023-24 2024-25	- - -	6.05 6.05 3.93	- - -	(6.05) (6.05) (3.93)
			Cargo assets					
			Cargo Building	2022-23	2023-24	18.90	18.90	-
			Cargo equipment	2022-23	2023-24	4.45	4.45	-
	B3.							
	B4.		Fuel Facility					
Purchase of assets of existing Oil Marketing Companies (OMC)			2022-23	2022-23	10.00	10.00	-	
Building of new assets for Open Access Fuel Facility operations			2022-23	2023-24	17.83	17.14	(0.69)	
B5.		Security equipment						

REGULATORY ASSET BASE AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

Reference	Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)
			Submitted by MIA	Proposed by Authority			
		Equipment for ARFF – runway mechanical sweeper, rubber removal and other equipment	2022-23	2022-23	1.20	1.27	0.07
			2023-24	2023-24	1.20	1.27	0.07
			2024-25	2024-25	0.78	0.82	0.04
	B6.	Plant and Machinery					
		Trans-installation of Navaids	2022-23	2023-24	1.98	2.08	0.10
		Bomb Detection and Disposal Equipment (BDDS)	2022-23	2022-23	4.03	4.25	0.22
			2023-24	2023-24	4.03	4.25	0.22
			2024-25	2024-25	2.62	2.76	0.14
		Electrical Sub-station equipment	2025-26	2025-26	4.63	2.44	(2.19)
		Triturator	2025-26	-	6.06	-	(6.06)
		Water tank, STP and storage tank, Pump house Building	2025-26	2025-26	5.45	2.64	(2.81)
		Various Other – Miscellaneous items	2022-23		4.39	-	(4.39)
			2023-24		2.49	-	(2.49)
			2024-25		1.62	-	(1.62)
			2025-26		3.88	-	(3.88)
	B7.	Roads					
		Vehicle Access roadway and allied works	2025-26	-	20.95	-	(20.95)
		Road entry and exit – improvement works	2022-23	2022-23	2.85	3.00	0.15
		Miscellaneous enabling works	2025-26	-	12.96	-	(12.96)
	B8.	Boundary Wall					
		Construction of property boundary wall of 11 kms	2022-23	-	2.87	-	(2.87)
			2023-24	-	2.87	-	(2.87)
			2024-25	-	1.86	-	(1.86)
		Operational boundary wall	2025-26	2025-26	2.95	2.29	(0.66)
	B9.	Information Technology Works					
		IT Infrastructure, AOCC, Command Post and various other systems	2022-23	2022-23	3.43	1.81	(1.62)
			2023-24	2023-24	3.43	1.81	(1.62)
			2024-25	2024-25	2.23	1.17	(1.06)
	B10.	Other Associated works					
		Storm water	-	-	-	-	-
		Water disposal and supply	2022-23	2022-23	5.70	5.52	(0.18)
		Airside Security gate	2025-26	2025-26	4.15	0.50	(3.65)

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Reference	Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)
			Submitted by MIA	Proposed by Authority			
		Rainwater harvesting	2025-26	2025-26	9.53	5.01	(4.52)
		Water tank	-	-	-	-	-
		Miscellaneous works – others	2022-23 2023-24 2024-25 2025-26	- - - -	0.24 0.24 0.16 9.22	- - - -	(0.24) (0.24) (0.16) (9.22)
		Total Project Cost			428.04	239.76	(188.28)
		Add: Cost towards Proportionate Technical Services like PMC & Design, Preliminaries, Insurances / Statutory Approvals, Labour cess, Site-preparation, Contingencies, Pre-Operatives, etc claimed on the above New Capital Expenditure Projects*.			75.98	19.24	(56.74)
		Financing Allowance / IDC – New Capital Expenditure Proposed			31.90	11.20	(20.70)
		Total – New Capital Expenditure proposed including IDC (B)			535.92	270.20	(265.72)

* Refer Para 7.3.10 (iii) and (iv).

7.3.17. In accordance with above, the Authority proposes the Total Aeronautical Capital Expenditure for the First Control Period as per the table below:

Table 59: Total Aeronautical Capital Expenditure (project wise) proposed by the Authority for Mangaluru International Airport for the First Control Period

(₹ Crores)

Reference	Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)	
			Submitted by MIA	Proposed by Authority				
A. Projects initiated in Pre-COD Period and proposed to be executed in First Control Period along with Enabling Capital Addition Projects integral to completion of the mandated projects								
A.	A1	Capital Addition projects initiated by AAI in	Runways, Taxiway & Apron	2022-23 2022-23	2022-23 2022-23	1.25 126.00	1.25 126.00	- -
	A2	Pre-Control Period and being executed in First Control Period along with Enabling Capital Projects integral to such mandated projects	Expansion and Modification of Existing Terminal Building including Enabling Capital Projects integral to completion of Expansion project					
			Terminal Building expansion including post award PMC	2021-22	2022-23	113.28	109.59	(3.69)
			Plant and machinery items (enabling capital project)					
			Expansion of Baggage Conveyor	2022-23	2022-23	7.86	8.27	0.41
			Substation equipment	2022-23	2022-23	2.03	2.14	0.11
			Lift & Travellator	2022-23	2022-23	1.58	1.53	(0.05)
			PA system	2022-23	2022-23	0.90	0.95	0.05
			Engineering Consultancy	2022-23	2022-23	0.83	0.87	0.04
			VDGS	2022-23	2022-23	1.98	2.08	0.10
			Expansion of Passenger Boarding Bridge	2022-23	2022-23	7.41	7.80	0.39
			Information Technology (IT) works (enabling capital projects)					
			Work related to IT for NITB	2022-23	2022-23	9.86	10.38	0.52
			Facelift work for NITB	2022-23	2022-23	0.16	0.17	0.01
			Aluminium Roof Gutter for NITB	2022-23	2022-23	0.02	0.02	-
			SITC of RC CCTV	2022-23	2022-23	1.21	1.27	0.06
			Flight Information Display System	2022-23	2022-23	1.31	1.38	0.05
			Network & Pen Tablet	2022-23	2022-23	0.01	0.01	-
			Supply of Bullet Proof Helmet	2022-23	2022-23	0.02	0.02	-
			Electrical Materials	2022-23	2022-23	0.71	0.75	0.04
	A3		Roads – widening and strengthening of existing perimeter road	2022-23	2022-23	4.36	4.59	0.23
			Financing Allowance / IDC – AAI initiated Capital Addition Projects			26.72	12.05	(14.67)

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Reference		Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)
				Submitted by MIA	Proposed by Authority			
			Total – AAI initiated projects including enabling capital addition projects and IDC - A			307.49	291.12	(16.37)
B. New Capital expenditure proposed for the First Control Period								
B.	B1.	New Capital expenditure proposed for the First Control Period	Runways, Taxiway and Apron					
			Centre-lighting	2023-24	2023-24	90.64	90.64	-
			Construction of new taxiway	2023-24	2023-24	36.47	36.47	-
			Construction of new portion RESA	2023-24	2023-24	7.85	7.85	-
			Apron improvement works	2022-23 2025-26	2023-24 2025-26	1.62 5.39	1.62 5.27	- (0.12)
			Miscellaneous Airside improvement works	2022-23 2023-24 2024-25 2025-26	2022-23 2023-24 2024-25 2025-26	2.14 2.14 1.39 3.27	1.51 1.51 1.51 0.00	(0.63) (0.63) 0.12 (3.27)
	B2.		Terminal Building					
			Modification / Expansion of existing Terminal Building	2022-23	-	79.88	-	(79.88)
			Miscellaneous works / interiors / finishes / kerbside of existing Terminal	2022-23 2023-24 2024-25	- - -	6.05 6.05 3.93	- - -	(6.05) (6.05) (3.93)
			Cargo assets					
		Cargo Building	2022-23	2023-24	18.90	18.90	-	
		Cargo equipment	2022-23	2023-24	4.45	4.45	-	
	B3.							
		Fuel Facility						
		Purchase of assets of existing Oil Marketing Companies (OMC)	2022-23	2022-23	10.00	10.00	-	
		Building of new assets for Open Access Fuel Facility operations	2022-23	2023-24	17.83	17.14	(0.69)	
	B4.							
		Security equipment						
		Equipment for ARFF – runway mechanical sweeper, rubber removal and other equipment	2022-23 2023-24 2024-25	2022-23 2023-24 2024-25	1.20 1.20 0.78	1.27 1.27 0.82	0.07 0.07 0.04	
B5.								
	Plant and Machinery							
	Trans installation of Nav aids	2022-23	2023-24	1.98	2.08	0.10		
	Bomb Detection and Disposal Equipment (BDDS)	2022-23 2023-24 2024-25	2022-23 2023-24 2024-25	4.03 4.03 2.62	4.25 4.25 2.76	0.22 0.22 0.14		

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Reference	Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)
			Submitted by MIA	Proposed by Authority			
		Electrical Sub-station equipment	2025-26	2025-26	4.63	2.44	(2.19)
		Triturator	2025-26	-	6.06	-	(6.06)
		Water tank, STP and storage tank, Pump house Building	2025-26	2025-26	5.45	2.64	(2.81)
		Various Other – Miscellaneous items	2022-23	-	4.39	-	(4.39)
			2023-24	-	2.49	-	(2.49)
			2024-25	-	1.62	-	(1.62)
			2025-26	-	3.88	-	(3.88)
	B7.	Roads					
		Vehicle Access roadway and allied works	2025-26	-	20.95	-	(20.95)
		Road entry and exit – improvement works	2022-23	2022-23	2.85	3.00	0.15
		Miscellaneous enabling works	2025-26	-	12.96	-	(12.96)
		Boundary Wall					
	B8.	Construction of property boundary wall of 11 kms	2022-23	-	2.87	-	(2.87)
			2023-24	-	2.87	-	(2.87)
			2024-25	-	1.86	-	(1.86)
		Operational boundary wall	2025-26	2025-26	2.95	2.29	(0.66)
	B9.	Information Technology Works					
		IT Infrastructure, AOCC, Command Post and various other systems	2022-23	2022-23	3.43	1.81	(1.62)
			2023-24	2023-24	3.43	1.81	(1.62)
			2024-25	2024-25	2.23	1.17	(1.06)
	B10.	Other Associated Works					
		Storm water	-	-	-	-	-
		Water disposal and supply	2022-23	2022-23	5.70	5.52	(0.18)
		Airside Security gate	2025-26	2025-26	4.15	0.50	(3.65)
		Rainwater harvesting	2025-26	2025-26	9.53	5.01	(4.52)
		Water tank	-	-	-	-	-
		Miscellaneous works – others	2022-23	-	0.24	-	(0.24)
			2023-24	-	0.24	-	(0.24)
			2024-25	-	0.16	-	(0.16)
			2025-26	-	9.22	-	(9.22)
		Total Project Cost			428.04	239.76	(188.28)
		Add: Cost towards Proportionate Technical Services like PMC & Design, Preliminaries, Insurances / Statutory Approvals, labour cess, Site preparation, Contingencies, Pre-			75.98	19.24	(56.74)

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Reference		Project Group	Description of the Project	Year of Capitalisation		Submitted by MIA (1)	Proposed by the Authority (2)	Difference (3) = (2)-(1)
				Submitted by MIA	Proposed by Authority			
			Operatives, etc claimed on the above New Capital Expenditure Projects					
			Financing Allowance / IDC – New Capital Expenditure Proposed			31.90	11.20	(20.70)
			Total – New Capital Expenditure proposed including IDC (B)			535.92	270.20	(265.72)
		Grand Total – AAI hand-over projects and New Capital Expenditure for the First Control Period (A) + (B)				843.41	561.32	(282.09)
Year-wise Capitalization of Assets is as follows (₹ Crores):								
FY 2021-22			FY 2022-23	FY 2023-24		FY 2024-25	FY 2025-26	TOTAL
-			321.98	211.81		7.06	20.47	561.32

7.3.18. The Authority proposes to consider capitalisation of Aeronautical Expenditure for Mangaluru International Airport for the First Control Period as ₹ 561.32 Crores.

Depreciation for the First Control Period

The Airport Operator's submission of Depreciation for Mangaluru International Airport the First Control Period

7.3.19. The Airport Operator follows the policy of determining the rates of depreciation based on the 'useful life' of different asset classes. While submitting the Multi-Year Tariff Proposal for the First Control Period for MIA, the Airport Operator has taken cognizance of the rates of depreciation approved by the Authority in its order vide Order No. 35 dated January 12, 2018, and Amendment No. 01 to Order No. 35 / 2017-18 on 'Determination of Useful Life on Airport Assets'. However, the Airport Operator has considered different rates for certain asset classes based on the recommendations of the "Technical Study report of useful life of assets" submitted by an Independent Expert (Kanti Karamsey & Co., Govt. Registered Valuers) engaged by the Airport Operator in May 2021 and the same are as per the table given below -:

Table 60: Depreciation rates determined by the Airport Operator for the First Control Period

Asset Class	Depreciation as per AO's submission
Terminal Building	4.00%
Runway, Taxiway and Apron	5.00%
Cargo Building	4.00%
Cargo Equipment	13.33%
Boundary wall	20.00%
Computer Servers, networks, etc.	33.33%
Computer End-user devices	33.33%
Security equipment	13.33%

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Asset Class	Depreciation as per AO's submission
Plant and Machinery	13.33%
Other buildings	3.33%
Access road	10.00%
Fuel farm facility assets	13.33%
Furniture & fixtures	14.29%
Vehicles	20.00%
Office Equipment	20.00%

- 7.3.20. Depreciation has been computed separately on opening block of assets and on the proposed additions.
- 7.3.21. For the additions to RAB, the Airport Operator has calculated the depreciation during year of capitalisation on 50% of the asset value (assuming that the asset is capitalised in the middle of the financial year).
- 7.3.22. The depreciation amount submitted by the Airport Operator for the First Control Period has been presented in the table below.

Table 61: Depreciation submitted by the Airport Operator for Mangaluru International Airport for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Terminal Buildings	5.65	10.05	12.24	12.48	12.55	52.98
Runways/Taxiway/ Apron	1.16	8.77	15.52	15.56	15.80	56.81
Cargo Building	0.00	0.29	0.58	0.58	0.58	2.04
Cargo Equipment	0.00	0.34	0.68	0.68	0.68	2.39
Boundary wall	1.27	2.53	2.53	2.54	2.77	11.65
Software	0.15	0.15	0.07	-	-	0.37
IT Equipment	2.29	5.18	6.52	7.64	2.58	24.21
Security equipment	-	0.25	0.77	1.21	1.38	3.61
Plant and Machinery	8.73	10.54	11.23	11.70	12.61	54.81
Other buildings	0.29	0.58	0.60	0.62	1.14	3.23
Access road	0.85	1.70	1.72	1.81	4.32	10.41
Fuel	0.67	2.18	3.03	3.03	3.03	11.94
Furniture & fixtures	0.19	0.19	0.17	0.15	0.12	0.81
Vehicles	1.48	1.29	1.28	0.10	-	4.15
Office Equipment	0.07	0.01	0.01	0.00	-	0.09
TOTAL	22.79	44.07	56.96	58.12	57.57	239.51

Authority's examination regarding Depreciation for the First Control Period

- 7.3.23. The Authority noted that Opening RAB has been revised from ₹ 125.64 Crores (submitted by the Airport Operator) to ₹ 123.67 Crores based on adjustments made to the RAB and mentioned as per the *Table 27* of this Consultation Paper. The Authority Further, notes that on account of revision to the Opening RAB, the depreciation for the First Control period will also be revised accordingly.
- 7.3.24. The Authority duly examined the recommendations of the Technical Study Report on 'useful life of assets' submitted by the Airport Operator and observed that the expert appointed by the Airport Operator

has prescribed the useful lives of assets component wise after technical assessment.

7.3.25. The Authority noted the methodology adopted by the Valuer to evaluate the useful lives of assets is as follows:

- *“Physical inspection of some of the assets*
- *Detailed discussions with the Projects, Finance & Engineering and Maintenance team of MIA and the General Manager (Engineering – Civil) of Airports Authority of India pertaining to usage of the assets.*
- *Guidance for determination of Useful Life given in Depreciation under Companies Act, 2013 Schedule 2, Airports Economic Regulatory Authority of India (“AERA”), Marshall & Swift Valuation Service (MVS) and American Society of Appraisers (ASA)*
- *Our understanding and experience as qualified engineers ”*

7.3.26. The Authority has observed the recommendations given in the study report for adopting shorter useful life and noted the following:

- The Independent Expert appointed by the Airport Operator has considered the various components of the Terminal Building such as False Ceiling, Sanitation works, Glass façade, Flooring works etc. for assessing the useful life of the Terminal Building. The Expert has calculated the contribution of each of the components to the overall structure of the Terminal Building along with the estimated useful life of such components wherein shorter useful lives have been adopted for False Ceiling, Sanitation works, Glass façade and Flooring works due to frequent renovation works in the building, weather conditions, wear and tear, etc., and arrived at the weighted average useful life of the entire structure of Terminal Building as approximately 25 years Further, the Authority notes that the Airport Operator has adopted the same shorter useful life of 25 years for the projected capital expenditure on construction of new Cargo Terminal Building.
- Similarly, the Independent Expert has recommended shorter useful life for Runways, Taxiways and Apron based on the useful life followed by various international regulators and associations.
- Further, in respect of Plant and machinery items, as per the technical report, these items are broadly used at Mangaluru International Airport for 24 hours per day as the Airport is working all three shifts and hence, as prescribed under the Companies Act 2013, Schedule II for assets used during the year for double shift or triple shift, the Expert has recommended to adopt useful life of 7.5 years instead of 15 years. The Authority also notes that the Airport Operator has adopted the same shorter useful life of 7.5 years for Cargo and Security Equipment.
- The Airport Operator has adopted shorter useful life of 3 years for Flight Information Display System (FIDS) and AOCC Equipment (included under the category of ‘Information and Technology equipment’) in its MYTP submission.

7.3.27. Apart from the above, the Authority notes that in respect of Fuel Farm facility, the Airport Operator has adopted ‘weighted average’ useful life of 7.5 years. Since the major portion of the assets are in the nature of Plant and Machinery the Airport Operator has estimated the useful life of the Fuel facility as 7.5 years and adopted higher depreciation of 13.33% for the entire capital expenditure projected for this facility.

7.3.28. The Authority on perusal of all the above, has summarized its view as under:

Asset class - Building: The Expert has recommended shorter life for False Ceiling, Sanitation works, Glass façade and Flooring works which appear to be integral part of the Airport Terminal Building. Authority's Order No.35 does not provide for reducing the life of assets under Asset class -Buildings. The Authority observes that various components mentioned above are also an integral part of the Terminal Building and should be added to the Terminal Building cost by applying the same rate of

depreciation as that of buildings. While the technical report provided by the Airport Operator has determined the shorter life to be adopted, it has not provided sufficient rationale for adopting such shorter useful life. Since these assets are all part of the building, the Authority is of the view that the same rate applicable to building should be applied to these assets and no reduction in life of these assets are called for. Further, the Authority notes that adequate maintenance expenditure is allowed to enable the Airport Operator to maintain the assets in good working condition during its entire life. The Authority has issued Order No.35 as part of its normative approach to various Building Blocks in Economic regulation of Major Airports where it has stated that, "The Authority has been of the considered view, that it would be preferable to have as far as practicable, a broad year to year consistency in what Depreciation is charged by the companies as certified by the relevant statutory auditors and what the Authority would take into account in its process of tariff determination. Issue of a notification will ensure this objective." In view of all the above, the Authority is not inclined to deviate from ensuring this objective and therefore proposes not to consider the shorter useful life of 25 years claimed by the Airport Operator for both the Terminal Building and newly projected Cargo terminal building.

Asset Class -Runways, Taxiways and Aprons: The Expert has recommended adopting a shorter life of 20 years based on useful life followed by certain international associations and regulators, like, Federation Aviation Administration -US Department of Transportation, Civil Aviation Authority – UK, Australian Airports Association – Australia etc., which the Authority feels does not provide proper justification for adopting a shorter useful life. Therefore, the Authority finds no reason to reduce the life of the Runway which enhances the burden of Airport users by increasing the tariff.

Other Asset Classes: Order No.35 provides for specific determination of life through technical evaluation for specific assets other than those listed in the Order based on specific requirement of the Airport. The Authority finds that none of the asset in these classes where a shorter life has been adopted as specific assets are based on specific requirement of the Airport. Therefore, the Authority finds no merit in reducing the life of such asset for tariff purposes.

FIDS and AOCC Equipment – The Authority notes that Paragraph 4.1 of Amendment No. 01 to order No.35 prescribes useful life of 6 years for these assets and hence the Authority proposes to consider depreciation of 16.67% instead of 33.33% claimed by the Airport Operator.

Fuel farm facility – The Authority examined the list of items forming part of Fuel facility including assets planned to be purchased from IOCL and observed that there are assets belonging to different asset category, namely Buildings, Roads, Plant and Machinery, Vehicles etc., and based on the same, proposes not to consider the weighted average useful life of 7.5 years claimed by the Airport Operator. Instead, the Authority proposes to adopt the specific depreciation rate prescribed as per Order No.35 for such asset category in line with depreciation rates adopted for similar facility at other airports.

- 7.3.29. Based on all the above, the Authority has proposed the following useful life for all the assets of Mangaluru International Airport during the First Control Period:

Table 62: Useful Life proposed by the Authority for all the assets in the First Control Period

Asset Class	Useful life submitted by the Airport Operator	Useful life proposed by the Authority
Terminal Building	25	30
Runway, Taxiway and Apron	20	30
Cargo Building	25	30
Cargo Equipment	7.5	15
Boundary wall	5	5

REGULATORY ASSET BASE AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

Asset Class	Useful life submitted by the Airport Operator	Useful life proposed by the Authority
Computer Servers, networks, etc. / Software	3	3
Computer End-user devices / IT equipment	3	3
IT equipment – FIDS	3	6
IT equipment – AOCC	3	6
Security equipment	7.5	15
Plant and Machinery	7.5	15
Other buildings	30	30
Access road	10	10
Furniture & fixtures	7	7
Vehicles	5	8
Office Equipment	5	5
Fuel farm facility assets		
(i) Plant and machinery items	7.5	15
(ii) Roads	7.5	10
(iii) Buildings	7.5	30
(iv) Furniture & fixtures	7.5	7
(v) Vehicles	7.5	8
(vi) Refuellers	7.5	15

Table 63: Depreciation proposed by the Authority for assets forming part of Fuel facility for Mangaluru International Airport

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Depreciation claimed by Airport Operator	0.67	2.18	3.03	3.03	3.03	11.94
Depreciation Proposed by Authority	-	0.41	1.43	2.04	2.04	5.93

7.3.30. Considering the above changes in depreciation rates, revision in the value of opening gross block of assets and proposed capital expenditure, the Authority proposes the following depreciation for the First Control Period.

Table 64: Depreciation proposed by the Authority for Mangaluru International Airport for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Terminal Buildings	2.45	4.33	6.23	6.23	6.23	25.47
Runways/Taxiway/ Apron	1.20	3.44	8.27	10.90	11.02	34.83
Building used for ANS activities	0.07	0.07	0.07	0.07	0.07	0.34
Cargo Building	-	-	0.36	0.72	0.72	1.81
Cargo Equipment	-	-	0.15	0.31	0.31	0.77
Boundary wall	0.37	0.37	0.36	0.36	0.53	1.99
Software	0.15	0.15	0.11	-	-	0.40

REGULATORY ASSET BASE AND DEPRECIATION FOR THE FIRST CONTROL PERIOD

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
IT equipment - Others	0.03	2.32	4.62	4.84	3.37	15.17
IT equipment – FIDS	-	0.08	0.16	0.16	0.16	0.56
IT equipment - AOCC	-	0.16	0.49	0.66	0.66	1.96
Security equipment	-	0.05	0.14	0.22	0.25	0.66
Plant and Machinery	3.93	4.71	5.59	5.82	5.77	25.82
Other buildings	-	0.10	0.21	0.21	0.31	0.83
Access road	-	0.41	0.82	0.82	0.82	2.86
<u>Fuel facility</u>						
Fuel facility Admin building	-	-	0.08	0.17	0.17	0.42
Roads	-	0.09	0.34	0.51	0.51	1.45
P&M and equipment	-	0.31	0.99	1.36	1.36	4.01
Furniture & Fixtures	-	0.00	0.00	0.00	0.00	0.01
Vehicles	-	0.01	0.01	0.01	0.01	0.04
Furniture & fixtures	0.19	0.19	0.18	0.17	0.15	0.87
Vehicles	1.44	1.43	1.28	0.80	0.76	5.71
Office equipment	0.02	0.00	0.00	0.00	0.00	0.03
TOTAL	9.84	18.21	30.47	34.33	33.17	126.02

7.3.31. The depreciation claimed by the Airport Operator in comparison with that proposed by the Authority for each FY is shown in the table below:

Table 65: Depreciation claimed by the Airport Operator vis-à-vis proposed by the Authority for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Depreciation claimed by the Airport Operator	22.79	44.07	56.96	58.12	57.57	239.51
Less: Adjustments made by the Authority on account of change in useful life and revision in asset addition.	(12.95)	(25.86)	(26.94)	(26.49)	(24.40)	(113.49)
Depreciation proposed by the Authority	9.84	18.21	30.47	34.33	33.17	126.02

The Authority proposes to consider depreciation for Mangaluru International Airport for the First Control Period as ₹ 126.02 Crores.

Regulatory Asset Base (RAB) for the First Control Period

Mangaluru International Airport's submission of RAB for the First Control Period

7.3.32. Mangaluru International Airport has submitted RAB for the First Control Period as follows:

Table 66: RAB proposed by the Airport Operator for Mangaluru International Airport for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Opening RAB	111.15	333.34	718.65	686.29	646.16	
Additions	244.98	429.38	24.60	17.99	112.71	829.67
Disposal/Transfers	-	-	-	-	-	
Depreciation	22.79	44.07	56.96	58.12	57.57	239.51
Closing RAB	333.34	718.65	686.29	646.16	701.31	
Average RAB	222.25	526.00	702.47	666.23	673.74	

Authority's examination of RAB for the First Control Period

7.3.33. Combining all its propositions, RAB proposed to be considered by the Authority for determination of Aeronautical tariff for the First Control Period is as follows:

Table 67: RAB proposed by the Authority for Mangaluru International Airport for the First Control Period

(₹ Crores)

Particulars	Ref.	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Opening RAB (1)	Table 27	123.67	113.82	417.58	598.91	571.64	
Capital Additions (2)	Table 59	0.00	321.98	211.81	7.06	20.47	561.32
Disposal/Transfers (3)	-	-	-	-	-	-	
Depreciation (4)	Table 64	9.84	18.21	30.47	34.33	33.17	126.02
Closing RAB (5) = [(1) + (2) - (3) - (4)]		113.82	417.58	598.91	571.64	558.93	
Average RAB = [(1) + (5)]/2		118.74	265.69	508.24	585.27	565.29	

7.3.34. The Authority proposes to consider RAB for the Mangaluru International Airport for the First Control Period as detailed in Table 67.

7.4. Authority's proposal regarding Regulatory Asset Base and Depreciation for the First Control Period

Based on the material before it and based on its analysis, the Authority proposes the following with regard to Regulatory Asset Base and Depreciation for the First Control Period.

- 7.4.1. To consider the revised Terminal Building ratio of 92:8 in line with the Study on allocation of assets between Aeronautical and Non-aeronautical assets for Mangaluru International Airport, IMG norms and as approved for other similar Airports.
- 7.4.2. To not allow Financing allowance on Capital additions but allow IDC during the First Control Period as mentioned in Paras 7.3.5 and 7.3.12.
- 7.4.3. To adopt the capitalisation of Aeronautical Expenditure for the First Control Period in accordance with

Table 59.

- 7.4.4. To reduce (adjust) 1% of the project cost from the ARR in case any particular capital project is not completed / capitalised as per the approved capitalisation schedule, as mentioned in para 7.3.11. The same will be examined during the true up of the First Control Period, at the time of determination of tariff for the Second Control Period.
- 7.4.5. Not to consider Stamp Duty and GST as part of RAB for the First Control Period, as the same has not been paid by the AO.
- 7.4.6. To true up the Aeronautical Capital expenditure on actuals at the time of determination of tariff for Second Control Period.
- 7.4.7. To adopt Aeronautical Depreciation as per Table 64 for the First Control Period.
- 7.4.8. To true up the Depreciation of the First Control period based on the actual asset additions and actual date of capitalisation during the tariff determination of the Second Control Period.
- 7.4.9. To consider average RAB for the First Control Period for Mangaluru International Airport as per Table 67.
- 7.4.10. To true up the RAB based on actuals at the time of tariff determination for the Second Control period.

8. FAIR RATE OF RETURN (FRoR) FOR THE FIRST CONTROL PERIOD

8.1. Mangaluru International Airport's submission of FRoR for the First Control Period

Cost of equity

- 8.1.1. The Airport Operator had engaged the services of PricewaterhouseCoopers Services LLP to carry out a study on evaluating the applicable Cost of equity. Based on this study, the Airport Operator has considered the Cost of equity as 17.49%.
- 8.1.2. The Airport Operator submitted the following assumptions for estimating the Cost of equity:
- Risk-free rate was calculated by taking 10-year average yield on a daily basis, for 10-year Government of India securities
 - Asset beta was derived based on five-year weekly regressed beta computed for comparable listed airports (weighted), and adjusted for appropriate leverage to determine the levered Equity beta
 - Although various debt-equity (leverage or gearing) ratios had been analysed, the assumed leverage for computation of Cost of equity was the normative approach and standard adopted in earlier tariff determination exercises of the Authority, i.e., debt-equity ratio of 48:52. For such leverage ratio, the Equity beta was computed as 1.40
 - Rate of market return was estimated by using average of last 40 years' data of BSE Sensex, and last 30 years' data of Nifty 50, computed using Geometric Mean. The average market return was 14.63%, accordingly, Equity risk premium over risk-free rate was computed as 7.06%

Table 68: Cost of equity computation as per Airport Operator's submission

Parameter	Value
Risk-free rate	7.57%
Market return	14.63%
Debt-equity ratio (leverage)	48:52
Equity beta	1.40
Cost of equity (rounded off)	17.49%

Cost of debt

- 8.1.3. The Airport Operator submitted that Cost of debt assumed for the First Control Period was 12%. The audited financial statements of Mangaluru International Airport Limited for the year ended March 31, 2021 disclosed that it has issued long-term secured, redeemable, non-convertible debentures to its shareholder group company, Adani Airport Holdings Limited in order to raise funds at interest rate of 12% p.a. Further, it had also raised inter-corporate deposit from the same shareholder group company at interest rate of 12% p.a. It is noted that neither Mangaluru Airport nor its current group lending shareholder, Adani Airport Holdings Limited has obtained credit rating from any external rating agency.
- 8.1.4. Subsequently, Adani Airport Holdings Limited announced on May 9, 2022 that it had raised a 3-year External Commercial Borrowing facility of \$ 250 million from a consortium of Standard Chartered Bank and Barclays Bank PLC. The all-in borrowing cost of this facility is 12.10% p.a., the breakdown of which is provided in the table below:

Table 69: Breakdown of all-in External Commercial Borrowing Cost of Adani Airport Holdings Limited

Particulars	Value
Secured Overnight Financing Rate (SOFR) reference	2.28%
Spread over SOFR	4.25%
Withholding tax gross up (at 5% of SOFR + spread)	0.33%

Particulars	Value
One-year forward Dollar-Rupee hedge cost (mandatory as per RBI guidelines)	4.51%
Upfront fees (annualised)	0.73%
All-in Cost of External Commercial Borrowing	12.10%

Source: Airport Operator data

- 8.1.5. It was mentioned that a part of the proceeds raised from this facility are being on-lent to Mangaluru International Airport Limited for the purpose of financing its capital expenditure at the rate of 12.25% p.a. For the purposes of computation of weighted average cost of capital, cost of debt has been assumed as 12% p.a.

Weighted average cost of capital

- 8.1.6. Based on the Cost of equity, Cost of debt and gearing ratio, the Airport Operator submitted the following FRoR for the First Control Period:

Table 70: Weighted average cost of capital computation submitted by Mangaluru Airport for FRoR

Parameter	Value
Cost of equity	17.49%
Cost of debt	12.00%
Weighted average gearing of equity	52.00%
Weighted average gearing of debt	48.00%
Weighted average Cost of equity	14.85%
<i>rounded off to</i>	14.90%

8.2. Authority's Examination of FRoR for the First Control Period

Cost of equity

- 8.2.1. The Authority had commissioned independent studies for the evaluation of cost of capital separately, in case of each PPP Airport, namely DIAL, MIAL, GHIAL, BIAL and CIAL through a premier institute, namely 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 Mangaluru International Airport for the First Control Period.
- 8.2.2. The independent study reports have drawn from the international experience of airports and their conclusions have been evaluated to the extent comparable with Mangaluru Airport in terms of hybrid till, ownership structure, size, scale of operations and regulatory framework. The median and average Cost of equity arrived at by the independent study reports are 15.16% and 15.18%, respectively, as shown in the table below:

Table 71: Computation of Cost of equity as per IIM Bangalore independent study reports

Particulars	CIAL	MIAL	BIAL	DIAL	GHIAL	Average
Risk-free rate (A)	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%
Equity beta (B)	0.9427	0.9391	0.9732	0.9296	0.9442	0.94576
Equity risk premium (C)	8.06%	8.06%	8.06%	8.06%	8.06%	8.06%
Cost of equity $A + B * C$	15.16%	15.13%	15.40%	15.05%	15.17%	15.18%
Average Cost of equity						15.18%

- 8.2.3. 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.

- 8.2.4. Based on the above reports, the Authority proposes the Cost of equity of 15.18% for Mangaluru International Airport for the First Control Period.

Cost of debt

- 8.2.5. The Authority noted that Mangaluru International Airport has considered Cost of debt at 12% for the First Control Period based on its current borrowing rate from a related party and based on Adani Airport Holdings Limited's all-in borrowing cost of 12.10%.
- 8.2.6. Since the Airport and its holding company have not obtained any credit rating from an external rating agency, there is no direct comparable entity or market data for determining cost of debt for MIA.
- 8.2.7. However, the Authority recommends that the Airport bring in further efficiencies in its cost of borrowing by leveraging its parent entity's financial strength in order to reduce the interest rates. This suggestion is also in keeping with the spirit of privatisation 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.
- 8.2.8. Further the Authority has also noted that average bank lending rate of public sector banks and scheduled commercial banks as per the Reserve Bank of India's publication of March 2022 has been in the range of 8.22% to 8.74% p.a.³ The Authority has also noted the cost of debt of other five PPP airports viz., DIAL, MIAL, GHIAL, BIAL and CIAL, which ranges from 7.80% to 10.30% (the average cost of debt works out to 8.96%).
- 8.2.9. Accordingly, the Authority has considered the Cost of Debt of 9% for the computation of Fair Rate of Return. The Authority proposes to true up the cost of debt, based on the efficiency and reasonableness for the First Control Period.

Fair Rate of Return

- 8.2.10. Based on the above, the Authority proposes to consider the following FRoR for the First Control Period for Mangaluru Airport:

Table 72: Fair Rate of Return proposed by the Authority for the First Control Period

Parameter	Value
Cost of equity	15.18%
Cost of debt	9.00%
Weighted average gearing of equity	52.00%
Weighted average gearing of debt	48.00%
Fair Rate of Return	12.21%

8.3. Authority's proposals regarding FRoR for the First Control Period

Based on the materials before it and based on its analysis, the Authority proposes the following:

- 8.3.1. To consider the Cost of equity at 15.18% as per CAPM formula.
- 8.3.2. 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.
- 8.3.3. To consider cost of debt of 9% and true up the cost of debt for the First Control Period, based on the efficiency and reasonableness.
- 8.3.4. To consider FRoR of 12.21% for the First Control Period based on above mentioned Cost of equity, Cost of debt and gearing ratio.

³ <https://www.rbi.org.in/rbi-sourcefiles/lendingrate/LendingRates.aspx>

9. INFLATION FOR THE FIRST CONTROL PERIOD

9.1. Mangaluru International Airport's submission regarding Inflation for the First Control Period

- 9.1.1. Airport Operator has submitted Inflation rate as 5% for all operating expenses including manpower expenses, utility expenses, IT expenses, rent and lease expenses, security expenses, corporate allocation, administrative expenses, repair and maintenance, and other operating expenses for MIA for the First Control Period.
- 9.1.2. The inflation rate of 5% has been submitted by the Airport Operator based CPI inflation forecasts as summarised in the table below:

Table 73: CPI inflation rate submitted by Airport Operator

Year	CPI	Source
FY2021-22 (CPI Combined General)	Q1 – 5% Q2 – 4.9% Q3 – 4.3% Q4 – 5%	Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 69th Round released on 07th April, 2021
CY2021*	4.6%	Oxford Economics Forecast
CY2022	4.8%	
CY2023	5.1%	
CY2024	5.3%	
CY2025	5.2%	
CY2026	5.0%	

* CY represents Calendar Year.

9.2. Authority's examination regarding Inflation for the First Control Period

- 9.2.1. The Authority has examined the submission made by MIA on inflation to be considered for the FCP.
- 9.2.2. The Authority proposes to consider median of WPI inflation forecasts (WPI Non-food Manufactured products) for the FY 2021-22 as per the recent "Results of the Survey of Professional Forecasters on Macroeconomic Indicators – Round 69" published by the Reserve Bank of India (RBI). An extract of the results of RBI's annual forecast of WPI inflation (WPI Non-food Manufactured products) for the 4th quarter of FY 2020-21 and the 1st, 2nd, 3rd and 4th quarters of FY 2021-22 is reproduced below:

Table 74: WPI inflation rates as per RBI's annual forecast

Year	WPI inflation	Source
FY 2020-21	Q4 – 5.5%	Survey of Professional Forecasters on Macroeconomic Indicators – Round 69
FY 2021-22	Q1-6.2%	
FY 2021-22	Q2-5.8%	
FY 2021-22	Q3-4.3%	
FY 2021-22	Q4-2.6%	

9.3. Authority's proposal relating to inflation for the First Control Period

Based on the material before it and its analysis, the Authority proposes:

- 9.3.1. To consider WPI inflation at 4.9% for the First Control Period based on average of the median WPI inflation forecasts of the 4th quarter of FY 2020-21 and of FY 2021-22 given in the 69th round of survey of professional forecasters on macroeconomic indicators of RBI.

10. OPERATION AND MAINTENANCE (O&M) EXPENSES FOR THE FIRST CONTROL PERIOD

10.1. Mangaluru International Airport's submission of Operation and Maintenance (O&M) Expenses for the First Control Period

10.1.1. AO in its MYTP submission has stated that the Aeronautical Operation and Maintenance (O&M) expenses for the First Control Period has been estimated based on the following assumptions:

- Expansion of Terminal Building which involves addition of 10,142 Sq.m. to the existing Terminal Building area (including other operational buildings) of 37,322 Sq.m.(approx. 27%) during FY 2022-23, resulting in additional increase of 27% in FY 2022-23 across various expenses such as Utilities, IT expenses, Rates & Taxes, Security and Other Operating expenses.
- 10% increase in the O&M expenses has been considered, taking into account the current economic scenario, concession agreement obligations and the expansion of Terminal Building.
- Inflationary increase of 5% has been considered towards all expenses for the First Control Period.
- FY22 has been considered as the base year and relevant growth percentages have been applied over the same to estimate expenses for other Financial Years.
- The operations of Fuel facility to be outsourced to a third-party vendor in FY 2022-23 on a 'Cost plus margin' basis, which includes employee cost, repairs and maintenance expenses and facility operating expenses.
- Cargo expenses have been estimated for the First Control Period based on the assumption of constructing new Cargo facility in FY 2022-23. Further, Cargo expenses have been increased by 10% for the remaining three (3) tariff years of the First Control Period.

10.1.2. The AO has submitted the following categories of O&M expenses in its MYTP submission:

Table 75: O&M expenses (category wise) claimed by the Airport Operator in the MYTP for the First Control Period

Type of O&M Expense	Expense Category
Aeronautical Operating Expenses	Manpower Expenses – AAI employees
	Manpower Expenses – Airport Operator employees
	Utility Expenses
	IT Expenses
	Rates and Taxes
	Security Expenses
	Security Others
	Corporate Allocation
	Administrative Expenses
	Insurance
	Repair and Maintenance Expenses
	Other Operating Expenses and
	Amortisation of Runway recarpeting expenses
Fuel Operating Expenses	Employee cost
	Repairs & Maintenance
	Facility Operating expense

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Type of O&M Expense	Expense Category
	Refuellers rental
Cargo Operating Expenses	Salary costs
	Operating expenses
	Customs cost recovery

10.1.3. The above expenses do not include Concession Fee, since it is not considered as part of Aeronautical O&M expenses, as per Clause 27.1.2 of the CA, which states that:

“The Monthly Concession Fee paid/ payable by the Concessionaire to the Authority under and pursuant to the terms of this Agreement shall not be included as a part of costs for provision of Aeronautical Services and no pass-through would be available in relation to the same.”

10.1.4. The AO has segregated all O&M expenses into Aeronautical, Non-aeronautical and Common expenses. Allocation ratios have been used to further segregate the Common expenses into Aeronautical and Non-aeronautical categories. The basis adopted by the AO for allocation and segregation of O&M expenses is as follows:

Table 76: Segregation of O&M expenses into Aeronautical and Non-aeronautical expenses and the basis of allocation as per Airport Operator’s submission

Expense Category	Expense classification	Allocation Basis	Aeronautical	Non-aeronautical
Manpower expenses – AAI employees	Aeronautical	-	100 %	0%
Manpower expenses – Airport Operator employees	Common	Department wise cost	97 %	3%
Utility expenses	Aeronautical	-	100 %	0%
IT expenses	Common	Initial RAB ratio	95 %	5%
Security expenses	Common	Initial RAB ratio	95 %	5%
Security Others	Common	Initial RAB ratio	95 %	5%
Corporate Allocation Cost	Common	Initial RAB ratio	95 %	5%
Administrative expenses	Common	Initial RAB ratio	95 %	5%
Insurance expenses	Common	Initial RAB ratio	95 %	5%
Rates and taxes	Common	Terminal Building ratio	95 %	5%
Repairs and Maintenance expenses	Common	Terminal Building ratio	95 %	5%
Other Operating expenses	Common	Terminal Building ratio	95 %	5%
Amortization of Runway recarpeting expenses	Aeronautical	-	100 %	0%
Fuel Operating expenses	Aeronautical	-	100 %	0%
Cargo Operating expenses	Aeronautical	-	100 %	0%

10.1.5. The total Aeronautical O&M expenses including Fuel and Cargo Operating Expenses submitted by the AO for the First Control Period have been presented as follows:

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Table 77: Total Aeronautical Operation and Maintenance (O&M) expenses submitted by the Airport Operator for Mangaluru International Airport

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
<u>Aeronautical Operating Expenses</u>						
Manpower expenses - AAI	20.00	23.00	22.06	18.19	20.92	104.18
Manpower expenses - Airport Operator	10.28	22.91	38.51	44.29	50.93	166.93
Utility expenses	9.38	12.52	13.15	13.81	14.50	63.36
IT expenses	4.75	6.75	7.77	8.93	10.27	38.47
Rates and Taxes	0.34	0.49	0.56	0.64	0.74	2.77
Security expenses	2.14	3.04	3.49	4.02	4.62	17.31
Security Others	0.00	11.97	12.57	13.20	13.86	51.59
Corporate Allocation Cost	9.50	10.93	12.56	14.45	16.62	64.05
Administrative expenses (excluding Collection charges on UDF)	4.23	4.76	5.41	6.18	7.08	27.65
Collection charges on UDF	0.28	0.43	0.56	0.68	0.81	2.77
Insurance	1.29	1.90	2.11	2.33	2.68	10.30
Repairs and Maintenance	14.25	23.52	26.22	29.21	33.58	126.78
Other Operating expenses	6.29	8.94	10.28	11.82	13.60	50.94
Runway recarpeting	-	11.95	13.72	15.76	18.10	59.53
Aeronautical Operating Expenses (A)	82.74	143.11	168.98	183.52	208.30	786.64
<u>Fuel Operating Expenses</u>						
Employee Cost & Related Expense – Inputs	-	1.16	1.78	2.05	2.35	7.34
Repair & Maintenance Cost - Inputs	-	0.40	0.69	0.82	0.95	2.86
Facility Operating Expense - Inputs	-	0.74	1.27	1.52	1.76	5.29
Outsourced Contractor Margin @ 25% on the above expenses	-	0.58	0.93	1.10	1.27	3.87
Refuelers Rentals	-	0.72	0.16	-	-	0.88
Fuel Operating Expenses (B)	-	3.60	4.82	5.48	6.34	20.23
<u>Cargo Operating Expenses</u>						
Insourced salary	-	0.31	0.68	0.75	0.83	2.57
O&M Expenses	-	0.72	1.91	2.55	3.39	8.57
Customs Cost Recovery	-	0.49	1.08	1.19	1.31	4.07
Cargo Operating Expenses (C)	-	1.52	3.68	4.48	5.52	15.20
Total Aeronautical O&M Expenses (A+B+C)	82.74	148.23	177.48	193.48	220.16	822.08

10.1.6. The growth rates assumed by the Airport Operator for total Aeronautical O&M expenses have been presented in the tables below:

Table 78: Growth rates for total Aeronautical Operation and Maintenance (O&M) expenses submitted by the AO for the First Control Period

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Aeronautical Operating Expenses (A)					
Manpower Expenses – AAI employees	15%	15%	15%	15%	15%
Manpower Expenses – Airport Operator employees	-	20%	15%	15%	15%
Utility expenses	5%	32.17%	5%	5%	5%
IT expenses	15%	42.17%	15%	15%	15%
Rates and Taxes	15%	42.17%	15%	15%	15%
Security expenses	15%	42.17%	15%	15%	15%
Security Others	5%	5%	5%	5%	5%
Corporate Allocation Cost	15%	15%	15%	15%	15%
Administrative expenses	15%	15%	15%	15%	15%
Insurance – on Opening Net block of Assets	15%	15%	15%	15%	15%
Repairs and Maintenance – on Opening Net block of Assets	15%	15%	15%	15%	15%
Other Operating expenses	15%	42.17%	15%	15%	15%
Fuel Operating Expenses (B)					
Employee cost and related expense	-	-	15%	15%	15%
Repairs and Maintenance	-	-	72%	19%	16%
Facility operating expense	-	-	72%	19%	16%
Cargo Operating Expenses (C)					
Insourced salary	-	-	10%	10%	10%
O&M Expenses	-	-	10%	10%	10%
Customs Cost Recovery	-	-	10%	10%	10%

10.2. Authority's examination of Operation and Maintenance (O&M) Expenses for the First Control Period

Allocation of O&M expenses to Aeronautical and Non-Aeronautical activities

10.2.1. The AO has considered the Manpower Expenses of AAI employees as 100% aeronautical, as this expense is considered as pass through in the determination of Aeronautical charges, as per the Clause 6.5 read with Clause 28.4.3 of the Concession Agreement. The Authority, in this regard examined the extract of the relevant clauses of the Concession Agreement which reads as under:

- Clause 6.5.1. states that:

"(i) 'Select Employees' shall mean those employees of the Authority as set forth in Schedule S (of the rank of assistant general manager and below) who are posted at the Airport by the Authority and shall be deployed at the Airport for the duration of the Joint Management Period and Deemed Deputation Period. The Select Employees shall stand reduced to the extent of employees who retire, are deceased or otherwise separated from Authority's services during the Joint Management Period or Deemed Deputation Period. It is clarified that the Select Employees shall not be reduced to the extent of

employees who are transferred by AAI.

(ii) "Joint Management Period" shall mean the period commencing from the COD and ending on the date which is 1 (one) calendar year after the COD.

(iii) "Deemed Deputation Period" shall mean the period commencing from the expiry of the Joint Management Period and ending on the date which is 2 (two) calendar years therefrom."

- Clause 6.5.4 states that:

"The Concessionaire shall bear the Select Employee Costs for the Joint Management Period and Deemed Deputation Period."

- Clause 6.5.10 states that:

"If, at the expiry of the Deemed Deputation Period, the number of Accepting Employees is less than 60% (sixty) percent of the Select Employees (the 'Deficit Employees'), the Concessionaire shall, commencing from the expiry of the Deemed Deputation Period pay to the Authority, on a monthly basis, such amounts as may be indicated in an invoice to be raised by the Authority on the Concessionaire with regard to the emoluments payable by the Authority in respect of such Deficit Employees (the 'Deficit Employee Costs')."

(ii) The Deficit Employee Costs shall be considered for pass-through in the determination of the Aeronautical Charges."

- Clause 28.4.3. states that:

"The Parties agree and acknowledge that the Concessionaire expressly waives its right to seek as pass-through in the Aeronautical Charges such costs and/ or expenses which the Concessionaire is restrained under this Agreement from seeking to be passed-through thereunder."

- 10.2.2. The Authority, on review of the above clauses of the CA, proposes to consider the assumptions of the Airport Operator as the Manpower Expenses of AAI employees during the First Control Period are mandated by the terms of the CA. However, the Authority proposes to consider the Manpower Expenses of AAI employees up to 'Deemed Deputation Period' and after the expiry of such period relating to 'Deficit Employee cost' as provided under the relevant Clauses of the Concession Agreement for such expenses.

In this respect, the Authority proposes to consider the Manpower Expenses of AAI employees up to 'Deemed Deputation Period' as Common, since the Manpower of AAI is used for both Aeronautical and Non-aeronautical activities and also in line with the report on Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport (refer Appendix II of this Consultation Paper). Accordingly, the Authority proposes to apportion the Manpower Expenses of AAI employees up to 'Deemed Deputation Period', to Aeronautical activities in the ratio of 98.84:1.16 (Aeronautical: Non-aeronautical) based on department-wise Employee Headcount of AAI employees as of October 31, 2021.

In respect of the Manpower Expenses of AAI employees relating to 'Deficit Employees' after the expiry of the Deemed Deputation Period, the Authority proposes to consider the same as 100% pass through as mandated by Clause 6.5.10. of the CA.

- 10.2.3. The Airport Operator has allocated the Manpower Expenses of its own employees, in the ratio of Employee Head Count of 97:3 based on the department-wise Employee Headcount, by including both AAI employees and Airport Operator employees, as of October 31, 2021. However, the Authority feels that the Employee Headcount ratio should not be based on the total number of employees of both AAI and Airport Operator, but only based on the Employee Headcount of Airport Operator, as these are

Manpower expenses of the Airport Operator only.

Further, the Authority believes that the 5-year average ratio after considering the Employee Headcount projected for the entire First Control Period is more appropriate than the ratio based on Employee Headcount as of October 31, 2021. Accordingly, the Authority has segregated the Manpower expenses of Airport Operator in the ratio of 96:4 based on the 5-year Average Employee Headcount ratio.

However, the Authority proposes to consider the Employee Headcount ratio of 97:3 (based on the 5-year average ratio of Total Employee Headcount of both AAI and Airport Operator for the First Control Period) for allocation of other applicable expenses such as Utilities, IT expenses, Administrative expenses, etc.

- 10.2.4. The Authority notes that the AO has segregated the expenses towards Utilities after netting off the recoveries proposed to be made from the Concessionaires for Non-aeronautical activities and has considered the net Utilities expenses as 100% Aeronautical. The Authority finds this allocation to be in line with that followed in other similar airports and proposes to consider the same.
- 10.2.5. The Authority notes that the AO has segregated the expenses towards IT expenses, Security expenses, Security others and Insurance expenses in the Initial RAB ratio, i.e., 95:5. However, considering the nature of expenses, the Authority proposes to apportion the IT expenses in the ratio of Employee Head Count i.e., 97:3 (derived based on 5-year average ratio of Total Employee Head Count of both AAI and Airport Operator) and Insurance expenses in the Terminal Building ratio of 92:8, in line with the *Asset Allocation Report*, IMG norms and as approved for other similar airports.

Further, the Authority notes that for Security expenses the allocation ratio prescribed by the *Study on Efficient Operation and Maintenance Expenses of Mangaluru International Airport (Table 19)* is the Gross Fixed Assets ratio i.e., 99.20:0.80. Since this ratio has been derived based on expenses for the past period (from FY 2016-17 up to October 30, 2020) and is on the higher side, the Authority proposes to consider the Terminal Building ratio of 92:8 in line with the *Asset Allocation Report*, IMG norms and as approved for other similar airports.

- 10.2.6. The Authority notes that AO has segregated Administrative expenses including expenses towards Professional & Consultancy, Sales & Marketing, Travelling & Communication, Printing & stationery and the Collection charges on UDF in the Initial RAB ratio, i.e., 95:5. The Authority proposes to allocate Collection charges on UDF as 100% Aeronautical in line with other similar airports and is of the view that the other expenses which are administrative in nature should be apportioned in the Gross Fixed Assets ratio. Since the Gross Fixed Assets ratio has been derived based on expenses for the past period (from FY 2016-17 up to October 30, 2020) and is on the higher side, the Authority proposes to consider the ratio of Employee Head Count i.e., 97:3 (derived based on 5-year average ratio of Total Employee Head Count of both AAI and Airport Operator) for allocating the Administrative expenses other than Collection charges on UDF.
- 10.2.7. The Authority notes that the AO has segregated expenses towards Corporate Allocation Cost in the Initial RAB ratio of 95:5 and has engaged an Independent Consultant for conducting a Study on allocation of Corporate Costs of both the Holding Companies of the AO. The AO has shared a Note on the Study report which provides the types of services / costs that have to be allocated to the AO, along with the basis of allocation of such costs.

The AO has derived the allocable Corporate Costs based on the study. However, the basis for allocation of the costs towards Aeronautical and Non-aeronautical activities has not been provided in the Study report. The Authority is of the view that in the absence of an appropriate basis, the Corporate costs can be allocated in the ratio of Employee Headcount (as also mentioned in the *Study on Efficient Operation and Maintenance expenses of Mangaluru International Airport*, given

as Appendix II to this Consultation Paper). However, as the Employee Headcount ratios have been derived based on expenses for the past period (from FY 2016-17 up to October 30, 2020) and are on the higher side and hence, the Authority proposes to consider the ratio adopted by the Airport Operator (i.e., Initial RAB ratio of 95:5) to be reasonable.

- 10.2.8. The Authority observes that the AO has segregated expenses towards Repairs and Maintenance, Rates and Taxes and Other Operating expenses (which includes Housekeeping, Horticulture and Hiring expenses) in the Terminal Building ratio of 95:5, which the Authority proposes to re-allocate in the revised Terminal Building ratio of 92:8 in line with the *Asset Allocation Report*, IMG norms and as approved for other similar Airports.
- 10.2.9. The AO has considered the expense towards Fuel and Cargo Operating expenses as 100% Aeronautical, which the Authority finds to be reasonable.
- 10.2.10. The Authority's proposal for allocation of Total Aeronautical O&M expenses of Mangaluru International Airport as compared to that submitted by the Airport Operator has been summarized in the table below:

Table 79: Allocation of Total Aeronautical O&M expenses for Mangaluru International Airport proposed by the Authority for the First Control Period

Particulars	O&M expense allocation	
	AO's Submission	Authority's Proposal
Manpower Expenses – AAI employees (up to Deemed Deputation Period)	100 %	98.14 %
Manpower Expenses – AAI employees (Deficit Employee Cost)	100 %	100 %
Manpower Expenses – Airport Operator employees	97 %	96 %
Utility expenses	100 %	100 %
IT expenses	95 %	97 %
Rates and Taxes	95 %	92%
Security expenses	95 %	92%
Security Others	95 %	92 %
Corporate Allocation Cost	95 %	95%
Administrative Expenses – Others	95 %	97%
Administrative Expenses – Collection Charges on UDF	95 %	100 %
Insurance	95 %	92 %
Repairs and Maintenance	95 %	92%
Other Operating expenses	95 %	92%
Amortization of Runway recarpeting expenses	100 %	100 %
Fuel Operating Expenses	100 %	100 %
Cargo Operating Expenses	100 %	100 %

The Authority has evaluated the submission made by MIA relating to operational expenditure. The

Authority analysis of various expenses under operational expenditure are given below:

Manpower Expenses

10.2.11. The Authority, on its examination of Airport Operator's submission towards Manpower expenses, notes the following:

- i. **Manpower Expenses of AAI employees** - The Airport Operator has projected the expense towards specified number of AAI employees across all the five (5) tariff years in the First Control Period as per clause 6.5.1 of the Concession Agreement entered into between AAI and Airport Operator, the extract of which has already been provided under paragraph 10.2.1.
 - The Airport Operator has claimed Manpower Expenses for 'Select employees' till the end of Deemed Deputation Period, namely 107 select employees (refer table below for the department wise list) and also 'Deficit Employee Cost' for 64 employees (calculated at 60% of 'Select employee' number as stated in Clause 6.5.10 of the Concession Agreement) for the remaining portion of the First Control Period. The Airport Operator has also projected a growth rate of 15% year-on-year towards Manpower Expenses of AAI employees.

The department-wise list of 'Select' employees of AAI deputed at MIA as of March 31, 2021 is shown as follows:

Table 80: List of department-wise Select employees of AAI deputed to MIA as of March 31, 2021

Department	No. of Employees
Engineering & Maintenance	36
Finance	6
Fire	38
Human Resource & Admin	15
Commercial (Non-Aero)	1
Terminal & Operations	11
Grand Total	107

- The Authority notes that the Manpower Expense of AAI employees are accounted by the Airport Operator, based on the invoice raised by AAI for the 'Select Employees' deputed at Mangaluru International Airport, on a monthly basis. However, the Authority notes that same does not include the cost of retirement benefits for such employees, which has been separately estimated by the Airport Operator in the MYTP submission.
- The Authority on review of Clause 6.5 read with clause 28.4.3 of the Concession Agreement entered into between AAI and the Airport Operator, notes that the cost of AAI employees deputed at the Mangaluru International Airport is eligible for pass-through in the determination of Aeronautical charges. The Manpower Expenses - AAI employees for the entire First Control Period are considered as 100% Aeronautical expenses by the Airport Operator.
- However, the Authority proposes to consider the Manpower Expenses – AAI employees up to 'Deemed Deputation Period' and after the expiry of such period relating to 'Deficit Employee cost' according to the explanation provided in the relevant Clauses of the Concession Agreement for such expenses and accordingly, treat the same which has been

explained in paragraph 10.2.2 above.

- Further, the Authority proposes to revise the 15% Y-o-Y increase in Payroll costs claimed by the Airport Operator to 6% for all the five (5) tariff years of the First Control Period, as approved by the Authority for other similar airports.
- ii. **Manpower Expenses of Airport Operator** – The Airport Operator has submitted the following regarding projected salary cost per employee per annum and increase in the total employee headcount:

- Salary cost projected per employee per annum - The Airport Operator has submitted a weighted average employee cost of ₹ 15.00 lacs per annum for FY 2021-22 and also projected an increase of 20% in FY 2022-23 and 15% year-on-year (Y-o-Y) for the 3 remaining tariff years in the First Control Period. As per the submission of the Airport Operator, the weighted average employee cost of ₹ 15.00 lacs per annum has been derived after considering the salary cost of projected recruitments for Senior-level positions like Chief Airport Officer, Chief Security Officer and Heads of Departments for Procurement, Legal, Customer Care, Experts for Quality, Corporate Communications and also the salary cost of other-level positions in various departments like Airside management, Security, Terminal Operations, Engineering & Maintenance, HR, Finance, etc.

The AO has further submitted that as per Clause 6.5.3. of the Concession Agreement, the Senior Personnel of AAI deputed to MIA shall remain only for a period not exceeding 3 months from the COD and shall be transferred on expiry of three months. Hence, the AO has projected the recruitment of Senior-level employees in FY 2021-22 itself, which has resulted in the projection of weighted average employee salary cost of ₹ 15.00 lacs per annum for FY 2021-22.

The Authority examined Clause 6.5.3 of the Concession Agreement which states that:

“The senior management staff of the Authority of the rank of deputy general manager and above (“Senior Personnel”) shall remain deputed at the Airport for a period not exceeding 3 (three) months from the COD.

- (i) On the expiry of such 3 (three) month period, the Senior Personnel shall be transferred out of the Airport and redeployed by the Authority.*
- (ii) It is clarified that the Concessionaire shall not be liable to bear any costs in respect of the Senior Personnel, which costs shall be borne entirely by the Authority.”*

Considering all the above, the Authority proposes to accept the weighted average employee salary cost of ₹ 15.00 lacs per annum in FY 2021-22 as appropriate for Senior level employee. However, the Authority proposes to rationalise the growth rate by considering only 6% Y-o-Y for all the 4 FYs, starting from FY 2022-23 in line with what has been considered for Manpower Expenses of AAI employees.

- Increase in Employee Headcount – The Airport Operator has projected an increase in Employee Headcount from 31 as at the end March 2021 to 190 (rounded off) as at the end the First Control period. The table below depicts increase in the total Headcount Y-o-Y with break-up of Aeronautical (department wise) and Non-aeronautical employees, wherein substantial increase (approximately 60 employees) has been projected during FY 2022-23 and FY 2023-24. The Aeronautical Employee headcount shown in below table is after allocation of Common employees.

Table 81: Head Count of Employees added by the Airport Operator for the First Control Period and Department-wise break-up for each FY

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Justification provided by Airport Operator
Aeronautical employees	72	122	188	188	188	
Non-aeronautical employees	4	5	6	6	6	
Total Employee Headcount	76	127	194	194	194	
Total Employee Head count (rounded off in MYTP)	70	130	190	190	190	
Department-wise break-up of Aeronautical employees						
Chief Airport Officer's office (CAO office)	2	3	3	3	3	As per Concession Agreement, Clause 6.5.3. AAI employees with designation over DGM and above have been transferred out by AAI and they are not associated with the Airport after 3 months from COD. Accordingly, Airport Director and all HoDs have been transferred out and are not working at Mangaluru Airport He is responsible for overall operations and management of the Airport. Department is akin to erstwhile Office of Airport Director. He is supported by relevant staff for analysis, reviews, KPI management, regular review, action taken follow-ups, stakeholder management, etc.
Techno Commercial (Procurement department)	2	4	5	5	5	AAI do not have any local purchase department at site. All the procurement at AAI is done centrally through tendering process. Techno commercial function is responsible for procurement of various requirement of user department, management of contract, RFP issue, onboarding of vendor, etc.
Corporate communication	1	1	1	1	1	As per Clause 18.1.1 (q), MIA is required to have public relation officer who will interface with various stakeholders. MIA has assumed to place one position to fulfil the mandated requirement.
Corporate Affairs	1	1	1	1	1	Position required to interact with various state government, local municipalities, utility boards, local police, land department etc. on day-to-day basis.
Security	5	9	14	14	14	Currently there is no person deputed for carrying out Security

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Particulars	FY 2021- 22	FY 2022- 23	FY 2023- 24	FY 2024- 25	FY 2025- 26	Justification provided by Airport Operator
						<p>function at the Airport. Earlier AAI was only performing pass section function with an outsourced support. However, there are various activities which need to be performed by MIA like CISF Documentation, Airport Security Program, Kerb Side Management, Traffic Management, Airport Operator Security Control Room, Security System Maintenance, Encroachment outside and perimeter area, Intelligence and Vigilance Gathering, Avsec Training and Compliances, Landside Operations, BCAS Compliance requirements.</p> <p>MIA will be carrying out the functions with a combination of on-roll and outsourced employees. MIA has assumed 14 employees on-rolls which is a composition of 1 CSO, 4 Pass Section, 2 Audit and Compliances, 2 Loss Prevention and Automation, 2 landside operations and others. Other operations like Kerb side, Tout Management, Traffic Management, Encroachment Prevention, Security System Maintenance etc. are expected to be outsourced.</p>
Legal	1	2	3	3	3	<p>AAI does not have legal positions at the Airport.</p> <p>Composition includes 1 HoD and 2 department supporting staff.</p>
Safety	2	2	2	2	2	<p>As per Concession Agreement clause 18.15.4, MIA is expected to create Airport Safety Management Unit (ASMU) and designate one of its officers to be in-charge of the ASMU.</p> <p>Composition includes 1 Aviation Safety Expert and 1 its associates.</p>
Quality	1	3	3	3	3	<p>Under clause 23.1 of concession Agreement, MIA is obligated to monitor and measure quality of service on the parameters prescribed in the Concession Agreement. Further as per Concession Agreement, MIA is expected to maintain relevant ISO certification and other quality certifications for all the facilities controlled and managed by MIA.</p> <p>Composition includes 1 Quality Expert and 2 its associates.</p>

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Particulars	FY 2021- 22	FY 2022- 23	FY 2023- 24	FY 2024- 25	FY 2025- 26	Justification provided by Airport Operator
Customer Engagement	1	2	3	3	3	MIA is expected to perform ASQ rating and take customer feedback on the various facilities, improvement areas at the Airport. Composition includes 1 HoD and 2 its associates.
Information Technology	3	4	4	4	4	AAI does not have Information Technology team to support the IT functioning of the Airport. IT is a backbone of the Aviation, and all the critical systems need to be running with zero downtime. Critical systems include AODB, FIDS, PDAs, SAP, Business Analytics, Integration with ATC, VDGS, Radio Sets, Desktops, Laptops, Billing Software, Document Management System, Access Control System etc. Composition includes 1 HoD, Support staff.
Airside Management	9	15	30	30	30	As per Clause 18.1.1 (d), (f) and (g), MIA is responsible to maintain and operate Airside including Runway, Taxiways, Apron, Approach Areas etc. Also, it is mentioned in the CNS-ATM Agreement about the airside obligations to be performed by MIA MIA is responsible to establish Apron Management Service, Airside safety, aerodrome safeguarding and aeronautical information services. Previously some of these services were performed by ANS team of AAI and some of the services were not done at all. Post COD, all these functions are to be performed by MIA. The composition includes In Charge Airside, Duty Managers, Duty Officers, Airside Executive, Airside Ground Maintenance, Aerodrome Licencing, Aerodrome Safeguarding, Wildlife Hazard Management, Environment Sustainability
Regulatory	1	1	1	1	1	New position to support in regulatory filing with AERA.
Terminal and Operation	9	10	18	18	18	Expansion of existing terminal area by 27% is under progress. It is expected that there will be requirement for additional duty managers, duty officers to cater to the increased area demand.

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Particulars	FY 2021- 22	FY 2022- 23	FY 2023- 24	FY 2024- 25	FY 2025- 26	Justification provided by Airport Operator
Human Resources and Admin	2	4	6	6	6	MIA is expected to consolidate and automate various positions/functions and will employ limited staff which will be comprising of HoD, HR Operations, Talent Acquisition, Compliances and 2 Admin purposes.
Finance	4	5	6	6	6	Composition includes 1 HoD, and support staff for various functions under finance and accounts.
Engineering & Maintenance	7	14	21	21	21	Currently AAI has approx. 10-15 people each in Civil, Technical and Engineering sections. MIA is expected to outsource some of the non-core activities. Second there will be increase in Terminal Area by 27%, Increase in Airside Facilities, increase in landside facilities, Utilities etc, there will be requirement of more manpower in Engineering and Maintenance department to cater to these increased facilities. Considering all the above factors, MIA is expected to consolidate the function and will have only 21 people on-rolls.
Aviation Rescue and Fire Fighting (ARFF)	1	2	7	7	7	As per AAI manual 2015, there is requirement of 17 Fire People for Category 7 Airport (considering 3.5 shift and 0.5 leave) (17 shift people * 4). Further there are 2 Shift Managers. Out of total 70 requirement, 16 are Ambulance people which MIA is expected to outsource and balance people to be required by MIA for the safe operations of the Airport. Currently AAI select employees includes 36 Fire Fighters. MIA is expected to employee additional Fire fighters to fulfil the desired requirement. Keeping in view the importance of ARFF activities in the Airport, there is requirement of additional position to fill like Head of Department, Station in Charge, Fire Prevention, Training Cell, Shift Managers etc.
Fire Fighters	20	40	60	60	60	
Total Aeronautical Employee Head count	72	122	188	188	188	

The Authority notes that the Airport Operator has estimated this increase in number of employees mainly towards functions relating to Security, Firefighting, Airside management, Terminal operations

and Engineering and Maintenance, considering the operationalization of the expanded Terminal Building in FY 2022-23 and that the deemed deputation period of the Select Employees deputed by AAI expires during the FY 2023-24.

The Authority also takes cognizance of the fact that, prior to COD, certain positions relating to Firefighters, Aviation rescue and firefighting (ARFF) etc., were not entirely filled up by AAI and that AAI had utilised the support of Central Head Quarters (CHQ) for certain other positions / departments, like Procurement department and of ANS team for performing certain functions relating to Airside Management. However, post COD, the AO has projected its manpower requirements in the First Control Period for all the above functions, as the same will be handled exclusively by the AO.

In this background, the Authority examined the Aeronautical Employee Head Count of Mangaluru International Airport for the period from FY 2016-17 to FY 2019-20 (Pre-COVID year) and notes that the 4-year average employee headcount is 103 and the same is given in below table:

Table 82: Headcount of Aeronautical employees of Mangaluru International Airport for the Period from FY 2016-17 to FY 2019-20

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	4 – Year Average
Employee Headcount *	100	103	111	99	103

* Refer Table 9 of paragraph 4.5.3.2. of *Study on Efficient Operation and Maintenance Expenses for Mangaluru International Airport*.

The Authority further observes that the growth in Passenger traffic and ATM during the First Control Period for Mangaluru International Airport (refer Table 44) is slow, and the traffic is expected to reach Pre-COVID level only during FY 2023-24. The same has been presented in the following table:

Table 83: Estimated Passenger and ATM traffic of Mangaluru International Airport

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Passenger Traffic (in lacs)	10.13	18.05	21.08	27.27	32.39
ATM Traffic (In '000s)	9.98	15.19	16.69	20.98	24.56

The Authority also observes that the AO in its submission have explained that they will be outsourcing certain activities relating to Security, Engineering and Maintenance department, etc.

Considering the slow growth projected in Passenger traffic and ATM and the current scale of operations, the Authority is of the view that, the Aeronautical Employee Head Count projected by the AO which is at 188 towards the end of the First Control Period, is on the higher side and the same needs to be rationalised.

Based on the above, the Authority has analysed the Employee Headcount projected vis-à-vis the functions of each department mentioned in Table 81 and proposes the following revision in Aeronautical Employee Headcount projected by AO for the First Control Period:

- (i) In respect of Security department, the Authority is of the view that barring few activities such as coordination with CISF, BCAS compliance etc. which are Aeronautical in nature, the remaining activities listed out by the AO in Table 81 are Non-aeronautical. Further, the Authority notes that the AO will be outsourcing certain activities pertaining to Security department. Hence, the Authority proposes to consider only 50% of the Aeronautical Employee Headcount projected by the Airport Operator for the first 2 tariff years and retain the same number of employees (Five)

proposed by the Authority in the 2nd tariff year (FY 2022-23), till the end of the First Control Period.

- (ii) The Authority notes that the Legal Function is excluded in accordance with Clause 28.3.8 of the Concession agreement and hence proposes not to consider the Employee Headcount projected by AO for the Legal Function for Aeronautical Headcount.
- (iii) The Authority proposes to retain the Employee Headcount at 2 for the last three (3) tariff years for Customer Engagement department as against 3 employees claimed by the AO, as the Authority feels that this function relates to ASQ rating activity, which is performed only on a quarterly basis, that too through outsourced Consultancy Firms.
- (iv) In respect of Airside Management, the Authority notes that the Headcount projected by AO for all the tariff years is on the higher side considering the fact that, MIA is a small airport with lesser traffic volume and also that the work on ground handling (outsourced) and VDGS system is already in place. Further, the activity of bird chasing has been outsourced by the AO. Based on the above factors, the Authority proposes to consider 75% of the Aeronautical Employee Headcount projected by the Airport Operator for the first 2 tariff years and retain the same number of employees (Eleven), proposed by the Authority in the 2nd Tariff Year (FY 2022-23) for the last three (3) tariff years of the First Control Period as against 30 employees claimed by the AO.
- (v) The Authority notes that the number of Employee Headcount projected by the AO for Terminal Operations is on the higher side considering that there are existing employees of AAI (i.e., Select employees deputed to MIA) at the Airport till the deemed deputation period and hence, proposes to consider 75% of the Headcount projected by the AO, for all the five (5) tariff years.
- (vi) In respect of Engineering & Maintenance department, the Authority notes that the AO has submitted that they will be outsourcing certain activities relating to this department including availing hiring services of PMC and hence the Authority proposes to consider 50% of the Aeronautical Employee Headcount projected by the Airport Operator for all the five (5) tariff years of the First Control Period.
- (vii) The Authority notes that the Employee Headcount of forty (40) projected by the AO in FY 2022-23 for Fire-fighting department is on the higher side as there are existing employees of AAI (i.e., Select employees deputed at MIA) already handling the function and hence, proposes to consider 24 employees, as reasonable. The Authority considers 60 employees projected by the AO for the last three (3) tariff years for Fire-fighting as reasonable.
- (viii) The Authority notes that AO has projected 7 employees for ARFF department for the last Three (3) tariff years of the First Control Period. The Authority is of the view that the AO has already projected 60 employees for Fire-fighting for the last Three (3) tariff years as per DGCA guidelines. Such employees are also involved in related activities. Hence, the Authority proposes to consider 3 employees for ARFF department for the last Three (3) tariff years as against 7 employees claimed by the AO.

Based on the above factors, the Aeronautical Employee Headcount proposed to be considered by the Authority for the First Control Period is shown in the Table below:

Table 84: Aeronautical Employee Head Count for the Airport Operator proposed by the Authority for the First Control Period

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Aeronautical Employee Head count claimed by the Airport Operator	70	122	188	188	188
Chief Airport Officer's office (CAO office)	2	3	3	3	3
Techno Commercial (Procurement department)	2	4	5	5	5
Corporate communication	1	1	1	1	1
Corporate Affairs	1	1	1	1	1
Security	3	5	5	5	5
Legal	-	-	-	-	-
Safety	2	2	2	2	2
Quality	1	3	3	3	3
Customer Engagement	1	2	2	2	2
Information Technology	3	4	4	4	4
Airside Management	6	11	11	11	11
Regulatory	1	1	1	1	1
Terminal and Operation	7	8	14	14	14
Human Resources and Admin	2	4	6	6	6
Finance	4	5	6	6	6
Engineering & Maintenance	4	7	11	11	11
Aviation Rescue and Fire Fighting (ARFF)	1	2	3	3	3
Fire Fighters	20	24	60	60	60
Aeronautical Employee Head count proposed by the Authority	60	86	137	137	137

Further, the Authority proposes not to consider the allocation of 96:4 (Employee Headcount ratio) for this expense, since the same has already been derived based on the revised *Aeronautical Employee Headcount* and not on the Total Employee Headcount.

Utility Expenses

10.2.12. The Authority examined the expenses towards Utilities and noted the following:

- **Power expenses:** Airport Operator has projected the Electricity costs, after netting off the recoveries made from the Concessionaires (which is assumed to be 4.06% of the total electricity cost). The Authority notes that the power recovery percentage is significantly lower than that of comparable airports. The Authority is of the view that with the gradual increase in the Non-aeronautical operations, the Airport Operator should increase the power recovery from the Concessionaires. Accordingly, the Authority proposes that the Airport Operator shall constitute a Committee to verify the bills relating to Power expenses and submit a report on the same to the Authority as part of Stakeholder comments / feedback. In case such report is not submitted by the Airport Operator, the Authority proposes to consider power recoveries at a notional rate of 25% while issuing the tariff order of the First Control Period.

The Airport Operator has also proposed to increase the cost Y-o-Y by 5% during the First Control Period and an additional increase of 27.17% on account of operationalization of the expanded Terminal Building area. The Authority as part of its review notes that for other similar airports, it had allowed the increase claimed by the Airport Operator which was in proportion to the

increase in the area of the Terminal Building. Based on the same, the Authority proposes to consider the additional increase of 27.17% in Power costs and also allow 4.90% Y-o-Y towards inflationary effect across all the five (5) tariff years in the First Control Period.

However, the Authority proposes to shift the above additional increase of 27.17% to FY 2023-24 as the same would take effect only after operationalization of the extended Terminal Building which is proposed to be completed only by FY 2022-23 as per the Capitalization Schedule proposed by the Authority.

- **Water and Fuel charges:** The Airport Operator has assumed 5% Y-o-Y increase in water and fuel charges for all the five (5) tariff years in First Control Period and an additional increase of 27.17% for FY 2022-23 on account of operationalization of the expanded Terminal Building. The Authority reviewed the submission of Airport Operator and notes that the fuel charges claimed by the Airport Operator pertain to the diesel fuel required for operating the Generators. As mentioned in the above para, the Authority proposes to allow the one-time increase of 27.17% in water and fuel charges, in line with that approved for other similar airports. Further, the Authority proposes to consider the above increase of 27.17% in the FY 2023-24 as the same would take effect only after operationalization of the extended Terminal Building which is proposed to be completed only by FY 2022-23 as per the Capitalization Schedule proposed by the Authority.
- The Authority also proposes to allow 4.90% Y-o-Y towards inflationary effect across all the five (5) tariff years in the First Control Period.

IT expenses, Rates & Taxes and Security expenses

10.2.13. The Airport Operator has claimed an increase of 15% Y-o-Y and an additional increase of 27.17% in FY 2022-23 due to the proposed increase in the Terminal Building area.

- The Authority examined the actual expenses incurred by the Airport Operator for all the above expenses till January 2022 and noted that the actual IT expenses incurred by the Airport Operator was only ₹ 1.66 crores as against ₹ 5.00 Crores projected for the entire FY 2021-22. Based on the same, the Authority proposes to rationalize the IT expense to ₹ 2.50 crores for the FY 2021-22 but for other expenses, namely, Rates and Taxes and Security expenses, the Authority proposes to consider the projected amount as appropriate. Further, the Authority proposes to revise the growth rate to 4.90% towards inflationary effect for all these expenses across the five (5) tariff years of the First Control Period.
- As explained in the above paras, the Authority on its review of the other similar airports, is of the opinion that expansion of Terminal Building area will result in proportionate increase in all these expenses and hence, proposes to consider the additional increase of 27.17% claimed by the AO. However, the Authority proposes to shift the additional increase to FY 2023-24 as the same would take effect only after operationalization of the extended Terminal Building which is proposed to be completed only by FY 2022-23 as per the Capitalization Schedule proposed by the Authority.

Security Others

10.2.14. The Authority on its examination of the expense claimed towards Security Others and notes the following:

- Airport Operator has projected expenses of ₹ 12.00 Crores in FY 2021-22 with an increase of 5% Y-o-Y towards charges proposed to be paid to a Service Vendor for commissioning,

operation and maintenance of ‘Aerial Threat Detection and Neutralization System’ (i.e., Counter-Drone system) at the Mangaluru International Airport based on the directive of Bureau of Civil Aviation Security (BCAS), which had directed the Indian Airports to implement sophisticated, reliable, robust and highly effective Counter drone technology/solution for Surveillance, detection and Neutralization of drones/ UAVs vide AVSEC Circular no 02/2020 dated February 11, 2020 and vide addendum dated February 9, 2021 to the said circular.

- However, the Authority notes that the above-mentioned Circular has been subsequently withdrawn by BCAS vide Order No. CAS-6(11)/2018/ Div-I/RPA/ (Part2)/ 180940 dated February 23, 2022 and hence the Authority proposes not to consider this expense during the First Control Period.

Corporate Allocation Cost

10.2.15. The Airport Operator has claimed Corporate Allocation Cost of ₹ 10.00 Crores towards Corporate Support Services received from the Holding Companies, namely, AEL and AAHL for the FY 2021-22 and projected 15% increase Y-o-Y during the First Control Period.

- (i) The Authority observes from the Note provided by the AO (refer Appendix IV for the Note on Corporate cost allocation study report), that it has engaged an independent consultant, to conduct a Study on Corporate Cost allocation and based on the Study Report, they have submitted the following in support of their claim for Corporate cost allocation:

- AEL provides various strategic functions/activities like corporate finance, legal, central procurement, green initiative, ESG, Information technology, human resource management, etc., and also includes various leadership functions. AAHL through its corporate structure, provides expertise and specialist domain knowledge in Airports Operation, Airside Management, Master Planning, Designing, Airport Development, Airport Regulatory, Hospitality, Customer management, Cargo Development and management, Airline Marketing, Non-Aeronautical etc.
- AEL and AAHL incur costs at the corporate level to provide these services and support to various Group Companies (including Airports) and Airport companies. The major composition of these costs includes salaries and administrative costs. These costs (except shareholders services and non-Aeronautical services) are recovered by AEL and AAHL through a pre-determined, appropriate allocation method.
- Similar corporate cost allocation process is used by other private airport operators’ holding entities, such as GMR Infrastructure Limited (GIL) and GMR Airports Limited (GAL), which provide corporate administration services to DIAL and GHIAL, and their costs are allocated based on suitable drivers. Similarly, AAI also allocates its Central Head Quarters (CHQ) / Regional Head Quarters (RHQ) costs to various airports based on appropriate cost drivers.

- (ii) The detailed break up of Corporate costs along with the basis of allocation submitted by the AO for the FY 2021-22 is as follows:

Table 85: Corporate Allocation cost break-up with allocation basis submitted by the Airport Operator for the FY 2021-22

(₹ Crores)					
Particulars	Department	Allocation Key (basis)	Admin cost	Salary cost	Total
	Finance, Tax and Internal Audit	Ratio of Debt raised for a SPV to total	0.06	0.37	0.42

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Particulars	Department	Allocation Key (basis)	Admin cost	Salary cost	Total
AEL		Debt raised for Adani Group, Ratio of Turnover of a SPV to Total Group Turnover and Ratio of Full Time Equivalents (FTE) allocated to a SPV to total FTEs			
	HR and Admin	Ratio of Number of Employees of a SPV to Total Adani Group Employees	0.44	0.40	0.84
	CMD Office and Support Staff	Ratio of a SPV PBT to Group PBT and Airport budgeted expenditure to Total budgeted expenditure	0.05	0.27	0.32
	IT	Ratio of Number of IT users in a SPV to total Group users	0.09	0.05	0.14
	Legal	Ratio of Legal Budget of a SPV to Total Legal Budget	0.00	0.05	0.05
	Procurement	Ratio of Turnover of a SPV to Total Group Turnover	0.00	0.01	0.01
	Land & Estate	Ratio of a SPV PBT to Group PBT	0.01	0.00	0.01
	Total (A)		0.65	1.16	1.81
AAHL	Human Resources and Admin	Ratio of Number of Employees of a SPV to Total Adani Group Employees	0.95	0.72	1.67
	Finance	Ratio of Debt raised for a SPV to total Debt raised for Airport Group	0.65	0.93	1.58
	Operations (Airline Marketing, Operation, Security, HSE, Regulatory)	Ratio of Per Pax Revenue of SPV to total Per Pax Revenue	0.07	1.25	1.32
	IT	Ratio of Number of IT users in a SPV to total IT users in all airports	0.24	0.30	0.53
	Inhouse Legal Team	Ratio of Legal Budget of a SPV to Total Legal Budget of all airports	0.04	0.07	0.10
	Cargo Development	Ratio of Per Pax Revenue of a SPV to	0.01	0.34	0.35

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Particulars	Department	Allocation Key (basis)	Admin cost	Salary cost	Total
		total Per Pax Revenue of all airports			
	CEO Office	Ratio of Per Pax Revenue of SPV to total Per Pax Revenue	0.02	2.62	2.64
	Total (B)		1.96	6.23	8.19
	Total (A) + (B)		2.61	7.39	10.00

(iii) The Authority observes that the activities of certain Functions such as Finance, HR & Admin and IT are performed both centrally at Corporate (AEL, AAHL) and at the individual Airports. The same has been detailed as follows:

- **Activities performed at Corporate level:** These are strategic, decision-making activities that are carried out across the Group such as:
 - Designing policies and procedures, benchmarking and standardisation of processes across the Group
 - Monitoring annual budgeting process
 - Implementation of ERP for the Group (particularly Finance and HR functions)
 - Reviewing performance of the Group and providing guidance to Group Companies
 - Maintaining Adani Airports Information Repository, standards in software development and networking.
 - Identifying new revenue generating IT services, technologies and solutions.
- **Activities performed at the Airport:** These are operational in nature which includes:
 - Recording of Financial data in ERP
 - Preparation of monthly MIS for presenting it to Corporate team
 - Financial due diligence of various proposals.
 - Conducting interviews at site level for hiring of manpower and managing manpower at the site.
 - Executing Performance appraisal process and providing feedback to Corporate team.
 - Executing day-to-day IT requirements at the Airport.
 - Maintaining airport related IT assets such as AODB, FIDS, software used in AOCC, etc.
 - Support HO/Corporate IT team in the areas of IT Strategy, delivery and Governance.

(iv) The Authority notes that AEL on overall basis, extends support and guidance to various Group Companies and AAHL provides expertise and specialist domain knowledge to the Airport Companies, which are essential for the sustainable operations of the business. The major composition of the costs of these services includes salaries and administrative costs that are recovered by AEL and AAHL through an appropriate allocation method. Further, this process is consistent with the approach followed by other PPP airports such as DIAL, GHIAL etc. for allocation of Corporate costs to the Airports. Based on the above factors, the Authority considers the apportionment of costs of AEL and AAHL to MIA as reasonable.

(v) The Authority on review of the above projection, observes that the same includes costs of inhouse legal team, which as per Clause 28.3.8 of the Concession agreement is excluded from the determination of Aeronautical charges. Extract of the above clause is provided hereunder:

“It is clarified that costs incurred by the Concessionaire with regard to legal services, shall not be considered by the Regulator for the purpose of determining the Aeronautical Charges.”

- (vi) Based on the above, the Authority proposes not to consider an amount of ₹ 0.15 Crores claimed by Airport Operator towards such inhouse legal team and allow the remaining amount of ₹ 9.85 Crores towards Corporate Allocation Expense of the Airport Operator for FY 2021-22. Further the Authority observes that Salary cost constitutes the major portion of the Corporate Cost of ₹ 10.00 Crores and hence, proposes to rationalize the increase claimed by the Airport Operator to 6% Y-o-Y across all the five tariff years in the First Control Period, is in line with the increase proposed for Manpower expenses under Para 10.2.11 above.

Administrative Expenses

- 10.2.16. The Airport Operator has projected an increase of 15% Y-o-Y for Administrative Expenses towards Professional & Consultancy, Sales & Marketing, Travelling & Communication, Printing & Stationery and Collection charges for UDF. The Authority proposes to consider increase in Collection charges for UDF in line with the growth in Passenger traffic proposed for the First Control period for Mangaluru International Airport, as per Table 44. The Authority is of the view that MIA is a brownfield airport and proposes to consider an increase of 4.90% Y-o-Y towards inflationary effect, for the Administrative expenses (other than Collection charges for UDF), across all the five tariff years in the First Control Period, in line with the other similar airports.

Insurance expenses

- 10.2.17. The Authority examined the expense claimed by the Airport Operator towards Insurance and notes the following:

- **Insurance on Opening Net block of assets** – The Airport Operator has claimed ₹ 1.29 crores in FY 2021-22 and an increase of 15% Y-o-Y for Insurance expenses on the Opening Net block of Assets. The Authority, on review of the same, proposes to consider 4.90% increase Y-o-Y towards inflationary effect for the First Control Period.
- **Insurance on New Capital Expenditure** – The Airport Operator has also claimed Insurance expense at the rate of 0.10% on the cumulative value of Capitalized Total Assets for each tariff year. The Authority reviewed the same and proposes to consider the expense at the same rate of 0.10% on the revised cumulative value of Capitalized Aeronautical Assets that are forming part of Table 59. Further, the Authority proposes not to consider the allocation of 92:8 (Terminal Building ratio) for this expense, since the same has already been derived based on the Capitalized value of Aeronautical Assets.

Repairs and Maintenance expenses

- 10.2.18. The Authority examined the expenses towards Repairs and Maintenance and noted that the same has been projected towards Civil, Electrical, Plant and machinery, Electronics and Others.

- **Repairs and Maintenance on Opening Net block of Assets-** The Airport Operator has claimed ₹ 15.00 Crores in FY 2021-22 towards Repairs and Maintenance for Opening Net block of Assets and an increase of 15% Y-o-Y.
- **Repairs and Maintenance on New Capital Expenditure** – The Airport Operator has also claimed Repairs and Maintenance expense at the rate of 1.00% on the cumulative value of Capitalized Total Assets for each tariff year.
- The Authority as part of its review of the total amount claimed by the Airport Operator in each FY towards Repairs and Maintenance notes, that the total amount claimed by the Airport Operator is higher than 6% of the Opening Net block of Aeronautical Assets for the first Three (3) tariff years

of the First Control Period and lower than 6% of the Opening RAB (Net block of Assets) for the last 2 tariff years, i.e., FY 2024-25 and FY 2025-26.

- The Authority is of the view that MIA is a brownfield airport, wherein Capital Additions have been newly proposed for the First Control Period. As the newly constructed/ installed assets are covered under warranty clauses, they may need only minimum repairs and maintenance. The Authority, therefore, proposes to restrict the total repairs and maintenance expenses claimed by the Airport Operator to 6% of the Opening Net block of Aeronautical Assets for the FYs 2021-22, 2022-23, 2023-24 and consider the amount claimed by the Airport Operator towards repairs and maintenance for the FY 2024-25 and FY 2025-26.
- Further, the Authority proposes not to consider the allocation of 92:8 (Terminal Building ratio) for this expense, since the same has already been derived based on the Capitalized value of Aeronautical Assets. The amount claimed by the Airport Operator (as per row 'D') and Proposed by the Authority (as per row 'E') is shown in the table below:

Table 86: Repairs and Maintenance on Opening Net block of Assets claimed by the Airport Operator and Proposed by the Authority for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Repairs and Maintenance – Opening Net block of Assets claimed by the Airport Operator (A)	15.00	17.25	19.84	22.81	26.24	101.14
Repairs and Maintenance – New Capital Expenditure claimed by the Airport Operator (B)	-	7.51	7.76	7.94	9.11	32.32
Total Repairs and Maintenance – claimed by the Airport Operator (C = A+B)	15.00	24.76	27.60	30.75	35.34	133.46
Aeronautical Repairs and Maintenance – claimed by the Airport Operator (D)	14.25	23.52	26.22	29.21	33.58	126.78
Aeronautical Repairs and Maintenance Proposed by the Authority ©	7.42	6.83	25.06	29.21	33.58	102.09

Other Operating expenses

10.2.19. The Airport Operator has submitted the Other Operating Expenses towards Housekeeping, Horticulture and Hire charges and claimed an increase of 15% Y-o-Y for all five (5) tariff years and an additional increase of 27.17% in FY 2022-23 on account of expansion of Terminal Building area.

- The Authority notes that the Airport Operator has issued a Letter of Award (LOA) in October 2021 to a vendor for handling various services, namely, housekeeping (terminal, landside, airside and ancillary buildings), landscape management, trolley management, birds and wildlife hazard management and Pest control at MIA and further notes that the contracted rates were effective for 1 year and extendable for 2 more years, based on agreed escalation rate of 4% after completion of each year. Therefore, the Authority is of the view that, for each tariff

year across the First Control period, an increase of 4.90% towards inflationary effect should only be considered, instead of 15% increase Y-o-Y claimed by the Airport Operator.

- In respect of additional increase of 27.17% claimed by the AO, the Authority proposes to consider this increase in line with that allowed by it for other similar airports (as mentioned in para 10.2.12) with regard to expansion of Terminal Building area within the Airport. However, the Authority proposes to shift the additional increase to FY 2023-24 as the same would take effect only after operationalisation of the extended Terminal Building which is proposed to be completed only by FY 2022-23 as per the Capitalization Schedule proposed by the Authority.

Amortization of Runway recarpeting expenses

- 10.2.20. The Airport Operator has claimed amortization of ₹ 59.53 Crores projected towards expenditure on Runway Recarpeting works over a period of five (5) FYs starting from FY 2022-23 and based on the Depreciation Order No. 35 / 2017-18 dated January 12, 2018.

In this respect, the Authority notes that, the Airport Operator had claimed amortization of ₹ 59.53 Crores projected towards expenditure on Runway Recarpeting works in their MYTP dated December 10, 2021, based on their plan to provide 2 layers of Semi Dense Asphaltic Concrete (SDAC) and Dense Asphaltic Concrete (DAC) with design layer as a recarpeting work. Subsequently, based on the Consultant's technical study report, the number of layers were increased from 2 to 4 which resulted in an increase in PCN value and accordingly, this project has been included under the revised CAPEX submitted by the AO on May 7, 2022.

The Authority based on its examination of the Consultant's study report (refer Appendix III of this Consultation Paper), BOQ and detailed explanation provided by the Airport Operator, proposes to allow the same as Capital Expenditure. The Authority, therefore, proposes not to consider the above expense of ₹ 59.53 Crores under O&M expenses for the First Control Period.

Boundary Wall expenses

- 10.2.21. The Airport Operator has claimed Capital Expenditure of ₹ 7.60 for the First Control Period towards construction of property boundary wall in their Revised CAPEX schedule submitted on May 7, 2022.

The Authority notes that this project includes replacement of small sections of the wall (11 km length wall) since frequent falling-down of certain vulnerable sections of the boundary wall has been noticed, due to the topology of the Airport and inherent weather conditions.

In this respect, the Authority observes that there is an existing Boundary Wall at the airport which largely adheres to all the necessary specifications as per BCAS Guidelines and is in good condition. Hence, the Authority feels that the amount of ₹ 7.60 Crores claimed by the AO is on the higher side and proposes to consider an amount of ₹ 0.50 Crores towards Boundary wall repairs expenses in each FY for the last four tariff years of the First Control Period i.e., commencing from FY 2022-23. The Authority further proposes to consider the actual expenses incurred by AO at the time of true up of the First Control Period, while determining tariff for the Second Control Period.

It is pertinent to note here that, AERA has outlined the principles of RAB boundary and Ring fencing of the assets which allow for inclusion of only those aeronautical assets which are integral to the functioning of the Airport and are within the boundary of the Airport.

Fuel Operating Expenses

- 10.2.22. Clause 19.3. of the Concession Agreement stipulates the Airport Operator's obligations towards providing aircraft fueling services (refer to paragraph 17.3.7 of Annexure 3 of Chapter 17 of this

Consultation Paper)

10.2.23. The Airport Operator has submitted the following assumptions regarding Fuel facility Operating expenses:

- The Airport Operator has projected that the Fuel farm facility operations will commence from July 2022 onwards (i.e., 9-month period in FY 2022-23) and continue for the remaining three (3) tariff years of the First Control Period.
- The Airport Operator has estimated the Fuel Throughput volume at the rate of approximately 3 KL per ATM for the Total ATM traffic projected in each tariff year.
- Further the Airport Operator has submitted that they planned to outsource the Fuel facility operations to a third-party vendor who will manage the facility on Cost plus margin basis.
- The charges payable to the Vendor by the Airport Operator have been projected at the rate of approximately ₹ 800 to ₹ 850 per KL of Fuel throughput which will include expenses towards employee cost, repairs and maintenance and facility operating cost and also the Operator's margin of 25% on such expenses. Since the Contract terms are based on Cost plus margin term, the Airport Operator has also projected 15% Y-o-Y increase in employee cost and increase in repairs and maintenance and facility operating cost corresponding to the increase in fuel throughput volume for each FY.
- Apart from the above, the Airport Operator has projected Rental cost for 4 numbers of Refuellers mainly for the first year of Operations i.e., FY 2022-23 at the rate of ₹ 0.02 crores per month for each refueller. Based on the same, the Airport Operator has estimated rental cost for 9-month period in FY 2021-22 and only for 2 months in FY 2023-24 after which they expect to have sufficient number of own refuellers to run the operations.
- The Airport Operator has further submitted that they have considered the Rate of ₹ 800 - ₹ 850 per KL based on the Operating and Maintenance expenditure and Fuel throughput volume proposed by the Authority during determination of Fuel Infrastructure Fee for BPCL Kannur Fuel Farm Private Limited (BKFFPL) (the Company handling operations of Aviation Fuel farm at Kannur International Airport) for the First Control Period i.e., from FY 2020-21 to FY 2022-23 (refer to Para 4.3.5 and 7.4.12 of CP No. 23 / 2021-22). The Airport Operator has considered the Operating and Maintenance expenditure proposed by the Authority for BKFFPL excluding land lease rental and their own submission excluding refueller rental cost.

The Authority examined all the above and summarised its view as under:

- a) The Airport Operator has not identified any 3rd party vendor or issued any contract / work order for handling the Fuel facility operations and hence, proposes to shift the base year of Fuel facility operations to FY 2023-24, in line with the shifting of the Capitalization of the asset, i.e., expected to commence operations from July 2023 instead of July 2022.
- b) The Authority notes that Kannur International Airport is a comparable airport in terms of PAX, ATM traffic, Fuel Throughput volume, Fuel facility operations etc., and hence considered as a benchmark for deriving the Fuel operations and maintenance cost of MIA. The Authority proposes to consider the Fuel throughput Volume and related Operations and Maintenance Costs of Kannur International Airport for the FY 2022-23, as a comparable year of operations.
- c) The Authority further notes that Kannur International Airport has created a separate Joint Venture Company namely, BKFFPL to design, develop, construct, operate and handle the

overall Fuel Facility operations and allied activities exclusively at the airport and in turn, BKFFPL has sub-contracted the Operation and Maintenance (O&M) of Fuel farm and Into-plane facilities to BPCL. Whereas, in Mangaluru International Airport, the Authority notes that, the Airport Operator has not formed any separate Joint Venture Company to operate and handle the Fuel facility but has submitted outsourcing the same directly, to a 3rd party vendor who will handle the operations and maintenance of the facility, similar to that of BPCL in Kannur International Airport. Therefore, the Authority proposes to consider the Operations and Maintenance Cost of BPCL, adopted by the Authority for FY 2022-23 as per Table 20 of Para 8.2.8 and Fuel throughput Volume as per Table 13 of Para 4.2.5 of Tariff Order No. 44 / 2021-22 for the purpose of benchmarking.

- d) Based on the above, the Authority proposes to consider the rate of ₹ 615 per KL towards Operations and Maintenance cost of the Outsourced Contractor, and additionally 16% on such Costs as the Operator's margin in each FY in line with the rate adopted by the Authority for Kannur International Airport.
- e) The Authority further proposes not to consider any increase Y-o-Y claimed by the Airport Operator, for all the individual expenses, since the Outsourced Contractor is responsible to handle the same as part of Contract terms.
- f) The Authority proposes to accept the refueller rental expense as projected by the Airport Operator for FY 2022-23 and FY 2023-24.

Cargo Operating Expenses

10.2.24. Clause 19.4.1. of the Concession Agreement stipulates the Airport Operator's obligations towards upgrading, developing, operating and maintaining the Cargo facilities in accordance with the provisions of the Concession Agreement (refer to paragraph 17.3.5 of Annexure 3 of Chapter 17 of this Consultation Paper).

10.2.25. The Airport Operator has claimed Cargo Operating Expenditure towards salary cost, Cargo O&M expenses and Customs cost recovery by considering the FY 2022-23 as base year of operations on the assumption of commencing Cargo Operations from mid FY 2022-23. The Airport Operator has projected the Insourced salary and Customs Cost recovery based on the Manpower required to efficiently handle the Cargo operations and the Cargo O&M expenses on the basis of estimated Cargo Volume and Cargo cost / MT for each FY. The Airport Operator has also claimed an increase of 10% Y-o-Y for all the expenses for the next 3 FYs in the First Control Period.

The Authority examined the submission of the Airport Operator and notes that apart from the salary cost of their own employees, the Airport Operator has projected reimbursement of salary cost of Customs officials who will be handling the international cargo operations, under the head 'Customs cost recovery'. The Authority notes that the Airport Operator has estimated the salary cost of 5 Customs officials as per Para 7 of the Circular issued by the Department of Revenue, Ministry of Finance vide Circular No. 02/2021-Customs dated January 19, 2021 and arrived at 0.90 crores per annum. Since the Airport Operator has estimated commencement of Cargo operations only during middle of FY 2022-23, they have considered approximately 50% in the first year of operations and entire amount of salary cost from the next FY. Based on the above, the Authority proposes to consider the same as appropriate.

The Authority proposes to shift the base year of Cargo operations to FY 2023-24 (as per Table 59), in line with the shifting of Capitalization of the asset, as per the Capitalisation schedule proposed by the Authority. Further the Authority proposes to revise the increase in salary cost to

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6% Y-o-Y, in line with that allowed for Manpower expense of AAI and Airport Operator and allow 4.90% Y-o-Y (inflationary effect) for other expenses, namely, Cargo O&M and Customs cost recovery as against 10% claimed by the Airport Operator for the remaining three (3) tariff years of the First Control period. Also, the Authority notes that the Cargo revenue projected by the AO for the First Control Period is sufficient to meet the Cargo expenses. However, the Authority is of the view that the AO should take efforts to substantially increase the Cargo revenue and the same will be examined by the Authority at the time of true up of the First Control Period.

10.2.26. After incorporating the above observations by the Authority, the revised Total Aeronautical O&M expenses including Fuel and Cargo Operating Expenses of Mangaluru International Airport have been presented in the tables below:

Table 87: Total Aeronautical Operation and Maintenance (O&M) expenses proposed by the Authority for Mangaluru International Airport for First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Aeronautical Operating Expenses						
Manpower expenses – AAI employees	19.77	20.95	18.59	14.25	15.10	88.67
Manpower expenses – Airport Operator employees	9.09	13.84	23.27	24.66	26.14	97.00
Utility expenses	9.38	9.84	13.11	13.75	14.43	60.51
IT expenses	2.43	2.54	3.36	3.52	3.70	15.55
Rates and Taxes	0.33	0.35	0.46	0.48	0.50	2.12
Security expenses	2.07	2.17	2.87	3.01	3.16	13.27
Security Others	-	-	-	-	-	-
Corporate Allocation Cost	9.36	9.92	10.51	11.14	11.81	52.75
Administrative Expenses - Others	4.34	4.55	4.77	5.01	5.25	23.91
Admin Expenses – Collection Charges on UDF	0.28	0.50	0.58	0.75	0.90	3.01
Insurance	1.00	1.37	1.64	1.70	1.78	7.49
Repairs and Maintenance	7.42	6.83	25.06	29.21	33.58	102.09
Other Operating expenses	6.09	6.39	8.44	8.85	9.29	39.05
Runway recarpeting	-	-	-	-	-	-
Boundary Wall repair expense	-	0.50	0.50	0.50	0.50	2.00
Total Aeronautical Operating Expenses (A)	71.54	79.75	113.16	116.85	126.13	507.43
Fuel Operating Expenses						
Outsourced Contractor Cost (@ ₹ 615/- per KL of Fuel Throughput)	-	-	2.00	3.43	4.10	9.54
Outsourced Contractor margin – 16% on above amount	-	-	0.32	0.55	0.66	1.53
Refuellers Rentals	-	-	0.72	0.16	-	0.88
Total Fuel Operating Expenses (B)	-	-	3.04	4.14	4.76	11.95
Cargo Operating Expenses						

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Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Insourced salary	-	-	0.31	0.66	0.70	1.66
O&M Expenses	-	-	0.72	1.83	2.31	4.86
Customs Cost Recovery	-	-	0.49	1.03	1.08	2.60
Total Cargo Operating Expenses (C)	-	-	1.52	3.51	4.09	9.13
Total Aeronautical O&M expenses (A+B+C)	71.54	79.75	117.72	124.50	134.98	528.51

- 10.2.27. Based on above considerations, the Authority proposes the following growth rates in Operation and Maintenance (O&M) expenses for Aeronautical Operating expenses, Fuel Operating expenses and Cargo Operating expenses, as compared to the projections submitted by the Airport Operator.

Table 88: Growth rates in total Aeronautical O&M expenses considered by the Authority for the First Control Period

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Aeronautical Operating expense (A)					
Manpower Expenses – AAI employees	6%	6%	6%	6%	6%
Manpower Expenses – Airport Operator’s employees	-	6%	6%	6%	6%
Utility expenses	4.90%	4.90%	32.07%	4.90%	4.90%
IT expenses	4.90%	4.90%	32.07%	4.90%	4.90%
Rates and Taxes	4.90%	4.90%	32.07%	4.90%	4.90%
Security expenses	4.90%	4.90%	32.07%	4.90%	4.90%
Security Others	-	-	-	-	-
Corporate Allocation Cost	6%	6%	6%	6%	6%
Administrative Expenses - Others	4.90%	4.90%	4.90%	4.90%	4.90%
Administrative Expenses – Collection Charges on UDF	-	78%	17%	29%	19%
Insurance – on Opening Net block of Assets	4.90%	4.90%	4.90%	4.90%	4.90%
Repairs and Maintenance – on Opening Net block of Assets	-	-	-	-	-
Other Operating expenses	4.90%	4.90%	32.07%	4.90%	4.90%
Amortization of Runway recarpeting	-	-	-	-	-
Boundary wall repair expense	-	-	-	-	-
Fuel operating expense (B)					
Fuel operator’s margin	-		16%	16%	16%
Cargo operating expense (C)					
Cargo Operating Expenses – Insourced Salary cost			6%	6%	6%
Cargo Operating Expenses – Other expenses	-	-	4.90%	4.90%	4.90%

10.3. Authority's proposal regarding Total Aeronautical O&M 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:

- 10.3.1. To consider total Aeronautical O&M Expenses including Aeronautical Operating Expenses, Fuel Operating Expenses and Cargo Operating Expenses for the First Control Period for Mangaluru International Airport as per Table 87.
- 10.3.2. To consider the actual total Aeronautical O&M expenses incurred by the Airport Operator during the First Control Period subject to reasonableness and efficiency, at the time of True up in the Second Control period.
- 10.3.3. Considering the small size and scale of operations of the Airport, the Authority expects AO to bring in efficiencies in the incurrence of O&M expenses.

11. NON-AERONAUTICAL REVENUE FOR THE FIRST CONTROL PERIOD

11.1. Mangaluru International Airport's submission of Non-aeronautical revenue for the First Control Period

11.1.1. The Airport Operator in its submission dated May 31, 2021 to AERA had stated that it follows a Master Concessionaire model for managing commercial activities at the Airport.

11.1.2. The Airport Operator had submitted that it outsourced all Non-aeronautical businesses (mentioned below) to the Master Concessionaire, Adani Airport Holdings Limited, vide Master Services Agreement executed on May 18, 2021. As per the Agreement, the scope of the Master Concessionaire is to develop, operate, maintain, manage the Non-aeronautical businesses at Mangaluru International Airport, in accordance with best-in-class standards and good industry practices, and at par with facilities at comparable airports:

- Duty free stores
- Food and beverages outlets
- Retail outlets
- Lounges
- Advertising, Sponsorship and promotion opportunities
- Car parks and ground transportation facilities
- Airport hotels and transit hotels
- Preferred partners association for including but not limited to pouring rights, services in air (Wi-Fi, Bluetooth, aroma etc.), music and video rights, mobile wallet, payment gateway and other as may be approved by the Airport Operator
- Business Center
- City side development
- Flight catering services
- Foreign exchange services
- Freight consolidators/forwarders or agents
- Left luggage, lost and found, excess baggage
- Porter service, Special assistance services (such as paid wheelchair services)
- Meet and assist services
- Provision of land and space for various stakeholders at Airport
- Various passenger amenities, including but not limited to, foreign exchange, SIM card, child-care room, kids play areas, car rental and hotel reservation counters, digital wallet tie-ups, ATMs, spas, and entertainment areas
- Airport village comprising of various retail, food and beverage, entertainment and amenities options; and
- Any other services as may be mutually agreed by the parties or permitted pursuant to the Applicable Laws.

11.1.3. As per the terms of the Master Services Agreement, the Service provider (Adani Airport Holdings Limited) shall pay to the Airport Operator an amount which is higher of the following:

- a) Minimum Guarantee amount of ₹ 6 Crores per annum or
- b) The amount arrived at by multiplying the Revenue Share Percentage (10%) with Gross Revenue in that year.

Further, it is stated in the Agreement that the Minimum Guarantee amount of ₹ 6 Crores per annum shall remain unchanged for the first five years from the date of signing the Master Services Agreement. Thereafter, this Minimum Guarantee amount shall be increased at the rate of 50% of the Delta CPI(IW) every year.

11.1.4. Based on the above, the Non-aeronautical revenue submitted by the Airport Operator for Mangaluru International Airport is given in the table below:

Table 89: Non-aeronautical revenue submitted by Airport Operator for MIA for the First Control Period.

(₹ Crores)						
Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
1. Revenue from Master Service Agreement	5.00*	6.00	6.00	6.00	6.00	29.00
2. Other income (not covered under Master Service Agreement) [#]						
a. Advertising	0.09					0.09
b. Car Parking	0.16					0.16
c. Lounges	0.02					0.02
d. Services	0.12					0.12
e. Space Rental: Others	1.01					1.01
f. Space Rental: Govt. Agencies	1.80	1.89	1.98	2.08	2.19	9.94
Total	8.20	7.89	7.98	8.08	8.19	40.34

* Master Services Agreement, which was signed on May 18, 2021 is effective only from June 1, 2021. Hence the revenue for 10 months beginning June 1, 2021 has been projected for the FY 2021-22.

[#] Revenue from Advertising, Car Parking, Lounges, Services etc. (covered under point 2a to 2e) totaling to ₹ 1.40 Crores have been shown separately for FY 2021-22, as these incomes were earned prior to initiation of Master Services Agreement.

11.2. Authority's examination regarding Non-aeronautical revenue for the First Control Period

11.2.1. The Authority has examined the Non-aeronautical revenue submitted by the AO for the First Control Period and reviewed the Master Services Agreement entered into by the Airport Operator with the Master Concessionaire - Adani Airport Holdings Limited with respect to scope of services outsourced to the Master Concessionaire and the revenue sharing arrangement.

11.2.2. The Authority notes that the AO undertook two-stage tendering process through e-tender mode vide Request for Proposal (RFP) dated March 1, 2021. Pursuant to the above RFP, three prospective bidders (domestic and global) had submitted their proposals to the AO. Based on technical qualification, financial parameters and evaluation criteria provided under the RFP, Adani Airport Holdings Limited was selected as the Service Provider, with whom the AO had entered into a Master Services Agreement. The Authority notes that the revenues projected by the Airport Operator are in line with the said Agreement.

- 11.2.3. The Authority notes that the total Non-aeronautical revenue projected by the Airport Operator for the First Control Period is only for ₹ 40.34 Crores (refer Table 89) which is substantially lower than the actual Non-aeronautical revenue earned by AAI for the Pre-COD period (FY 2016-17 till COD) which was for ₹ 72.97 Crores.
- 11.2.4. The Authority is not convinced that the revenue from Master Services Agreement is remaining constant for the entire Control Period, while all the other costs are increasing substantially across the First Control Period. Further, the Terminal Building space will be increasing considerably adding more area for Non-aeronautical services.
- 11.2.5. The Authority takes cognizance of the fact that Non-aeronautical revenues have been projected for the First Control Period by the Airport Operator, after taking into consideration the de-growth in passenger traffic caused due to the on-going COVID-19 pandemic. However, the Authority feels that the gradual increase in Non-aeronautical operations (by increasing in the Non-aeronautical area within the Terminal Building from the existing 5% to 8% to 10%), will lead to increase in the Non-aeronautical revenues.
- 11.2.6. Considering the positive outlook provided by the Expert Agencies and the GoI's recent decision to resume commercial flights, the Authority is of the view that the domestic and international passenger traffic will revert to pre-COVID levels by FY 2022-23 and FY 2023-24 respectively. Further, the traffic is expected to progressively increase during the First Control Period (as also discussed in Chapter 6).
- 11.2.7. With the steady increase in passenger traffic and extension of existing Terminal Building area, the Authority foresees an increase in passenger related Non-aeronautical revenue across the First Control Period. Further, the Authority expects that the Airport Operator may bring in efficiencies in Non-aeronautical operations as being followed by other PPP airports wherein the proportion of Non-aeronautical revenue projected by the AO is equal or comparable to the quantum of O&M expenses. Whereas, in MIA the situation is peculiar wherein the projection of NAR is substantially lesser than O&M expenses. Further, this will impact the interest of the airport users as 30% of the Non-aeronautical revenue is used for cross subsidization. The Authority feels that with the progressive increase in the passenger traffic, the AO should make efforts to generate Non-aeronautical revenue for Mangaluru International Airport higher than that earned by AAI during the pre-COD period (which was ₹ 72.97 Crores).
- 11.2.8. The Authority notes that the revenue on Space rental from Govt. agencies has been increased by 5% Y-o-Y by the Airport Operator and the Authority finds the same to be reasonable.
- 11.2.9. Based on the above considerations, the Authority has estimated the total Non-aeronautical revenues for the First Control Period for MIA as follows:
- i. The NAR earned by AAI in FY 2019-20, which is a pre-COVID year, is considered as the base for estimating the NAR for MIA for the First Control Period.
 - ii. The Authority has considered the actual revenue earned by the AO for FY 2021-22, as this FY has already passed.
 - iii. The NAR of FY 2019-20 i.e. ₹ 17.36 crores has been assumed for FY 2022-23, as the traffic is expected to reach the pre-COVID level of FY 2019-20 by FY 2022-23 (as explained in Chapter 6).
 - iv. The Authority proposes to increase NAR by 5% Y-o-Y for the remaining tariff years for the First Control Period. However, the Authority takes cognizance of the fact that with the expansion of the existing terminal building area in FY 2022-23, the Non-aeronautical area may also increase. Hence, the Authority proposes an additional increase of 5% to the NAR of the FY 2023-24 (the year that immediately succeeds the year of operationalization of the extended Terminal Building).

The NAR derived by the Authority based on the above factors have been presented as follows:

Table 90: Total Non-aeronautical revenues estimated by the Authority for First Control Period

(₹ Crores)

Particulars	NAR of AAI for FY 2019-20	FY	FY	FY	FY	FY	Total
		2021-22	2022-23	2023-24	2024-25	2025-26	
Total NAR	17.36*	8.20	17.36	19.10	20.05	21.05	85.76
% increase in NAR				10%	5%	5%	

* Refer Table 18 of this Consultation Paper

11.2.10. Based on the total NAR derived as per Table 90, the Authority has bifurcated it component wise as under:

- Revenue from Master Service Agreement:** This has been derived as the difference between total NAR derived as per Table 90 and the Revenue from Space rental of Govt. Agencies.
- Other income (Revenue from Space rental of Govt. Agencies):** The Authority has considered this revenue as projected by the AO in its MYTP.

Table 91: Non-aeronautical revenues (component wise) proposed by the Authority for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
1. Revenue from Master Service Agreement	5.00	15.47	17.12	17.97	18.86	74.42
2. Other income (not covered under Master Service Agreement)						
a. Advertising	0.09					0.09
b. Car Parking	0.16					0.16
c. Lounges	0.02					0.02
d. Services	0.12					0.12
e. Space Rental: Others	1.01					1.01
f. Space Rental: Govt. Agencies	1.80	1.89	1.98	2.08	2.19	9.94
Total (a : f)	3.20	1.89	1.98	2.08	2.19	11.34
3. Grand Total (1+2)	8.20	17.36	19.10	20.05	21.05	85.76

11.2.11. The Authority is of the view that the NAR projected by the AO for the First Control Period is significantly lower as compared to that of other PPP airports (DIAL, MIAL, BIAL, GHIAL, CIAL), wherein the NAR projected by such PPP airports either equalize or higher or constitute at least 50% of the total O&M expenses projected by them for the respective Control Period. Whereas in the case of MIA, the Authority notes that the NAR projected by the AO for the First Control Period is ₹ 40.34 crores which is significantly lower as compared to the O&M expenses submitted by the AO which is ₹ 822.08 crores (refer Chapter 10).

The Authority is of the view that the AO should take efforts to substantially increase NAR for the First Control Period for MIA, in line with the other PPP airports. Otherwise, AERA may propose for a notional increase in the NAR for the First Control Period, while determining tariff for the Second Control Period, in the interest of the Airport Users.

11.3. Authority's proposal relating to Non-aeronautical revenue for the First Control Period

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

- 11.3.1. To consider Non-aeronautical revenues for the First Control Period for Mangaluru International Airport as per Table 91.
- 11.3.2. To true up Non-aeronautical revenues for the current Control Period, at the time of determination of tariff for the next Control Period.
- 11.3.3. The AO should take efforts to substantially increase the NAR of MIA for the First Control Period, in line with other PPP airports.

12. TAXATION FOR THE FIRST CONTROL PERIOD

12.1. Mangaluru International Airport's submission of Taxation for the First Control Period

12.1.1. The AO has submitted that the computation of income tax on aeronautical income, has been made on the prevailing Income Tax laws and rules.

12.1.2. AO has calculated the revenue generated from Regulated services, Non-aeronautical revenue Aeronautical operating expenses, interest and financing charges, and depreciation on written down value (WDV) of assets as per the Income Tax Act. After calculating the Profit Before Tax (PBT), a tax rate of 25.17% was applied, after setting off prior losses. The Aeronautical taxes submitted by Mangaluru International Airport are shown in the table below:

Table 92: Taxation submitted by AO for Mangaluru International Airport for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Aeronautical Revenue with Revised Rates	29.55	257.00	366.45	471.96	589.64	1,714.60
Add: 30% of Non-aeronautical revenue	2.46	2.37	2.40	2.43	2.46	12.11
Less: O&M expenses	82.74	148.23	177.48	193.48	220.16	822.08
Less: Interest costs	19.98	55.48	67.62	64.44	69.63	277.14
Less: Interest costs on Working Capital	0.05	1.34	3.21	4.48	5.85	14.93
Less: Financing charges	4.12	3.49	0.88	1.03	1.22	10.74
Less: Tax Depreciation	41.51	81.35	75.24	68.90	73.45	340.45
Profit Before Tax	(116.39)	(30.52)	44.42	142.06	221.79	261.37
Set-off of prior period tax losses			(44.42)	(47.14)		
Less: Carry forward of unabsorbed depreciation	(10.52)	(52.04)	(82.56)	(82.56)		
PBT after set-off of prior period losses				12.36	221.79	
Tax rate (%)	25.17%	25.17%	25.17%	25.17%	25.17%	
Tax	-	-	-	3.11	55.82	58.93

12.2. Authority's examination of Taxation for the First Control Period

12.2.1. The Authority notes that MIA has considered 30% Non-aeronautical revenues in the estimation of Aeronautical PBT, which was then used in the computation of Aeronautical taxes. The fact that a part of Non-aeronautical revenues is used for cross subsidization as per the Hybrid Till mechanism, doesn't change the nature of such revenues 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 the AO to make effective investments in Non-aeronautical generating sources.

12.2.2. Therefore, the Authority is of the view that:

- 30% Non-Aeronautical revenues should not be treated as a subsidy for the airport operator as the airport operator 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 revenues as part of revenues from Aeronautical services would result in undeserved enrichment to the airport operator effectively reducing the cross-subsidy benefit to the airport user from the present 30% Non-Aeronautical income.

- 12.2.3. The Authority thus proposes to consider only Aeronautical revenues and expenses in the calculation of Aeronautical PBT.
- 12.2.4. Further, the Authority has considered the Financing charges and Fees payable to Independent Engineer for the purpose of determining ARR for the First Control Period (Refer Table 96), for computing Aeronautical taxes.
- 12.2.5. The Authority has recomputed taxes of MIA based on the changes proposed to the other building blocks and based on the proposal discussed above on exclusion of Non-aeronautical revenue.
- 12.2.6. Further, as the Authority has considered the prior period losses in the computation of true up of AAI for the pre-COD period, the same has been excluded in the computation of taxes of the AO for the First Control Period for MIA.
- 12.2.7. The following table summarizes the Aeronautical taxes proposed by the Authority for the First Control Period.

Table 93: Taxation proposed to be considered as per the Authority for the First Control Period
(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Aeronautical Revenue (refer Table 96)	247.97	129.39	213.84	240.66	247.15	1079.01
30% Non-aeronautical revenues	0.00	0.00	0.00	0.00	0.00	0.00
Less: O&M expenses (Refer Table 87)	71.54	79.75	117.72	124.50	134.98	528.51
Less: Financing charges (refer para 14.2.2)	5.09	2.62	0.67	0.80	0.60	9.78
Less: Fees payable to Independent Engineer	1.58	1.58	1.58	1.58	1.58	7.90
Less: Tax Depreciation	14.25	47.51	65.77	58.13	53.93	239.58
Profit Before Tax	155.51	(2.07)	28.10	55.65	56.06	293.26
Tax rate (%)	25.17%	25.17%	25.17%	25.17%	25.17%	
Aeronautical Tax	39.14	0.00	7.07	14.01	14.11	74.33

12.3. Authority's proposal regarding Taxation for the First Control Period

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

- 12.3.1. To consider the Taxation for the First Control Period for Mangaluru International Airport as per Table 93.
- 12.3.2. To true up the Aeronautical tax estimates based on the actual tax outflow at the end of the current Control Period.

13. QUALITY OF SERVICE FOR THE FIRST CONTROL PERIOD

13.1. Mangaluru International Airport's submission relating to Quality of Service

- 13.1.1. AO has submitted that it will abide by the ASQ performance indicators mentioned in Annexure I to Schedule H in the Concession Agreement.

Clause 23.7.1 of the CA states:

"The Concessionaire shall participate in the user survey of ASQ undertaken by Airports Council International (ACI) or any substitute thereof, conducted every quarter and shall ensure that the Airport achieves and maintains a rating of at least 4.5 out of 5.0 and/ or shall appear within top 20 percentile of all airports, in its category in the World in such survey within 5 years from the COD and maintain the same throughout the rest of the Concession Period."

Clause 23.7.2 of the CA states:

"The Concessionaire shall, within 21 days of the end of each calendar quarter, provide to the Authority a written report on the results of the user survey of ASQ for the immediately preceding quarter, together with its analysis of the results and the action, if any, that it proposes to take for improvement in User satisfaction."

- 13.1.2. AO has further submitted that adherence and maintenance of these standards will require creation of significant infrastructure, ramp-up of human resource and increase in operations and maintenance costs and that the AO has considered the cost implications, while preparing future projections as part of its MYTP submission.

13.2. Authority's examination regarding Quality of Service for the First Control Period

- 13.2.1. 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."*

- 13.2.2. The Authority noted from AAI's website that the ACI ASQ survey results for Mangaluru International Airport for the FYs 2017 to 2020 have been in the range of 4.65 to 4.54 (overall score), as against the average score of AAI Airports which ranges from 4.57 to 4.71.

Table 94: ASQ rating for Mangaluru International Airport for the years 2017-2020

Financial Year	ASQ rating
2017	4.65
2018	4.87
2019	4.84
2020	4.54
2021 – Q1 & Q2	ASQ was not conducted due to lockdown on account of COVID-19 pandemic

Financial Year	ASQ rating
2021- Q3	4.33
2021- Q4	4.80
2022 -Q1	4.87
2022- Q2	4.87
2022-Q3	4.91

- 13.2.3. The Authority notes that the ASQ rating awarded to Mangaluru International Airport is quite close to the average rating of the AAI airports for the FYs 2017 to 2020.
- 13.2.4. The Authority reviewed the MoU between AAI and MoCA for the FY 2019-20 and noted that the ASQ rating target for FY 2019-20 was 4.68. As MOU for FY 2020-21 had not been signed due to COVID-19 pandemic, the Authority has considered the MOU target of FY 2019-20, which is 4.68. The actual ASQ rating achieved by Mangaluru International Airport for FY 2019-20 was 4.84, which was higher than the target rating.
- 13.2.5. The Authority also notes that as per the Concession Agreement, the AO is required to maintain an ASQ rating of at least 4.5 out of 5. However, the Authority notes that the AO has achieved ASQ rating of 4.87 to 4.91 during the first 3 quarters of the FY 2021-22, which is higher than the requirement given in the Concession Agreement. Further, the Authority notes that the rating for Q3 of 2021 was lower than the target rating mandated by the Concession Agreement (which is 4.5), due to the onset of COVID-19 pandemic, which had then recouped in the subsequent quarters.
- 13.2.6. Based on the above factors, the Authority does not propose any adjustment towards tariff determination for the First Control Period on account of quality of service maintained by the Mangaluru International Airport.

13.3. Authority's proposal relating to 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:

- 13.3.1. Not to consider any adjustment towards tariff determination for the First Control Period with regard to Quality of Service of MIA.
- 13.3.2. The Airport Operator should ensure that service quality at Mangaluru International Airport conforms to the performance standards as indicated in the Concession Agreement over the First Control Period.

14. AGGREGATE REVENUE REQUIREMENT (ARR) FOR THE FIRST CONTROL PERIOD

14.1 Mangaluru International Airport's submission of ARR for the First Control Period

14.1.1. AO has submitted ARR and Yield per Passenger (YPP) for the First Control Period as per the regulatory building blocks discussed.

14.1.2. The summary of ARR and YPP has been presented in the table below.

Table 95: ARR submitted by AO for Mangaluru International Airport for the First Control Period

(₹ Crores)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Average RAB	220.94	522.17	696.27	657.68	662.86	
Fair Rate of Return	14.86%	14.86%	14.86%	1.86%	14.86%	
Return on average RAB	32.83	77.60	103.47	97.73	98.50	410.13
O&M expenses (including interest on working capital, financing charges etc).	82.74	148.23	177.48	193.48	220.16	822.08
Working capital loan - interest	0.00	1.36	3.38	4.75	6.19	15.68
Negative Cash loan - interest	7.08	12.27	5.19	0.00	0.00	24.55
Financing charges	4.19	3.59	0.92	1.07	1.25	11.03
Depreciation	25.13	46.41	59.30	60.46	59.91	251.21
Tax expense				3.11	55.82	58.93
Less: 30% NAR	(2.46)	(2.37)	(2.40)	(2.43)	(2.46)	(12.12)
Add: True up for the period from COD till March 31, 2021	29.76					29.76
ARR per year (₹ Crores)	179.26	287.09	347.34	358.17	439.37	1,611.23
Discount factor (@ 14.86%)	1.00	0.87	0.76	0.66	0.57	
PV of ARR	179.26	249.95	263.28	236.36	252.44	1,181.30
Sum Present value of ARR (₹ Crores)	1,181.30					1,181.30
Total Traffic (million passengers)	1.13	1.73	2.24	2.73	3.24	
Yield per passenger (YPP) (₹)	261.55	1,293.35	1,240.02	1,142.27	1,045.77	

14.2 Authority's examination of Aggregate Revenue Requirement (ARR) for the First Control Period

14.2.1. 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 AO in computation of ARR and Yield in the table above, the Authority proposes to consider the regulatory building blocks as discussed in the above chapters.

14.2.2. The Authority has determined Financing charges (₹ 9.78 crores) based on the Aeronautical CAPEX allowed by the Authority and has considered the same in the computation of ARR.

14.2.3. The Authority notes that the AO has estimated working capital requirements and interest thereon, based on projected Aeronautical revenues. As the AO has not submitted individual year-wise tariff rate card to determine Aeronautical revenue, the Authority proposes to consider interest on working

capital, upon submission of the Tariff Rate card by the AO.

14.2.4. The Authority has also included the fees payable to the Independent Engineer in the determination of ARR (shown in the table below), in accordance with clause 24.1.7 of the Concession Agreement. The Authority has considered the fee payable to the Independent Engineer on a proportionate basis for the First Control Period.

14.2.5. The Authority notes that the AO has claimed interest on Negative Cash Loan, based on cash flows from Operating, Investing and Financing activities. The Authority is of the opinion that since Interest on Working Capital (operating activity), Interest During Construction (Investing activity) and Financing charges for processing debts (financing activity) are claimed separately by the AO, the aforementioned interest on negative cash loan seems to be repetitive of the above costs and hence the Authority proposes not to consider interest on negative cash loan (₹ 24.55 crores) claimed by the AO.

14.2.6. The Authority notes that the AO has on-going capital expenditure projects and other planned works, which have resulted in a higher ARR for the First Control Period. Whereas, the existing traffic base is not sufficient for the complete recovery of ARR in the current Control Period and this would require a significant increase in tariff, which in the present times is likely to adversely impact the recovery of air traffic. Further, a significant increase in Aeronautical tariff, is also attributable to the following factors:

- i. Tariff is being determined for the first time for Mangaluru International Airport, wherein hitherto tariff rate card of Non-Major airport has been followed.
- ii. New Aeronautical tariff proposed by the Authority may be implemented only by the end of the current Financial Year, thereby resulting in only lesser tariff years being available for recovery of the ARR.

In this regard, the Authority would like to draw reference to the guiding principles issued by the International Civil Aviation Organization (“ICAO”) on charges for Airports and Air Navigation Services (ICAO DoC 9082), which lays down the main purpose of economic oversight which is to achieve a balance between the interest of Airports and the Airport Users. This policy document categorically specifies that *caution be exercised when attempting to compensate for shortfalls in revenue considering its effects of increased charges on aircraft operators and end users*. The said policy document also emphasizes on balancing the interests of airports on one hand and aircraft operators, end users on the other, in view of the importance of the air transport system to States. This should be applied particularly during periods of economic difficulty. Therefore, the policy document recommends that States encourage increased cooperation between airports and aircraft operators to ensure that the economic difficulties facing them all are shared in a reasonable manner.

This may also be read in conjunction with the objectives of the National Civil Aviation Policy (NCAP) 2016, which intends to provide affordable and sustainable air travel for passengers/masses. As per para 12 (c) of the NCAP, “In case the tariff in one particular year or contractual period turns out to be excessive, the Airport Operator and the Regulator will explore ways to keep the tariff reasonable and spread the excess amount over the future.” The above has also been conveyed by AERA vide its Order No. 14/2016-17 dated January 12, 2017.

Further, it is pertinent to note that considerable investments in capacity have already been made which would be sufficient for the foreseeable future. Therefore, the subsequent control periods are expected to witness lower capital expenditure requirements while catering to a larger traffic base.

Based on the above considerations, the Authority has proposed to carry forward some portion of

the ARR to the next Control Period in the harmonious interest of all the stakeholders chain including the Airport Operator.

14.2.7. After considering the above, the Authority proposes the following ARR and YPP:

Table 96: ARR proposed to be considered by the Authority for the First Control Period

(₹ Crores)

Particulars	Table/ Para Ref.	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Total
Average RAB = A	Table 67	118.74	265.69	508.24	585.27	565.29	
Fair Rate of Return = B	Table 72	12.21%	12.21%	12.21%	12.21%	12.21%	
Return on average RAB C= A*B		14.50	32.44	62.06	71.46	69.02	249.48
O&M expenses – D	Table 87	71.54	79.75	117.72	124.50	134.98	528.51
Depreciation – E	Table 64	9.84	18.21	30.47	34.33	33.17	126.02
Financing Charges – F	Para 14.2.2	5.09	2.62	0.67	0.80	0.60	9.78
Independent Engineer's fees – G		1.58	1.58	1.58	1.58	1.58	7.90
Taxation – H	Table 93	39.14	0.00	7.07	14.01	14.11	74.33
ARR per year = SUM (C:H)		141.69	134.60	219.57	246.68	253.46	996.00
Add: PV of Under- recovery of AAI as on March 31, 2022– I	Table 22	81.14					
Add: PV of Under- recovery of AO as on March 31, 2022 – J	Table 36	27.60					
ARR – K (ARR+I+J)		250.43	134.60	219.57	246.68	253.46	1,104.74
NAR	Table 91	8.20	17.36	19.10	20.05	21.05	85.76
Less: 30% NAR – L		2.46	5.21	5.73	6.02	6.32	25.73
Net ARR = (K-L)		247.97	129.39	213.84	240.66	247.15	1,079.01
Discount factor (@ 12.21%)		1.00	0.8912	0.7942	0.7078	0.6308	
PV of ARR/ Target Revenue as on 31 March 2022		247.97	115.31	169.83	170.34	155.90	859.36
Sum Present value of ARR		859.36					859.36
Total Traffic (million passengers)	Table 44	11.02					11.02
Yield per passenger on Total Traffic (YPP) (₹)		779.82					779.82
Departing Passengers		5.51					5.51
Yield per Departing Passenger (₹)		1,559.63					1,559.63

14.2.8. 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 MIA 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.

14.3. Authority's proposal regarding Aggregate Revenue Requirement (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:

- 14.3.1. To consider the ARR and YPP for the First Control Period for Mangaluru International Airport in accordance with Table 96.
- 14.3.2. To direct MIA 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.

15. SUMMARY OF AUTHORITY'S PROPOSALS

Chapter 4: True up of AAI for the period from FY 2017 to COD

- 4.4.1 To consider Deemed Initial RAB as on October 31, 2020, as ₹ 125.64 crores as per Table 9.
- 4.4.2 To consider true up of RAB for the pre-COD period as per Table 10.
- 4.4.3 To consider true up of depreciation for the pre-COD period as per Table 11.
- 4.4.4 To consider true up of Aeronautical O&M expenses for the pre-COD period as per Table 17.
- 4.4.5 To consider true up of Non-aeronautical revenue for the pre-COD period as per Table 18.
- 4.4.6 To consider true up of Aeronautical revenue for the pre-COD period as per Table 19.
- 4.4.7 To consider true up of Aeronautical Taxation for the pre-COD period as per Table 21.
- 4.4.8 To consider true up of FRoR for the pre-COD period as per Table 22.
- 4.4.9 To consider Adjusted Deemed Initial RAB as per Table 24 or based on formula provided in paragraph 4.3.11.4, as appropriate for actual date of payment.
- 4.4.10 To consider Under recovery of ₹ 81.14 crores for True up of AAI for the Pre-COD period as per Table 22 and readjust the same in the ARR for the First Control Period.

Chapter 5: True up of Airport Operator for the period from COD till March 31, 2021

- 5.4.1 To consider true up of RAB and depreciation for the period from COD till March 31, 2021 as per Table 27.
- 5.4.2 To consider true up of FRoR for the period from COD till March 31, 2021 @ 14%.
- 5.4.3 To consider true up of Aeronautical O&M expenses for the period from COD till March 31, 2021 as per Table 33.
- 5.4.4 To consider true up of Non-aeronautical revenue for the period from COD till March 31, 2021 as per Table 34.
- 5.4.5 To consider true up of Aeronautical revenue for the period from COD till March 31, 2021 as per Table 35.
- 5.4.6 To consider Under recovery of ₹ 27.60 crores for True up of Airport Operator as per Table 36 for the period from COD till March 31, 2021 and readjust the same in the ARR for the First Control Period.

Chapter 6: Traffic for the First Control Period

- 6.3.1 To consider the ATM, Passenger traffic and Cargo traffic for the First Control Period for Mangaluru International Airport as per Table 44.
- 6.3.2 To true up the traffic volume (ATM, Passengers and Cargo) on the basis of actual traffic in the First Control Period while determining tariffs for the Second Control Period.

Chapter 7: Regulatory Asset Base (RAB) and Depreciation for the First Control Period

- 7.4.1 To consider the revised Terminal Building ratio of 92:8 in line with the Study on allocation of assets between Aeronautical and Non-aeronautical assets for Mangaluru International Airport, IMG norms and as approved for other similar Airports.
- 7.4.2 To not allow Financing allowance on Capital additions but allow IDC during the First Control Period as mentioned in Paras 7.3.5 and 7.3.12.

- 7.4.3 To adopt the capitalisation of Aeronautical Expenditure for the First Control Period in accordance with Table 59.
- 7.4.4 To reduce (adjust) 1% of the project cost from the ARR in case any particular capital project is not completed / capitalised as per the approved capitalisation schedule, as mentioned in para 7.3.11. The same will be examined during the true up of the First Control Period, at the time of determination of tariff for the Second Control Period.
- 7.4.5 Not to consider Stamp Duty and GST as part of RAB for the First Control Period, as the same has not been paid by the AO.
- 7.4.6 To true up the Aeronautical Capital expenditure on actuals at the time of determination of tariff for Second Control Period.
- 7.4.7 To adopt Aeronautical Depreciation as per Table 64 for the First Control Period.
- 7.4.8 To true up the Depreciation of the First Control period based on the actual asset additions and actual date of capitalisation during the tariff determination of the Second Control Period.
- 7.4.9 To consider average RAB for the First Control Period for Mangaluru International Airport as per Table 67.
- 7.4.10 To true up the RAB based on actuals at the time of tariff determination for the Second Control period.

Chapter 8: Fair Rate of Return (FRoR) for the First Control Period

- 8.3.1 To consider the Cost of equity at 15.18% as per CAPM formula
- 8.3.2 To consider the notional debt to equity (gearing) ratio of 48%:52% in line with target gearing ratio
- 8.3.3 To consider cost of debt of 9% and true up the cost of debt for the First Control Period, based on the efficiency and reasonableness.
- 8.3.4 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 9: Inflation for the First Control Period

- 9.3.1 To consider WPI inflation at 4.9% for the First Control Period based on average of the median WPI inflation forecasts of the 4th quarter of FY 2020-21 and of FY 2021-22 given in the 69th round of survey of professional forecasters on macroeconomic indicators of RBI.

Chapter 10: Operation and Maintenance Expenditure for the First Control Period

- 10.3.1 To consider total Aeronautical O&M Expenses including Aeronautical Operating Expenses, Fuel Operating Expenses and Cargo Operating Expenses for the First Control Period for Mangaluru International Airport as per Table 87.
- 10.3.2 To consider the actual total Aeronautical O&M expenses incurred by the Airport Operator during the First Control Period subject to reasonableness and efficiency, at the time of True up in the Second Control period.
- 10.3.3 Considering the small size and scale of operations of the Airport, the Authority expects AO to bring in efficiencies in the incurrence of O&M expenses.

Chapter 11: Non-aeronautical revenue for the First Control Period

- 11.3.1 To consider Non-aeronautical revenues for the First Control Period for Mangaluru International Airport as per Table 91.

- 11.3.2 To true up Non-aeronautical revenues for the current Control Period, at the time of determination of tariff for the next Control Period.
- 11.3.3 The AO should take efforts to substantially increase the NAR of MIA for the First Control Period, in line with other PPP airports.

Chapter 12: Taxation for the First Control Period

- 12.3.1 To consider the Taxation for the First Control Period for Mangaluru International Airport as per Table 93.
- 12.3.2 To true up the Aeronautical tax estimates based on the actual tax outflow at the end of the current Control Period.

Chapter 13: Quality of Service for the First Control Period

- 13.3.1 Not to consider any adjustment towards tariff determination for the First Control Period with regard to Quality of Service of MIA.
- 13.3.2 The Airport Operator should ensure that service quality at Mangaluru International Airport conforms to the performance standards as indicated in the Concession Agreement over the First Control Period.

Chapter 14: Aggregate Revenue Requirement (ARR) for the First Control Period

- 14.3.1 To consider the ARR and YPP for the First Control Period for Mangaluru International Airport in accordance with Table 96.
- 14.3.2 To direct MIA 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.

16. STAKEHOLDERS' CONSULTATION TIMELINE

- 16.1. In accordance with the provision of Section 13(4) of the AERA Act, 2008, the proposals contained in the Chapter 15 – 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.
- 16.2. 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.
- 16.3. The Authority welcomes written evidence-based feedback, comments and suggestions from stakeholders on the proposals made in this Consultation Paper, latest by September 5, 2022.

**Secretary,
Airports Economic Regulatory Authority of India
AERA Building, Administrative Complex
Safdarjung Airport New Delhi -110003
Tel: 011-24695044-47, Fax: 011-24695048**

(Chairperson)

17. ANNEXURES

17.1 Annexure 1 – Summary of study on allocation of assets between Aeronautical and Non-aeronautical assets

Background

- 17.1.1 RAB is one of the fundamental elements in the process of tariff determination. The return to be provided on the RAB constitutes a considerable portion of the Aggregate Revenue Requirement for an airport operator. 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. Assets not directly related to provision of Aeronautical services, if considered as Aeronautical assets, would result in increased charges for the passengers, stakeholders and other users. Therefore, the diligent allocation of assets into Aeronautical and Non-aeronautical assets becomes an important part of the tariff determination process.
- 17.1.2 RAB evolves on a continuous basis, primarily due to the addition of capital assets required to meet the growing demand and ensure optimal level of service, replacement of obsolete assets at end of their useful life, sales or transfers of assets and depreciation. The allocation of an asset towards RAB depends upon the type of asset (building & civil works, plant & machinery, equipment, etc.), usage (provision of various services such as Aeronautical, Non-aeronautical, or Common), ownership (by airport operator, concessionaire or other entities) and useful life of the asset. Based on these factors, the rationale for allocation of each asset into the appropriate classification needs to be determined diligently.
- 17.1.3 Towards this objective, AERA has decided to conduct an independent study on allocation of assets and segregation between Aeronautical and Non-aeronautical components in respect of assets appearing in the Fixed Asset Register (FAR) of Mangaluru International Airport Limited as on March 31, 2021, based on the audited financial statements for the year ended March 31, 2021 and the True up workings as submitted by AAI to the AERA up to October 30, 2020.

Classification of Assets

- 17.1.4 The study based on the analysis, classified the aggregate assets of MIA under the following categories:
- Aeronautical assets:** All assets that are exclusively used for the provision of Aeronautical services/ activities have been classified as ‘Aeronautical assets’. Such assets would include runway(s), taxiways, drainage, culverts, aprons, etc.
 - Non-aeronautical assets:** All assets that are exclusively used for the provision of Non-aeronautical services/ activities have been classified as ‘Non-aeronautical assets’. Such assets would include land side development, commercial projects, etc.
 - Common assets:** All assets that cannot be directly allocated to either Aeronautical assets or Non-aeronautical assets have been classified as ‘Common assets’. Such assets as the name suggests, get utilised for both Aeronautical and Non-aeronautical activities. They would include terminal building, select terminal equipment, etc.

Principles for segregation of assets

- 17.1.5 The study reviewed the various asset categories and developed a basis for classification of assets

into aeronautical and non – aeronautical activities. The study also determined the appropriate proportion of the Common Assets that may be included as part of Aeronautical activity so in order to determine the Aeronautical asset base. The principles of segregation used by the study are as follows:

Aeronautical Assets

- Assets required for the performance of the Aeronautical services at the airport.
- Classification of aeronautical assets are taken as defined in the AERA Act.
- Assets necessary to maintain the service quality of the airport are proposed to be considered as aeronautical except those located in the Non-aeronautical area.

Non-aeronautical Assets

- Assets required for the performance of the Non-aeronautical activities at the airport. Examples include car parking, advertisement, retail etc.

Common Assets

- Common assets are assets which are not directly attributable to either Aeronautical or Non-aeronautical services. These assets include the terminal building, air conditioning, furniture, administrative office of airport company, etc.
- Common assets are bifurcated between Aeronautical and Non-aeronautical assets based upon Terminal Building ratio or Employee Head Count ratio or Staff Quarters ratio. The ratio of Aeronautical to Non-aeronautical as considered by the Study for the period from FY 2016-17 to FY 2020-21 are as follows:

Table 97: The ratio of Aeronautical to Non-aeronautical as considered by the Study for the period from FY 2016-17 to FY 2020-21

Particulars	Ratio (Aeronautical: Non-aeronautical)
Terminal Building ratio	92.00: 8.00
Employee Head Count ratio (up to October 30, 2020)	89.60: 10.40
Employee Head Count ratio (from October 31, 2020)	94.44: 5.56
Staff Quarters ratio	77.21: 22.79

Details of adjustment to RAB

A. Exclusion of Financing Allowance and assets related to ANS activities from the RAB as on October 30, 2020

It was observed that the RAB as on October 30, 2020, included Financing Allowance of ₹ 2.52 Crores. Since AAI has not disclosed any borrowings in the True up submission, such amount is proposed not to be allowed for the determination of RAB.

It was also observed that certain assets related to ANS activities had been included in the RAB as

per AAI's submission. Such assets have been excluded from the Adjusted RAB computed by the Study as on COD.

B. Reclassification of assets of AAI as on October 30, 2020

Terminal building

- a. Allocation as per AAI: Aeronautical
- b. Observation: The assets pertaining to the expansion of the terminal building in the lower ground floor and other areas have been considered as Aeronautical assets by AAI. However, as these assets are within the terminal building, wherein both Aeronautical and Non-aeronautical activities are carried out, the same is reclassified as Common asset and segregated in the ratio of the terminal building (92:8). It was also identified that an asset, viz., covering for car park which pertains to Non-aeronautical activities, had been classified as Aeronautical by AAI. Such asset has been reclassified as Non-aeronautical assets.
- c. Allocation proposed as per the Study report: Common / Non-aeronautical
- d. Impact on RAB: Reduction of ₹ 0.19 Crores.

Staff Quarters

- a. Allocation as per AAI: Aeronautical
- b. Observation: The construction of staff quarters and other assets in and around the Quarters have been classified as Aeronautical assets by AAI. As these assets are used by both Aeronautical and ANS staff, these are reclassified as Common assets and have been reallocated in the ratio of the occupancy of the staff quarters between Aeronautical and ANS (77.21: 22.79). Further, it was observed that the Quarters ratio had been considered as 79:21 in cases where the assets had been classified as Common and apportioned in the Quarters ratio. Such ratios are also proposed to be updated to 77.21: 22.79.
- c. Allocation proposed as per the Study report: Common (Quarters Ratio)
- d. Impact on RAB: Reduction of ₹ 0.09 Crores.

Plumbing and Electrical works for Airport

- a. Allocation as per AAI: Aeronautical
- b. Observation: The assets pertaining to supply of water, including drilling of borewells, rainwater harvesting and building for sub-station have been considered as Aeronautical assets by AAI. However, since these assets cater to the need of both Aeronautical and Non-aeronautical activities, these assets are reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).
- c. Allocation proposed as per the Study report: Common
- d. Impact on RAB: Reduction of ₹ 0.01 Crores.

Artwork

- a. Allocation as per AAI: Aeronautical
- b. Observation: Artwork related assets have been classified as Aeronautical assets by AAI. However, since these assets are for the common use within the terminal building, they have been reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).
- c. Allocation proposed as per the Study report: Common
- d. Impact on RAB: Reduction of ₹ 0.06 Crores.

Equipment for utilities

- a. Allocation as per AAI: Aeronautical
- b. Observation: The equipment related to sub-station, including earthing and wiring, generators, rainwater harvesting and water supply have been considered as Aeronautical assets by AAI. However, since these assets cater to the need of both Aeronautical and Non-aeronautical activities, these assets are reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).
- c. Allocation proposed as per the Study report: Common
- d. Impact on RAB: Reduction of ₹ 0.27 Crores

CCTV

- a. Allocation as per AAI: Aeronautical
- b. Observation: The assets pertaining to the installation of CCTV cameras across the airport, including those at entry, exit, parking and expansion of its storage medium have been considered as Aeronautical assets by AAI. In the absence of specific identification as to the location of the assets, it is prudent to consider such assets as Common assets and has segregated these in the ratio of the Terminal Building (92:8).
- c. Allocation proposed as per the Study report: Common
- d. Impact on RAB: Reduction of ₹ 0.11 Crores.

Air Conditioning

- a. Allocation as per AAI: Aeronautical
- b. Observation: Replacement of air conditioners have been classified as Aeronautical assets by AAI. As these assets are used for servicing both Aeronautical and Non-aeronautical activities within the terminal building, these are reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8).
- c. Allocation proposed as per the Study report: Common
Impact on RAB: Reduction of ₹ 0.02 Crores.

Other Assets

- a. Allocation as per AAI: Aeronautical
- b. Observation: Certain miscellaneous assets (such as streetlights, furniture, computers etc.) have been classified as Aeronautical assets by AAI. However, since these assets are for the common use, they have been reclassified as Common assets and have been reallocated in the ratio of the Terminal Building (92:8) or in the ratio of the Employee Head Count (89.60:10.40) depending on the nature of such individual assets.
- c. Allocation proposed as per the Study report: Common
- d. Impact on RAB: Reduction of ₹ 0.028 Crores.

Impact of revised Terminal Building ratio and Employee Head Count ratio as per the Study

The total impact of revised Terminal Building Ratio and the differential Employee Head Count ratio as per Study is ₹ 0.923 Crores.

The year-wise impact of reclassification of assets to the RAB of Mangaluru International Airport is detailed in the table below:

Table 98: Year-wise impact of reclassification of assets as per the Study
(₹ in Crores)

Particulars	Up to March 31, 2016	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*	Total
Opening RAB (A)	73.58#	74.21	101.42	96.00	110.78	129.80	NA
Additions # (B)	-	40.00	4.78	23.78	29.03	2.69	100.28
Financing allowance and assets related to ANS activities excluded from RAB (C)	(0.35)	(3.56)	(0.03)	(0.36)	(0.28)	(0.07)	(4.65)
Deletions (D)	-	(0.01)	(0.81)	(0.58)	(0.34)	(0.24)	(1.98)
Depreciation as per AAI (E)	-	(9.06)	(9.30)	(8.23)	(9.34)	(6.09)	(42.02)
Depreciation impact on (B) above (F)	-	0.04	0.18	0.25	0.28	0.17	0.92
Sub-total (G)	73.23	101.62	96.24	110.86	130.13	126.26	
Reclassification adjustments							
Reclassification impact (other than depreciation) (H)	0.98	(0.12)	(0.18)	(0.07)	(0.33)	(0.01)	0.27
Depreciation impact on reclassification (I)	-	(0.08)	(0.06)	(0.01)	-	0.02	(0.13)
Total reclassification impact (J = H + I)	0.98	(0.20)	(0.24)	(0.08)	(0.33)	0.01	0.14
Closing RAB (G + J)	74.21	101.42	96.00	110.78	129.80	126.27	NA

* Up to October 30, 2020

As per AAI's submission

The summary of the value of assets transferred by AAI to the Airport Operator, computed based on the Study report is presented in the table below.

Table 99: Value of assets, post adjustments and reclassification, transferred by AAI to the Airport Operator as per the Study

(₹ in Crores)

Particulars	Aeronautical assets (A)	Non-aeronautical assets (B)	Other assets (C)*	Total D = (A + B + C)
Total assets of AAI as on October 30, 2020 (Net block) as per True up submission	129.86	0.46	27.58	157.90

Particulars	Aeronautical assets (A)	Non-aeronautical assets (B)	Other assets (C)*	Total D = (A + B + C)
Exclusion of Financing Allowance and assets related to ANS Activities	(3.73)	-	1.04	(2.69)
Reclassification	0.14	0.54	-	0.68
Total assets of AAI as on October 30, 2020 (Net block), after reclassification and other adjustments	126.27	1.00	28.62	155.89
Less assets retained by AAI	(0.63)	(0.01)	(25.65)	(26.29)
Net assets transferred by AAI to the Airport Operator as on October 31, 2020.	125.64	0.99	2.97	129.60

* Other assets pertain to assets related to ANS activity (refer Asset Allocation report in Appendix I to this Consultation Paper).

C. Reclassification of assets of the Airport Operator as on March 31, 2021

Computer and Software additions

- Allocation as per Mangaluru International Airport Limited: Common
- Observation: The assets pertaining to Computers and Software have been classified as Common assets by the Airport Operator and have been allocated in the ratio of Terminal Building as had been determined by the Airport Operator (95:5). However, since these assets are for the use of employees of the Airport Operator, the same have been reallocated in the ratio of Employee Head Count of the Airport Operator (94.44:5.56).
- Allocation proposed as per the Study report: Common (Employee Head Count ratio)
- Impact on RAB: Reduction of ₹ 0.003 Crores.

Intangible asset

- Allocation as per Mangaluru International Airport Limited: Common
- Observation: It is determined from Clause 5.1.1 of the Concession Agreement that the capitalisation of Intangible asset and its allocation may not be a subject matter to be considered as part of the Study report. Accordingly, the Intangible asset have been excluded from the Adjusted RAB computed by the Study as of March 31, 2021.
- Allocation proposed as per the Study report: Exclude Intangible asset from this report
- Impact on RAB: Reduction of ₹ 16.37 Crores.

The Summary of the impact of proposed adjustments on Aeronautical assets as on March 31, 2021 is provided in the table below:

Table 100: Adjusted RAB as of March 31, 2021 as per the Study

(₹ Crores)

Particulars		Amount
Adjusted RAB as on October 31, 2020 transferred to Mangaluru International Airport Limited	A	125.64
Additions to RAB from COD to March 31, 2021 as per Airport Operator's submission	B	16.89
Sub-total (A + B)	C	142.53
Reclassifications on asset additions		
Computers and Software – reclassification	D	(0.003)
Exclusion of Intangible asset	E	(16.37)
Impact of differential Employee Head Count ratio	F	0.01
Total reclassifications on asset additions Sum (D: F)	G	(16.36)
Adjusted RAB (C + G)	H	126.17
Depreciation for the period from COD to March 31, 2021	I	(4.26)
Adjusted RAB as on March 31, 2021, i.e., opening RAB for First Control Period (H + I)		121.91

17.1.6 Based on the above, the year-wise revision in the Gross Fixed Assets ratio has been summarized in the tables below:

Table 101: Summary of assets as submitted by AAI up to COD

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (October 30, 2020)
Aeronautical Gross block (closing) (A)	316.40	320.37	343.57	372.26	374.71
Non-aeronautical Gross block (B)	14.18	14.18	14.19	14.35	14.35
Total Gross block (C = A + B)	330.58	334.55	357.76	386.61	389.06
Non-Aeronautical ratio	4.29%	4.24%	3.97%	3.71%	3.69%
Aeronautical Accumulated Depreciation (D)	(211.89)	(221.19)	(229.42)	(238.76)	(244.85)
Non-aeronautical Accumulated Depreciation (E)	(9.68)	(11.43)	(13.09)	(13.82)	(13.89)
Aeronautical Net block (RAB) (F = A – D)	104.51	99.18	114.15	133.50	129.86
Non-aeronautical Net block (G = B – E)	4.50	2.75	1.10	0.53	0.46
Total Net block (H = F + G)	109.01	101.93	115.25	134.03	130.32
Non-aeronautical Net block as a % of Total Net block	4.13%	2.70%	0.95%	0.40%	0.35%

Table 102: Summary of assets up to COD, net of Financing allowance and assets related to ANS activities included in Aeronautical assets

(₹ in Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020- 21 (October 30, 2020)
Aeronautical Gross block (closing) (A)	312.43	316.37	339.21	367.62	370.00
Non-aeronautical Gross block (B)	14.18	14.18	14.19	14.35	14.36
Total Gross block (C = A + B)	326.61	330.55	353.40	381.97	384.36
<i>Non-Aeronautical ratio</i>	<i>4.34%</i>	<i>4.29%</i>	<i>4.02%</i>	<i>3.76%</i>	<i>3.74%</i>
Aeronautical Accumulated Depreciation (D)	(211.79)	(220.91)	(228.89)	(237.95)	(243.88)
Non-aeronautical Accumulated Depreciation (E)	(9.68)	(11.43)	(13.09)	(13.82)	(13.90)
Aeronautical Net block (RAB) (F = A – D)	100.64	95.46	110.32	129.67	126.12
Non-aeronautical Net block (G = B – E)	4.50	2.75	1.10	0.53	0.46
Total Net block (H = F + G)	105.14	98.21	111.42	130.20	126.58
<i>Non-aeronautical Net block as a % of Total Net block</i>	<i>4.28%</i>	<i>2.80%</i>	<i>0.99%</i>	<i>0.41%</i>	<i>0.36%</i>

Table 103: Summary of assets derived for the Airport Operator as part of the Study as on March 31, 2021 prior to reclassification

(₹ in Crores)

Particulars	Assets transferred from AAI on October 31, 2020	Additions as per Airport Operator	Total Assets as on March 31, 2021
Aeronautical Gross block (A)	125.40	16.89	142.29
Non-aeronautical Gross block (B)	0.46	0.89	1.35
Total Gross block (C = A + B)	125.86	17.78	143.64
<i>Non-Aeronautical ratio</i>	<i>0.37%</i>		<i>0.94%</i>
Aeronautical Depreciation (D)			(5.50)
Non-aeronautical Depreciation (E)			(0.11)
Aeronautical Net block (RAB) (F = A – D)			136.79
Non-aeronautical Net block (G = B – E)			1.23
Total Net block (H = F + G)			138.02

Table 104: Types of reclassifications and impact as per the Study

(₹ Crores)

S. No.	Reclassification	Impact of reclassification of assets on Gross Block of the assets– Increase / (Decrease)					
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (up to October 30, 2020)	From COD up to March 31, 2021
1	Aeronautical to Common	(0.65)	(0.72)	(0.78)	(1.12)	(1.12)	(0.61)
2	Aeronautical to Non-aeronautical	-	(0.11)	(0.11)	(0.11)	(0.11)	(0.10)
3	Intangible asset excluded	-	-	-	-	-	(16.37)
	Sub-Total	(0.65)	(0.83)	(0.89)	(1.23)	(1.23)	(17.04)
4	Terminal Building ratio adjustment	2.99	2.99	2.99	2.99	2.99	0.92
	Total	2.34	2.16	2.10	1.76	1.76	(16.12)

Table 105: Revised Gross and Net block of Assets up to COD as per the Study report

(₹ Crores)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (October 30, 2020)
Aeronautical gross block (A)	314.77	318.53	341.31	369.38	371.76
Non-aeronautical gross block (B)	11.57	11.76	11.83	12.32	12.33
Total gross block (C = A + B)	326.34	330.29	353.14	381.70	384.09
Revised Non-Aeronautical ratio	3.55%	3.56%	3.35%	3.23%	3.21%
Reduction in Non-Aeronautical ratio	0.80%	0.73%	0.67%	0.53%	0.53%
Aeronautical Accumulated Depreciation (D)	(213.35)	(222.53)	(230.53)	(239.58)	(245.49)
Non-aeronautical Accumulated Depreciation (E)	(7.72)	(9.16)	(10.52)	(11.19)	(11.33)
Aeronautical Net block (RAB) (F = A – D)	101.42	96.00	110.78	129.80	126.27
Non-aeronautical Net block (G = B – E)	3.85	2.60	1.31	1.13	1.00
Total Net block (H = F + G)	105.27	98.60	112.09	130.93	127.27

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21 (October 30, 2020)
<i>Non-aeronautical Net block as a % of Total Net block</i>	3.66%	2.64%	1.17%	0.86%	0.79%

Table 106: Revised Gross and Net block of Assets as on March 31, 2021 as per the Study report

(₹ Crores)

Particulars	Assets transferred from AAI on October 31, 2020	Additions as per Airport Operator	Reclassification adjustments/ exclusions	Total Assets as on March 31, 2021
Aeronautical gross block (closing) (A)	125.40	16.89	(16.12)	126.17
Non-aeronautical gross block (B)	0.46	0.89	(0.33)	1.02
Total gross block (C = A + B)	125.86	17.78	(16.45)	127.06
<i>Non-Aeronautical ratio</i>				0.80%
Aeronautical Depreciation (D)				(4.26)
Non-aeronautical Depreciation (E)				(0.10)
Aeronautical Net block (RAB) (F = A – D)				121.91
Non-aeronautical Net block (G = B – E)				0.92
Total Net block (H = F + G)				122.83

17.1.7 As seen from the above table, the net increase due to the above adjustments in the Aeronautical RAB from FY 2016-17 to FY 2020-21 (up to October 30, 2020) for AAI as on October 30, 2020, is ₹ 0.14 Crores and the net decrease for the Airport Operator as on March 31, 2021 is ₹ 16.36 Crores.

17.2 Annexure 2 - Summary of study on efficient Operation and Maintenance expenses

Background

- 17.2.1 Establishing efficient Operation and Maintenance (O&M) expenses is an essential component in tariff determination for Aeronautical services. The allocation of O&M expenses as Aeronautical and Non-aeronautical expenses depends on the nature of expenses, type of assets which they service, the business function which they are deployed for, the end-user that benefits or avails services from those expenses, and reasonableness of the quantum of such expenses.
- 17.2.2 Towards this objective, AERA has decided to conduct an independent study on efficient Operation and Maintenance expenses, and their allocation as Aeronautical and Non-aeronautical components in respect of O&M expenses appearing in the extract of the audited trial balance of AAI for the period from FY 2016-17 (period from which MIA is a Major Airport) to October 30, 2020 and the audited financial statements of Mangaluru International Airport Limited for the period from October 31, 2020 (Commercial Operation Date (COD)) to March 31, 2021, and the True up workings as submitted to AERA by AAI up to October 30, 2020 and by the Airport Operator up to March 31, 2021.

Principles for segregation of costs

- 17.2.3 This Study segregates the O&M expenses of Mangaluru International Airport into the following:
- **Aeronautical expenses:** Expenses which are incurred for operation and maintenance of Aeronautical assets have been categorised as Aeronautical expenses.
 - **Non-aeronautical expenses:** Expenses which are incurred for operation and maintenance of Non-aeronautical assets have been categorized as Non-aeronautical expenses.
 - **Common expenses:** Expenses for which the benefits or use cannot be exclusively linked to either Aeronautical or Non-aeronautical activities have been segregated as Common expenses. Expenses primarily incurred for provision of Aeronautical services but are also used for provision of Non-aeronautical services are segregated as Common Expenses. Expenses which are used for general corporate purposes including legal, administration, and management affairs are treated as Common Expenses.
- 17.2.4 The Segregation of the various O&M expenses as per AAI's submission is as below:

Table 107: Segregation ratio for O&M expenses as per AAI's submission

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*
Employee benefit	98.75%	98.27%	97.94%	97.81%	96.40%
Administrative and other expenses	96.21%	85.48%	73.93%	99.20%	81.61%
Operating expenses	88.36%	87.68%	88.02%	88.14%	89.90%
Repairs and Maintenance	96.51%	97.38%	96.53%	98.38%	96.91%
Finance cost	NA	NA	NA	100.00%	NA

*Up to the date of COD (October 31, 2020)

Details of adjustment to O&M expenses

- 17.2.5 The study on the basis of the expense classification and principles of segregation adopted, as can be seen in the above paragraphs, has considered re-segregation of Operation and Maintenance expenses

to determine Aeronautical O&M costs. The study has proposed the following ratios:

Table 108: Revised segregation ratio for O&M expenses as per the study

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*
Employee benefit	91.01%	90.37%	90.99%	88.39%	87.43%
Administrative and other expenses	95.88%	85.03%	73.51%	98.70%	81.19%
Operating expenses	87.42%	86.56%	86.51%	86.59%	87.85%
Repairs and Maintenance	91.27%	92.14%	90.97%	93.52%	92.74%
Finance cost	NA	NA	NA	100.00%	NA

*Up to the date of COD (October 31, 2020)

- 17.2.6 Based on the above reclassification and change in allocation ratio, the Study has proposed the revised Aeronautical O&M expenses (prior to rationalisation) for the period FY 2016-17 to COD as summarised in the table below:

Table 109: Aeronautical O&M expenses due to reclassification and change in allocation ratio (prior to rationalisation) for AAI for the period from FY 2016-17 to COD as per Study

(₹ Crores)

O&M expenses	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*	Total
Employee benefit	10.93	15.68	19.40	19.80	10.43	76.24
Administrative and other expenses	14.66	16.98	15.76	15.95	9.80	73.15
Operating expenses	8.34	11.66	12.06	12.78	6.00	50.84
Repairs and Maintenance	5.75	8.09	7.35	16.16	6.00	43.35
Finance cost	0.00	0.00	0.00	0.11	0.00	0.11
Total	39.68	52.41	54.57	64.80	32.23	243.69

*Up to the date of COD (October 31, 2020)

- 17.2.7 Based on the review of the O&M expenses as per the Airport Operator's submission, adjustments were made in the Manpower expenses with respect to staff deputed by AAI, rectification of the Employee Head Count ratio considered by the Airport Operator and adjustment for Utility expenses. Pursuant to such adjustments and reclassifications, the revised Aeronautical O&M expenses for the period from COD to March 31, 2021, as summarised in the table below:

Table 110: Aeronautical O&M expenses for the Airport Operator for the period from COD to March 31, 2021, proposed by Study

(₹ Crores)

Particulars	October 31, 2020 to March 31, 2021
Manpower expenses	9.67
Utility expenses	3.89
IT expenses	1.67
Security expenses	0.86
Allocation of Corporate expenses	2.20
Administration and General expenses	2.00
Insurance expenses	0.31
Repairs and Maintenance expenses	3.40
Bank charges	0.41
Other expenses	2.39
Total	26.80

Rationalisation of O&M expenses

17.2.8 Based on the Internal Benchmarking analysis, it was observed that the Operation and Maintenance expenses for Mangaluru International Airport for the period from FY 2016-17 to FY 2020-21 are higher than normal operating efficiency levels, in respect of Repairs and maintenance expenses and CHQ/RHQ allocations of the corporate overheads included in Administrative and other expenses.

17.2.9 It is proposed to rationalise such expenses to determine the efficient Aeronautical O&M expenses for the period from FY 2016-17 to FY 2020-21.

Efficient Aeronautical O&M expenses

17.2.10 Based on the above, the efficient Aeronautical operating and maintenance expenses for AAI and the Airport Operator is given in the tables below:

Table 111: Efficient Aeronautical O&M expenses for AAI for the period from FY 2016-17 to COD after rationalisation as per Study

(₹ Crores)

Aeronautical O&M expenses	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*	Total
Employee benefit expenses	10.93	15.68	19.40	19.80	10.43	76.24
Administrative and other expenses	10.93	12.30	10.60	10.47	2.68	46.98
Operating expenses	8.34	11.66	12.06	12.78	6.00	50.84

Aeronautical O&M expenses	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21*	Total
Repairs and maintenance expenses	4.45	6.09	5.76	13.40	4.54	34.24
Finance cost	0.00	0.00	0.00	0.11	0.00	0.11
Total	34.65	45.73	47.82	56.56	23.65	208.41

* Up to the date of COD (October 31, 2020)

Table 112: Efficient Aeronautical O&M expenses for the Airport Operator for the period from COD to March 31, 2021 after rationalisation as per Study

(₹ Crores)

Aeronautical O&M expenses	FY 2020-21*
Manpower expenses	9.67
Utility expenses	3.89
IT expenses	1.67
Security expenses	0.86
Allocation of Corporate expenses	2.20
Administration and General expenses	2.00
Insurance expenses	0.31
Repairs and Maintenance expenses	3.14
Bank charges	0.41
Other expenses	2.39
Total	26.54

* For the period from COD to March 31, 2021

17.2.11 AAI had claimed Aeronautical O&M expenses of ₹ 254.19 Crores for the period from FY 2016-17 to COD as part of their True up submission and the Airport Operator had claimed Aeronautical O&M expenses of ₹ 27.00 Crores as part of their True up submission for the period from COD to March 31, 2021.

17.2.12 The Study proposes ₹ 208.41 Crores as the Aeronautical O&M expenses for AAI for the period from FY 2016-17 to COD, thus, resulting in a downward adjustment of ₹ 45.78 Crores in the Aeronautical O&M expenses. The Aeronautical O&M expenses for the period from FY 2016-17 to COD is reduced by 18.01%.

17.2.13 The Study proposes ₹ 26.54 Crores as the Aeronautical O&M expenses for the Airport Operator for the period from COD to March 31, 2021, thus, resulting in a downward adjustment of ₹ 0.46 Crores for the Airport Operator. The Aeronautical O&M expenses for the period from COD to March 31, 2021 is reduced by 1.70%.

17.3 Annexure 3 – Clauses of the Concession Agreement entered between AAI and Airport Operator

17.3.1. The Airports Authority of India (AAI) entered into a Concession Agreement with Mangaluru International Airport Limited (Airport Operator) on February 14, 2020 for the Operation, Development, Maintenance and Management of Mangaluru International Airport for a period of 50 years from the Commercial Operation Date (COD) i.e., October 31, 2020 in accordance with the terms and conditions mentioned in the Concession Agreement.

17.3.2. The relevant Clause of the Concession Agreement may be read as under:

3.1.1. *"Subject to and in accordance with the provisions of this Agreement, Applicable Laws and the Applicable Permits, the Authority hereby grants to the Concessionaire, the concession set forth*

herein including the exclusive right, lease and authority to operate, manage and develop the Airport ("Concession") for a period of 50 (fifty) years commencing from the COD, and

the Concessionaire hereby accepts the Concession and agrees to implement the Project subject to and in accordance with the terms and conditions set forth herein".

3.1.2. *Subject to and in accordance with the provisions of this Agreement, the Authority, Applicable Laws and the Applicable Permits, the Concession hereby granted shall oblige or*

entitle (as the case may be) the Concessionaire to:

- (a) *the Right of Way, access and lease to the Site for the purpose of and to the extent conferred by the provisions of this Agreement.*
- (b) *finance the development and expansion of the Airport.*
- (c) *operate, maintain and manage the Airport and regulate the use thereof by third parties.*
- (d) *demand, collect and appropriate Fee from Users liable for payment of Fee for using the Airport or any part thereof and refuse entry of any such User if the Fee due is not paid.*
- (e) *perform and fulfil all of the Concessionaire's obligations under and in accordance with this Agreement.*
- (f) *save as otherwise expressly provided in this Agreement, bear and pay all costs, expenses, Taxes and charges in connection with or incidental to the performance of the obligations of the Concessionaire under this Agreement; and*
- (g) *neither assign, transfer or create any lien or encumbrance on this Agreement, or the Concession hereby granted or on the whole or any part of the Airport nor transfer, or part possession thereof, save and except as expressly permitted by this Agreement or the Substitution Agreement.*

27.1.1. *Subject to Clause 27.3, the Concessionaire agrees to pay to the Authority, during the Concession Period, a monthly concession fee calculated as follows (the "Monthly Concession Fee"):*

$$\frac{\text{Per Passenger Fee International Passenger}}{\text{Passenger for International that Passengers}} \times \frac{\text{Throughput for that month}}{\text{month}} + \frac{\text{Per Passenger Fee for Domestic Passengers}}{\text{Passengers}} \times \frac{\text{Throughput for Domestic month}}{\text{month}}$$

Where:

"Per Passenger Fee for Domestic Passengers" means Rs. 115 (Rupees One Hundred and Fifteen), as may be revised pursuant to Clause 27.3;

"Per Passenger Fee for International Passengers" means 2 (two) times the Per Passenger Fee for Domestic Passengers;

"Domestic Passenger Throughput" for any month shall mean the total domestic Passenger Traffic (embarking and disembarking passengers) as provided by the Authority by the 7th (seventh) day of the subsequent month in the form and manner as may be specified by the Authority from time to time.

"International Passenger Throughput" for any month shall mean the total International Passenger Traffic (embarking and disembarking passengers) as provided by the Authority by the 7th (seventh) day of the subsequent month in the form and manner as may be specified by the Authority from time to time.

Provided further that, in the first and that last month of the Concession Period, the International Passenger Throughput and Domestic Passenger Throughput shall be pro-rated by the number of the days in such months as reckoned with respect to the COD or Transfer Date, as relevant.

27.1.2. The Monthly Concession Fee paid/ payable by the Concessionaire to the Authority under and pursuant to the terms of this Agreement shall not be included as a part of costs for provision of Aeronautical Services and no pass-through would be available in relation to the same.

20.1.1 The Concessionaire acknowledges and agrees that only the Designated GOI Agencies are authorised to undertake the following services ("**Reserved Services**") at the Airport:

- (a) CNS/ATM Services;
- (b) security services;
- (c) meteorological services;
- (d) mandatory health services;
- (e) customs control;
- (f) immigration services;
- (g) quarantine services;
- (h) any other services, as may be notified by GOI;

Provided that, subject to the Applicable Laws and the Applicable Permits, nothing in this

Agreement shall restrict the Authority from requiring the Concessionaire to undertake any or all of the Reserved Services on such terms and conditions as may be mutually agreed between the Parties.

17.3.3. The relevant portion of Schedule T which pertains to the list of capital expenditure contracts already awarded by AAI and handed over to the Airport Operator and Schedule U which pertains to the list of capital expenditure projects proposed / planned by AAI but not yet awarded and forming part of the terms of the Concession Agreement are given below:

SCHEDULE T

EXISTING CONTRACTS

List of capital expenditure already awarded:

S. No	Name of Work/Scheme planned	Contractor Name /Address	Estimate Cost (Crores)	Awarded Value (Crores)	Date of Start	Stipulated date of Completion	Likely Physical Progress up till 30th June 2019	Likely Financial Progress up till 30th June 2019
	CIVIL							
1	Providing and fixing Sun Control film for NITB side glasses at Mangaluru International Airport. S/H: Providing and fixing Sun Control film and Graphic film	M/s Balaji Associates, Bengaluru	0.64	0.51	14-12-2017	30-11-2018	100%	0.60
2	C/o CISF family accommodation renamed as 'C/oCISF Barracks at Mangaluru International Airport'	M/s A.L.Pinto & Brothers, Airport Road, Bajpe.	2.40	2.03	26-12-2017	25-12-2018	100%	2.25
3	Construction of Link Parallel Taxi Track (Phase-II) and Grading of Basic Strip at South Side at Mangaluru International Airport	M/s PBI Construction Company, Bunder Road, Bhatkal, U.K. Karnataka	114.47	97.71	19-02-2017	18-08-2019	60%	60.00
4	Modification / Expansion of existing Integrated Terminal Building at Mangaluru International Airport	M/s Harsh Constructions, Nashik, Maharashtra	132.24	95.80	19-04-2018	18-04-2020	33%	30.00
5	Face lift works in NITB & minor expansion of Domestic SHA	M/s Harsh Constructions, Nashik, Maharashtra	4.86	4.35	03-08-2018	02-08-2019	70%	3.00
6	Extension of Apron towards East side	M/s Sheela Constructions, Balmatta	6.76	5.37	20-09-2018	19-09-2019	74%	4.00
7	Post Award Project Management Consultancy for supervision of Modification / Expansion of existing Integrated terminal Building at Mangaluru International Airport	M/s KITCO Ltd., 4407, Femith's PB No. 4407, Puthiya Road, Vennala, Kochi-78	2.15	2.42	15-10-2018	14-06-2020	44%	1.06

S. No	Name of Work/Scheme planned	Contractor Name /Address	Estimate Cost (Crores)	Awarded Value (Crores)	Date of Start	Stipulated date of Completion	Likely Physical Progress up till 30th June 2019	Likely Financial Progress up till 30th June 2019
8	Replacement of ILS system - Civil & Internal Electrical works	M/s Sheela Constructions, Balmatta Road, Mangaluru	0.43	0.32	30-11-2018	30-01-2019	100%	0.32
9	Widening and strengthening of perimeter road	M/s Shaan Enterprises, Kunjathbail, Mangaluru	7.1	4.59	30-11-2018	30-11-2019	58%	2.75
10	Construction of storm water drains in Malavoor Village on foothills of Mangaluru Airport	Panchayat Raj Engineering Department, Mangaluru	6.75	6.75	15-01-2019	30-07-2019	90%	6.08
11	Providing Artwork	M/s S Cube-Mangalore M/s S.K.Pahari - New	1.17	1.17	15-07-2018	31.01-2019	100%	1.17

ANNEXURES

S. No	Name of Work/ Scheme planned	Contractor Name / Address	Estimated Cost (Crores)	Awarded Value (Crores)	Date of Start	Stipulated date of Completion	Likely Physical Progress up till 30th June 2019	Likely Financial Progress up till 30th June 2019
	ELECTRICAL							
1	Extension of Apron Towards East side at Mangaluru Intl. Airport. SH: SITC of Apron Flood lights and allied Electrical works	M/s B/814, 8th Floor, B.G. Tower, Opp. Delhi Gate, Shahibaug Road, Ahmedabad - 380 004.	0.3	0.27	20-10-2018	18-04-2019	100%	0.27
2	Replacement of HPSV fittings of perimeter lighting with LED fittings i/c re-orientation of fittings - Phase-I.	M/s Saraswat Engineer Services, 6, Vanarai Complex, W E Highway	0.41	0.34	15-11-2018	14-03-2019	100%	0.34
3	Replacement of ceiling fans in AAI Residential Colony	M/s Guru Electricals, Shop No.2-96(6), Church Building, Bajpe, Mangaluru- 574 142.	0.05	0.04	15-11-2018	16-02-2019	100%	0.04
4	Provision of additional remote control desk	M/s Nasu Systems, 503-A, 'Amrat' Society,	0.04	0.04	26-04-2018	30-11-2018	100%	0.04
5	Provision of 3 Nos. of additional check in counters for Departure Baggage Handling system at Mangaluru International Airport. SH: Supply of Conveyor System.	M/s, Pteris Global Ltd., Singapore		0.95	04-08-2018	03-02-2019	100%	0.95
6	Provision of 3 Nos. of additional check in counters for Departure Baggage Handling system at Mangaluru International Airport.	M/s Delite Systems Engineering (I) Pvt. Ltd, 34, 'B' wing, Ground Floor, Guru Gobind		0.24	04-08-2018	03-02-2019	100%	0.24
7	Providing Apron Drive Glass walled Passenger Boarding Bridges and Advanced	M/s ADELTE Airport, Technologies, SLV, No.1 Calle Buenos Aires,		1.6	01-07-2016	31-01-2019	100%	1.60

S. No	Name of Work/ Scheme planned	Contractor Name / Address	Estimated Cost (Crores)	Awarded Value (Crores)	Date of Start	Stipulated date of Completion	Likely Physical Progress up till 30th June 2019	Likely Financial Progress up till 30th June 2019
	Visual Docking Guidance System (AVDGS) for Goa, Calicut, Coimbatore, Mangalore, Trichy, Vadodara, Amritsar, Ahmedabad & Trivandrum Airport in India.	Barcelone, Spain						
8	Replacement of ductable AC in NDB and LLZ & Replacement of RO filters and Water Coolers at various locations at Mangalore International Airport	M/s Velocity Aircon, New Delhi	0.13	0.12	22-12-2017	31-10-2018	100%	0.12
9	Replacement of conventional light fittings to LED fittings	M/s Energy Efficiency Service Ltd, (EESL)		0.21	30-07-2018	30-11-2018	100%	0.21
10	Provision of additional cable to NAVAIDS - SH: - Providing standby cables for Glide path at Mangaluru International Airport.	M/s N L Neema, 8/3 North, Rajmohalla, Indore- 452 002.	0.4	0.36	06-09-2018	05-01-2019	100%	0.36

SCHEDULE U**List of Works Proposed by AAI:**

S. No	Name of Work/Scheme planned	Line Estimate(cost) of work
ELECT	MANGALORE AIRPORT	
1	Converting HT overhead line to underground cabling in AAI colony.	0.08
2	Relocation of Landing 'T' & Windssock.	0.01
3	Provision of additional CCR	0.1
4	Provision of Ladders	0.02
5	Replacement of pumps and rewiring in pump house at OTB	0.07
6	Provision of standby cable for NATS building from OTB.	0.46
7	Replacement of AC's water cooler and water dispenser at various locations	0.1
8	Modification of existing threshold cum end light inset fitting at 06 beginning.	0.3
9	Replacement of obsolete kirloskar make 33 KVVCB panel with new VCB panel	0.5
10	Provision of thermal storage system for HVAC plant at NITB	1
12	Work to meet emergency operational and DGCA requirement	0.05
13	Provision of Solar lights for existing CISF hut and new watch towers	0.1
14	Provision of CAT-I approach lighting system.	2
15	Central Line Light	3
16	Solar Roof Top	2
CIVIL		
15	C/o C&D type quarters (18 Nos) to be renamed as 'C/o staff quarters of various categories at Mangaluru International Airport'	
16	'Extension of Runway by 120 m for RESA'	
17	Extension of NITB Departure side	
18	Wall to wall grading at operational area	
19	Extension of existing MT workshop	
20	Rainwater Harvesting works	
20	Providing new Aluminum roof Gutters for NITB	2.52

List of Works that are in planning stage and works cannot be deferred for operational reasons

Sl No	Name of Work/Scheme planned	Line Estimate (cost) of work	Status of obtaining A/A & E/S	Whether work essential for operational requirement	If so commencement to be specified for meeting operational requirement
ELECT					
1	Converting HT overhead line to underground cabling in AAI colony.	0.08	-	-	Planning stage
2	Relocation of Landing 'T' & Windsock.	0.10	-	-	Planning stage
3	Provision of additional CCR	0.10	-	-	Planning stage
4	Provision of Ladders	0.02	-	-	Planning stage
5	Replacement of pumps and rewiring in pumphouse at OTB	0.07	-	-	Planning stage
6	Provision of standby cable for NATS building from OTB.	0.46	-	-	Planning stage
7	Replacement of AC's water cooler and waterdispenser at various locations	0.10	-	-	Planning stage
8	Modification of existing threshold cum endlight inset fitting at 06 beginning.	0.30	-	-	Planning stage
9	Replacement of obsolete Kirloskar make 33KV VCB panel with new VCB panel	0.50	-	-	Planning stage
10	Provision of thermal storage system for HVAC plant at NITB	1	-	-	Planning stage
12	Work to meet emergency operational and DGCA requirement	0.05	-	-	Planning stage
13	Provision of Solar lights for existing CISF hut and new watch towers	0.1	-	-	Planning stage
14	Provision of CAT-I approach lighting system.	2	-	-	Planning stage
15	Central Line Light	3			Planning stage
16	Solar Roof Top	2			Planning stage
CIVIL					
15	C/o C&D type quarters (18 Nos) to be renamed as 'C/o staff quarters of various categories at Mangaluru International Airport'				Planning stage
16	'Extension of Runway by 120 m for RESA'				Planning stage
17	Extension of NITB Departure side				Planning stage
18	Wall to wall grading at operational area				Planning stage
19	Extension of existing MT workshop				Planning stage
20	Rainwater Harvesting works				Planning stage
20	Providing new Aluminum roof Gutters for NITB	2.52			Planning stage

17.3.4. **Carved-out Area** - Annexure IV of Schedule A to the Concession Agreement provides details of the carved-out area for Cargo Terminal.

Annex IV
(Schedule A)
(See Clause 10.1)

Carved Out Assets and Areas

It is clarified that the Site and Project Assets shall not include the following:

SI No.	ASSET	AREA OF LAND IN SQ.M. (Approx.)
1.	ATC TOWER	2258 Sq.m. (0.56 Acres)
2.	CARGO TERMINAL	
	a) Existing Domestic	2785.059 Sq.m.
	b) Existing International	1813.52 Sq.m.
	c) Proposed ICT Complex	11000 Sq.m.
	Total	15598.58 Sq.m. (3.85 Acres)
4.	ANY FUTURE LAND REQUIREMENT FOR CNS/ATM/STAFF QUARTERS	
	a) Land for ASR/MSSR Building at Remote Location	5625 Sq.m. (1.39 Acres)
	b) Densification of Residential Colony	46834.2 Sq.m. (11.57 Acres)
	Total	52459.2 Sq.m. (12.96 Acres.)
5.	TOTAL	70315.78 Sq.m. (17.37 Acres.)

17.3.5. Clause 19.4.1. of the Concession Agreement relating to obligations of the Airport Operator Towards cargo facilities is reproduced below-

- (a) *The Concessionaire shall upgrade, develop, operate and maintain the Cargo Facilities in accordance with the provisions of this Agreement, Applicable Laws, Applicable Permits, relevant ICAO Documents and Annexes and Good industry Practice.*
- (b) *Notwithstanding anything to the contrary provided in this Clause 19.4 and Clause 23.5, it is clarified that, where Cargo Facilities have been earmarked for AAICLAS in Schedule A (i) the Concessionaire will not be responsible for operations, development, maintenance and management thereof, nor shall the Concessionaire be bound by the obligations set out elsewhere in this Clause 19.4; and (ii) AAICLAS shall be granted access to the airside by the Concessionaire free of cost.*
- (c) *It is further clarified that, where Cargo Facilities have been earmarked for AAICLAS in Schedule A, there shall be no restriction on the upgradation and/ or development of Cargo Facilities by the Concessionaire, including on grounds of quantum of cargo volumes at the Airport, business potential or impact of such additional facilities on Cargo Facilities earmarked for AAICLAS.*

- 17.3.6. Clause 19.2. relating to Airport Operator's obligation towards Ground Handling Services is given below:

The Concessionaire shall provide or cause to be provided as per Applicable Laws and Good Industry Practice, at its own cost and expense, the infrastructure required for operation of the ground handling services required at the Airport for and in respect of the Users, like aircrafts, passengers and cargo, which shall include ramp handling, traffic handling, aircraft handling, aircraft cleaning, loading and unloading ("**Ground Handling Services**"). Such infrastructure shall include luggage conveyor belts, computer terminals, information technology backbone and associated facilities in accordance with the provisions of this Agreement, Applicable Laws and Good Industry Practice.

- 17.3.7. The Clause 19.3. of the Concession Agreement clearly mentions the Airport Operator's obligations towards providing aircraft fueling services, which has been reproduced below:

"The Concessionaire shall provide, or cause to be provided, the infrastructure required for operation of fuelling services on equal access basis for all the aircrafts at the Airport in a transparent and non-discriminatory manner. Such infrastructure shall include tank farms and associated facilities in accordance with the provisions of this Agreement, Applicable Laws and Good Industry Practice."

- 17.3.8. As per the Concession Agreement, the Estimated Deemed Initial RAB as on March 31, 2018, was determined to be ₹ 71 Crores, which was due and payable by the Concessionaire to AAI. The terms of the Concession Agreement also provide for the value of ₹ 71 Crores to be subject to reconciliation, True up and final determination by AERA. The extract of the relevant clauses from the Concession Agreement shall be read as under:

Clause 28.11.3 states that:

- a) *It is agreed by the Parties that the Concessionaire shall be liable to pay to the Authority an amount equivalent to the investments made by the Authority in the Aeronautical assets as of the COD and considered by the Regulator as part of the Regulatory Asset Base, subject to requisite reconciliation, true-up and final determination by the Regulator of the quantum of such investment ("**Deemed Initial RAB**").*
- b) *The estimated depreciated value of investments made by the Authority in the Aeronautical assets at the Airport as on March 31, 2018, is Rs. 71,00,00,000 (Rupees Seventy-One Crore) ("**Estimated Deemed Initial RAB**"). It is agreed by the Parties that the Estimated Deemed Initial RAB shall be due and payable by the Concessionaire to the Authority within 90 (ninety) days of COD.*

Clause 28.11.4 states that:

*Pursuant to the payment of the Estimated Deemed Initial RAB, and upon the reconciliation, true-up and final determination by the Regulator of the quantum of the investment under 28.11.3(a), any surplus or deficit in the Estimated Deemed Initial RAB with respect to the Deemed Initial RAB shall be adjusted as part of the Balancing Payment that becomes due and payable as per Clause 31.4 after the expiry of 15 (fifteen) days from such final determination by the Regulator, with due adjustment for the following ("**Adjusted Deemed Initial RAB**"):*

- a) *reduced to the extent of over-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as a downward adjustment while determining Aeronautical Charges for the next Control Period; or*
- b) *increased to the extent of under-recoveries, if any, of Aeronautical Revenues by the Authority*

until the COD, that the Regulator would provide for as an upward adjustment while determining Aeronautical Charges for the next Control Period.

The amount(s) to be paid by the Authority or Concessionaire shall be the present value of Adjusted Deemed Initial RAB calculated using the fair rate of return as determined by the Regulator for the time period from the COD to the date of actual payment of the Adjusted Deemed Initial RAB.

Clause 28.11.5 states that:

Upon reimbursement of such amount by the Concessionaire to the Authority, the Deemed Initial RAB will, in addition to the investments made by the Concessionaire, be considered for the purpose of determination of Aeronautical Charges by the Regulator.

- a) The Authority undertakes to make any required supporting submissions to the Regulator towards such consideration and determination by the Regulator.*
- b) The Parties shall submit to and request the Regulator to separately identify the Deemed Initial RAB in future determinations of Aeronautical Charges with regard to consideration of depreciation, required returns, etc.*

17.3.9. Clause 5.1.1 of the Concession Agreement which states that “Subject to and on the terms and conditions of this Agreement, the Concessionaire shall, at its own cost and expense, procure finance for and undertake the operations, management and development of the Airport, in accordance with the provisions of the Applicable Permits, Applicable Laws, this Agreement and observe, fulfil, comply with and perform all its obligations set out in this Agreement or arising hereunder”.

17.3.10. The relevant clause (6.4.5.) of the Concession Agreement relating to the Airport Operator’s obligation regarding CWIP handed-over by AAI as on COD and as set forth in Schedule T, has been reproduced below-

“Notwithstanding anything to the contrary in this Clause 6.4, the Concessionaire shall be liable to pay to the Authority such amounts as may have been incurred by the Authority as on the COD in respect of the contracts relating to works-in-progress as have been set forth in Schedule T. Such amounts shall be intimated by the Authority with supporting documents and details within 30 (thirty) days of COD and shall be due and payable by the Concessionaire to the Authority within a period of 90 (ninety) days thereon.

The Parties shall constitute a committee comprising representatives of the Concessionaire, Authority and each of the counterparties under such contracts, which committee shall be responsible for: (a) facilitating any discussions and/ or interactions amongst AAI, the Concessionaire and the counterparties under such contracts, including in respect of any modifications to the works and (b) coordinating, facilitating, and monitoring the progress of such works-in-progress. The Concessionaire shall be responsible to incur any additional cost towards completion of such work-in-progress assets after COD.

Upon reimbursement by the Concessionaire to the Authority, of amounts as may have been incurred by the Authority as on the COD for such work-in-progress assets as provided for above, and completion of such works-in-progress by the Concessionaire, such works-in-progress assets shall form part of the Airport.

The amounts reimbursed by the Concessionaire to the Authority and additional amounts incurred by the Concessionaire for completion of such work-in-progress assets shall be considered as investments made by the Concessionaire in creation of such assets for the

purpose of determination of Aeronautical Charges by the Regulator. In the event that any part of the amounts reimbursed by the Concessionaire to the Authority pursuant to this Clause 6.4.5 are not considered for pass-through by the Regulator due to any act or omission on the part of the Authority, the adjustment towards any differences in the amounts reimbursed by the Concessionaire to the Authority and the amounts considered for pass-through by the Regulator shall be undertaken as part of the Balancing Payment that becomes due and payable as per Clause 31.4 immediately after the determination of the Aeronautical Charges by the Regulator."

- 17.3.11. The relevant clause 4.1.3. (h) of the Concession Agreement relating to the Airport Operator's obligation regarding Conditions Precedent required to be satisfied within 180 days of the agreement relating to works proposed by AAI and as set forth in Schedule U, has been reproduced below-

Except as may have been specifically otherwise provided in this Agreement, the Conditions Precedent required to be satisfied by the Concessionaire within a period of 180 (one hundred and eighty) days from the date of this Agreement shall be deemed to have been fulfilled, when the Concessionaire shall, subject to the satisfaction of the Authority, have -

(h) delivered to the Authority –

(a) a list of Construction works it proposes to undertake in the first 7 (seven) Concession years having due regard to the works:

a. Currently being implemented by the Authority; and

b. Proposed to be implemented by the Authority as on the date of signing the Agreement and (as set forth in Schedule U),

(b) the scheduled date for completion of such Construction works.

- 17.3.12. The relevant Clauses relating to the Independent Engineer's appointment, duties & functions and remuneration are reproduced below:

Clause 24.1 Appointment of Independent Engineer

24.1.1 *The Authority (AAI) and the Concessionaire shall appoint a consulting engineering firm substantially in accordance with the selection criteria set forth in Schedule K, to be the independent consultant under this Agreement ("**Independent Engineer**"). The Independent Engineer shall be appointed in accordance with the provisions of Schedule K.*

24.1.2 *The appointment of the Independent Engineer shall be made within 90 (ninety) days of the date of execution of this Agreement, and such appointment shall be valid for a period of 3 (three) years. On the expiry or termination of the said appointment, the Authority shall appoint an Independent Engineer for a further term of 3 (three) years in accordance with the provisions of Schedule K, and such procedure shall be repeated after expiry of each appointment.*

Clause 24.2. Duties and Functions

24.1.3 *The Independent Engineer shall discharge its duties and functions substantially in accordance with the terms of reference set forth in Schedule L.*

24.1.4 *The Independent Engineer shall submit regular periodic reports (at least once every*

month) to the Authority in respect of its duties and functions set forth in Schedule L.

24.1.5 *A true copy of all communications sent by the Authority to the Independent Engineer and by the Independent Engineer to the Authority shall be sent forthwith by the Independent Engineer to the Concessionaire.*

24.1.6 *All communications required to be sent by the Independent Engineer to the Concessionaire shall be undertaken through the Authority.*

Clause 24.3 Remuneration

24.1.7 *The remuneration, cost and expenses of the Independent Engineer shall be paid by the Authority, and all such remuneration, cost and expenses shall be reimbursed by the Concessionaire to the Authority within 15 (fifteen) days of receiving a statement of expenditure from the Authority. Any amounts paid to the Independent Engineer shall be considered for a pass-through for the determination of the Aeronautical Charges by the Regulator.*

17.3.13. The relevant Paras relating to Role and functions of the Independent Engineer as stated in Schedule L of the Concession Agreement are reproduced below:

3. *Role and functions of the Independent Engineer*

3.1 *The role and functions of the Independent Engineer shall include the following:*

- (a) *review of the designs, drawings, and documents as set forth in Paragraph 4.*
- (b) *review, inspection and monitoring of Construction Works as set forth in Paragraph 4.*
- (c) *reviewing and witnessing the Tests on completion of construction and assisting the Authority in issuing Completion Certificate/ provisional certificate as set forth in Paragraph 4.*
- (d) *review, inspection and monitoring of O&M as set forth in Paragraph 5.*
- (e) *review, inspection and monitoring of Divestment Requirements as set forth in Paragraph 6.*
- (f) *determining, as required under the Agreement, the costs of any works or services and/or their reasonableness.*
- (g) *determining, as required under the Agreement, the period or any extension thereof, for performing any duty or obligation.*
- (h) *assisting the Parties in resolution of Disputes as set forth in Paragraph 8.*
- (i) *undertaking all other duties and functions in accordance with the Agreement; and*
- (j) *assisting the Concessionaire in determining the Scheduled Completion Dates and Phase Milestones.*

3.2 *The Independent Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.*

17.4 Annexure 4 – Project wise details of Capital expenditure submitted by the AO in the revised MYTP as on December 10, 2021

(₹ Crores)

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost (includes design, PMC, Pre- operative expenses etc)	Financing allowance (FA)	Total Capex (incl. FA)
A. Projects initiated in Pre-COD Period and proposed to be executed in First Control Period along with Enabling Capital Projects integral to completion of the mandated Projects					
A1.	Runways, Taxiway & Aprons				
	Joint Filling work at Runway / taxiway	2021-22	1.25	0.74	1.99
	Construction of Link Parallel taxi track (Phase II) and Grading of basic strip at south side	2022-23	119.55	2.70	122.25
A2.	Terminal Building				
	Expansion / modification of Existing Terminal Building on its western side (arrival side)	2021-22	109.83	-	109.83
	Post Award Project Management Consultancy for supervision of Expansion / Modification of Existing Integrated Terminal Building	2021-22	3.45	-	3.45
	Buildings- Financial Allowance	2021-22	-	5.64	5.64
	Plant and Machinery (enabling capital project)				
	Expansion of Baggage Conveyor	2021-22	7.86	-	7.86
	Substation equipment	2021-22	2.03	-	2.03
	Lift & Travellator	2021-22	1.58	-	1.58
	PA system	2021-22	0.90	-	0.9
	Engineering Consultancy	2021-22	0.83	-	0.83
	VDGS	2022-23	1.98	-	1.98
	Expansion of Passenger Boarding Bridge	2022-23	7.41	-	7.41
	Plant & Machinery – Financial Allowance	2021-22	-	0.11	0.11
	Information Technology (IT) works (enabling capital project)				
	Work related to IT for NITB	2021-22	9.86	-	9.86
	Facelift work for NITB	2021-22	0.16	-	0.16
	Aluminium Roof Gutter for NITB	2021-22	0.02	-	0.02
	SITC of RC CCTV	2021-22	0.68	-	0.68
	Flight Information Display System	2021-22	1.21	-	1.21
	Network & Pen Tablet	2021-22	1.31	-	1.31
	Supply of Bullet Proof Helmet	2021-22	0.01	-	0.01
	Electrical Materials	2021-22	0.02	-	0.02
	Information Technology (IT) works – Financing allowance		-	0.26	0.26
A3.	Roads				
	Widening and strengthening of existing perimeter road	2021-22	4.36	-	4.36

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost (includes design, PMC, Pre-operative expenses etc)	Financing allowance (FA)	Total Capex (incl. FA)
Total Capex initiated in the Pre-COD Period and mandated to be executed in the First Control Period along with Enabling Capital Projects (A)			274.30	9.45	283.75
B. New Capital expenditure proposed for the First Control Period					
B1.	Runways, Taxiway & Aprons				
	Miscellaneous Airside improvement works- threshold lights, AGL cable, LED lights, illuminated guidance signages, infrastructure for GHA, etc	2021-22	21.12	12.57	33.69
	Runway recarpeting	2022-23	52.00		52.00
	Centre-lighting	2022-23	37.65		37.65
	Construction of new taxiway	2022-23	66.53		66.53
	Construction of new portion RESA	2022-23	17.16		17.16
	Apron improvement works	2022-23	1.80	4.38	6.18
	Miscellaneous Airside improvement works- demolition of existing structures for construction of new Runway End Safety Area (RESA) and new Taxiway, airside canteen, taxiway improvement works, Navaids etc	2022-23	19.04		19.04
	Miscellaneous Airside improvement works-LED lights for NATS Building and exit road, illuminated guidance signages etc.	2023-24	0.92	0.05	0.97
	Apron improvement works Miscellaneous Airside improvement works- airside canteen, taxiway improvement works, Navaid, bomb cooling pit etc	2024-25	0.56	0.26	0.82
		2025-26	5.96	0.20	8.66
		2025-26	2.50		
B2.	Terminal Building				
	Modification / Expansion of existing Terminal Building	2022-23	93.39	2.25	102.37
	Miscellaneous works / interiors / finishes / kerbside of existing Terminal	2022-23	6.72		
	Miscellaneous works / interiors / finishes / kerbside of existing Terminal	2023-24	7.38	-	7.38
		2024-25	4.52	-	4.52
B3.	Cargo assets				
	Financing allowance – Cargo Buildings	2021-22	-	0.08	0.08
	Cargo Buildings (new integrated Cargo Terminal)	2022-23	14.46	0.08	19.61
	Cargo equipment	2022-23	5.07		
B4.	Fuel Facility				
	Purchase of assets of existing Oil Marketing Companies (OMC)	2021-22	10.00	-	10.00
	Building of new assets for Open Access Fuel Facility operations	2022-23	12.73	-	12.73

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost (includes design, PMC, Pre- operative expenses etc)	Financing allowance (FA)	Total Capex (incl. FA)
B5.	Security equipment				
		2022-23	3.73	-	3.73
	Equipment for ARFF – runway mechanical sweeper, rubber removal and other equipment	2023-24	4.10	-	4.10
		2024-25	2.51	-	2.51
B6.	Plant and Machinery				
	Miscellaneous items - Trilo for grass cutting, fire water tanker, call tree eqpt, Police outpost, anti-hijack room, Power reticulation from SS to new infrastructures	2021-22	6.25	0.05	6.30
	Shifting of Navaid systems	2022-23	2.20	-	2.20
	Bomb Detection and Disposal Equipment (BDDS)	2022-23	4.48	-	4.48
	Miscellaneous items - Trilo for grass cutting, fire water tanker, call tree eqpt, Police outpost, anti-hijack room, Power reticulation from SS to new infrastructures	2022-23	1.99	-	1.99
	Bomb Detection and Disposal Equipment (BDDS)	2023-24	4.92	0.08	7.19
	Miscellaneous items - Trilo for grass cutting, fire water tanker, call tree eqpt, Police outpost, anti-hijack room, Power reticulation from SS to new infrastructures	2023-24	2.19		
	Bomb Detection and Disposal Squad (BDDS)	2024-25	3.02	0.59	4.95
	Miscellaneous items - Trilo for grass cutting, fire water tanker, call tree eqpt, Police outpost, anti-hijack room, Power reticulation from SS to new infrastructures	2024-25	1.34		
	Electrical Sub-station equipment	2025-26	5.21	0.51	23.05
	Triturator	2025-26	6.82		
	Water tank, STP and storage tank, Pump house Building	2025-26	6.13		
	Landside utilities - Landscaping and irrigation systems, Fuel station and Landside utilities – STP and storage tanks, Pumphouse Buildings	2025-26	4.38		
B7.	Roads				
	Road entry and exit – improvement works	2021-22	12.67	0.01	12.68
	Financing allowance - Roads	2022-23	-	0.31	0.31
	Financing allowance - Roads	2023-24	-	1.51	1.51
	Vehicle Access roadway and related works – on landside of existing Terminal Building	2025-26	32.44	1.20	48.73

S. No	Capital Expenditure Project	Financial Year of Commissioning	Project cost (includes design, PMC, Pre- operative expenses etc)	Financing allowance (FA)	Total Capex (incl. FA)
	Miscellaneous works – earth work, construction of temporary roads, retaining walls, temporary barricading, sign board etc	2025-26	15.09		
B8.	Boundary walls				
	Construction of boundary wall	2021-22	12.67	-	12.67
	Financing allowance – Boundary wall	2023-24	-	0.01	0.01
	Financing allowance – Boundary wall	2024-25	-	0.07	0.07
	Airside boundary wall	2021-22	2.17	0.06	2.23
B9.	Information Technology (IT)				
		2021-22	0.03	-	0.03
	IT Infrastructure, AOCC, Command Post and various other systems	2022-23	3.82	-	3.82
		2023-24	4.19	-	4.19
		2024-25	2.57	-	2.57
B10.	Other Associated Works				
	Storm water	2021-22	7.92	-	7.92
	Water disposal and supply	2021-22	9.50	-	9.50
	Miscellaneous works - others	2022-23	0.27	-	0.27
		2023-24	0.29	0.16	0.45
		2024-25	0.18	0.71	1.05
	Airside security gate	2025-26	4.69		
	Rainwater Harvesting	2025-26	10.77		
	Water tank	2025-26	2.16		
	Miscellaneous works - Into Plane facility, Hazardous Waste Storage, Nursery plot, various enabling activities and other miscellaneous works	2025-26	11.71	0.71	30.05
New Capital expenditure proposed for the First Control Period (B)			571.92	26.00	597.92
GRAND TOTAL (A+B)			846.22	35.45	881.67

17.5 Annexure 5 – Template for providing Stakeholders’ comments

Stakeholder’s Comments on Authority’s proposals contained in this Consultation Paper may be furnished as per the following format:

Name of Stakeholder.....

S. No	Authority’s Proposal under each Chapter	Stakeholder’s Comments
1	Background, Framework of tariff determination	
2.	True up of AAI for the period from FY 2017 TO COD	
3.	True up of Airport Operator for the period from COD till March 31, 2021	
4.	Traffic for the First Control Period	
5.	Regulatory Asset Base (RAB) and Depreciation for the First Control Period	
6.	Fair Rate of Return (FRoR) for the First Control Period	
7.	Inflation for the First Control Period	
8.	Operation and Maintenance Expenditure for the First Control Period	
9.	Non-aeronautical revenue for the First Control Period	
10.	Taxation for the First Control Period	
11.	Quality of Service for the First Control Period	
12	Aggregate Revenue Requirement (ARR) for the First Control Period	
13	Annual Tariff Proposal (Tariff Rate Card)	
14	Any Other Comment	

In case, Stakeholder’s having ‘Nil’ comments in any of the Authority’s proposal, the same may be mentioned as “No comments” against the particular Chapter.

18. APPENDICES

Appendix I - Study on Allocation of assets between Aeronautical and Non-Aeronautical Assets

Appendix II - Study on efficient Operation and Maintenance Costs

Appendix III – Schematic Design Report from KITCO on Design Consultancy services for Airside Improvement Works at Mangaluru International Airport submitted by the Airport Operator

Appendix IV – Brief Note on independent study on allocation of Corporate costs submitted by the Airport Operator