File No. AERA/20010/MYTP/CIAL/CP-III/2020-21

Order No. 08/2021-22

सत्यमेव जयते

AIRPORTS ECONOMIC REGULATORY AUTHORITY OF INDIA

IN THE MATTER OF
DETERMINATION OF AERONAUTICAL TARIFF FOR
COCHIN INTERNATIONAL AIRPORT, KOCHI (COK)
FOR THE THIRD CONTROL PERIOD
(01.04.2021 - 31.03.2026)

Date of Issue: 24th August, 2021

AERA Building
Administrative Complex
Safdarjung Airport
New Delhi – 110003

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Glossary

Abbreviation	Full Form
AAI	Airports Authority of India
ACFT	Air Crash Fire Tender
ACI	Airports Council International
AERA	Airports Economic Regulatory Authority
AERAAT	Airports Economic Regulatory Authority Appellate Tribunal
AHU	Air Handling Unit
AKISL	Air Kerala International Services Limited
APAO	Association of Private Airport Operators
APU	Auxiliary Power Unit
ARR	Aggregate Revenue Requirement
ASF	Aviation Security Fee
ASQ	Airport Service Quality
ATM	Air Traffic Movement
AUCC	Airport User Consultative Committee
AVDGS	Advanced Visual Docking Guidance Systems
BAOA	Business Aircraft Operators Association
BCAS	Bureau of Civil Aviation Security
BIAL	Bangalore International Airport Limited
BPCL	Bharat Petroleum Corporation Limited
BRS	Baggage Reconciliation System
BWFS	Bird Worldwide Flight Services
CA	Chartered Accountant
CAGR	Compounded Annual Growth Rate
CAPM	Capital Asset Pricing Model
CAR	Civil Aviation Requirements
CBR	California Bearing Ratio
CCTV	Closed Circuit Television
CDRSL	CIAL Duty Free and Retail Services Limited
CIAL	Cochin International Airport Limited
CIASL	Cochin International Aviation Services Limited
CIL	CIAL Infrastructures Limited
CISF	Central Industrial Security Force
CoE	Cost of Equity
CSR	Corporate Social Responsibility
CTO	Cargo Terminal Operator
CUPPS	Common User Passenger Processing System
CUSS	Common User Self Service Kiosks
CUTE	Common User Terminal Equipment

Airports Economic Regulatory Authority of India

Abbreviation	Full Form
DACAAI	Domestic Air Cargo Agents Association of India
DER	Debt Equity Ratio
DFMD	Door Frame Metal Detector
DG	Diesel Generators
DGCA	Directorate General of Civil Aviation
DIAL	Delhi International Airport Limited
DPR	Detailed Project Report
DVOR	Doppler Very high frequency Omni directional Range
EASA	European Union Aviation Safety Agency
ERP	Equity Risk Premium
ETD	Explosive Trace Detectors
F&B	Food and Beverages
FA	Financing Allowance
FAR	Fixed Asset Register
FIA	Federation of Indian Airlines
FOREX	Foreign Exchange
FRoR	Fair Rate of Return
FTC	Fuel Throughput Charges
FY	Financial Year
GH	Ground Handling
GHIAL	GMR Hyderabad International Airport Limited
GoK	Government of Kerala
GoI	Government of India
GPU	Ground Power Unit
GSR	General Statutory Rules
HHMD	Handheld Metal Detector
HRA	House Rent Allowance
HUDCO	Housing and Urban Development Corporation Limited
INR	Indian Rupee
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IDC	Interest During Construction
ILS	Instrument Landing System
IOCL	Indian Oil Corporation Limited
IT	Information Technology
ITC	Input Tax Credit
KIAS	Kochi International Airport Society
KITCO	Kerala Industrial and Technical Consultancy Organisation
KSEB	Kerala State Electricity Board
KWIL	Kerala Waterways and Infrastructures Limited
LAN	Local Area Network

Abbreviation	Full Form
MAHB	Malaysia Airport Holdings Berhad
MD	Managing Director
MIAL	Mumbai International Airport Limited
MMG	Minimum Monthly Guarantee
MoCA	Ministry of Civil Aviation
MPPA	Million Passengers Per Annum
MRO	Maintenance, Repair, Overhaul
MT	Metric Tonnage
MTPA	Metric Tonnes Per Annum
MWp	Megawatt peak
MYTP	Multi Year Tariff Proposal
NAR	Non-Aeronautical Revenue
NRI	Non-Resident Indian
NRK	Non-Resident Keralite
O&M	Operations & Maintenance
OPEX	Operational Expenses
PAX	Passengers
PBT	Profit Before Tax
PCA	Pre-Conditioned Air Unit
PCN	Pavement Classification Number
PHP	Peak Hour Passengers
PIDS	Perimeter Intrusion Detection System
PIF	Project Investment File
PPP	Public Private Partnership
PSF-SC	Passenger Service Fee – Security Component
PV	Present Value
R&M	Repairs and Maintenance
RAB	Regulatory Asset Base
RBI	Reserve Bank of India
RSD	Refundable Security Deposit
TDSAT	Telecom Disputes Settlement & Appellate Tribunal
SCP	Second Control Period
SD	Security Deposit
SITA	Société Internationale de Télécommunications Aéronautiques
TCP	Third Control Period
UDF	User Development Fee
ULD	Unit Load Devices
UV-C	Ultraviolet C
WIP	Work in Progress
WPI	Wholesale Price Index

CHAPTER 1. BRIEF ON COCHIN INTERNATIONAL AIRPORT LIMITED (CIAL)

1.1. Background

1.1.1. CIAL was the first airport in India to be built under Public Private Partnership (PPP), with equity participation from the Government of Kerala, financial institutions, and more than 16,000 individual investors who are mostly non-resident Keralites (NRKs). CIAL as it exists today, was an alternative to the then civil enclave in the Naval Airport at Cochin.

1.1.2. CIAL was incorporated on 30th March 1994 as a public limited company, with an authorised share capital of INR 90 crores. The construction work commenced in August 1994. The airport was inaugurated by the President of India on 25th May 1999. CIAL's operation started from June 1999 with Air India operating the first flight to the gulf.

1.1.3. A significant part of air traffic is driven by strong state-domiciled Non-Resident Indian (NRI) community residing in the Middle East and attractiveness of the state as an international and domestic tourist destination.

1.2. Cochin International Airport Limited

1.2.1. The total project cost for the initial phase of the airport was around Rs. 315 Crores financed through a paid-up equity capital of Rs. 85 Crores and a term loan of Rs. 218 Crores. The balance was tied up through interest free security deposits from various airport service providers.

1.2.2. There are two terminals at present,

- Domestic Terminal: The old international terminal at Cochin International Airport was converted to Domestic post commissioning of the new International terminal in March 2017 resulting in a five-fold in increase in area for domestic operation. The terminal area for the Domestic Terminal is 74123 sq.m.
- New International Terminal: In order to cater to its growing international passenger traffic, CIAL had envisioned the construction of a new International terminal. CIAL had started the construction of the new International terminal on 1st February 2014 after conducting consultations with the Airport Users Consultative Committee as per AERA guidelines. The new terminal with an area of 1,46,528 sq.m and with a capacity to handle 4000 pax during peak hours was commissioned in March 2017.

1.2.3. CIAL, through its subsidiary company CIAL Infrastructures Limited (CIL) has commissioned Solar Power Plants of 40 MWp capacity in the premises of Cochin International Airport and the Airport is currently fully powered by Solar Energy. The eco-friendly initiative of CIAL has won it International accolades including "The Champions of the Earth Award-2018" from United Nations.

1.2.4. Technical Highlights[1]:

- The airport has a Code E Runway, with Boeing 747-400 as critical aircraft, that is 3400m long and 45m wide
- The apron has 34 parking stands (Including 2 Multiple Apron Ramp Systems) and 17 Aerobridge Bays
- Full length parallel Taxi Track, Rapid Exit Taxiway and 3 normal Taxi Links and CAT III Runway lighting
- Full-fledged aircraft refuelling facilities operated by Bharat Petroleum Corporation Ltd.
- Fully equipped CAT-9 Firefighting & Rescue services. MRO facility with 2 conventional Hangars

[1]Source: https://cial.aero/

1.3. Ownership Structure

1.3.1. Cochin International Airport is owned and managed by Cochin International Airport Limited (CIAL) which has an ownership structure involving equity contributions from Government of Kerala, financial institutions, and more than 16,000 individual investors who are mostly Non-Resident Keralites (NRKs).

1.3.2. The shareholding pattern of equity investors (as on 31st March 2020) is as shown in the table below.

Table 1: Equity Shareholding pattern of CIAL

Equity Partner	% share
Government of Kerala	32.42%
Directors and Key Managerial Personnel	18.98%
Synthite Industries Private Limited	6.53%
BPCL	3.43%
HUDCO	3.28%
Air India Limited	3.27%
State Bank of India	3.27%
Federal Bank Limited	1.96%
Others	26.86%
Total	**100.0%**

Source: CIAL Annual Report FY 2020

1.3.3. In June 2015, CIAL raised Rs. 382.60 Crores through a rights issue to existing equity shareholders. The object of this issue was to part finance the construction cost of the new International Terminal Building, other ongoing projects and for the future expansion and diversification projects of CIAL.

1.3.4. CIAL had for the first time declared dividend to its shareholders in the fifth year of its operation (i.e. 2003-04). It has been regularly declaring dividend to its shareholders ever since.

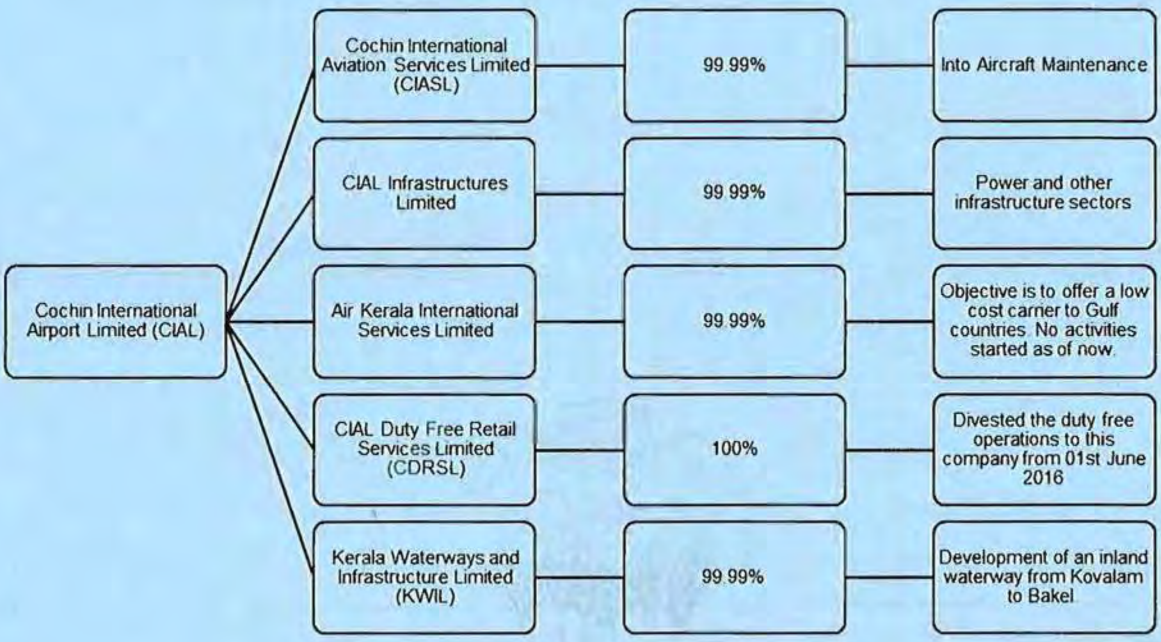
1.4. Management Structure

1.4.1. The Government of Kerala holds significant equity in CIAL (32.4%). The chairman of the board of directors is the Chief Minister of Kerala. As per Clause 125(1) of the Memorandum and Articles of Association of the company, so long as the GoK and/or its Public Sector Undertakings jointly or severally hold not less than 26% of the paid-up equity capital of the company, the GoK shall have the right to appoint one among the directors as Managing Director of the company for such term, not exceeding five years at a time, and will also have the right to withdraw/cancel appointments so made at their discretion. On account of the government's active involvement in the airport development and operations, safeguarding public interest continues to remain a key priority for CIAL.

1.5. Subsidiaries

1.5.1. CIAL has five subsidiary companies namely Cochin International Aviation Services Limited (CIASL), Air Kerala International Services Limited (AKISL), CIAL Infrastructures Limited (CIL), CIAL Duty-Free and Retail Services Limited (CDRSL) and Kerala Waterways and Infrastructures Limited (KWIL).

Figure 1: Subsidiaries of CIAL



1.5.2. The details[2] regarding the subsidiaries are given below.

- **Cochin International Aviation Services Limited:** Cochin International Aviation Services Limited (CIASL) is a subsidiary of CIAL, which was incorporated for Aircraft Maintenance, Repair and Overhaul (MRO) services and for Aviation Training. CIASL is currently undertaking Line Maintenance Services for several international carriers operating at Cochin International Airport. The organisation has secured approvals from regulators like Director General of Civil Aviation (DGCA), European Aviation Safety Agency (EASA), General Civil Aviation Authority (GCAA-UAE) etc. for line maintenance services. The Company has also entered into an agreement with a leading MRO service provider for operationalising the MRO facility at Cochin Airport. The company has also established two Narrow Body Hangars, with easy and direct access to the Airport.
- **Air Kerala International Services Limited:** Air Kerala International Services Limited (AKISL) is a subsidiary of CIAL and the primary objective of the Company is to establish a low-cost airline based at Cochin International Airport, to benefit the huge population of non-resident Keralites in the Middle East. The National Civil Aviation Policy 2016 had decided to scrap the requirement that mandated Airlines to have 5 years of Domestic Operations to be eligible to fly Overseas. However, the rule also mandated that the Airlines must allocate 20 Aircrafts or 20% of their total fleet of Aircraft, whichever is higher, to Domestic Operations. CIAL finds this condition unconducive for the successful operation of the Airline.
- **CIAL Infrastructures Limited:** CIAL Infrastructures Limited (CIL) was incorporated in the year 2012 to exploit the opportunities in the power and other infrastructure sectors. CIL has already commissioned 40 MWp solar power plant at the Cochin Airport premises, which enabled the Company to continue the status of World's first fully solar powered Airport. The plant now generates adequate power to meet the energy requirements of the Airport. In addition to Cochin Airport, CIL has undertaken a 12 MWp solar power plant at Payyannur and 4.5 MWp capacity plant at Arippara.
- **CIAL Duty free and Retail Services Limited:** CIAL Duty free and Retail Services Limited (CDRSL) is a wholly owned public limited company of CIAL. The Company was incorporated on the 01st of March 2016, in order to clasp the maximum benefits deriving out of the duty free and travel retail

[2] Source: CIAL Annual Report FY 2020

business. CDRSL currently carries out the Duty-Free Business at Cochin International Airport and has two shops at the Airport; one at the arrival area and the other at the Departure Security Hold Area. CDRSL was established with the major objective to expand the duty-free operations beyond Cochin Airport to the several travel destinations spread across the world.

- **Kerala Waterways and Infrastructure Limited:** Kerala Waterways and Infrastructures Limited (KWIL) was incorporated on 03rd October 2017 jointly by the GoK and Cochin International Airport Limited. The company was established with the major objective to facilitate the development of a 610 KM long Inland Waterway from Kovalam to Bakel, along the West coast, which is proposed to be developed in three phases. The project would be a major step taken towards the integration of Water, Road and Rail Transport networks across the state.

1.6. Cargo Operations

1.6.1. CIAL, while being the Airport Operator at Cochin International Airport, also manages and operates the Cargo facility at Cochin Airport.

1.6.2. The new Air Cargo centre at Cochin International Airport has more than 1,00,000 sq. ft. of office and Warehouse space dedicated for the Cargo Operations. The Airport has a close proximity to the major Industrial and Infrastructure facilities of the State of Kerala. It is about 30 Kms from the Cochin Sea Port and 25 Kms from Cochin Economic Zone.

1.6.3. Key Facts regarding the Air Cargo Facilities at Cochin International Airport are[3]:

- Total Area earmarked for the facility is 50 acres. The facility has more than 1,00,000 sq. Ft of Warehouse and Handling facilities
- Separate areas dedicated for the storage and handling of Domestic and International Cargo, including the Transhipment Cargo.
- The entire International Air Cargo Centre is designated as Custom Bonded Area.
- The Cargo centre accommodates all Aircraft Loading: both narrow and wide body upper deck and narrow-body belly.
- CIAL has planned to undertake the construction of new integrated Import Buildings and the conversion of the present building to an Automated Export Warehouse in the Third Control Period. The handling capacity of the Export Warehouse is estimated to reach 1,50,000 MTPA from the current capacity of 50,000 MTPA.

[3] Source: CIAL Website and MYTP submitted by CIAL for Third Control Period

CHAPTER 2. MULTI YEAR TARIFF PROPOSAL SUBMISSION BY CIAL AND STAKEHOLDER CONSULTATION

2.1. Introduction

2.1.1. AERA, was established by the Government of India vide notification No. GSR 317(E) dated 12th May 2009. The functions of AERA, in respect of major airports, are specified in section 13 of the Act, 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.

2.1.2. The terms "aeronautical services" and "major airports" are defined in Sections 2(a) and 2(i) of the Act, respectively.

2.1.3. After its establishment, AERA has categorised the aeronautical services, in respect of which it is required to determine Tariff, as under:

i. Aeronautical services provided by the airport operators

ii. Cargo, Ground Handling and Fuel Supply Services, and

iii. Air Navigation Services.

2.1.4. AERA has, after extensive stakeholder consultation, finalised its approach to the economic regulation of services categorised in para 2.1.3 above. Detailed Guidelines laying down information requirements, periodicity and procedure for Tariff determination have also been issued. The details of Orders and Guidelines issued in this behalf are as under:

i. Order No. 13 dated 12.01.2011 and Direction No. 5 dated 28.02.2011; and

ii. Order No. 05 dated 02.08.2010; Order No. 12 dated 10.01.2011 and Direction No. 4 dated 10.01.2011

iii. Order No. 07/2016-17 dated 13.06.2016

iv. Order No. 14/2016-17dated 23.01.2017

v. Order No. 20/2016-17 dated 31.03.2017

vi. Order No. 35/2017-18 dated 12.01.2018 and Amendment No. 01 to Order No. 35/2017-18 dated 09.04.2018

vii. Order No. 42/2018-19 dated 05.03.2019

2.1.5. Cochin International Airport Limited is a major airport under the provisions of the AERA Act 2008 and the subsequent AERA (Amendment) Act 2019 that revised the annual passenger handling threshold definition of major airports from 1.5 million to 3.5 million. Pursuant to AERA Act 2008, AERA issued guidelines for the purpose of determination of aeronautical tariffs for major airports. CIAL had submitted Multi Year Tariff Proposal (MYTP) for the Second Control Period from FY 2017 to FY 2021. AERA issued the order for Second Control Period on 13th July 2017.

2.1.6. As per proviso to clause 3.1 of the Airport Guidelines, the Airport Operator(s) are required to submit to the Authority for its consideration, a Multi-Year Tariff Proposal (MYTP) for the respective Control Periods within the due date as specified by the Authority. CIAL had submitted the MYTP for the Third Control Period from FY 2022 to FY 2026 on 26th October 2020.

2.1.7. The Authority had appointed an Independent Consultant, M/s PricewaterhouseCoopers Private Limited (PwC India) to assess the MYTP submitted by the Airport Operator of Cochin International Airport, Kochi. Accordingly, PwC India has assisted the Authority in examining the MYTP of the Airport Operator, verifying the data from various supporting documents 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, approach, Independent Study Reports etc.

2.1.8. AERA had examined and addressed the points raised by CIAL in their MYTP in respective sections of the Consultation Paper No. 08/2021-22 dated 15th June 2021 and had provided its considered proposals on each building block. The Authority had also commissioned three independent studies with respect to CIAL viz., "Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets", "Study on Efficient Operations and Maintenance Expenses" and "Study on Determinants of Cost of Capital of CIAL", for the purpose of tariff determination. The recommendations of these studies were used in the Consultation Paper.

2.1.9. Following the issuance of the Consultation Paper, the Authority had invited a meeting of stakeholders for consultation on 30th June 2021. The 'minutes' of the meeting are available on the AERA website. The Authority also invited formal comments from all stakeholders on the issues and proposals presented in its Consultation Paper No. 08/2021-22. The Authority appreciates the responses it has received from the various stakeholders and has considered their inputs while preparing this Tariff Order.

2.1.10. The following stakeholders provided their comments on the Consultation Paper No. 08/2021-22:

- Cochin International Airport Limited (CIAL)
- Mumbai International Airport Limited (MIAL)
- Airports Authority of India (AAI)
- Association of Private Airport Operators (APAO)
- International Air Transport Association (IATA)
- Federation of Indian Airlines (FIA)
- Business Aircraft Operators Association (BAOA)
- Domestic Air Cargo Agents Association of India (DACAAI)

2.1.11. Regulatory building blocks along with the names of stakeholders who have commented on each building block are as follows:

Table 2: List of stakeholders who have commented on various components of tariff determination

Component impacting tariff determination of the Third Control Period	Name of the stakeholder who has provided comments (other than CIAL)
True up of Second Control Period	AAI, APAO, BAOA, FIA, IATA, MIAL
Traffic for the Third Control Period	FIA, IATA, MIAL
Regulatory Asset Base and Depreciation for the Third Control Period	APAO, FIA, IATA, MIAL
Fair Rate of Return for the Third Control Period	AAI, FIA, IATA
Return on Land for the Third Control Period	APAO, FIA, IATA, MIAL
Operating Expenses for the Third Control Period	AAI, APAO, FIA, IATA, MIAL
Non-Aeronautical Revenue for the Third Control Period	AAI, APAO, FIA
Taxation for the Third Control Period	No comments
Inflation for the Third Control Period	No comments
Quality of Service for the Third Control Period	IATA
Aggregate Revenue Requirement for the Third Control Period	APAO, FIA, IATA
Tariff Card / ATP	BAOA, DACAAI, FIA, IATA

2.1.12. All the written comments submitted by the Stakeholders are also available on the AERA website (Public Notice No. 19/2021-22).

2.1.13. In the Consultation Paper No. 08/2021-22, the Authority had considered the actual figures for FY 2017 to 2020 and projections for FY 2021 as the audited financial statements for FY 2021 were not available during the finalisation of the paper. The Airport Operator vide email dated 04th June 2021 shared the financial statements for FY 2021.Thereafter CIAL submitted several items of information based on protracted follow up by the Authority from time to time. The actual figures for FY 2021 were incorporated in the computations of various building blocks and the resultant shortfall of the Second Control Period was updated. The Authority has considered these revised and final figures in this Tariff Order.

2.2. Construct of the Tariff Order

2.2.1. The Tariff Order is structured under various chapters with the third chapter explaining the framework applied for determining tariffs for CIAL. The fourth chapter lists out CIAL's submissions regarding true up of the Second Control Period pertaining to various issues followed by a recap of Authority's decisions regarding the various building blocks for the Second Control Period as per the Tariff Order for the Second Control Period. This is followed by Authority's analysis on the specific issues regarding true up of the Second Control Period as part of the tariff determination for the Third Control Period as already mentioned in the Consultation Paper. The same is followed by comments from various stakeholders along with counter comments from the airport operator and followed by Authority's Analysis and Final Decision on the subject matter. This chapter also discusses the assessment and the outcomes of the independent studies conducted by the Authority regarding asset allocation between Aeronautical and Non-Aeronautical assets and efficient O&M expenses. The summaries of these reports were given under annexures to the Consultation Paper No. 08/2021-22 and the reports were appended to the said Consultation Paper.

2.2.2. Chapters 5 - 13 bring out CIAL's submissions regarding various building blocks pertaining to the Third Control Period including projected Traffic, RAB and Depreciation, Fair Rate of Return, Return on Land, Operating Expenses, Non-Aeronautical Revenue projections, Taxes, Inflation and Quality of Service along with Authority's analysis regarding the same at the consultation stage. These are followed by comments from various stakeholders along with counter comments and responses from the airport operator and followed by Authority's Analysis and Final Decision on the subject matter. As mentioned in Para 2.1.8, the had Authority conducted the following studies for the purpose of its current assessment:

- Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets
- Study on Efficient Operation and Maintenance Expenses
- Study on Determinants of Cost of Capital of CIAL

The summaries of these reports are given under annexures to this Tariff Order. The detailed reports of these studies are available for public consumption on the AERA website along with the Tariff Order.

2.2.3. Chapter 14 presents the revised Aggregate Revenue Requirement as determined by the Authority based on the decisions and adjustments considered by the Authority for the Third Control Period. This is followed by comments of CIAL and other stakeholders. Thereafter, the Authority's Analysis and Final Decisions are set out. The Tariff Card for Cochin International Airport, Kochi to be charged in Third Control Period given in Annexure 1 is based on the ARR computed by the Authority in this Chapter.

2.2.4. Chapter 15 discusses the views of the Authority on certain key issues arising from the unprecedented impact of COVID-19 pandemic. Chapter 16 summarises Authority's decisions on all the matters relating to the tariff computations and Chapter 17 is the final Tariff Order issued by the Authority for the Third Control Period of Cochin International Airport, Kochi.

CHAPTER 3. FRAMEWORK FOR DETERMINATION OF TARIFF FOR CIAL

3.1. Till to be adopted

3.1.1. The methodology adopted by the Authority to determine Aggregate Revenue Requirement (ARR) is based on AERA Act, 2008 and the Airport Guidelines issued by AERA.

3.1.2. As per the guidelines, for the Second Control Period, the Authority had adopted the Hybrid-Till mechanism for tariff determination, wherein, only 30% of the Non-Aeronautical revenue is to be used for cross-subsidising the aeronautical charges. The Authority has considered the same methodology in the true up of the Second Control Period and for tariff determination in the Third Control Period.

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

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

$$ARRt = (FRoR * RABt) + Dt + Ot + Tt - \alpha * NARt$$

- Where t is the Tariff Year in the Control Period
- Where ARR_t is the Aggregate Revenue Requirement for year t
- Where FRoR is the Fair Rate of Return for the Control Period
- Where RAB_t is the Regulatory Asset Base pertaining to Aero activities for the year t
- Where D_t is the Depreciation corresponding to the RAB for the year t
- Where O_t is the Operation and Maintenance Expenditure for the year t, which include all expenditures incurred by the Airport Operator(s) pertaining to Aero activities
- Where T_t is the Taxation cost for the year t, relating to Aero activities
- α is the cross-subsidy factor for revenue from services other than aeronautical services. Under the hybrid till methodology followed by the Authority, α = 30%.
- Where NAR_t is the revenue from Non-Aeronautical Services.

3.1.4. Based on ARR, yield per passenger (Y) is calculated as per the formula given below

$$Yield\ per\ passenger(Y) = \sum_{t=1}^{5} PV(ARRt) \div \sum_{t=1}^{5} VEt$$

- 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. Further, the date considered by the Authority for discounting of cash flows is one year from the start of the Control Period.
- Where, VE_t is the passenger traffic in year t

3.2. Control Period

3.2.1. In terms of Direction No. 5 issued on 28 February 2011, Control Period means a period of five Tariff Years during which the Multi Year Tariff Order and Tariff(s) as determined by the Authority pursuant to such order shall subsist. The Second Control Period commences from 1st April 2016 and the Third Control Period shall commence from 01st April 2021.

3.3. Consideration of Cargo, Ground Handling, Fuel Farm services and rental revenues

3.3.1. CIAL, while being the airport operator, also manages the cargo operations at Cochin airport. Accordingly, the Authority had decided to carry out the assessment of cargo services provided by CIAL under "Price Cap" method together with the determination of tariff for Airport operations for the Second Control Period. The Authority has continued with the same approach while determining the tariff for of the Third Control Period.

3.3.2. Determination of ARR for airport operations together with the ARR for cargo operations will provide flexibility to the airport operator to determine individual charges within the overall ARR. This is because the cargo operator is the same legal entity that operates the airport. In future, if a different legal entity operates the cargo services, determination of ARR would, accordingly be done individually.

3.3.3. At the time of determination of tariff for the Second Control Period, the Authority had taken the following decisions pertaining to consideration of Cargo, Ground Handling, Fuel Farm services and revenues from leasing of space to agencies providing Aeronautical services,

a. *"To consider Cargo Services provided by CIAL as material and non-competitive and determine tariff under "Price Cap" regulation together with determination of Tariff for Airport Operations (Decision No.1. a. i)"*

b. *"To consider revenues from Cargo, Ground Handling and Fuel Farm Services and rentals from leasing of space to agencies providing Aeronautical services as Aeronautical revenues (Decision No. 1. a. ii)"*

3.3.4. In line with the above, the Authority has considered revenues from Aeronautical services viz., Cargo, Ground Handling, Fuel Farm services and revenues from other Aeronautical Service providers as Aeronautical revenues for true up of the Second Control Period and to compute Aggregate Revenue Requirement for the Third Control Period.

CHAPTER 4. TRUE UP OF SECOND CONTROL PERIOD

4.1. Key aspects pertaining to true up of the Second Control Period

4.1.1. In addition to true up of various building blocks based on actuals, CIAL had raised the following issues concerning the Second Control Period for true up as part of their MYTP:

- Treatment of return on land and segregation of land into Aeronautical and Non-Aeronautical areas (refer section 4.7)
- Return on refundable security deposits (refer section 4.6)
- Terminal area allocation ratio (refer section 4.4)
- Lease rental revenues from subsidiaries (refer section 4.10)

4.2. Authority's analysis of true up for Second Control Period as part of the Consultation Paper

4.2.1. For each of the issues raised by CIAL as stated above and the regulatory building blocks proposed for true up by the Airport Operator, the Authority had looked at the past decisions taken with regards to the true up of the particular building block for Second Control Period as per the tariff order for the Second Control Period and had then proceeded to examine the same as part of the tariff determination for the Third Control Period. These issues had been discussed in detail in the relevant sections of the Consultation Paper.

4.3. True up of Traffic

CIAL's submissions regarding true up of Traffic for the Second Control Period

4.3.1. CIAL as part of its MYTP had submitted the passenger, cargo and ATM traffic based on actuals for FY 2017-2020 and projections for FY 2021. Later, the Airport Operator vide their email dated 22 May 2021 ("Actual Data for FY 21 | CIAL") shared the actual traffic figures achieved during FY 2021 and the same was included in CIAL's submission of traffic to be considered for true up.

4.3.2. The passenger, ATM and cargo traffic as submitted by CIAL for true up of the Second Control Period is as given in the table below.

Table 3: Traffic submitted by CIAL for true up of Second Control Period

FY ending 31st March	2017	2018	2019	2020	2021	Total
Passengers (in Millions)						
Domestic	3.95	4.89	5.27	5.01	1.55	**20.67**
International	5.00	5.23	4.93	4.70	0.92	**20.79**
Total Pax	8.95	10.12	10.20	9.71	2.47	**41.46**
ATMs (in no's)						
Domestic	31,164	36,752	41,104	38,463	18,954	**1,66,437**
International	31,653	32,909	30,762	29,267	8,071	**1,32,662**
Total ATMs	62,817	69,661	71,866	67,730	27,025	**2,99,099**
Air Cargo (in MT)						
Domestic outbound	3,291	3,658	3,831	4,013	2,345	**17,139**
Domestic inbound	9,867	9,765	11,087	10,993	7,854	**49,570**
International Export	64,012	62,794	49,454	47,727	29,410	**2,53,396**
International Import	7,239	6,068	11,993	10,855	6,232	**42,387**
Total Cargo	84,409	82,285	76,365	73,589	45,845	**3,62,491**

Decisions taken by the Authority regarding Traffic as per Tariff Order for the Second Control Period

4.3.3. Relevant decision taken by the Authority for traffic at the time of tariff determination for the Second Control Period is as follows:

- *"To true up the traffic of the Second Control Period based on actuals, at the time of determination of tariff for the next Control Period (Decision No. 3.a.ii.)"*

4.3.4. Traffic proposed by the Authority as per tariff order for the Second Control Period is as given in the table below.

Table 4: Traffic proposed by the Authority as per Second Control Period tariff order

FY ending 31st March	2017	2018	2019	2020	2021	Total
Passengers (in Millions)						
Domestic	3.43	3.75	4.11	4.50	4.93	**20.72**
International	4.86	5.14	5.75	6.42	7.18	**29.35**
Total Pax	8.29	8.90	9.86	10.93	12.11	**50.09**
ATMs (in no's)						
Domestic	30,127	32,531	35,134	37,952	41,005	**1,76.749**
International	30,985	32,448	35,920	39,768	44,031	**1,83,152**
Total ATMs	61,113	64,979	71,054	77,720	85,036	**3,59,902**
Air Cargo (in MT)						
Domestic outbound	3,039	3,280	3,541	3,822	4,126	**17,808**
Domestic inbound	9,503	10,570	11,757	13,078	14,547	**59,455**
International Export	51,849	57,341	63,414	70,129	77,557	**3,20,290**
International Import	4,837	5,050	5,272	5,503	5,745	**26,407**
Total Cargo	56,687	62,391	68,685	75,663	83,302	**3,46,728**

Authority's analysis of Traffic submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.3.5. The Authority compared Traffic submitted by CIAL based on actuals for true up of Second Control Period and the Traffic approved by the Authority in the previous tariff order. The comparison is given below:

Table 5: Comparison of Traffic submitted by CIAL for Second Control Period true up and that approved by the Authority in tariff order for Second Control Period

FY ending 31st March	Formula	2017	2018	2019	2020	2021	Total
Domestic passengers (In Millions)							
As per CIAL	A	3.95	4.89	5.27	5.01	1.55	**20.67**
As per tariff order for Second Control Period	B	3.43	3.75	4.11	4.50	4.93	**20.72**
Difference	A-B	0.52	1.14	1.16	0.51	(3.38)	**(0.05)**
International Passengers (In Millions)							
As per CIAL	C	5.00	5.23	4.93	4.70	0.92	**20.79**
As per tariff order for Second Control Period	D	4.86	5.14	5.75	6.42	7.18	**29.35**
Difference	C-D	0.14	0.09	(0.82)	(1.72)	(6.26)	**(8.56)**
Domestic ATMs (In Nos)							
As per CIAL	E	31,164	36,752	41,104	38,463	18,954	**1,66,437**
As per tariff order for Second Control Period	F	30,127	32,531	35,134	37,952	41,005	**1,76,749**
Difference	E-F	1,037	4,221	5,970	511	(22,051)	**(10,312)**
International ATMs (In Nos)							
As per CIAL	G	31,653	32,909	30,762	29,267	8,071	**1,32,662**

FY ending 31st March	Formula	2017	2018	2019	2020	2021	Total
As per tariff order for Second Control Period	H	30,985	32,448	35,920	39,768	44,031	**1,83,152**
Difference	G-H	668	461	(5158)	(10,501)	(35,960)	**(50,490)**
International + Domestic Cargo (In MT)							
As per CIAL	I	84,409	82,285	76,365	73,589	45,845	**3,62,491**
As per tariff order for Second Control Period	J	56,687	62,391	68,685	75,663	83,302	**3,46,728**
Difference	I-J	27,722	19,894	7,680	(2,074)	(37,457)	**15,763**

4.3.6. The Authority observed that the domestic pax and ATM traffic attained by CIAL during the period FY 2017-2020 were higher than that approved by the Authority in the previous tariff order. For FY 2021, the traffic was lower than that approved by the Authority, due to the negative impact caused by the COVID-19 pandemic.

4.3.7. The Authority noted that the international pax and ATM traffic attained by CIAL during the period FY 2019 - FY 2020 were lower than that approved by the Authority in the previous tariff order. This indicates that the estimates made at the time of tariff determination in light of new international terminal completion weren't attained. The Airport Operator had stated that the closure of the airport for 15 days in August 2018 due to severe floods had an impact on the traffic in FY 2019. CIAL had attributed the shortfall in international traffic in FY 2020 to various factors including grounding of Jet Airways[4], minor flooding during the monsoon, reduced operations due to runway re-carpeting, slowdown in Middle East economy and the spread of COVID-19. Further, it is also believed that the commissioning of another airport in the State could have impacted the demand at Cochin airport. For FY 2021, the international pax and ATM traffic was lower than that approved by the Authority, primarily because of the negative impact of COVID-19 global pandemic.

4.3.8. The Authority further noted that the actual cargo traffic (international and domestic combined) during FY 2017 – FY 2019 was higher than that approved by the Authority while, the actual cargo traffic during FY 2020 – FY 2021 was less than that approved by the Authority. However, the Authority noted that the total cargo traffic during the Second Control Period as submitted by CIAL was higher than that approved by the Authority in the previous tariff order.

4.3.9. The Authority, based on the actual traffic achieved by CIAL, observed that the passenger, ATM and cargo traffic realised by CIAL during FY 2017 to 2019 was higher than that proposed by the Authority in the tariff order for the Second Control Period. However, there was a dip in traffic numbers for the FY 2020, which can be attributed to the grounding of Jet Airways in early part of the financial year, minor flooding during the monsoon, runway re-carpeting leading to reduced operations, economic slowdown in the gulf and the spread of pandemic COVID-19. Further, there was a significant dip in passenger, ATM and cargo traffic during FY 2021 as compared to the projections given in the tariff order due to the negative impact of COVID-19 pandemic on the aviation sector. The authority compared the actual traffic as submitted by CIAL for the Second Control Period with the actual traffic as given by AAI on its website. The comparison is as given in the table below.

Table 6: Comparison of traffic submitted by CIAL and as per AAI website

FY ending 31st March	Formula	2017	2018	2019	2020	2021	Total
Domestic passengers (In Millions)							
As per CIAL	A	3.95	4.89	5.27	5.01	1.55	20.67
As per AAI website	B	3.95	4.80	5.21	4.94	1.55	20.47
Difference	A-B	(0.01)	0.09	0.06	0.06	0.00	0.21
Difference (%)	(1-B/A) *100	(0.2)%	1.8%	1.2%	1.3%	0.2%	1.0%
International Passengers (In Millions)							
As per CIAL	C	5.00	5.23	4.93	4.70	0.92	20.79

[4] Jet Airways had considerable operations at Cochin airport. It accounted for more than ~10% of ATMs at CIAL during the initial years of the Second Control Period, as per the DGCA schedules.

FY ending 31st March	Formula	2017	2018	2019	2020	2021	Total
As per AAI website	D	5.00	5.37	4.90	4.67	0.91	20.86
Difference	C-D	0.00	(0.14)	0.02	0.02	0.01	(0.08)
Difference %	(1-D/C) *100	0%	(2.6)%	0.5%	0.5%	1.4%	(0.4)%
Domestic ATMs (In Nos)							
As per CIAL	E	31,164	36,752	41,104	38,463	18,954	1,66,437
As per AAI website	F	32,164	38,477	42,406	38,845	16,803	1,68,695
Difference	E-F	(1000)	(1725)	(1302)	(382)	2,151	(2,258)
Difference %	(1-F/E) *100	(3.2)%	(4.7)%	(3.2)%	(1.0)%	11.3%	(1.4)%
International ATMs (In Nos)							
As per CIAL	G	31,653	32,909	30,762	29,267	8,071	1,32,662
As per AAI website	H	29,524	30,295	28,651	27,261	8,109	1,23,840
Difference	G-H	2,129	2,614	2,111	2,006	(38)	8,822
Difference %	(1-H/G) *100	6.7%	7.9%	6.9%	6.9%	(0.5)%	6.6%
Intl + Domestic Cargo (In MT)							
As per CIAL	I	84,409	82,285	76,365	73,589	45,845	3,62,491
As per AAI website	J	81,485	76,274	70,199	72,142	42,776	3,42,876
Difference	I-J	2,924	6,011	6,166	1,447	3,069	19,615
Difference %	(1-J/I) *100	3.5%	7.3%	8.1%	2.0%	6.7%	5.4%

4.3.10. The difference between the total passenger traffic numbers provided by CIAL with respect to the numbers available on the website of AAI was insignificant. For the total ATM and cargo traffic, the difference between the numbers given by CIAL and the numbers available on the AAI website was considerable, and the traffic submitted by the Airport Operator was higher than that reported by AAI. The Airport operator had confirmed that the passenger, ATM and Cargo traffic submitted by it were based on actual traffic at the Airport. Hence, the Authority proposed to consider the numbers given by CIAL for true up of the Second Control Period.

4.3.11. The Traffic proposed by the Authority for true up of the Second Control Period is given in the table below.

Table 7: Traffic proposed by the Authority for true up of Second Control Period as part of the Consultation Paper

FY ending March 31	2017	2018	2019	2020	2021	Total
Passengers (in Millions)						
Domestic	3.95	4.89	5.27	5.01	1.55	**20.67**
International	5.00	5.23	4.93	4.70	0.92	**20.79**
Total Pax	**8.95**	**10.12**	**10.20**	**9.71**	**2.47**	**41.46**
ATMs (in no's)						
Domestic	31,164	36,752	41,104	38,463	18,954	**1,66,437**
International	31,653	32,909	30,762	29,267	8,071	**1,32,662**
Total ATMs	**62,817**	**69,661**	**71,866**	**67,730**	**27,025**	**2,99,099**
Air Cargo – (in MT)						
Domestic - Outbound	3,291	3,658	3,831	4,013	2,345	**17,139**
Domestic - Inbound	9,867	9,765	11,087	10,993	7,854	**49,570**
Domestic - Total	**13,159**	**13,423**	**14,919**	**15,007**	**10,202**	**66,708**
International - Export	64,012	62,794	49,454	47,727	29,410	**2,53,396**
International - Import	7,239	6,068	11,993	10,855	6,232	**42,387**
International - Total	**71,251**	**68,862**	**61,447**	**58,582**	**35,643**	**2,95,783**
Total Cargo	**84,409**	**82,285**	**76,365**	**73,588**	**45,845**	**3,62,491**

<u>**Stakeholder comments of true up of Traffic for the Second Control Period**</u>

4.3.12. There were no stakeholder comments with respect to true up of traffic for the Second Control Period.

Authority's analysis of stakeholder comments on true up of Traffic for the Second Control Period

4.3.13. No stakeholder comments were received regarding traffic for the Second Control Period. In this regard, the Authority has decided to consider the traffic based on actuals for true up of the Second Control Period, consistent with its proposal made in this regard in the Consultation Paper No. 08/2021-22. The traffic considered by the Authority for true up of the Second Control Period is given in Table 7.

4.4. True up of Regulatory Asset Base

CIAL's submission of Opening RAB and Capital Expenditure for the Second Control Period

4.4.1. The opening RAB as submitted by CIAL is given in the table below.

Table 8: Opening RAB submitted by CIAL for true up of Second Control Period

Particulars	Value as on 1st April 2016 (in INR crores)
Buildings and Civil works	102.03
Runway, Roads and Culverts	66.06
Plant and Equipment, Office Equipment, Computers and Accessories, Furniture and Fixtures, Vehicles and Intangibles Assets	104.42
Total	**272.5**

4.4.2. CIAL submitted capital additions during the Second Control Period as given below.

Table 9: Capital additions during the Second Control Period submitted by CIAL

Particulars	Cost Incurred (in INR crores)
Construction of new terminal T3 and related works proposed to be constructed in March 2017	923
Apron works, roads proposed to be constructed in March 2017	172
Runway Re-carpeting & Construction of Rapid Exit/Vertical Links – FY 2021	178
Additional Parking Bays, Code f upgradation, approach road and other road works	166
Ground Handling related	59
Other works including terminal modification, new equipment purchase etc.	373
New Cargo warehouse and allied works	20
PSF – SC assets	85
Flood control measures	30
Commercial complex, family entertainment centre and product display showroom	97
Total	**2103**

4.4.3. CIAL had submitted that the proposed works for Additional Parking Bays were not undertaken in the Second Control Period and that these are now proposed to be undertaken in the Third Control Period.

4.4.4. Regarding Ground Handling Related expenses, CIAL had stated that, *"Ground handling equipment procurement and leasing was intended to be undertaken in the 2nd Control Period. However, as more airlines are opting for self-handling, by virtue of policy change of the government the same has been shelved. The amount incurred in 2nd Control Period is for construction of new ground handling support building".*

4.4.5. The new cargo warehouse is currently under construction and the expenses had not been considered in the Second Control Period.

4.4.6. Regarding PSF – SC Assets, CIAL had stated that, *"Ministry of Civil Aviation vide order dated 18 February 2014 had instructed the airport operators including CIAL to reimburse the capital expenditures incurred out of PSF (SC) escrow account maintained and operated by CIAL in the fiduciary capacity. As* *per the directions of MoCA, CIAL had refunded the capital expenditures incurred from FY 2007 to FY 2018 at the original cost of such capital expenses. Accordingly, the PSF (SC) assets were accounted in the FY 2018 financial statements of CIAL at its original cost of INR 84.99 Cr".*

4.4.7. The Authority noted that CIAL had carried out Flood Control Measures in light of the floods of 2018 and 2019 that hampered flight operations at CIAL. The Airport Operator had submitted the detailed report for flood mitigation measures prepared by KITCO Ltd.

4.4.8. CIAL's submission regarding Depreciation for the Second Control Period was discussed in section 4.5.

4.4.9. The Regulatory Asset Base as submitted by CIAL for true up during the Second Control Period is given in the table below:

Table 10: RAB submitted by CIAL for true up of Second Control Period

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Opening RAB	272.5	1350.7	1414.0	1576.0	1529.3	
Less: Depreciation during year	31.9	92.9	94.9	111.7	125.4	456.8
Add: Capitalisation during year	1110.0	157.8	276.8	65.3	249.1	1859.0
Sales/transfers/retirements	0.0	(1.5)	(19.9)	(0.3)	0.0	(21.7)
Closing RAB	1350.7	1414.0	1576.0	1529.3	1653.0	
Average RAB	**811.6**	**1382.4**	**1495.0**	**1552.7**	**1591.2**	

**Projected figures including Financing Allowance*

Decisions taken by the Authority regarding Capital Expenditure as per Tariff Order for the Second Control Period

4.4.10. Relevant decisions taken by the Authority at the time of tariff determination for the Second Control Period are given below

- *"To true up the actual Capital Expenditure on actuals at the time of determination of tariff for the next Control Period (Decision No. 5. a. iii)"*
- *"To true up the Regulatory Asset Base at the end of the Control Period based on actuals, at the time of determination of tariff for the next Control Period (Decision No.7. a. ii)"*

Authority's analysis of Opening RAB and Capital Expenditure for the Second Control Period as part of the Consultation Paper

4.4.11. The Authority noted that CIAL had considered the Opening RAB as computed and approved by the Authority in the previous tariff order.

4.4.12. CIAL had submitted planned capital additions for the Second Control Period broken up into project-wise line items and a consolidated asset-wise breakup of the total capital expenditure. In the true-up exercise relating to these expenditures, CIAL had provided the Fixed Asset Register (FAR), which did not capture the project wise mapping of the new assets commissioned in the Second Control Period. Therefore, it was not possible to verify the project wise estimates and allocations provided in the previous Tariff Order with the capital projects provided in the MYTP for the Third Control Period.

4.4.13. In order to validate the actual costs incurred by the CIAL, the Authority sought CA certificate for the actual amounts spent on each of the projects mentioned in Table No. 9 as per the MYTP of CIAL for the Third Control Period and CIAL had submitted the same.

4.4.14. The capital expenditure on projects approved for the Second Control Period was done on an estimate basis during the determination of tariff for Second Control Period. Hence, the amount spent towards projects approved for the Second Control Period required true up.

4.4.15. The Authority compared the actual capital expenditure against the project costs approved in the previous tariff order.

Table 11: Comparison of capital expenditure as per CIAL and as per Second Control Period Tariff Order

Particulars (INR Cr.)	Actual cost incurred as per CIAL	Cost approved in the tariff order for the Second Control Period	Difference
Construction of new terminal T3 and related works proposed to be constructed in March 2017	923	927	(4)
Apron works, roads proposed to be constructed in March 2017	172	201	(29)
Runway Re-carpeting & Construction of Rapid Exit/Vertical Links – FY 2021	178	176	2
Additional Parking Bays, Code f upgradation, approach road and other road works	166	311	(145)
Ground Handling related	59	71	(12)
Other works including terminal modification, new equipment purchase etc.	373	370	3
New Cargo warehouse and allied works	20	131	(111)
PSF – SC assets	85	0	85
Flood control measures	30	0	30
Commercial complex, family entertainment centre and product display showroom	97	354	(257)
Total	**2103**	**2540**	**(437)**

4.4.16. Additional parking bays:

- CIAL had stated that the proposed works for construction of parking bays phase 2 were not undertaken in the Second Control Period and these are proposed to be undertaken in the Third Control Period. The project was envisaged considering the expected growth in traffic at the airport, however, in the latter half of the Second Control Period the traffic at Cochin airport hadn't grown as expected. Hence, it would be prudent to undertake this project as and when the need for the same is realised as per the expected recovery in demand.

4.4.17. Ground Handling Assets capitalised in the Second Control Period:

- As per the Tariff Order for the Second Control Period, the Authority had approved 'Ground Handling related' item for a cost of INR 70.45 Cr.
- In this regard, the Airport Operator has constructed new ground handling support building (for about INR 59 Cr), by citing that more Airlines are opting for self-handling by virtue of policy change of the government and hence, Ground handling equipment procurement and leasing, which was intended earlier was not taken up.
- On further discussion on this aspect with the Airport Operator, the operator mentioned that no further break up was given in the order (detailing 'Ground Handling related') at the time of tariff determination for the Second Control Period.
- All ground handling related procurements and two new ground handling support buildings were classified under this expense. Individual costs of procurement were far less than INR 50 crores Predominantly, two ground support building for an amount of INR 8.16 crores each (total of INR 16.32 crores). Runway sweeper, jeeps, triage and first aid equipment, other equipment etc. were also procured and included in the head.
- During the site visit the ground handling support buildings were observed and the operator had clarified that these spaces are currently rented out to Ground Handling Agencies, viz., Celebi, BWFS and Air India; the revenues from these agencies were considered Aeronautical.

4.4.18. New cargo warehouse and allied works:

- The construction of the new cargo warehouse had commenced in FY 2020, however CIAL did not expect the costs to be capitalised by FY 2021, hence the project was included in the proposed capital expenditure for the Third Control Period. The Authority noted that the costs proposed by CIAL were still within the figures approved as per the tariff order for the Second Control Period.

4.4.19. PSF-SC Assets capitalised in the Second Control Period:

- Citing Ministry of Civil Aviation's Order dated 18 February 2014 CIAL had reimbursed the capital expenditures incurred out of PSF (SC) account.
- Such assets capitalised between FY 2007 and FY 2018 were transferred to the books of CIAL, at the original cost adjusted for depreciation.
- As per the Fixed Asset Register, 352-line items were added in FY 2018. The original cost of these assets is INR 84.99 Cr, which was accounted in RAB after adjusting for depreciation, which comes out to be INR 71.9 Cr.
- These assets were classified as Aeronautical by the Airport Operator. Since these items are Security related, their classification had been retained as Aeronautical.

4.4.20. Assets to be commissioned in FY 2021:

- The Airport Operator was asked to share the documents supporting the PCN values before and after the runway re-carpeting that was proposed to be capitalised in FY 2021. The Aeronautical Information Publication documents of AAI showed that the PCN value had significantly increased from 60/F/B/W/T to 105/F/B/W/T. Since there had been considerable strengthening of the runway, the cost of re-carpeting had to be capitalised as per AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets.
- CIAL had been severely affected by floods in FY 2019 leading to suspension of airport operations for 15 days. To address the risk of such disruptions in future CIAL had started implementing various projects based on the recommendations of the detailed report by KITCO. Since these measures would be necessary to avoid flood related losses and suspension of operations in future, the Authority had considered the capital expenditure incurred in this regard in the true up of the Second Control Period.
- The proposed RAB for FY 2021 was computed using forecasted capital additions. The Airport Operator was requested to share the actual financial and physical progress of these projects as of March 2021.
- Based on the actual details shared by the operator, it was observed that most of the major Aeronautical items (about 80%) had achieved significant progress and were expected to be completed on schedule.
- Minor asset items (approximately 33 items totalling to 17 Cr) that were proposed to be capitalised in FY 2021 were at 0% physical and financial progress. However, it was understood from the Airport Operator that such items were related to procurement and were expected to be completed before 31 March 2021. Hence, the Authority proposed to consider the cost proposed by the Operator for the computation of RAB at that stage and update the same based on actuals before the issue of the final tariff order.

4.4.21. The Commercial Complex and related works were still in progress; however, they are Non-Aeronautical in nature and do not form a part of RAB.

4.4.22. The Authority observed that most of the projects were completed within the estimated costs and that the over-runs of the remaining projects were not of significant magnitude. The capital addition for the

Second Control Period, as considered by the Authority as part of the Consultation Paper is given in the tables below.

Table 12: Project-wise capital addition in Second Control Period proposed by the Authority as part of the CP

Particulars	Capital Addition (in INR crores)
Construction of new terminal T3 and related works constructed in March 2017	923
Apron works, roads constructed in March 2017	172
Runway Re-carpeting & Construction of Rapid Exit/Vertical Links – FY 2021	178*
Additional Parking Bays, Code f upgradation, approach road and other road works	166
Ground Handling related	59
Other works including terminal modification, new equipment purchase etc.	373
PSF – SC assets	85
Flood control measures	30*
Total Capital Additions**	**1963**

**Proposed to be capitalised in FY 2021*

*** Excluding Ind-AS grant of INR 23 Cr*

Table 13: Total capital addition in the Second Control Period as proposed by the Authority as part of the CP

Particulars (INR Cr)	2017	2018	2019	2020	2021	Total
Land	0.00	0.00	0.00	0.00	0.00	0.00
Buildings & Civil Works	586.44	50.76	134.20	9.10	9.00	789.50
Golf Course Development	0.00	0.00	0.00	0.00	0.00	0.00
Runway, Roads and Culverts	271.22	25.85	31.65	8.62	178.24	515.58
Plant and Equipment	308.05	103.00	121.25	40.10	47.94	620.35
Office Equipment	0.34	0.15	0.22	0.07	2.50	3.27
Computers and Accessories	0.62	0.63	1.53	3.94	6.86	13.58
Furniture and Fixtures	2.90	3.52	3.88	0.80	0.00	11.10
Vehicles	1.09	1.09	0.85	4.46	0.50	7.99
Intangible assets	0.31	0.37	1.10	0.47	0.00	2.25
Total	**1170.97**	**185.38**	**294.67**	**67.56**	**245.04**	**1963.62**

CIAL's submission of Allocation of Assets Between Aeronautical and Non-Aeronautical for the Second Control Period:

4.4.23. Under Hybrid-Till, only Aeronautical assets are included as part of the Regulatory Asset Base. Therefore, all airport assets need to be segregated between Aeronautical and Non-Aeronautical. Further, only projections of capitalisations during the control period classified as Aeronautical assets need to be considered as part of RAB.

4.4.24. CIAL had submitted the bifurcation of assets for the opening RAB as given below:

Table 14: Aeronautical allocation of opening RAB for Second Control Period submitted by CIAL

Particulars	Aeronautical allocation
Buildings and Civil works	71%
Runway, Roads and Culverts	100%
Plant and Equipment, Office Equipment, Computers and Accessories, Furniture and Fixtures, Vehicles and Intangibles Assets	90%

4.4.25. CIAL had submitted the basis for segregation of assets capitalised in the Second Control Period as follows:

Table 15: Basis for allocation of capital additions undertaken in Second Control Period as per CIAL

Existing Assets	Basis for Segregation
Land	Land was excluded from RAB and was taken as a separate line item for determination of FRoR as per AERA Order 42/2018-19 dated 5th March 2019.
Buildings and Civil Works	Buildings and civil works assets were divided into Aeronautical, Non-Aeronautical and Common assets based on usage of each assets. Common assets were further apportioned into Aeronautical and Non-Aeronautical based on Aeronautical and Non-Aeronautical area in the terminal building. KITCO had undertaken a study for computation of the Aeronautical and Non-Aeronautical area in the terminal buildings. As per the study, total area of the terminal building is 2,20,651 sq. m. out of which Aeronautical area is 2,04,780 and Non-Aeronautical area is 15,872 sq. m. Accordingly, Common assets were bifurcated into Aeronautical and Non-Aeronautical assets based on the ratio of 92.81% and 7.19%, respectively. Please refer to Annexure for KITCO certificate on terminal area usage.
Golf Course Development	Golf course development assets were considered as Non-Aeronautical assets.
Runways, Roads and Culverts	Existing runway, roads and culverts were considered as Aeronautical assets except for roads comprising connected roads and car park area. Overall cost of connecting roads were bifurcated into Aeronautical and Non-Aeronautical assets based on the actual cost incurred for internal roads and car park roads. Details of the bifurcation are given in the below section.
Plant and Equipment Office Equipment Computers and Accessories Furnitures and Fixtures Vehicles Intangible Assets	These assets were divided into Aeronautical, Non-Aeronautical and Common assets based on usage of each assets. Common assets were apportioned into Aeronautical and Non-Aeronautical component based on the terminal area ratio of 92.81% and 7.19%.

4.4.26. Further, CIAL had submitted KITCO's certificate with the workings for the calculation of the terminal area ratio, i.e., the ratio of Aeronautical portion to Non-Aeronautical portion of the terminal building, as presented in the table below:

Table 16: Outcome of KITCO study report regarding Terminal Area allocation

International Passenger Terminal		
Total Terminal Area	146528	Sqm
Total Non-aero area	9201	Sqm
Total Aero Area	137328	Sqm
Non-aero % in International Passenger Terminal	**6.28**	**%**
Domestic Passenger Terminal		
Total Terminal Area	74123	Sqm
Total Non-aero area	6671	Sqm
Total Aero Area	67452	Sqm
Non-aero % in Domestic Passenger Terminal	**9.00**	**%**
Combined Passenger Terminal Area of Domestic and International	220651	Sqm
Combined Non-aero Area	15872	Sqm
Combined Aero Area	204780	Sqm
Combined Non-aero % of the Terminal in CIAL	**7.19**	**%**

Decisions taken by the Authority regarding Allocation of Assets between Aeronautical and Non-Aeronautical as per Tariff Order for the Second Control Period

4.4.27. Relevant decisions taken by the Authority regarding Aeronautical allocation of assets at the time of Tariff determination for the Second Control Period were as given below:

- *"To carry out a technical study on the area used between Aeronautical and Non-Aeronautical in the existing and new terminal once the operations are commissioned and stabilised (Decision No.4. a. ii)"*
- *"To true up the details based on the actuals and consider the same in the next Control Period (Decision No. 4. a. iii)"*

4.4.28. Aeronautical allocation of assets as proposed by the Authority as per Tariff Order for the Second Control Period were as given in the table below.

Table 17: Aeronautical Allocation of Assets as proposed by the Authority as per Second Control Period Tariff Order

Particulars (Gross Block)	% Aeronautical
Land	Not considered as RAB
Buildings and Civil Works	69.28%
Golf Course Development	0.00%
Runways, Roads and Culverts	100.00%
Plant and Equipment	86.79%
Office Equipment	74.22%
Computers and Accessories	91.85%
Furnitures and Fixtures	86.50%
Vehicles	94.81%
Intangible Assets	84.21%

Authority's analysis of CIAL's submission of Allocation of Assets between Aeronautical and Non-Aeronautical as part of the Consultation Paper

4.4.29. For the opening RAB, CIAL had used the Aeronautical allocation percentages that the Authority had decided in the tariff order for the Second Control Period.

4.4.30. For the purposes of segregation of assets capitalised in the Second Control Period, CIAL had divided its assets into three components – Aeronautical, Non-Aeronautical and Common. Common assets had been further apportioned in to Aeronautical and Non-Aeronautical by applying the terminal allocation ratio.

4.4.31. The Authority had commissioned a study on the allocation of assets between Aeronautical and Non-Aeronautical assets for CIAL (summary of the study is given in Annexure 2, the detailed report is available along with the Tariff Order on the AERA's website). The study had provided a broad framework for allocation of various classes of airport assets into Aeronautical, Non-Aeronautical and Common. The process followed in the study was as follows:

- Assets which are purely Aeronautical and purely Non-Aeronautical were identified.
- Asset which could not be attributed to purely Aeronautical or Non-Aeronautical activities were classified as Common assets.
- The Common assets were further apportioned into Aeronautical and Non-Aeronautical based on suitable ratios.

4.4.32. Based on the principles for the asset's allocation into Aeronautical and Non-Aeronautical, the Authority observed that the various assets that were capitalised during FY 2017 to FY 2020 as per the Fixed Asset Register required reclassification, which impacted the RAB. For instance, few assets related to the Butterfly Canteen in front of T3 were classified as Aeronautical or Common by the Airport Operator. The re-classification of assets related to the Butterfly Canteen to Non-Aeronautical had resulted in the reduction of Aeronautical additions by INR 5.1 Crores. Similarly, certain other assets belonging to Duty Free operations, Golf-course, Airport Security, Passenger Handling etc. were reclassified accordingly. Details pertaining to other such reclassifications are provided in the study on allocation of assets between Aeronautical and Non-Aeronautical assets (a summary of the study is provided in Annexure 2 of this Tariff Order; the detailed report is available along with the Tariff Order on the AERA's website).

4.4.33. The Authority noted that certain assets, including UV-C systems and IT Assets, that were projected to be capitalised in FY 2021 were categorised as Aeronautical by the Airport Operator. However, based on the study on allocation of assets between Aeronautical and Non-Aeronautical assets, the above items were reallocated to Common or Non-Aeronautical, thus reducing the Aeronautical capital additions by INR 0.72 Crores.

Terminal area allocation:

4.4.34. On the terminal allocation ratio, the Authority observed that CIAL has considered only the specific areas used for Non-Aeronautical activities as Non-Aeronautical area and the remaining area was considered as Aeronautical. Therefore, the Common areas were not been allocated into Aeronautical and Non-Aeronautical (as against AERA's direction in paragraph 9.2.4 of Order No. 07/2017-18 dated 13 July 2017 regarding determination of tariffs for Aeronautical services in respect of Cochin International Airport for the Second Control Period) and was considered as purely Aeronautical.

4.4.35. Considering the detailed break-up of the terminal area, usage details and the floor plans provided by the Airport Operator, the weighted average terminal usage ratio was analysed in the study on allocation of assets between Aeronautical and Non-Aeronautical assets, based on the actual usage. The ratio was found to be as follows:

Table 18: Terminal allocation ratio as recomputed by the Authority as part of the Consultation Paper

International Passenger Terminal		
Total Terminal Area	146528	sqm
Excluded Area	1910	sqm
Total Non-Aero Area	12247	sqm
Total Aero Area	132371	sqm
Non-Aero % in International Passenger Terminal	8.47	%
Domestic Passenger Terminal		
Total Terminal Area	74123	sqm
Total Non-Aero Area	7325	sqm
Total Aero Area	66798	sqm
Non-Aero % in Domestic Passenger Terminal	9.88	%
Combined Passenger Terminal Area of Domestic & International	220651	sqm
Excluded Area	1910	sqm
Combined Non-Aero Area	19572	sqm
Combined Aero Area	199169	sqm
Combined Non-Aero % of Terminals in CIAL	8.94	%

4.4.36. The summary of the revisions to Aeronautical capital additions in the Second Control Period as per the study on allocation of assets between Aeronautical and Non-Aeronautical assets is given below.

Table 19: Summary of revisions as per study on allocation of assets between Aeronautical and Non-Aeronautical assets

Particulars (INR Cr)	FY 17	FY 18	FY 19	FY 20	FY 21*	Total
CIAL's submission						
Aeronautical Gross Additions	1110.03	157.75	276.79	65.34	237.16	1847.08
Non-Aeronautical Gross Additions	60.94	27.63	17.88	2.22	7.88	116.54
Total Gross Additions	1170.97	185.38	294.67	67.56	245.04	1963.62
Revised as per the study						
Revised Aeronautical Gross Addition[5]	1094.18	150.15	272.94	64.10	236.29	1817.66
Revised Non-Aeronautical Gross Additions	76.78	35.23	21.73	3.47	8.75	145.96
Revised Total Gross Additions	**1170.97**	**185.38**	**294.67**	**67.56**	**245.04**	**1963.62**

**Forecasted figures*

4.4.37. The Authority proposed to consider the recommendations of the study on allocation of assets between Aeronautical and Non-Aeronautical assets, regarding Aeronautical capital additions, for the true up of the Second Control Period.

4.4.38. The Authority noted that the Airport Operator had considered a Financing Allowance (as provided in Direction 5 – Airport Guidelines) of INR 11.9 Crores, against Interest During Construction (IDC) on the Work-in-Progress (WIP) assets worth INR 158 Crores projected to be capitalised in FY 2021.

4.4.39. The Airport Operator had computed Financing Allowance on the entire WIP amount whereas the Authority is of the view that such allowance is essentially the IDC for a project and should be provided only on the debt portion of the project fund. Accordingly, the Authority had considered IDC to be provided based on the changes in Aeronautical capital additions discussed above, and the average gearing considered for the Second Control Period (refer Section 4.6) as part of the Consultation Paper.

4.4.40. Based on the revisions as per the study on allocation of assets between Aeronautical and Non-Aeronautical assets and the changes in Depreciation (as discussed in section 4.5), the Authority had recomputed the RAB for true up of the Second Control Period as given in the table below.

Table 20: RAB Proposed by the Authority for true up of Second Control Period as part of the Consultation Paper

Particulars (INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Opening RAB	272.50	1334.987	1391.57	1556.08	1517.64	
Less: Depreciation during year	31.80	91.99	88.49	102.24	111.01	425.54
Add: Capitalisation during year	1094.20	150.15	272.94	64.10	240.66	1822.03**
Sales/transfers/retirements	(0.01)	(1.45)	(19.95)	(0.29)	(0.00)	(21.70)
Closing RAB	1334.87	1391.57	1556.08	1517.64	1647.29	
Average RAB	**803.69**	**1363.22**	**1473.82**	**1536.86**	**1582.47**	

**Projections including IDC*
***Includes IDC of INR 4.4 Cr*

<u>Stakeholder comments on true up of Regulatory Asset Base for the Second Control Period</u>

4.4.41. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No.

[5] Includes capitalised interest costs on borrowings for capital expenditure projects

08/2021-22 with respect to true up of Regulatory Asset Base for the Second Control Period. The comments by stakeholders are presented below.

CIAL's comments regarding true up of Regulatory Asset Base for the Second Control Period

4.4.42. CIAL stated that AERA's proposal regarding exclusion of Financing Allowance does not confirm to the AERA Guidelines. CIAL has requested AERA to consider Financing Allowance based on its Guidelines as it had allowed the same in the second control period tariff orders of CIAL, BIAL and HIAL.

4.4.43. CIAL requested AERA to consider revising the classification of the terminal areas as given below:

a. *"Terminal area (old viewers gallery) of domestic terminal is not used for non-aeronautical purposes by CIAL and no revenue is generated by CIAL. Therefore, it should be considered as aeronautical area.*

b. *Circulation area of international terminal is used by passengers; shops have been separately considered as non-aeronautical and therefore, circulation area should be considered as aeronautical.*

c. *Forecourt is an essential area for travellers and therefore, it should be considered as aeronautical."*

Other stakeholders' comments regarding true up of Regulatory Asset Base for the Second Control Period

4.4.44. AAI commented that AERA has allowed Financing Allowance to BIAL in both First and Second Control Period as per Order No. 18/2018-19 dated 31 August 2018 for Second Control Period and has requested AERA to consider the financing allowance on both debt and equity portion for financing the capex.

4.4.45. APAO stated that AERA's proposal regarding exclusion of Financing Allowance does not confirm to AERA Guidelines. APAO has requested AERA to consider Financing Allowance based on its Guidelines as it had allowed the same in the second control period tariff orders of CIAL, BIAL and HIAL.

4.4.46. MIAL stated that by allowing only IDC, the airport operator is being denied return on its own funds used for financing the capex which is against the provisions of Section 13(1)(a)(i) of the AREA Act, 2008. MIAL has requested the Authority to allow financing allowance on the capital works in progress in line with its own Guidelines.

4.4.47. IATA commented that only the projects deemed to be efficient based on benefits, cost, quality and benchmarks should be allowed in RAB and has requested AERA to scrutinize projects for capital efficiency based on normative costs against the final accounts.

4.4.48. BAOA has commented that, *"Since AERA is undertaking independent airport specific study on aeronautical assets and the associate charges, it is requested that aeronautical assets for each square foot area, and the applicable aeronautical charges for its by aircraft operators, be unambiguously stated in every AERA order. As a 'follow up' of the above point, 'housing charges', that affect the small aircraft industry the most, be well defined in terms of specific aeronautical assets available for the purpose on the airport. In the absence of each area specific charges, the possibility of airport operators interpreting the applicability of such charges in their own way, and to own advantage, has been taking place".*

CIAL's counter-comments and response to stakeholder comments regarding true up of Regulatory Asset Base for the Second Control Period

4.4.49. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the various stakeholder comments with respect to true up of Regulatory Asset Base for the Second Control Period are presented below.

4.4.50. Regarding IATA's comment on scrutiny of projects against normative costs, CIAL has responded as follows:

"CIAL has noted IATA's comment regarding the efficient capital expenditure based on the normative cost benchmarks set by AERA. CIAL has been extremely conscious of operational and capital

expenditure cost. CIAL has completed the International Terminal project within the normative benchmarks prescribed by AERA. Capital expenditure for T3 is INR 922.5 cr. and the area of T3 is 1,46,528 sq. m. Based on the above, the per sq. m. cost of T3 is INR 62,957 which is lower than the normative cost of INR 65,000 per sq. m. CIAL takes pride that AERA has utilized the terminal building cost benchmarks of CIAL while issuing the Order No. 07/ 2016-17."

4.4.51. CIAL has concurred with the comments of MIAL and AAI.

Authority's analysis of stakeholder comments on true up of Regulatory Asset Base for the Second Control Period

4.4.52. The Authority has noted CIAL, APAO, MIAL and AAI's comments on Financing Allowance. Views of the Authority on the same, for future tariff orders, have been discussed in detail in the section on RAB and Depreciation for the Third Control Period (refer Para 6.5.1). However, for true up of the Second Control Period, the Authority notes that, in the Tariff Order for the Second Control Period, it was decided that Financing Allowance would be trued up based on the final capital expenditure. In its MYTP submission, CIAL had proposed an addition of INR 11.9 Cr. in FY 2021 only as Financing Allowance for true up of Second Control Period. Accordingly, the Authority has recomputed the Financing Allowance to be added based on the actual WIP capitalised in FY 2021.

Table 21: Financing Allowance considered by the Authority

Particulars (INR Cr.)	WIP Capitalised	Aeronautical WIP Capitalised	Financing Allowance
FY 2021	141.40	131.62	10.27

4.4.53. The Authority would like to invite CIAL's attention to the clarifications shared by it vide email dated 03rd March 2021 post discussion with the Authority held on 12th February 2021. The explanation provided regarding Terminal area (old viewers gallery) reads, *"Old viewers gallery is not operational at present due to COVID related restrictions. However, it shall be made operational in near future. This would be an exclusive area for visitors and certain fee shall be charged against the use from the visitors"*. Based on these inputs received from CIAL and in the absence of any further information regarding changes in planned usage of the area, the Authority has decided to retain the classification of this area as Non-Aeronautical.

4.4.54. The Authority has noted CIAL's comment that retail areas have been classified as Non-Aeronautical. However, circulation areas and forecourt are essential for passengers in terms of visibility and accessibility to the retail spaces, without these there would be no demand at the Non-Aeronautical areas. Though these areas primarily cater to passenger movement, they also contribute towards generation of Non-Aeronautical Revenue in the commercial spaces housed within these areas or in adjoining spaces. Further, in the tariff order for the Second Control Period, the Authority had noted that *"in computing the Terminal Area relating to Non-Aeronautical assets, CIAL had considered only the specific area used for Non-Aeronautical activities as Non-Aeronautical Area and the common area was not allocated to Aeronautical and Non-Aeronautical activities"*. Hence, the Authority is of the view that such areas should be treated as Common and has therefore decided to retain the classification of these areas as recommended by the study on allocation of assets between Aeronautical and Non-Aeronautical assets which has taken into account all such factors while determining the terminal area ratio.

4.4.55. The Authority has noted IATA's comment regarding scrutinizing projects for capital efficiency based on normative costs. The Authority would like to highlight that prior to issue of AERA Order No. 07/2016-7 in the matter of normative approach to building blocks in economic regulation of major airports-capital costs reg., the Authority had visited Cochin Airport. Subsequent to discussions with airport officials and examination of details regarding project cost, facilities and finishes provided, the Authority had found the capital cost incurred by CIAL for Terminal Building and Pavement (Runway/Taxiway/Apron) to be reasonable. Therefore, the Authority is of the view that there is no reason to consider any further revisions in this regard.

4.4.56. The Authority takes note of BAOA's comments on Housing Charges, however CIAL has not included any housing charges in the Tariff Card proposed by them (Please refer to AERA Public Notice No. 07/2021-22). Regarding determination of Aeronautical assets per square foot area and the applicable Aeronautical charges, the Authority is of the view that regulating individual charges might set constraints on the Airport Operator and might impact the flexibility related to business decisions. The setting of all Aeronautical charges on square feet basis would be impractical.

4.4.57. The cost approved by the Authority in the tariff order for the Second Control Period towards runway re-carpeting was INR 175.9 Cr. However, the actual cost incurred as per the CA certificate submitted by the Airport Operator vide email dated 21st July 2021 is INR 188.38 Cr. The Authority sought the explanation for increase in costs against the estimates, to which CIAL responded (vide email dated 04th August 2021, "Actual Data for FY 21 | CIAL") that while forecasting for the Second Control Period, it was expected that Input Tax Credit (ITC) could be claimed on this expense. Whereas under GST law these works became ineligible for ITC. Therefore, an amount of INR 15.36 Cr. of GST has formed part of the capitalised asset.

4.4.58. In view of this justification and reference to the Section 17(5) of Central Goods and Service Tax Act, the ITC on GST is not available for "land, building or any other civil structures", the Authority has considered the actual cost incurred towards runway re-carpeting for true up of the Second Control Period.

4.4.59. As part of its MYTP, CIAL had projected total capitalisation worth INR 245 Cr. in FY 2021. The Airport Operator vide email dated 21st July 2021, shared the details regarding the actual capitalisation in FY 2021. The Authority observed that, against the projected capitalisation of INR 245 Cr., CIAL has capitalised projects worth INR 191.03 Cr. in FY 2021. Further, certain other assets worth INR 14.18 Cr. were capitalised by CIAL which were not included in its MYTP submission. The Airport Operator has not provided any justification for the incurrence of this additional capital expenditure. Therefore, the Authority has considered the total capitalisation in FY 2021 to be INR 191.03 Cr. for the purposes of computation of RAB. Along with the Financing Allowance of INR 10.27 Cr. (refer Table 21), the actual addition to RAB considered by the Authority in FY 2021 is INR 201.29 Cr. For the first four years of the Second Control Period, the Authority has retained the figures considered by it during the consultation stage (refer Table 20).

4.4.60. The Authority noted that out of the total capital additions of INR 245 Cr. projected in FY 2021, the Airport Operator has shifted certain projects adding up to INR 63.6 Cr. to FY 2022 as the same could not be completed on account of delays due to the impact of COVID-19. CIAL requested the Authority to consider these projects and revise the capital expenditure for FY 2022 accordingly. The Authority has proceeded to include these projects in the capital expenditure for the Third Control Period.

4.4.61. Based on the above, the Authority has decided to consider RAB for true up of Second Control Period consistent with its proposals regarding the same in the Consultation Paper No. 08/2021-22 after updating the figures for FY 2021 based on actuals and in line with the principles laid out in the study on allocation of assets between Aeronautical and Non-Aeronautical assets, as against projections considered during the consultation stage. RAB as considered by the Authority for true up of the Second Control Period is given below.

Table 22: RAB considered by the Authority for true up of Second Control Period

Particulars (INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Opening RAB	272.51	1334.87	1391.57	1556.08	1517.64	
Less: Depreciation during year	31.80	91.99	88.49	102.24	108.35	422.88
Add: Capitalisation during year	1094.18	150.15	272.94	64.10	201.29	1782.65
Sales/transfers/retirements	(0.01)	(1.45)	(19.95)	(0.29)	(0.07)	(21.77)
Closing RAB	1334.87	1391.57	1556.08	1517.64	1610.51	
Average RAB	**803.69**	**1363.22**	**1473.82**	**1536.86**	**1564.08**	

4.5. True up of Depreciation

CIAL's submission of Depreciation for the Second Control Period

4.5.1. CIAL submitted that until FY 2018, the useful lives of Assets were computed based on the rates prescribed in the Schedule II of the Companies Act 2013. From 01st April 2018 (FY 2019) onwards, CIAL had submitted that it has categorised Assets into various asset classes and the useful lives as given in the Authority's Order No.35/2017-18 dated 12 January 2018 regarding useful lives of key airport assets were used wherever applicable. The useful lives used by CIAL until FY 2018 and beyond are given in the tables below.

Table 23: Useful Lives considered by CIAL until FY 2018

S.No.	Asset Category	Useful lives in Years (Till FY 2018)
1	Building - Civil, earth, pile, masonry, concrete, steel and RCC Works	60
2	Building - False ceiling, handrails and façade works	20
3	Building - Interior, flooring, roofing, plumbing and finishing	15
4	Elevators, Escalators, VDGS, Travellators, BHS, aerobridges, aircraft recovery equipment	15
5	HVAC Systems	4 - 15
6	Light fittings	5
7	Electrical installations, DG sets, transformers, sign boards, firefighting systems, UPS	5-10
8	CUPPS, CUSS, Networking, BRS	5
9	Apron, approach road bridge, railway over bridge	30
10	Roads, flexible pavements	10
11	Flexible pavements	5

Table 24: Useful Lives considered by CIAL and as proposed in AERA Order No. 35/2017-18 dated 12 January 2018 from FY 2019 onwards

S.No.	Asset Category	Useful lives in years from FY 2019 onwards (As per CIAL)	Useful lives in years from FY 2019 onwards (As per AERA Order No. 35/2017-18)
	Assets for which useful life as per Part C of Schedule II / AERA Order No. 35/2017-18 regarding determination of useful lives of airport assets/ technical evaluation is used		
1	Building - Civil, earth, pile, masonry, concrete, steel and RCC Works	60	30/60
2	Building - False ceiling, handrails and façade works	20	-
3	Building - Interior, flooring, roofing, plumbing and finishing	15	-
4	Elevators, Escalators, Baggage Handling Systems, Travellators, HVAC equipment, aircraft recovery equipment and aerobridges	15	15
5	Light fittings	10	-
6	Runway, Apron and Taxiway	30	30
	Assets for which useful life as given in AERA Order No. 35/2017-18 is applied		
7	Electrical Installation and equipment	10	10
8	Flight Information System	10	10
9	Aircraft Fire tenders and other fire Equipment	15	15
10	X - Ray, RT Sets, DFMD, HHMD and security equipment	15	15
11	Office equipment	5	5
12	Furnitures and fixtures other than trolleys	7	7

S.No.	Asset Category	Useful lives in years from FY 2019 onwards (As per CIAL)	Useful lives in years from FY 2019 onwards (As per AERA Order No. 35/2017-18)
13	Furniture and fixture trolleys	3	3
14	Computer end user devices	3	3
15	Computers, servers and networks	6	6
16	CUPPS, CUSS, Networking and BRS	6	6
17	Roads and flexible pavement	10	05/10
18	Flexible pavements	5	05/10
19	Software	5	Based on Technical Justification
20	Vehicles	8	8

4.5.2. CIAL had submitted Aeronautical depreciation of assets for true up of Second Control Period as given in the table below.

Table 25: Aeronautical Depreciation of assets as submitted by CIAL for true up of Second Control Period

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Land	0.0	0.0	0.0	0.0	0.0	**0**
Buildings and civil works	4.6	23.6	25.2	30.5	31.0	**114.8**
Golf course development	0.0	0.0	0.0	0.0	0.0	**0**
Runway, roads and culverts	10.0	21.2	19.5	22.7	32.6	**106.0**
Plant and Equipment	12.5	44.2	45.7	54.0	55.6	**211.9**
Office Equipment	0.0	0.1	0.1	0.2	0.4	**0.8**
Computers and accessories	0.9	0.9	1.0	1.1	2.1	**5.9**
Furnitures and fixtures	0.7	0.9	1.6	1.7	1.6	**6.5**
Vehicles	0.5	0.6	0.6	0.9	1.1	**3.7**
Intangible assets	2.8	1.5	1.3	0.6	0.5	**6.7**
FA	0.0	0.0	0.0	0.0	0.6	**0.6**
Total Depreciation	**31.9**	**92.9**	**94.9**	**111.7**	**125.4**	**456.8**

**Forecasted figures*

<u>Decisions taken by the Authority regarding Depreciation as per Tariff Order for the Second Control Period</u>

4.5.3. Relevant decision taken by the Authority on depreciation of assets at the time of tariff determination for the Second Control Period was as follows:

- *"To true up the depreciation based on the actual capital expenditure and the change in useful lives/rates as per the results of the depreciation study (Decision No. 6. a. ii)"*

4.5.4. At the time of tariff determination of CIAL for the Second Control Period, the Authority had decided that the useful lives of assets would be decided based on the study that will be conducted in this regard. Further, the Authority had conducted the study and issued Order No. 35/2017-18 dated 12th January 2018 regarding determination of useful life of airport assets. The salient decisions outlined in the order are as follows:

- *"To determine useful lives for key airport assets under Part B of Schedule II to Companies Act 2013 (Decision No.1.a)"*
- *"To consider the effective date of the order as 1st April 2018 (Decision No.1.c)"*
- *"To propose that the carrying amount of the asset as on date of effect shall be depreciated over the remaining useful life of asset (Decision No.1.d)"*

Authority's analysis of Depreciation submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.5.5. The Authority had noted that CIAL had applied its policy of depreciating assets till 95% of their original cost in its submission of Depreciation. A clarification was sought from the Airport Operator in this regard, to which, CIAL had responded that it depreciates its assets till 95% of their original value as per its existing accounting policy complying with the Companies Act provisions.

4.5.6. From FY 2019, CIAL had adopted the useful lives given in AERA Order No. 35/2017-2018 dated 12th January 2018 regarding determination of useful lives of airport assets and revised the depreciation rates wherever applicable. The notes regarding revision of depreciation rates/ useful lives were verified from the audited financial statements.

4.5.7. The Authority had noted that for certain assets (S.N. 2 and S.N. 3 in Table 24) that are not specifically mentioned in AERA Order No. 35/2017-18 dated 13th July 2017 regarding determination of useful lives of airport assets, CIAL had used a different useful life as compared to Order No. 35, these had been evaluated and considered by the Statutory Auditors in the Annual Reports of CIAL for the year ended 31st March 2019. Further, AERA had sought clarification from the Airport Operator and CIAL mentioned that it had used these rates based on the approval of the Internal Technical Committee. The Authority had looked at CIAL's submission regarding Depreciation and had also perused the relevant clauses in the financial statements of CIAL which mention that the depreciation rates considered for key airport specific assets are aligned with the depreciation rates as per the Authority's Order no. 35/2017-2018 dated 12th January 2018 regarding determination of useful lives of airport assets.

4.5.8. Further, the Authority noted that the actual details available in the FAR do not include the mapping to the depreciation classes/ useful life classification suggested by AERA. Also, the description provided for the items was insufficient to understand the nature and class of asset. The Airport Operator was requested additional details and clarifications regarding the nature and useful lives of certain assets.

4.5.9. The justification provided by the airport was not satisfactory in the use of the two additional asset classes (Item No. 2 and 3 in Table 24) defined by CIAL. The Authority revised the useful lives of these assets as given below.

Table 26: Useful lives of certain assets classes as per CIAL and as revised by the Authority as part of the CP

Asset Category – Buildings and Civil Works	Useful Life (As per CIAL)	Revised Useful Life (As per Authority)
Building – False Ceiling, Handrails and Façade Works	20	30
Building – Interior, Flooring, roofing and finishing	15	30

4.5.10. It was also observed that CIAL had not considered the useful lives of some assets in the Fixed Asset Register in order to align with the Authority's Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets. The Authority recomputed the depreciation from FY 2019, after revising the useful lives of the assets wherever necessary, in accordance with Order No. 35/2017-18 for the purpose of true-up. The Airport Operator was advised to ensure the consideration of useful lives as per Order No. 35/2017-18 for all relevant assets in future. The details of the assets for which the useful life was revised by the Authority are given in the table below.

Table 27: Details of assets for which useful life has been revised by the Authority as part of the Consultation Paper

Unique Asset Number	Asset Description as per FAR of CIAL	Life (As per CIAL)	Revised Useful Life	Category Considered by Authority
1400000350	T3 Fly Over	30	10	Roads, Bridges and Culverts
1400000270	Approach Road Bridge	30	10	Roads, Bridges and Culverts
1400000310	Railway Overbridge	30	10	Roads, Bridges and Culverts
1500002000	T3 Light Fittings	5	10	Electrical Installation
1400000271	PMC ROB	30	10	Roads, Bridges and Culverts
1500002191	Light Fittings	5	10	Electrical Installation
1400000353	Sub Asset IDC T3 Fly Over	30	10	Roads, Bridges and Culverts
1500001991	LIGHT LUMINARES	5	10	Electrical Installation
1580000250	T1: Light Fittings for City Side facelift works	5	10	Electrical Installation
1580000160	SITC of LED lights 2.7 MWp-solar carport	5	10	Electrical Installation
1580000211	T1: 30W LED downlight fitting	5	10	Electrical Installation
1500002002	Sub Asset IDC T3 Light Fittings	5	10	Electrical Installation
1580000230	LED taxiway guidance signboards	5	10	Electrical Installation
1500002210	Additional light Fittings for T3	5	10	Electrical Installation
1410000140	Runway recarpeting	15	20	Runway Re-carpeting
1530000922	Ducting & Insulation	10	15	HVAC Equipment
1530000924	Chiller Unit	8	15	HVAC Equipment
1530000921	Floor Mounted Air Handling Units	8	15	HVAC Equipment
1870000001	Sub Asset IDC T3 Baggage Handling System	10	15	Baggage Handling System
1500002010	T3 Internal sign Boards	8	10	Electrical Installation
1530000928	ASSOCIATED ELECTRICAL WORKS	8	10	Electrical Installation
1530001191	T1: AHU,cooling Tower,chiller unit,ventilatn etc	8	15	HVAC Equipment
15300009212	VENTILATION SYSTEM	8	15	HVAC Equipment
1500002020	Electrification of Phase II -Road & ROB	8	10	Electrical Installation
1530000923	Cooling Tower	8	15	HVAC Equipment
1530001140	T1: BMS Air conditioning Management system	10	15	HVAC Equipment
1530000500	350 TR ROTARY SCREW CHILLER AND CONNECTED WORKS	8	15	HVAC Equipment
15300009215	Sub Asset IDC T3 HVAC systems	8	15	HVAC Equipment
1500001948	Capacitor panel - 500KVAr	5	10	Electrical Installation
1530001000	T3 SITC of Airconditioning Works(VRF & DX) System	8	15	HVAC Equipment
15300009216	Sub Asset IDC T3 HVAC systems	10	15	HVAC Equipment
1530000490	SITC of AHU (Air Handling Unit) at Domestic terminal	8	15	HVAC Equipment
1500001981	Transformers and Connectors	5	10	Electrical Installation
1530000550	350TR chiller for arrival block of Int. Terminal	8	15	HVAC Equipment
1700000730	ride on scrubber	10	8	Vehicles
1530000520	SITC OF AHU	8	15	HVAC Equipment
1530000810	SITC of AHU of Duty free Arrival	8	15	HVAC Equipment
1500001960	LED sign boards - Entrance Gate	8	10	Electrical Installation

4.5.11. The original runway at CIAL was commissioned in FY 2000. The life considered at the time of commissioning was 15 years. The re-carpeting of the runway was first carried out in FY 2010, the cost for the same was capitalised in the books of CIAL considering a useful life of 15 years. As per the AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets, the useful life of the original runway should have been 30 years. However, prior to the issue of the Order, the runway had already been fully depreciated on the books of CIAL. Nevertheless, the life of runway re-carpeting should co-terminate with the revised life of the original runway. Therefore, the Authority revised the life of the runway re-carpeting carried out in FY 2010 to 20 years and recalculated the depreciation from FY 2019 onwards when the Order on useful lives came into effect. Depreciation was adjusted such that the book value of the asset gets depreciated over its updated balance life.

4.5.12. Similarly, the Authority revised the life of the runway re-carpeting proposed to be commissioned in FY 2021 to 9 years (as against 5 years proposed by CIAL) in order to co-terminate its life with the updated life of the original runway.

Table 28: Revised useful lives of runway re-carpeting proposed by the Authority as part of the Consultation Paper

Item / Description	FY of Commissioning	Useful Life (as per CIAL)	Revised Useful Life (as per Authority)	Revised Year of Expiry
Original runway	2000	15	30	2030
First re-carpeting	2010	15	20	2030
Second re-carpeting	2021	5	9	2030

4.5.13. The Authority had commissioned a study on allocation of assets between Aeronautical and Non-Aeronautical assets for CIAL for the Second Control Period (summary of the study is given in Annexure 2, the detailed report is available along with the Tariff Order on the AERA's website). The study had examined the allocation of assets of CIAL and recommended revisions in the classification of certain assets and the terminal allocation ratio. Based on the recommendations of the study regarding the allocation of assets and the revision in useful lives of assets, the Authority had recomputed the Aeronautical Depreciation for all the assets and the summary of the same is given in the table below.

Table 29: Aeronautical Depreciation proposed by the Authority for true up of the Second Control Period in the CP

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Land	0.0	0.00	0.00	0.00	0.00	**0.00**
Buildings and civil works	4.54	23.11	17.56	20.23	20.74	**86.18**
Golf course development	0.00	0.00	0.00	0.00	0.00	**0.00**
Runway, roads and culverts	9.99	21.16	23.51	26.68	32.15	**113.48**
Plant and Equipment	12.43	43.74	42.96	51.05	52.62	**202.81**
Office Equipment	0.04	0.11	0.11	0.14	0.35	**0.76**
Computers and accessories	0.88	0.87	0.94	1.09	2.00	**5.78**
Furnitures and fixtures	0.70	0.93	1.56	1.64	1.49	**6.31**
Vehicles	0.46	0.60	0.63	0.86	1.08	**3.63**
Intangible assets	2.76	1.47	1.22	0.54	0.38	**6.38**
IDC	0.00	0.00	0.00	0.00	0.20	**0.20**
Total Depreciation	**31.80**	**91.99**	**88.49**	**102.24**	**111.01**	**425.54**

**Forecasted figures*

Stakeholder comments on true up of Depreciation for the Second Control Period

4.5.14. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to true up of Depreciation for the Second Control Period. The comments by stakeholders are presented below.

CIAL's comments on true up of Depreciation for the Second Control Period:

4.5.15. CIAL has requested the Authority to consider the useful lives Buildings - False Ceiling, Handrails and Façade Works and Building - Interior, Flooring, Roofing and Finishing as adopted by CIAL. The detailed comments of CIAL are as follows:

i. "AERA has revised the depreciation rates as follows:

Item Description	*FY of Commissioning*	*Useful Life (CIAL)*	*Useful Life (AERA)*	*Year of Expiry (AERA)*
Building – False Ceiling, Handrails and Façade Works		*20*	*30*	

Item Description	FY of Commissioning	Useful Life (CIAL)	Useful Life (AERA)	Year of Expiry (AERA)
Building – Interior, Flooring, roofing and finishing		15	30	
Original Runway	2000	15	30	2030
First re-carpeting	2010	15	20	2030
Second re-carpeting	2021	5	9	2030

Useful life of Building - False Ceiling, Handrails and Façade Works and Building - Interior, Flooring, roofing and finishing

ii. *CIAL prepares its books of account based on the Companies Act. The Ind-AS accounting has been made applicable from FY 16 onwards for companies above INR 500 cr. turnover, thus applicable to CIAL.*

iii. *Order no. 35/2017-18 of AERA on useful life is not consistent with the Ind-AS standards on asset accounting. The Companies Act, 2013 provision stipulates that in case the useful life of an asset is not available in its Schedule II - Useful lives to compute depreciation, the useful life if any, arrived by the sectoral regulator of the industry can be used. However, this stipulation does not change the mandatory componentization of assets under Ind-AS standards. The decision of AERA for CIAL has resulted in non-componentization of assets which have varying useful life.*

iv. *Ind-AS accounting mandated component accounting of assets, that is, in case an asset has various components, the useful life of those components shall be determined based on the technical study. CIAL has complied with the provisions of the Ind-AS accounting and componentized the assets which have varying useful life.*

v. *Accordingly, CIAL had set-up a technical committee to arrive at the useful life of the components. Thereafter, the useful life of certain industry specific assets has been adopted based on the AERA specified rates while for the rest of the cases, the rates applicable under Companies Act read with Ind-AS standards were continued/applied. Technical committee report is submitted to AERA as part of the response to queries.*

vi. *Alternatively, AERA may issue useful life of assets in the industry which invariable requires componentization so that consistency is brought between Ind-AS and AERA guidelines.*

vii. *Based on the above, CIAL requests AERA to consider the useful life of Building – False Ceiling, Handrails and Façade Works and Building - Interior, Flooring, roofing and finishing and runway recarpeting as 20 years and 15 years respectively in compliance with Ind-AS standards.*

Useful life of runway recarpeting

viii. *AERA has assumed a notional useful life for original runway which is written off. The original runway is fully depreciated before the issue of the order thus outside the purview of AERA's order.*

ix. *In case AERA is assuming a notional life of original runway then it should also give adequate return to CIAL by including it in RAB and depreciation.*

x. *The current methodology adopted by AERA for determining the useful life of runway recarpeting will fall apart for runway recarpeting undertaken after 2030, when the remaining notional life of existing runway would be nil. CIAL suggests AERA to find out a permanent solution to determine the useful life of runway recarpeting.*

xi. *CIAL is of the view that the runway re-carpeting has to be looked at independently from the life of the original runway.*

xii. *CIAL would suggest AERA that it should delink the useful life of runway and the useful life of runway recarpeting. AERA may specify to the airport operators an useful life for the runway* *recarpeting or provide the independence to the airport operator, subject to the Technical Study, to determine the useful life of runway recarpeting so that such issues will not arise in future."*

Other stakeholders' comments on true up of Depreciation for the Second Control Period:

4.5.16. FIA has submitted that, *"AERA should consider the useful life of Building including Terminal Building as sixty (60) years as envisaged in AERA Order No. 35/2017-18 read with Schedule II of Companies Act 2013, as applicable, and revise the amount of depreciation accordingly".*

4.5.17. FIA also submitted that, *"useful life of assets at various international airports like London Heathrow, Sydney airport and Amsterdam airport indicated that terminal buildings have useful life of as long as 60 years and aprons have it for as long as 99 years. FIA submits that the useful life of terminal building for Kannur and Cochin airports have been considered sixty (60) years by AERA".*

CIAL's counter-comments and response to stakeholder comments regarding true up of Depreciation for the Second Control Period

4.5.18. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the various stakeholder comments with respect to true up of Depreciation for the Second Control Period are presented below.

4.5.19. CIAL has disagreed with FIA's comment to consider the useful life of components of the Terminal Building as 60 years as it is not in line with the Ind-AS as well as the AERA guidelines. CIAL has proposed to AERA to consider the useful life proposed by CIAL for determining the depreciation.

4.5.20. On FIA's comment regarding useful life of assets at various international airports, CIAL has stated that the Indian authorities have set the applicable rates for Indian airports through Companies Act, accounting standards and regulatory orders.

Authority's analysis of stakeholder comments on true up of Depreciation for the Second Control Period

4.5.21. The Authority notes CIAL's comments regarding componentisation of assets. However, Order No. 35/2017-18 regarding determination of useful lives of airport assets does not provide for componentisation of assets. The Authority is of the view that all components like false ceiling should be added to the main asset for capitalisation and the depreciation should be charged for all components together. The Authority is allowing adequate maintenance expenditure to enable the Airport Operator to maintain the assets in good working condition during its entire life. The Authority has issued Order No. 35/2017-18 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 being 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".* In view of this the Authority is not inclined to deviate from ensuring this objective and has therefore decided to retain the revisions made during the consultation stage.

4.5.22. Regarding CIAL's comment on useful live considered for runway re-carpeting, the Authority is of the view that there is no reason to provide additional return on the original runway, as Order No. 35/2017-18 clearly states that *"the carrying amount of the asset as on the date of effect shall be depreciated over the remaining useful life of asset".* In the case of CIAL, since the original runway was fully depreciated before the date of effect of order, no additional depreciation needs be considered on the same. However, since the original runway is retained on the book of accounts at residual value, the asset is deemed to be in active use until 2030 by when the revised life of the asset (as per Order No. 35/2017-18) would expire. Beyond 2030, any runway re-carpeting carried out resulting in a significant increase in PCN value and increase in useful life of runway would require capitalisation by considering the expected durability of the work as its useful life, provided that the same is adequately justified through the necessary technical certifications in this regard. In view of the above, the Authority has decided to retain the treatment followed with respect to useful life of runway re-carpeting during the consultation stage.

4.5.23. The Authority has examined the comments of FIA regarding useful life of terminal building and wishes to highlight that the Authority, after extensive consultation, had issued Order No. 35/2017-18, which specifies useful life of Buildings as either 30 years or 60 years. Further, the Authority has noticed in the Fixed Asset Register of CIAL that they have considered a useful life of 60 years for majority of their Buildings. Wherever CIAL had considered a useful life different from that specified in Order No. 35/2017-18, the Authority had made the necessary revisions in useful lives during the consultation stage. Accordingly, depreciation was recomputed as explained in Section 4.5 and Section 6.2 of Consultation Paper No. 08/2021-22. Therefore, the Authority has decided to not consider any further revisions in this regard.

4.5.24. Based on the above, the Authority has decided to consider Depreciation for true up of Second Control Period consistent with the proposals made in this regard in Consultation Paper No. 08/2021-22 after updating the figures for FY 2021 based on actuals and in line with the principles laid out in the study on allocation of assets between Aeronautical and Non-Aeronautical assets. For FY 2017-20, the Authority has retained the figures considered by it during the consultation stage (refer Table 29). Accordingly, the Depreciation considered by the Authority for true up of Second Control Period is given in the table below.

Table 30: Aeronautical Depreciation considered by the Authority for true up of Second Control Period

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Land	0.0	0.00	0.00	0.00	0.00	**0.00**
Buildings and civil works	4.54	23.11	17.56	20.23	20.77	**86.21**
Golf course development	0.00	0.00	0.00	0.00	0.00	**0.00**
Runway, roads, and culverts	9.99	21.16	23.51	26.68	32.09	**113.43**
Plant and Equipment	12.43	43.74	42.96	51.05	50.72	**200.91**
Office Equipment	0.04	0.11	0.11	0.14	0.15	**0.56**
Computers and accessories	0.88	0.87	0.94	1.09	1.19	**4.97**
Furnitures and fixtures	0.70	0.93	1.56	1.64	1.49	**6.30**
Vehicles	0.46	0.60	0.63	0.86	1.05	**3.60**
Intangible assets	2.76	1.47	1.22	0.54	0.42	**6.43**
Financing Allowance	0.00	0.00	0.00	0.00	0.46	**0.46**
Total Depreciation	**31.80**	**91.99**	**88.49**	**102.24**	**108.35**	**422.88**

4.6. True up of Fair Rate of Return

CIAL's submission of FRoR for the Second Control Period

4.6.1. CIAL submitted its outstanding Equity during the Second Control Period as given in the table below.

Table 31: Outstanding Equity submitted by CIAL for true up of Second Control Period

Particulars (in INR crores)	Formula	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*
Share Capital	A	382.60	382.60	382.60	382.60	382.60
Reserves and Surplus	B	599.80	640.70	692.30	771.80	457.30
Share Premium	C	306.10	306.10	306.10	306.10	306.10
Less: Grant	D	0.00	0.00	0.00	0.00	0.00
Less: Investment in Subsidiaries	E	230.70	230.80	235.10	239.50	239.50
Closing Equity	A+B+C-D-E	1057.70	1098.60	1145.80	1220.90	906.40
Average Equity		**1015.80**	**1078.10**	**1122.20**	**1183.40**	**1063.70**

**Forecasted figures*

4.6.2. CIAL submitted its outstanding debt and cost of debt for true up during the Second Control Period as given in the table below.

Table 32: Outstanding Debt submitted by CIAL for true up of Second Control Period

Particulars (In INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*
Cost of debt (%)	9.63%	9.63%	8.90%	8.50%	7.80%
Total closing Debt	379	488	570	555	749
Average Debt	**264**	**434**	**529**	**562**	**652**

Forecasted figures

4.6.3. CIAL had considered refundable security deposits of INR 150 crores received from the Fuel farm operator as equivalent to debt for calculation of Fair Rate of Return for the Second Control Period.

4.6.4. The FRoR submitted by CIAL for true up for the Second Control Period was as given in the table below.

Table 33: FRoR submitted by CIAL for true up of Second Control Period

Particulars (in INR crores)	Details (%)
Weighted average gearing including SD	36.9%
Share of Equity	63.1%
Weighted Average cost of debt and SD	8.7%
Cost of equity	14.0%
FRoR calculated by CIAL	**12.05%**

Decisions taken by the Authority regarding FRoR as per Tariff Order for the Second Control Period

4.6.5. Relevant decisions taken by the Authority regarding true up of FRoR for the Second Control Period:

- *"To commission a study on Cost of Equity for CIAL and take a view on the same for true up and for the third Control Period (Decision No.10. a. ii)"*
- *"To true up Cost of Debt based on any changes to interest rate and to true up cost of Equity based on the study and Fair rate of return based on changes to the Gearing between Equity and Debt considering actual position for the Control Period, at the time of determination of tariff for the next Control Period (Decision No. 10. a. v)"*

Authority's analysis of FRoR submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.6.6. The Authority compared FRoR proposed by it in the previous Tariff Order and that submitted by the Airport Operator in the current MYTP. The comparison is as given below:

Table 34: Comparison of FRoR submitted by CIAL and as per Second Control Period Tariff Order

Particulars	As Proposed by CIAL (Current MYTP)	As proposed by the Authority (Previous tariff order)
Weighted average gearing	28.20%	39.68%
Weighted Average cost of Debt	8.72%	9.63%
Share of Equity	63.13%	52.50%
Cost of Equity	14.00%	14.00%
Share of Deposit	8.67%	7.83%
Cost of Deposit	8.72%	0.00%
FRoR	**12.05%**	**11.17%**

4.6.7. The Authority observed that there's a significant difference between the Weighted Average Gearing as proposed in the Tariff Order and as submitted by CIAL for the Second Control Period. The Authority compared average equity and average debt as proposed in the Tariff Order for the Second Control Period and as submitted by CIAL in the current MYTP The Authority noted that CIAL had resorted largely to internal cash accrual for capital expansions in the Second Control Period. The comparison is as given in the table below.

Table 35: Comparison of Debt and Equity as per CIAL's submission and as per tariff order for Second Control Period

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*
Equity					
Average Equity as per tariff order for Second Control Period (A)	899.0	941.0	988.0	1055.0	1147.0
Average Equity as per CIAL's submission (B)	1015.8	1078.1	1122.2	1183.4	1063.7
Difference (A-B)	(116.8)	(137.1)	(134.2)	(128.4)	(83.3)
Debt					
Average Debt as per tariff order for Second Control Period (A)	369.0	639.0	775.0	933.0	1086.0
Average Debt as per CIAL's submission (B)	264.0	434.0	529.0	562.0	652.0
Difference (A-B)	105.0	205.0	246.0	370.7	434.0

**Forecasted figures*

4.6.8. The Authority had observed that CIAL had raised three term loans. A term loan of INR 500 Cr. was sanctioned for commissioning of the new international terminal T3. A second loan of INR 120 Cr. was availed during FY 2019 for the renovation of the old international terminal and its conversion into domestic terminal. Another term loan of INR 100 Cr. was tied up with the second loan to meet general capital expenditures for FY 2020. The source of funds submitted by CIAL is given in the table below.

Table 36: Sources of funds submitted by CIAL

Sources of Funds (INR Cr)	FY 2017	FY 2018	FY 2019	FY 2020
Shareholders' Funds				
Share Capital	382.6	382.6	382.6	382.6
Share Premium	306.1	306.1	306.1	306.1
Reserves & Surplus	599.8	640.7	692.3	771.8
Loan Funds	369.7	437.9	506.3	489.1
Other Long-Term Liabilities	236.5	244.8	264.1	257.4
Current Liabilities	305.6	426.8	409.3	418.8
Short-Term Provisions	3.0	6.6	4.9	5.9
Deferred Tax Liability	46.3	72.7	93.5	71.9
Total	**2249.6**	**2518.2**	**2659.1**	**2703.5**

4.6.9. The Authority had considered Cost of Debt on the basis of actual rates of interest and Gearing based on actual position of Equity and Debt during the Second Control Period, both in accordance with the decision taken at the time of Tariff Determination for the Second Control Period.

4.6.10. In the Tariff Order for the Second Control Period, the Authority had decided to commission a study with regards to determination of Cost of Equity and then true up the same in the current Control Period. For the purposes of true-up for the Second Control Period, the Authority had decided to consider the rate of 14% for cost of equity, whereas, for the Third Control Period, the Authority would advise a rate based on the cost of equity study conducted by it.

Refundable security deposit:

4.6.11. At the time of tariff determination for the Second Control Period, the Authority had noted that the matter of considering SD for FRoR is sub-judice. Pending decision from AERAAT, the Authority proposed to not provide any return on SD. However, the Authority had noted the following relevant extracts in the TDSAT order dated April 23, 2018 on the matter of issues raised by DIAL in the First Control Period.

- Page No 114, Para no 105: *"Whether voluntarily or mandatorily, there is no doubt that the RSD amount has been used as an investment in the project and the SSA allows a fair return on the investment which is to be proportionate to the cost of investment"*
- Page no 115, Para no 106: *"At the least, the cost would be the rate of return made available by the approved funds having required ratings of CRISIL"*

4.6.12. With reference to the above, CIAL had considered a rate equivalent to Cost of Debt on SD while calculating FRoR for the Second Control Period. CIAL also clarified that the amount of RSD was obtained by it during the T3 construction and was utilised during the construction. Therefore, the Refundable Security Deposit had allowed CIAL to raise lower amount of debt.

4.6.13. Therefore, in light of the above order and the fact that RSD been utilised by CIAL for the creation of assets, the Authority proposed to consider cost of debt as a return on Refundable Security Deposits of INR 150 crores deposited by the Fuel Farm Operator in line with the judgement given by TDSAAT in the case of DIAL.

4.6.14. Based on its analysis of other Regulatory Building Blocks (changes in capital additions etc.) and its decisions on components of FRoR as discussed above, the Authority proposed FRoR as given in the table below for true up of Second Control Period for CIAL as part of the Consultation Paper.

Table 37: FRoR for the true up of Second Control Period as proposed by the Authority as part of the CP

Particulars (in INR crores)	Details (%)
Weighted average gearing	28.12%
Share of Equity	63.23%
Share of Deposit	8.64%
Weighted Average cost of debt	8.72%
Cost of equity	14.00%
Cost of Deposit	8.72%
FRoR calculated by the Authority	12.06%

Stakeholder comments on true up of FRoR for the Second Control Period

4.6.15. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to true up of FRoR for the Second Control Period. The comments by stakeholders are presented below.

CIAL's comments on true up of FRoR for the Second Control Period:

4.6.16. CIAL has sought a cost of equity of 16% for true up of the Second Control Period, the detailed comments of CIAL in this regard are as follows:

i. "The tariff determination guidelines set by AERA provides a return to investors apart from covering costs pertaining to operating expenditure, depreciation, interest and tax. However, in case of older airports like Cochin, tariff determination before the application of regulatory framework was not lined to the capital investment and other costs.

ii. In fact, the tariffs charged or aeronautical revenues earned by Cochin airport was much lower than what would have been permissible under a generic cost-plus framework as espoused in AERA's tariff guidelines.

iii. During the initial years, the returns to CIAL's investors did not match the expected return to equity because of perpetual low tariffs that have benefited the users. Thus, CIAL deserves a cost of equity of 16% for the losses it has endured in the past.

iv. CIAL has noted that the Authority has proposed 14% cost of equity for CIAL, whereas it has allowed 16% cost of equity for other airports such as Mumbai, Delhi, Bangalore and Hyderabad. ***CIAL strongly objects such discriminatory, prejudiced and unfair treatment given to CIAL.***

v. *Such discrimination is also evident when compared with airports operated by AAI. FRoR allowed for AAI airports is 14% which has no debt and least risk due to sovereign holding whereas the Authority has proposed 14% as cost of equity for CIAL which has used debt for financing development of new international terminal and other capital expenditure. With the cost of equity of 14%, the resultant FRoR for CIAL as per AERA is 12.06% only. Given the nature of ownership of AAI and CIAL, cost of equity for CIAL is bound to be higher than AAI. However, AERA has adopted a lower cost of equity for CIAL.*

vi. *COVID19 pandemic has exposed the vulnerable side of the aviation sector and displayed the enormous risk the travel industry faces in case of such events. COVID19 pandemic has not differentiated between the airports. Its severe impact on the airport financials can be seen not only in the Indian airports but also across the global airports. COVID19 pandemic has increased the risk of the airport sector and it has to be accounted by the Authority accordingly in the cost of equity.*

vii. *The rational by AERA for providing a lower cost of equity to CIAL based on the lower risk profile is flawed and contradicted by AERA's own independent study on cost of equity which has used the same equity premium of 8.06% across all the private airports, which includes CIAL, BIAL, MIAL, DIAL and HIAL.*

viii. *CIAL strongly proposes that all the airport operators should be allowed reasonable return on equity and the cost of equity should be same and fair for all airport operators in India.*

ix. *Different cost of equity for different airport operators also leads to ambiguity and inconsistency for investors at a time when the Government is focusing on increasing the private sector participation in airports development and operations.*

x. *CIAL would point out to AERA that AERA's rational on low volatility of traffic only for CIAL is incorrect as all the Indian private airports have seen similar growth rates in the past. CIAL's domestic and international traffic has plunged 69% and 80% in FY21. FY21 is part of the second control period and AERA should consider the traffic volatility while accessing the traffic risk for the second control period. Share of international traffic in total traffic at CIAL is the highest among the private airport operators at approximately 50%. COVID-19 pandemic has affected the international traffic more severely than the domestic traffic further compounded by longer recovery of the international travel to the pre-COVID levels. With lower international traffic for the medium term, COVID-19 pandemic impact on CIAL's financials is significantly higher in comparison to other private airports which entails a higher risk profile.*

xi. *Apart from traffic risk, CIAL faces operational risk from the natural calamities like flood which resulted in closure of the airport for 15 days and new airports (Kannur) commissioning within and outside the state.*

xii. *CIAL has submitted its bonafide forecast during the second control period which is evident from the fact that CIAL has shortfall in the true-up of the second control period due to the impact of COVID19 pandemic on FY21 financials. CIAL noted that all the other private operators have an over-recovery at the end of the second control period which gives them with a cushion to face the current pandemic. However, CIAL's shortfall during the second control period puts it in dire financial state with an uncertain future and further increases its risk profile in comparison to the other airport operators.*

xiii. *CIAL requests AERA's support in acknowledging the higher risk faced by CIAL in comparison to other private airports.*

xiv. *Given the above facts the rate of return offered to CIAL of 14% is unfair and not commensurate with the associated risks and the complex ground realities.*

xv. *CIAL is seeking AERA for a non-discriminatory treatment on allowing consistent cost of equity of 16% for true-up of the second control period let alone the higher cost of equity it deserves on account of its higher risk profile."*

Other stakeholders' comments on true up of FRoR for the Second Control Period:

4.6.17. FIA has submitted that AERA should not provide any return on Refundable Security Deposit as the matter on FRoR on RSD is presently sub-judice.

CIAL's counter-comments and response to stakeholder comments regarding true up of FRoR for the Second Control Period

4.6.18. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the various stakeholder comments with respect to true up of FRoR for the Second Control Period are presented below.

4.6.19. CIAL disagreed with FIA's comment on the return on RSD. CIAL stated that the TDSAT order has adjudged that some return on the RSD needs to be given. Therefore, AERA has correctly allowed some return on the RSD. CIAL proposed to AERA to consider 16% return as return on RSD.

Authority's analysis of stakeholder comments on true up of FRoR for the Second Control Period

4.6.20. The Authority has noted CIAL's comments regarding cost of equity for the Second Control Period. However, it would not be prudent to compare CIAL with other private airport operators like DIAL and HIAL which have started operations more recently as compared to CIAL. The Authority had noted at the time of determining tariffs for the Second Control Period that it is reasonable to presume that newer companies would have a greater risk when compared to a well-established, investment-light and dividend paying airport like Cochin International Airport. This is also evident from the high contribution of equity (around 63% in Second Control Period) in capital investments at Cochin Airport.

4.6.21. CIAL's rationale, that it deserves a higher cost of equity to compensate for losses endured in the past, is flawed, as the cost of equity should ideally reflect the current and potential future risk exposure of the business and should not be used as a means to recover unrealised gains of past periods. The Airport Operator has earned consistent profit and declared dividend which implies a lower risk. Moreover, the capital structure of CIAL is not cost efficient and is highly equity leveraged.

4.6.22. In view of the above the Authority finds the cost of equity of 14% as determined by it for CIAL, during determination of tariffs for the Second Control Period, to be reasonable and has therefore decided to not consider any revisions from the proposals made in this regard at the consultation stage.

4.6.23. Regarding FIA's comment on return on RSD, the Authority wishes to highlight that it had made its proposal regarding the same in light of the TDSAT order dated 23rd April 2018 in the case of DIAL. Since there has been no further developments or directives in this regard, the Authority sees no reason to deviate from the stance taken during the consultation stage. On the counter-comment of CIAL wherein CIAL has proposed a 16% return on the RSD, the Authority would like to state that CIAL can consider investing the funds pertaining to RSD elsewhere and not utilise it for capital expenditure related to the airport, if CIAL is of the view that it is not getting the adequate return on RSD.

4.6.24. Given the unique nature of each airport, the Authority has started carrying out detailed independent study in this regard for determining cost of equity, effective Third Control Period.

4.6.25. Based on the above, the Authority has decided to consider a cost of equity of 14% for the Second Control Period and a return on RSD equivalent to cost of debt consistent with its proposal in Consultation Paper No. 08/2021-22. The Authority has revised the gearing ratio for FY 2021 based on actuals as against projections considered at the consultation stage. Accordingly, the FRoR for true up of the Second Control Period as considered by the Authority is given in the table below.

Table 38: FRoR considered by the Authority for true up of Second Control Period

Particulars (in INR crores)	Details (%)
Weighted average gearing	27.28%
Share of Equity	64.03%
Share of Deposit	8.69%
Weighted Average cost of debt	8.76%
Cost of equity	14.00%
Cost of Deposit	8.7%
FRoR calculated by the Authority	12.11%

4.7. True up of Return on Land

CIAL's submission on Return on Land for the Second Control Period

4.7.1. CIAL had submitted return on cost of land during the Second Control Period as given below.

Table 39: Return on land for the Second Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Land Cost	125.00	125.00	125.00	125.00	125.00	
Aero Ratio (%)	89.60%	89.60%	89.60%	89.60%	89.60%	
Aero Land	112.10	112.10	112.10	112.10	112.10	
Actual cost of debt (%)	9.63%	9.63%	8.90%	8.50%	7.80%	
SBI Rate + 2%	>11.00%	. >10.50%	>10.50%	>10%	>9%	
Rate for calculation of return on land cost	9.63%	9.63%	8.90%	8.50%	7.80%	
Return on land cost	**11.5**	**11.5**	**10.80**	**10.40**	**9.80**	**54.05**

**Forecasted figures*

Decisions taken by the Authority regarding Return on Land as per Tariff Order for the Second Control Period

4.7.2. At the time of tariff determination for Cochin Airport during the Second Control Period, The Authority had decided the following:

- *"A study will be conducted on manner of providing return on land investment and the Authority will decide based on the same, which will then be applied to CIAL also"* (Para 10.6.2)
- *"To not consider Land as part of RAB for computing return, as detailed in Para 10.6.2 above, pending study to be conducted (Decision No. 5. a. i)"*

Authority's analysis of Return on Land submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.7.3. The Authority noted that in Order No.42/2018-19 dated 05th March 2019 regarding determination of Fair Rate of Return to be provided on cost of land, the Authority after deciding on the manner in which return would be provided on Land also decided thus, *"This Order of the Authority will take effect from the next Control Period (Decision No. 4.1.8)"*. In the case of CIAL, the next control period as stated in the order is the Third Control Period starting from FY 2022.

4.7.4. The Authority thus proposed to provide return on land cost to CIAL during the Third Control Period and to not consider it for true up of the Second Control Period.

4.7.5. Return on Land for true up of Second Control Period as proposed by the Authority during the consultation stage was as given in the table below.

Table 40: Return on Land as proposed by the Authority for the Second Control Period as part of the CP

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Return on cost of Land	0.00	0.00	0.00	0.00	0.00	0.00

Stakeholder comments on true up of Return on Land for the Second Control Period

4.7.6. There were no stakeholder comments with respect to true up of Return on Land for the Second Control Period.

Authority's analysis of stakeholder comments on true up of Return on Land for the Second Control Period

4.7.7. No stakeholder comments were received regarding true up of Return on Land for the Second Control Period. In this regard, the Authority has decided to not provide any return on the cost of land for the Second Control Period as proposed in Consultation Paper No. 08/2021-22.

4.8. True up of Operating Expenses

CIAL's submission on Operations and Maintenance expenses for the Second Control Period

4.8.1. The basis for allocation of O&M expenses as submitted by CIAL were as given below:

- **Employee costs**: Employees were bifurcated into Aeronautical, Non-Aeronautical and Common. In accordance with Authority's decision in the Previous Tariff Order common employees like those in MD's office, Finance and HR Department have further been bifurcated into Aeronautical and Non-Aeronautical employees. Total employee cost was segregated into Aeronautical and Non-Aeronautical in the respective proportion of their numbers.
- **Admin and General expenses**: Loss on sale of assets due to flood was bifurcated into Aeronautical and Non-Aeronautical based on the ratio of Aeronautical gross block to total gross block. Flood mitigation expenses were considered as 100% Aeronautical in nature. Remaining Admin and General expenses were allocated as Aeronautical in the ratio of number of employees providing Aeronautical and Non-Aeronautical services.
- **Utilities cost**: The power, water and fuel generator set costs were considered as net of utility service charges from concessionaires. The net cost thus obtained was considered as 100% Aeronautical.
- **Repairs and Maintenance expense**: Repairs and Maintenance cost was bifurcated into Aeronautical and Non-Aeronautical based on the ratio approved by the Authority in the previous tariff order.
- **Other operational expenses:** Other operational expenses were bifurcated in the ratio of employees providing Aeronautical and Non-Aeronautical services as per the Tariff Order for the Second Control Period.
- **CUTE operational expenses:** CUTE operational expenses were considered as 100% Aeronautical.

4.8.2. CIAL had submitted Aeronautical allocation of operations and maintenance expense as given in the table below.

Table 41: Aeronautical allocation of O&M expenses for true up of the Second Control Period as submitted by CIAL

Particulars	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Employee costs	95.3%	95.4%	95.7%	96.0%	96.1%
Total Repairs cost	85.4%	85.4%	85.4%	85.4%	85.4%
Safety and security expense	95.3%	95.4%	95.7%	96.0%	96.1%

Utility charges	100.0%	100.0%	100.0%	100.0%	100.0%
Vehicle R&M expenses	95.3%	95.4%	95.7%	96.0%	96.1%
Housekeeping expenses	95.3%	95.4%	95.7%	96.0%	96.1%
Consumables	95.3%	95.4%	95.7%	96.0%	96.1%
Other operational expenses	95.3%	95.4%	95.7%	96.0%	96.1%
CUTE operational expenses	100.0%	100.0%	100.0%	100.0%	100.0%
Admin related expense except flood related costs and flood mitigation expenses	95.3%	95.3%	95.3%	95.3%	95.3%
Net amount of loss on sale of assets related to floods and flood related expenses	85.2%	85.1%	86.0%	86.3%	87.7%
Flood mitigation expenses	100.0%	100.0%	100.0%	100.0%	100.0%

4.8.3. Aeronautical O&M expenses, as submitted by CIAL for the Second Control Period, were as given in the table below.

Table 42: Aeronautical Operational and Maintenance expenses submitted by CIAL for true up of Second Control Period

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Payment to Employees	50.44	54.92	76.70	75.13	79.31	**336.49**
Repairs and Maintenance	15.18	19.35	20.81	25.22	20.18	**100.73**
Utility costs	17.03	26.31	27.78	31.25	23.45	**125.83**
Safety and Security expenses	3.76	6.42	8.21	8.45	6.77	**33.60**
Vehicle Repairs and Maintenance	0.85	0.87	1.38	0.94	0.57	**4.61**
Housekeeping expenses	6.95	9.52	9.82	11.13	10.03	**47.45**
Consumables	1.95	3.16	3.19	3.65	3.65	**15.60**
Other operational expenses	6.88	7.93	7.07	7.30	7.31	**36.49**
CUTE operational expenses	1.03	2.07	4.48	5.30	6.15	**19.03**
Admin and General expense	22.17	13.09	25.96	35.22	28.50	**124.93**
Total O&M expenses	**126.24**	**143.63**	**185.41**	**203.58**	**185.91**	**844.78**

Decisions taken by the Authority regarding O&M expenses as per Tariff Order for the Second Control Period

4.8.4. The Authority had, at the time of tariff determination for the Second Control Period taken the following decision regarding operations and maintenance expenditure:

- *"To true up the operations and maintenance expenditure for the current Control Period, at the time of determination of tariff for the next Control Period (Decision No.8.a.iii)"*

4.8.5. Aeronautical allocation of O&M expenses approved by the Authority as per Tariff Order for the Second control were as given in the table below.

Table 43: Aeronautical allocation of O&M expenses as per tariff order for Second Control Period

Particulars	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Employee costs	82.00%	92.50%	92.50%	92.50%	92.50%
Total Repairs cost	85.36%	85.36%	85.36%	85.36%	85.36%
Safety and security expense	82.00%	92.50%	92.50%	92.50%	92.50%
Utility charges	100.00%	100.00%	100.00%	100.00%	100.00%
Vehicle R&M expenses	82.00%	92.50%	92.50%	92.50%	92.50%
Housekeeping expenses	82.00%	92.50%	92.50%	92.50%	92.50%
Consumables	82.00%	92.50%	92.50%	92.50%	92.50%
Other operational expenses	82.00%	92.50%	92.50%	92.50%	92.50%
CUTE operational expenses	100.00%	100.00%	100.00%	100.00%	100.00%
Admin expenses	82.00%	92.50%	92.50%	92.50%	92.50%

4.8.6. Aeronautical O&M expenses as per Second Control Period Tariff Order were as given in the table below.

Table 44: Aeronautical O&M expenses as per tariff order for Second Control Period

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Payment to Employees	58.79	70.96	75.93	81.25	86.93	**373.86**
Repairs and Maintenance	17.89	21.97	27.23	33.32	37.54	**137.95**
Utility costs	26.05	39.35	43.83	48.25	53.14	**210.62**
Safety and Security expenses	4.04	6.44	6.84	7.26	7.70	**32.28**
Vehicle Running expenses	0.71	0.81	0.81	0.82	0.82	**3.97**
Housekeeping expenses	9.86	17.83	19.39	21.10	22.96	**91.14**
Consumables	2.71	5.22	5.47	5.73	6.00	**25.13**
Miscellaneous expenses	12.06	16.17	19.22	22.85	27.16	**97.46**
CUTE operational expenses	3.75	3.75	3.75	3.75	3.75	**18.75**
Admin and General expense	12.46	15.11	16.52	17.92	19.88	**81.89**
Total O&M expenses	**148.32**	**197.60**	**218.99**	**242.24**	**265.89**	**1073.04**

Authority's analysis O&M expenses submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.8.7. The Authority had validated the actual numbers submitted by CIAL against the audited financial reports for FY 17-20.

4.8.8. In order to examine the issues in the allocation of operating expenses as Aeronautical and Non-Aeronautical, the Authority had decided to conduct a study on efficient O&M expenses for CIAL. In addition to examination of allocation of expenses, the study also included the examination of the baseline operating levels and benchmarking of O&M expenses incurred by the Airport Operator during the Second Control Period. The Authority proposed to consider the recommendations of study on efficient O&M expenses for CIAL for the true up of the Second Control Period (summary of the study is given in Annexure 3, the detailed report is available along with the Tariff Order on the AERA website).

4.8.9. The study had allocated O&M expenses into Aeronautical, Non-Aeronautical and Common based on the following principles

- **Aeronautical costs:** Expenses which are incurred for operation and maintenance of Aeronautical assets were categorised as Aeronautical costs
- **Non-Aeronautical costs:** Expenses which are incurred for operation and maintenance of Non-Aeronautical assets were categorised as Non-Aeronautical costs
- **Common costs:** Costs for which the benefits or use cannot be exclusively linked to either Aeronautical or Non-Aeronautical were segregated as Common costs

4.8.10. The basis for aeronautical allocation of O&M expenses as submitted by CIAL and as proposed by the study on efficient O&M expenses for CIAL were as given below.

Table 45: Comparison of basis for allocation as submitted by CIAL and as proposed by the study

Item	Basis according to CIAL	Basis according to the study
Employee costs	Employees were bifurcated into Aeronautical, Non-Aeronautical and Common. Common employees were further bifurcated in the proportion of Aeronautical and Non-Aeronautical employees. Total employee costs were then bifurcated into Aero and Non-Aero in the respective proportion of their numbers.	Same as according to CIAL.

Item	Basis according to CIAL	Basis according to the study
Total Repairs cost	Repairs and maintenance expenses were bifurcated based on the ratio approved by the Authority in the Tariff Order.	Bifurcated based on revised ratio of Aeronautical Gross Block to Total Gross Block.
Safety and security expenses	Safety and security expenses were bifurcated in proportion of number of employees providing Aeronautical and Non-Aeronautical services.	As the security expenses are incurred for the whole of Terminal building and the Airport, the same were bifurcated using the terminal allocation ratio.
Utilities cost	Utilities costs were considered as net of revenues from concessionaires and the net amount so obtained were considered as 100% Aeronautical.	Same as according to CIAL.
Vehicle running and maintenance expenses	Vehicle running and maintenance expenditure were bifurcated in the proportion of number of employees providing Aeronautical and Non-Aeronautical services.	Same as according to CIAL.
Housekeeping expenses	Housekeeping expenses were bifurcated in the proportion of number of employees providing Aeronautical and Non-Aeronautical services.	As the housekeeping expenses are incurred for the upkeep and cleanliness of the Terminal building and the areas surrounding them, the same were bifurcated using the terminal allocation ratio.
Consumables expenses	Consumables expenses were bifurcated in the proportion of number of employees providing Aeronautical and Non-Aeronautical services.	As the consumables are used across the Terminal building by employees and passengers alike, consumable expenses were bifurcated using the terminal allocation ratio.
CUTE operational expenses	CUTE operational expenses were considered as 100% Aeronautical.	Same as according to CIAL.
Other operational expenses	Other operational expenses were segregated in the proportion of employees providing Aeronautical and Non-Aeronautical services.	As the other operational expenses pertains to the overall Airport operations, the same were bifurcated using the terminal allocation ratio.
Administrative and general expenses	All admin and general expenses except flood related expenses were segregated in the proportion of employees providing Aeronautical and Non-Aeronautical services. Flood mitigation expenses were considered as 100% Aeronautical while loss on sale of assets due to flood were bifurcated in the ratio of aero gross block to total gross block.	Components of Admin and general expenses related to Terminal building were segregated using the terminal allocation ratio, those related to employees were segregated in the employee ratio and the remaining in the ratio of average aeronautical assets to total assets. Flood mitigation expenses were found to be incurred outside the airport area and were excluded from O&M expenses.

4.8.11. Based on the study on efficient O&M expenses for CIAL, the authority proposed the Aeronautical allocation percentage of various O&M heads as given in the table below.

Table 46: Aeronautical allocation of O&M expenses proposed by the Authority as part of the Consultation Paper

Particulars	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Employee costs	95.32%	95.36%	95.70%	96.01%	96.13%
Total Repairs cost	83.64%	83.35%	84.30%	84.58%	85.82%
Safety and security expense	91.06%	91.06%	91.06%	91.06%	91.06%

Utility charges	100.00%	100.00%	100.00%	100.00%	100.00%
Vehicle R&M expenses	95.32%	95.36%	95.70%	96.01%	96.13%
Housekeeping expenses	91.06%	91.06%	91.06%	91.06%	91.06%
Consumables	91.06%	91.06%	91.06%	91.06%	91.06%
Other operational expenses	91.06%	91.06%	91.06%	91.06%	91.06%
CUTE operational expenses	100.00%	100.00%	100.00%	100.00%	100.00%
Admin expenses	90.68%	88.91%	90.12%	89.45%	89.71%

4.8.12. The study on efficient O&M expenses for CIAL compared O&M expenses under various heads as submitted by CIAL for true up, for the entire duration of Second Control Period and separately for the period FY 2017 to 2020 with the expenses approved by the Authority as per Tariff Order for the Second Control Period. The period FY 2017 – FY 2020 was studied separately, in order to remove the negative impact caused by COVID-19 pandemic from the analysis. The comparison is given in the table below.

Table 47: Comparison of O&M expenses submitted by CIAL for Second Control Period true up and as approved by the Authority in the Second Control Period Tariff Order

Particulars	FY 2017 – FY 2020[6]		Second Control Period (FY 2017 – FY 2021)	
	Approved by the Authority	As per CIAL for true up	Approved by the Authority	As per CIAL for true up
Payment to Employees	286.93	257.19	373.86	336.49
Administrative Expenses	62.01	96.44	81.89	124.93
Repairs costs	100.41	80.56	137.95	100.73
Safety & Security costs	24.58	26.84	32.28	33.60
Power, Water and Fuel	157.48	102.37	210.62	125.83
Vehicle R&M costs	3.15	4.04	3.97	4.61
Housekeeping expense	68.18	37.42	91.14	47.45
Consumables	19.13	11.95	25.13	15.60
Other Operational	70.30	29.18	97.46	36.49
CUTE expenses	15.00	12.88	18.75	19.03
Total	**807.15**	**658.86**	**1073.04**	**844.78**

4.8.13. As seen from the comparison done in the study on efficient O&M expenses for CIAL, the actual costs incurred during the period FY 2017 were lower than those approved by the Authority in the Tariff order. Certain expenses like Admin and General, Safety and Security expenses and Vehicle Running and maintenance were higher than those approved by the Authority. The Authority noted that these increases were due to flood related expenses and additional requirements post completion of new International Terminal. However, at an aggregate level, the actual costs during FY 2017 – FY 2020 were lower than those approved by the Authority.

4.8.14. The Authority had made the following observations regarding CIAL's submission of O&M expenses under various heads for the Second Control Period.

Employee Costs

4.8.15. The growth rates in employee costs, during the Second Control Period as submitted by CIAL and as proposed by the Authority in the tariff order, were as given in the table below.

Table 48: Growth rate in employee costs as submitted by CIAL and as proposed by the Authority in the tariff order

Aero Employee cost	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
As per CIAL	(2)%	9%	39%	(2)%	5%
As per tariff order	25%	7%	7%	7%	7%

[6] The figures for FY 2017 to 2020 have been compared separately since the expenses are as per the audited financial statements whereas the figures for FY 2021 are forecasted numbers

4.8.16. In the previous tariff order, The Authority had allowed a 25% increase in employee costs in FY 2017 owing to CIAL's submission regarding salary revision for both the staff and officers cadre employees (CIAL had submitted for an increase of 50%). In the current MYTP, CIAL had submitted that the pay revision was done in FY 2019, as a result of which there was a high growth in actual employee costs in FY 2019 (39%).

4.8.17. The Authority sought clarifications from CIAL regarding consideration of departments like Electrical Engineering and Civil engineering as Aeronautical and not as Common. The Authority asked CIAL to confirm if the services of these departments are availed by Non-Aeronautical service providers. CIAL responded that these departments are completely engaged for Aeronautical activities and that the concessionaires can't avail services from these departments.

4.8.18. The Authority noted that the number of employees in FY 2021 had increased to 496 from 482 in FY 2020. The Authority sought clarification from CIAL regarding the increase in number of employees considering the slowdown due to the COVID-19 pandemic. CIAL responded that the requirement of additional employees was determined during the pre-COVID period and the recruitment process had begun before the start of the crisis. CIAL had further added that it hadn't retrenched any workers after the crisis hit.

4.8.19. The Authority had gone through CIAL's initial submission related to employee expenses and the clarifications provided afterwards and had noted that the employee expenses submitted by CIAL were lower than that proposed by the Authority in the Second Control Period Tariff Order. Based on its analysis of employee expenses as detailed above, the Authority proposed to consider employee expenses as submitted by CIAL for true up of Second Control Period.

Repairs and Maintenance

4.8.20. The Authority observed that CIAL had considered a COVID-19 reduction factor of 20% on repairs cost for FY 2021 and sought clarification from CIAL regarding the basis for such an assumption. CIAL responded that the reduction factor was calculated based on the expenses incurred during April 2020 to Sept 2020.

4.8.21. The Authority noted that CIAL had submitted R&M expenses at actuals for FY 2017 to FY 2020. For FY 2021, the Authority had studied CIAL's assumptions regarding R&M expenses as a percentage of Gross Block, Growth Factor etc. in detail. The Authority also noted that the Aeronautical allocation of R&M expenses submitted by CIAL was in line with the proposal made by the Authority in the Second Control Period. Accordingly, the Authority proposed to revise the R&M expenses as explained in the study on efficient O&M expenses for CIAL, based on the recomputed Aeronautical Gross Block ratio as per the study on allocation of assets between aeronautical and non-aeronautical assets (summary of the Study is provided in Annexure 2 of this Tariff Order, the detailed report is available along with the Tariff Order on the AERA website).

Utilities Costs

4.8.22. The Authority noted that CIAL had estimated utilities consumption for FY 2021 in line with the passenger traffic growth rate. Hence, the Authority proposed to consider the same as per CIAL's submission. The Authority had also studied the Power Purchase Agreement with CIAL Infra in detail and understood that the unit power charges from CIAL Infra is in line with the PPA.

4.8.23. The Authority noted that the Utility service charges for FY 2020 was 17.2% of utility costs during the same year and an average of 19% during FY 2017 to FY 2020, while CIAL had forecasted utility service charges for FY 2021 as 10% of utilities cost. The Authority sought clarifications regarding this, to which CIAL responded that the ratio was reduced to account for the closing of businesses by concessionaires due to the impact of COVID-19 and that the actual charges during April-September 2020 was 7.4% of utility costs during the same period, which was lower than the original assumption of 10%.

4.8.24. The Authority noted that CIAL had considered Utilities costs (Power, Water and Fuel Generator sets) as net of revenue from concessionaires. The costs thus obtained were considered as Aeronautical, in line with the decision taken by the Authority in the Second Control Period Tariff Order. The Authority, on the basis of CIAL's submissions and its analysis of the same, proposed to consider Utilities Cost as submitted by CIAL for the Second Control Period.

Safety and Security expenses

4.8.25. The Authority noted that the safety and security expenses during FY 2018 had increased by 71% while the CAGR during the period FY 2012 - FY 2017 was 10%. The Authority sought clarifications from CIAL in this regard and CIAL responded that the increase was due to additional requirements after commissioning of international terminal T3.

4.8.26. The Authority proposed to consider Aeronautical Allocation of Safety and Security expenses as per the study regarding efficient O&M costs and recompute Aeronautical Safety and Security expenses for the Second Control Period.

Housekeeping expenses

4.8.27. The Authority noted that the housekeeping expenses during FY2018 had increased by 37% while the CAGR during FY 2012 – FY 2017 was 19%. The Authority sought clarifications from CIAL in this regard and CIAL responded that the increase was due to additional requirements after the commissioning of the new international terminal T3.

4.8.28. The Authority proposed to consider Aeronautical allocation of Housekeeping expenses as per the study on efficient O&M costs for CIAL and recompute the same for the Second Control Period.

Admin and General expenses

4.8.29. Admin and General expenses consider various miscellaneous expenses including flood mitigation expenses. During the site visit, it was observed that certain flood mitigation measures were carried out outside the airport premises, on public land. The Authority asked CIAL to provide a detailed breakup of flood mitigation expenses for the Second Control Period.

4.8.30. Since these measures benefit the general public in the adjoining areas of the airport that include farmlands and households, the responsibility of these measures could not be entirely attributed to the Airport Operator. Based on the break-up of flood mitigation expenses provided by CIAL, the Authority proposed to consider only the expenses incurred within the airport area for ARR calculations.

4.8.31. The Authority noted that different COVID-19 reduction factors were used for items like printing and stationery and repairs to office equipment (15% for repairs to office equipment and 50% for printing and stationery). The Authority sought clarifications from CIAL in this regard and CIAL responded that the reduction factors were estimated based on internal assessment of these expenses. The Authority proposed to revise Admin and General expenses based on the changes discussed above and the revised allocation based on the study conducted regarding efficient O&M costs for CIAL.

4.8.32. CIAL had excluded the Provision for Doubtful Debt from Aeronautical O&M expenses in its MYTP submission. However, it was noticed that the figures of the preceding year were deducted from the O&M expenses instead of deducting the Provision for Doubtful Debt figures of the same year. In the study on efficient O&M expenses for CIAL, this error was rectified, and the Admin and General expenses were adjusted accordingly.

Working Capital Interest:

4.8.33. The Authority had noted that CIAL had not included working capital interest under O&M expenses and instead had considered it separately in its computation of ARR.

4.8.34. The Authority sought clarification regarding the working capital needs of CIAL and its source of funds in this regard. CIAL responded that working capital is required to meet short-term cash requirements for expenses like payment of salaries and preventive maintenance etc. CIAL further added that working capital was required for payment of dividends as well and that working capital is financed in the form of overdraft facilities from banks. However, CIAL had considered the entire interest on working capital as an Aeronautical expense.

4.8.35. Working capital requirements cannot be purely attributed to the aeronautical activities at the airport. Since this is a general corporate requirement the Authority proposed to bifurcate the working capital interest expenses using the gross fixed asset ratio and consider the same as part of operational expenses for true up of the Second Control Period.

4.8.36. Based on its analysis of CIAL's submissions, the decisions taken in the Second Control Period tariff order and the proposals made by the study for determination of efficient O&M expenses for CIAL (summary of the study is given in Annexure 3, the detailed report is available along with the Tariff Order on the AERA website), the Authority proposed the following operations and maintenance expenditure for true up during the Second Control Period.

Table 49: Aeronautical O&M expenses as proposed by the Authority for true up of Second Control Period in the CP

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Payment to Employees	50.44	54.92	76.70	75.13	79.31	**336.49**
Repairs and Maintenance	14.87	18.89	20.55	24.99	20.28	**99.58**
Utility costs	17.03	26.31	27.78	31.25	23.45	**125.83**
Safety and Security expenses	3.59	6.13	7.81	8.02	6.41	**31.96**
Vehicle Repairs and Maintenance	0.85	0.87	1.38	0.94	0.57	**4.61**
Housekeeping expenses	6.64	9.09	9.35	10.56	9.50	**45.13**
Consumables	1.87	3.01	3.03	3.46	3.46	**14.83**
Other operational expenses	6.58	7.57	6.73	6.92	6.92	**34.72**
CUTE operational expenses	1.03	2.07	4.48	5.30	6.15	**19.03**
Admin and General expense	19.36	12.98	25.53	20.01	15.72	**93.60**
Working Capital Interest	0.16	0.87	0.29	1.61	4.28	**7.21**
Total O&M expenses	**122.41**	**142.71**	**183.63**	**188.19**	**176.06**	**812.99**

**Forecasted figures*

Stakeholder comments on true up of Operating Expenses for the Second Control Period

4.8.37. Subsequent to the stakeholder consultation process, the Authority received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to true up of Operating Expenses for the Second Control Period. The comments by stakeholders are presented below.

CIAL's comments on true up of Operating Expenses for the Second Control Period:

4.8.38. CIAL requested for the entire flood mitigation expenses incurred to be included under aeronautical operational expenses irrespective of location, stating that these are integral for the airport's preparedness. The detailed comments of CIAL are as follows:

i. *"CIAL has noted that AERA has excluded flood mitigation expenses of INR 23.54 cr. in the second control period and INR 11.49 cr. in the third control period from the aeronautical operational expenditure. Further, AERA has excluded the regulator cum bridge of INR 41.73 cr. from the aeronautical capital expenditure of CIAL.*

ii. *CIAL notes that AERA has acknowledged the necessity of the flood control measures which are essential for the business continuity during heavy rains. However, AERA has excluded the flood related works undertaken by CIAL outside the boundary of the airport.*

iii. *To set the context and highlight the gravity of the situation, CIAL has reproduced the paragraph from the KITCO report on the havoc caused by Aug, 2018 floods:*
"The compound walls of the airport collapsed at several locations. The runways were all flooded and water even entered into the Terminal Buildings. It was an alarming situation for the airport and the adjoining areas."

iv. *Photo of Cochin Airport of Aug, 2018 during floods is given below:*

v. *CIAL is situated within the river basin of Periyar and shares the boundary with the Chengalthodu, a branch of Periyar. KITCO report highlights that during the construction of the airport, the course of Chengalthodu was broken with 5 km in the upstream at north and 17 km in the downstream at south. Thus, the canal in place was diverted for construction of the airport and alternate drainage facility was required. The government had even directed CIAL to construct the diversion canal at the cost of CIAL which could not be undertaken till date for lack of funds.*

vi. *Due to repeated floods during the last few years, it has become imperative for the airport operator to complete/rejuvenate the diversion canal to the adequate capacity level. It could be seen that basically flood related works are nothing but a postponed expenditure forming part of original runway construction and creation of proper drainage system for storm water and flood waters.*

vii. *KITCO report has thus suggested the flood control measures which among other things includes altering of course to the established flow of water of Chengalthodu, so that the airport area is least impacted. Since the Chengalthodu's course lies outside the airport boundary, KITCO study has proposed the flood control works outside the airport area.*

viii. *As part of the flood related measures, after the canal is widened but naturally the corresponding bridge also has to be widened. Some of the bridges proposed by CIAL have one end within the airport boundary while the other end is outside the airport boundary.*

ix. *CIAL wants to clarify to AERA that it cannot safeguard itself by completing the flood related projects falling within the airport boundary. The flood related projects recommended by KITCO report are based on facts and detailed technical study. Projects outside and inside the airport are interdependent and integral for the airport's preparedness for the heavy rains and flood related matters cannot be looked from the narrow perspective of the land boundaries. CIAL requests AERA to appreciate the requirement of the flood related measures in its entirety.*

x. *CIAL's board had decided to undertake the flood related projects outside its airport boundary with the sole purpose of ensuring the safety of the airport and its airport users. The benefit to the adjoining communities is only incidental.*

xi. *All the stakeholders of the airport – passengers, airlines, ground handlers, fuel suppliers, including the surrounding communities have suffered during the floods of August, 2018. Airplanes were submerged in water, ground handler's equipment were damaged and passengers were* *inconvenienced due to these floods. Airport operator has faced losses however the aggregate losses incurred by all the stakeholders is much more.*

xii. *After the events of Aug 2018, all the stakeholders including the public institution had pitched to CIAL for urgent action to mitigate such future events.*

xiii. *Based on AERA's proposal, if CIAL suspends the flood related projects outside the airport boundary, the airport and its users (passengers, airlines, ground handlers, etc.) are bound to suffer severely during the heavy spell of rains. CIAL wants to take the liberty to ask AERA whether it is willing to compensate the loss of assets of airport, loss to airline community, losses to the passengers and higher insurance costs of the aviation stakeholders during the floods.*

xiv. *CIAL feels that AERA has missed to visualize the bigger picture and the proposal of AERA to disallow the essential flood related costs is unreasonable. The flood control measures are a one-time expense undertaken by CIAL for the benefit of the entire airport users. These costs are much lower that the anticipated losses from the floods/heavy rains of the future.*

xv. *CIAL wants to impress upon AERA that Cochin Airport is a public use asset whose safeguards are of utmost importance during the disaster situation like floods/heavy rains to carry out the rescue operations as well as supply of emergency kits. The limited view adopted by AERA in the Consultation Paper on mitigating the disaster situation like floods is not in favour of the airport users and the airport operator.*

xvi. *CIAL has also noted that AERA, as part of its Order no. 57/2020-21, has allowed the capital expenditure proposed by IGIA, Delhi for the construction of the Shiv Murthy Underpass which is outside the premises of Delhi Airport based on the need for the airport and its users. Based on the previous precedence, AERA can also allow the cost of flood control measures for CIAL.*

xvii. *CIAL requests AERA's support to mitigate the future floods by approving the operational expenses on flood mitigation expenses of INR 23.54 cr. in the second control period and INR 11.49 cr. in the third control period and the capital expenditure on regulator cum bridge of INR 41.73 cr."*

4.8.39. CIAL requested the Authority to allow CSR expenses in the aeronautical operation al expenditure for the true-up of the Second Control Period, the comments of CIAL in this regard are as follows:

i. *"As per TDSAT judgement dated 16 December 2020 for BIAL, CSR expenses are allowed as part of aeronautical operational expenditure. Below is the excerpt from the TDSAT judgement: "The decision of the Authority to not allow CSR expenditure as a cost of the Airport Operator is not proper and is set aside. The Authority shall pass consequential orders so as to prevent loss of or reduction in the determined fair return to the equity holders. Necessary truing-up exercise shall be done accordingly. (Para 81)"*

ii. *CIAL has noted that in the recent consultation paper for Hyderabad Airport and Bangalore Airport have allowed the CSR expenses as part of the aeronautical operational expenditure.*

iii. *CIAL's requests AERA to maintain consistency in approach and allow the CSR expenses in the aeronautical operational expenditure for the true-up of the second control period and for the computation of ARR for the third control period.*

iv. *CSR expenses of CIAL for the second control period are given in the table below:*

Year	***2017***	***2018***	***2019***	***2020***	***2021***	***Total***
CSR expenses (INR cr.)	*4.00*	*5.89*	*10.00*	*5.43*	*4.99*	***30.31***

v. *CSR expenses of CIAL for the third control period as per CIAL's MYTP submission are given in the table below":*

Year	*2022*	*2023*	*2024*	*2025*	*2026*	*Total*
CSR expenses (INR cr.)	*1.89*	*1.17*	*2.68*	*8.52*	*12.89*	***27.14***

Other stakeholders' comments on true up of Operating Expenses for the Second Control Period:

4.8.40. APAO requested AERA to implement the TDSAT judgement dated 16 December 2020 on all tariff determination processes and allow CSR expenses as part of aeronautical operational expenses.

4.8.41. MIAL stated that AERA should honour the Hon'ble TDSAT judgement dated 16 December 2020 and Suo moto allow CSR expenses for the true up of Second Control Period.

CIAL's counter-comments and response to stakeholder comments regarding true up of Operating Expenses for the Second Control Period

4.8.42. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the various stakeholder comments with respect to true up of Operating Expenses for the Second Control Period are presented below.

4.8.43. CIAL concurred with the comment of MIAL on consideration of CSR expenses under the allowed operating expenses for the purposes of determination of ARR.

Authority's analysis of stakeholder comments on true up of Operating Expenses for the Second Control Period

4.8.44. The Authority notes the comments made by CIAL with respect to flood mitigation expenses and finds that these are critical to the airport's disaster resilience. In this regard, the Authority considers the following:

- The airport and its stakeholders have suffered the impact of severe floods in the past with the floods of August 2018 leading to operational closure and damage to property.
- CIAL is situated within the basin of Periyar river, and a branch of the river (Chengalthodu) was diverted for construction of the airport. Alternate drainage facility was required to be provided which CIAL hadn't undertaken at the time citing lack of funds.
- The course of Chengalthodu lies outside the airport boundary due to which certain works had to be carried out beyond the airport boundary, however these are interdependent with the measures carried out within the airport and integral to the airport's preparedness for potential adverse events in future.
- The projects are being carried out with the primary motive of ensuring the safety of the airport and its users. The benefits accrued to adjoining communities are only incidental, however, the airport also has a responsibility to ensure that the development/existence of the airport does not put the local communities in jeopardy.
- Flood mitigation expenses are a one-time expense and could be much lower compared to the anticipated losses to all the stakeholders in the event that such incidents occur again in future. Ultimately airport users would have to bear the burden of losses if the lack of preparedness results in disasters in the future.

4.8.45. In view of the foregoing, the Authority is inclined to consider the costs of these measures as Aeronautical and has therefore decided to allow the entire flood mitigation expenses incurred in the true up of operational expenses for the Second Control Period.

4.8.46. The Authority has examined the matter of allowing CSR expenses based on the TDSAT judgement dated 16th December 2020 in the matter of Bangalore International Airport Limited vs. Airports Economic Regulatory Authority of India which is as follows:

"Hon'ble TDSAT held that there is no difference between CSR expenditure mandated by law and an expenditure in the nature of income tax which is allowed as a cost pass-through. It reasoned that not allowing such cost would amount to indirectly lowering the percentage fixed as a fair return on equity, as the CSR expenditure would be apportioned from the return allowed to equity holders. TDSAT therefore set aside the decision of AERA and directed it to pass relevant orders so that reduction in determined fair return does not cause loss to equity holders due to CSR expenditure. It further directed AERA to conduct the necessary truing-up exercise"

4.8.47. Based on this judgement, the Authority has decided to allow CSR expenses for true up of operational expenses for the Second Control Period. The eligible CSR will be calculated based on the provisions of Companies Act, 2013 where the average net profit in the aeronautical P&L for preceding three years is calculated and in case the value is positive, CSR will be computed as 2% of average net Aeronautical profit. This will be the maximum CSR eligibility applicable to be trued up as part of operational expenditure. In case the CSR actually incurred by CIAL is lower than the eligible value, the actual CSR values as per audited financials of CIAL will be considered by the Authority.

4.8.48. However, for the true up of Second Control Period, the CSR eligibility for the initial three years (FY 17, FY 18, and FY 19) has been determined by considering the 2% of actual net Aeronautical profit in the respective year of the Second Control Period. This is on account of the unavailability of net Aeronautical profit details for CIAL for the past three years, i.e., FY 14, FY 15, and FY 16.

4.8.49. Based on the above analysis and after considering the actual figures for FY 2021, the Authority has recomputed the operational expenses to be reckoned for true up of Second Control Period as given below.

Table 50: Operating Expenses considered by the Authority for true up of Second Control Period

Particulars (in INR crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Payment to Employees	50.44	54.92	76.70	75.13	75.57	**332.75**
Repairs and Maintenance	14.87	18.89	20.55	24.99	22.67	**101.96**
Utility costs	17.03	26.31	27.78	31.25	21.28	**123.66**
Safety and Security expenses	3.59	6.13	7.81	8.02	7.52	**33.06**
Vehicle Repairs and Maintenance	0.85	0.87	1.38	0.94	1.00	**5.04**
Housekeeping expenses	6.64	9.09	9.35	10.56	8.02	**43.65**
Consumables	1.87	3.01	3.03	3.46	2.03	**13.40**
Other operational expenses	6.58	7.57	6.73	6.92	3.68	**31.48**
CUTE operational expenses	1.03	2.07	4.48	5.30	4.22	**17.10**
Admin and General expense	19.36	12.98	25.53	29.97	13.24	**101.07**
Working Capital Interest	0.16	0.87	0.29	1.61	3.80	**6.73**
CSR Expenses	1.98	1.57	1.64	1.73	1.46	**8.38**
Total O&M expenses	**124.38**	**144.28**	**185.27**	**199.87**	**164.49**	**818.30**

4.8.50. The Authority noted that the total O&M expenses proposed by it during the consultation stage was INR 812.99 Cr (refer Table 49) and the figure considered post consultation stage is INR 818.30 Cr. The difference of INR 5.31 Cr. is on account of inclusion of flood mitigation measures of INR 18.84 Cr., inclusion of CSR expenses of INR 8.38 Cr. and a reduction of INR 21.91 Cr. as a result of the actual O&M expenses in FY 2021 being lower than the projections made by CIAL in its MYTP.

4.9. True up of Non-Aeronautical Revenue

CIAL's submission on Non-Aeronautical Revenue for the Second Control Period

4.9.1. CIAL submitted Non-Aeronautical Revenue for Second Control Period as given in the table below.

Table 51: CIAL's submission of Non-Aeronautical revenue for true up of Second Control Period

Particulars (INR Crores)	F Y 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Non-Aeronautical royalties, license fees and lease rentals	69.11	79.45	97.46	124.91	34.45	**405.37**
Duty free revenues	133.15	100.35	97.48	98.05	12.57	**441.59**
Interest Income	7.97	8.58	7.34	11.97	1.77	**37.62**
Other Income	10.48	7.39	8.25	7.18	3.98	**37.29**
Income from Golf Course, Trade Fair Centre, and Commercial complex	5.12	6.14	6.25	6.41	3.09	**27.02**
Total NAR	**225.82**	**201.90**	**216.78**	**248.51**	**55.86**	**948.88**

**Forecasted Figures*

4.9.2. In accordance with the Authority's decision at the time of tariff determination for the Second Control Period, CIAL had made the following adjustments while calculating Non-Aeronautical Revenue:

- Utility charges were excluded from Non-Aeronautical Revenue calculations and were netted out from utility costs incurred by CIAL for the purpose of calculation of Aeronautical utilities cost.
- Airline space rentals were excluded from Non-Aeronautical Revenue calculations and were considered as Aeronautical revenue.
- Fuel hydrant space rentals were considered as Aeronautical revenue.

4.9.3. CIAL had excluded lease rentals from subsidiaries from the calculation of Non-Aeronautical Revenue as the equity investments in subsidiaries were not considered in the calculation of Fair Rate of Return.

4.9.4. The detailed break-up of the Non-Aeronautical Revenue submitted by CIAL is provided below:

Table 52: Detailed break-up of Non-Aeronautical Revenue submitted by CIAL for the Second Control Period

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Duty free revenues	133.1	100.3	97.5	98.0	12.6	**441.5**
Non-Aero Royalties						
Royalty - Engineering	0.3	0.3	0.3	0.2	0.2	**1.3**
Royalty – Security	4.0	3.3	1.5	1.1	1.1	**11.1**
Royalty – Terminal Handling & Valet	1.8	0.4	0.2	0.1	0.1	**2.6**
License Fees						
License Fee – Car Park	11.2	12.1	11.5	11.6	0.7	**47.1**
License Fee – Catering	4.0	4.0	4.8	4.6	0.9	**18.3**
Other License Fees						
F&B	10.8	12.1	18.8	30.0	3.0	**74.7**
Retail Shops	9.2	9.6	11.9	23.8	4.1	**58.6**
GH Agency Space	1.0	1.8	1.7	3.9	8.9	**17.3**
Hoarding/Board	10.3	11.3	12.6	14.1	2.7	**51.0**
Airline Space	0.0	0.0	0.0	0.0	0.0	**0.0**
Land Space (excluding BPCL)	2.0	5.9	8.0	8.7	2.4	**27.1**
Baggage Wrapping Space	1.4	1.6	5.2	7.1	2.6	**17.9**
Forex Counter	4.5	4.1	8.2	9.8	1.0	**27.5**
Forex Counter –SBT and Federal Bank	0.0	3.2	3.9	3.6	0.7	**11.4**
Antenna Space	1.4	2.4	2.2	2.4	2.1	**10.6**
ATM	0.9	1.1	1.3	1.5	1.4	**6.1**
Duty Free Shop Rentals	4.7	3.6	0.7	0.8	0.8	**10.6**

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Mobile Counter	0.9	1.9	2.1	1.7	0.2	**6.7**
Miscellaneous	0.6	0.8	2.6	0.1	1.4	**5.5**
Interest Income	8.0	8.6	7.3	12.0	1.8	**37.6**
Other Income	10.5	7.4	8.3	7.2	4.0	**37.3**
Income from Golf Course, Trade Fair Centre and Commercial complex	5.1	6.1	6.3	6.4	3.1	**27.0**
Total Non-Aeronautical Revenue	**225.8**	**201.9**	**216.8**	**248.5**	**55.9**	**948.9**

Decisions taken by the Authority regarding Non-Aeronautical Revenue as per Tariff Order for the Second Control Period

4.9.5. Relevant decision taken by the Authority with regards to Non-Aeronautical Revenue at Cochin International Airport at the time of tariff determination for Second Control Period was as given below:

- *"To true up the non-aeronautical revenues at actuals, at the time of determination of tariff for the next Control Period (Decision No.9. a. ii)"*

4.9.6. Regarding Duty-Free revenue, the Authority had stated in its Order No. 07/2017-18 dated 13 July 2017 regarding determination of tariffs for Aeronautical services in respect of Cochin International Airport for the Second Control Period, in paragraph 14.6.3, *"Since the income would be earned by the wholly earned subsidiary, the Authority sees no reason in a part of the revenues earned by CIAL through the wholly earned subsidiary to be kept outside the purview of being considered as Non-Aeronautical revenues and hence, the entire profits from hat activity should be considered as Non-Aeronautical revenues for computing the Aggregate Revenue Requirement. The Authority has hence decided to consider 30% as revenue share and true up the same based on actual revenues and profits of the subsidiary."*

4.9.7. Regarding revenues collected from Aeronautical service providers and their consideration as Aeronautical revenue, the Authority had stated in its Order No. 07/2017-2018 dated 13 July 2017 regarding determination of tariffs for Aeronautical services in respect of Cochin International Airport for the Second Control Period, in paragraph 14.2.3, *"However, as these relate to revenues realised from Aeronautical service providers, the Authority proposed to consider this revenue as part of Aeronautical Revenue. Similarly, the Authority proposed to consider revenue/rentals collected from Airlines and other agencies allied with the Aeronautical Services as Aeronautical Revenue".*

4.9.8. The Authority had proposed Non-Aeronautical Revenue as given in the table below at the time of Tariff determination for the Second Control Period.

Table 53: Non-Aeronautical Revenue considered by the Authority as per Second Control Period Tariff Order

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Duty Free Revenues	72.17	82.46	99.58	120.26	145.23	519.70
Non-Aero Royalty, License Fees and Lease Rentals						
Non – Aero Royalties	7.71	8.48	9.33	10.26	11.29	47.07
License Fee - Car Park	7.90	8.69	9.56	10.52	11.57	48.24
License Fee – Catering	2.56	2.74	3.04	3.37	3.73	15.44
Meet and Greet Revenue Share	0.08	0.09	0.10	0.11	0.12	0.50
Revenue Sharing Rent (Retail and F&B)	5.68	6.24	6.87	7.56	8.31	34.66
Fixed Rent – Airline Office and Commercial	12.22	13.44	14.78	16.26	17.89	74.59
Fixed Rent – Retail Space Rent	4.73	10.40	15.81	21.70	24.46	77.10
Fixed Rent – F&B	0.32	0.63	0.69	0.83	0.92	3.39
Minimum Annual Guarantee	26.55	42.72	53.42	64.41	65.60	252.7
Fuel Throughput lease rentals	Considered as Aeronautical Revenue					
Lease Rentals – CIAL Infra	0.07	0.07	0.07	0.07	0.07	0.35
Interest Income	2.69	0.94	0.94	0.94	0.94	6.45

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Utility Service Charges	Reduced from O&M expenses					
Other Income	8.20	9.02	9.93	10.92	12.01	50.08
Golf Course, Trade Centre and Commercial Complex	4.61	4.86	6.33	7.94	9.72	33.46
Total Non-Aeronautical Revenue	**155.50**	**190.72**	**230.39**	**275.08**	**311.78**	**1163.47**

Authority's analysis of Non-Aeronautical Revenue submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.9.9. The following table summarises the difference between the Non-Aeronautical Revenue submitted by CIAL based on actuals and the Non-Aeronautical Revenue determined by the Authority in the tariff order for the Second Control Period.

Table 54: Comparison of NAR submitted by CIAL and as considered by the Authority in tariff order for SCP

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Non-Aeronautical royalties, license fees and lease rentals						
As per CIAL (A)	69.11	79.45	97.46	124.91	34.45	**405.37**
As per tariff order for Second Control Period (B)	67.75	93.43	113.60	135.02	143.89	**553.69**
Difference (A – B)	1.36	(13.98)	(16.14)	(10.11)	(109.44)	**(148.31)**
Duty free revenues						
As per CIAL (A)	133.15	100.35	97.48	98.05	12.57	**441.60**
As per tariff order for Second Control Period (B)	72.17	82.46	99.58	120.26	145.23	**519.70**
Difference (A-B)	60.98	17.89	(2.10)	(22.21)	(132.66)	**(78.10)**
Interest Income						
As per CIAL (A)	7.97	8.58	7.34	11.97	1.77	**37.63**
As per tariff order for Second Control Period (B)	2.69	0.94	0.94	0.94	0.94	**6.45**
Difference (A-B)	5.28	7.64	6.40	11.03	0.83	**31.18**
Other Income						
As per CIAL (A)	10.48	7.39	8.25	7.18	3.98	**37.28**
As per tariff order for Second Control Period (B)	8.20	9.02	9.93	10.92	12.01	**50.08**
Difference (A-B)	2.28	(1.63)	(1.68)	(3.74)	(8.03)	**(12.80)**
Income from Golf Course, Trade Fair Centre and Commercial complex						
As per CIAL (A)	5.12	6.14	6.25	6.41	3.09	**27.01**
As per tariff order for Second Control Period (B)	4.61	4.86	6.33	7.94	9.72	**33.46**
Difference (A-B)	0.51	1.28	(0.08)	(1.53)	(6.63)	**(6.45)**
Total Non-Aeronautical Revenue						
As per CIAL (A)	225.82	201.90	216.78	248.51	55.86	**948.87**
As per tariff order for Second Control Period (B)	155.50	190.72	230.39	275.08	311.78	**1163.47**
Difference (A-B)	70.32	11.18	(13.61)	(26.57)	(255.92)	**(214.60)**

4.9.10. The Authority had verified the revenues as submitted by CIAL with the audited financial reports for FY 2017-20 and the actual numbers submitted by CIAL were correct. However, the allocation between Aeronautical and Non-Aeronautical Revenue required revisiting.

4.9.11. The Authority had studied the submissions made by CIAL with respect to Non-Aeronautical Revenue in detail and the analysis made by the authority in this regard is discussed below.

4.9.12. It was observed that the Non-Aeronautical Revenue projected for FY 2021 was lower compared to the figures approved by the Authority in the tariff order for the Second Control Period. Also, there was more than 75% drop in the revenues in FY 2021 when compared to FY 2020. However, it would be pertinent to note that the passenger traffic in FY 2021 had dropped by ~70% (close to 80% drop in international and 65% drop in domestic) compared to FY 2020 due to the negative impact of the COVID-19 pandemic.

4.9.13. Non-Aeronautical Revenues like Duty-Free revenue are driven primarily by passenger traffic. The drop in traffic had severely affected the concessionaires at the airport. As per the data shared by the Airport Operator, 10 concessionaires had already requested termination in June 2020. In order to ensure quality of service at the airport, CIAL had provided interim relief to concessionaires having Minimum Annual Guarantee or revenue share agreements (mainly in retail, F&B and FOREX) so as to retain them. The minimum monthly guarantees to be paid by the concessionaires as per the agreements with them were discounted in proportion to the drop in monthly traffic in FY 2021 as against the figures of FY 2020.

4.9.14. The components of Non-Aeronautical Revenue were discussed in detail in the subsequent sections as part of the Consultation Paper.

Non-Aero Royalties and License fees

4.9.15. The Authority noted that the license fees for car park had remained almost a constant during the period FY 2017 – FY 2020, while in FY 2021, it had dropped by 94% to INR 0.72 crores. The Authority had asked clarification from CIAL for such a decline. To this, CIAL had responded that for FY 2021, CIAL had to re-tender the contract due to the contract expiry. As a result of sharp fall in passenger numbers, there weren't enough takers for this tender and based on bids received, the contract was then renewed for 6 months (October 2020 - March 2021) at INR 12 lakhs per month.

4.9.16. The Authority observed that the Non-Aeronautical royalties during FY 2017 to 2020 had been following a downward trajectory with a CAGR of -14%. The Authority had further observed that this reduction in Non-Aero royalties had occurred despite a growth in total passenger traffic during the same period (CAGR of 3%). For FY 2021, CIAL had assumed that the royalty revenue will be equal to that in FY 2020.

4.9.17. The Authority sought clarifications from CIAL regarding the decline in royalty revenue to which CIAL responded that the royalty is charged from those airlines that avail engineering and security services from other airlines and third-party agencies. According to CIAL, airlines have become increasingly self-reliant and hence availed less of these services from the Airport Operator during the period FY 2017 – FY 2020. Hence, the numbers projected for FY 2021 by the Airport Operator were found to be acceptable.

Rentals and Other License fees

4.9.18. The Authority noted that CIAL had excluded fuel throughput lease rentals from Non-Aeronautical Revenue in the Second Control Period.

4.9.19. CIAL had considered airline space rentals as Aeronautical revenue for the Second Control Period and this is line with the decision taken by the Authority with respect to such revenues in the Tariff Order for the Second Control Period.

4.9.20. The Authority had observed that CIAL had considered Ground Handling agency space as Non-Aeronautical Revenue. As per Tariff Guidelines, Ground Handling services are Aeronautical in nature and hence, the revenues received from these agencies must be considered as Aeronautical in nature

The Authority proposed to consider revenues received from GH agencies in any form to be considered as Aeronautical Revenue for true up of Second Control Period.

4.9.21. The Authority asked CIAL to submit a detailed break up of 'Land space excluding BPCL fuel hydrant rent' with the details of concessionaires for FY 2017 – 2020. The Authority noted that the land space rentals included land allotted to ground handling agencies and to other services such as engineering and maintenance. The Authority proposed to consider land space rentals from agencies related to Aeronautical services (such as Ground Handling) as Aeronautical revenue.

Table 55: Details of rentals proposed under Land Space excluding BPCL fuel hydrant as part of the CP

Customer	Name	Revised Classification
Air India Ltd	Space allocated in ULD area	Aeronautical
Airways	Space allocated to Jet Airways in front of Bay no. 9	Aeronautical
BWFS	Space allocated to BWFS at eastern side	Aeronautical
Air India Ltd	Space allocated to Air India to the northern side	Aeronautical
Air India Ltd	Space allocated to Air India in the west bay 9	Aeronautical
Pawan Hans	Space allocated to Pawan Hans in the eastern side of bay 1	Aeronautical
Anjali Hotels	Restaurant in CGGC	Non-Aeronautical
Interglobe Aviation Limited	Airside space allotted to Indigo in the Airside, East end o	Aeronautical
Indian Navy	Space allotted to Indian Navy for laying optical fibre thro	Aeronautical
Celebi Airport Services India	Equipment parking space allotted to Celebi in the eastern side	Aeronautical
BWFS	Space allocated to BWFS at eastern side of bay 18	Aeronautical
Celebi Airport Services India	Equipment charging area at Northern side of T3 pier	Aeronautical
Bird Worldwide Flight Services	Equipment parking area in the Westside of Bay #1	Aeronautical
Bird Worldwide Flight Services	Equipment parking area in front of Bays # 10-13	Aeronautical
BWFS	BWFS equipment charging area	Aeronautical
Air India Ltd	Equipment parking area no:01 East side of T3 pier	Aeronautical
Air India Ltd	Equipment parking area no:02 East side of T3 pier	Aeronautical
Air India Ltd	Equipment parking area no:03 in front of Bays 09 to 13	Aeronautical
Air India Ltd	Equipment parking area no:04 East side of T3 pier	Aeronautical
Air India Ltd	ULD Parking area in front of International Cargo Bldg.	Aeronautical
Bharat Petroleum Corporation Ltd	Equipment parking space for BPCL in the northern side of T3 pier	Aeronautical
Bharat Petroleum Corporation Ltd	Equipment parking space for BPCL	Aeronautical
Go Airlines (India) Ltd	Equipment parking area in the eastern side of T3 pier	Aeronautical
Celebi Airport Services India	Equipment parking space allotted to Celebi in front of Bay#15	Aeronautical
Bharat Petroleum Corporation Ltd	Land Lease allotted to BPCL for setting up Fuel Hydrant	Aeronautical
Indian Oil Corporation	Land Lease allotted to IOCL for setting up of Auto LPG Dispenser	Non-Aeronautical
Ministry of Defence (Coast Guard)	Land Lease Deed - Indian Coast Guard	Aeronautical
Reliance Jio Infocomm Limited	Space allotted to Reliance Jio along the VIP road for laying	Non-Aeronautical
Reliance Jio Infocomm Limited	Space allotted to Reliance Jio for laying optical fibre thro	Non-Aeronautical
Vodafone Idea Limited	Space allotted to Idea for laying optical fibre through CIAL	Non-Aeronautical
Bharat Petroleum Corporation Ltd	Land space allotted to BPCL for Retail Petroleum Outlet	Non-Aeronautical

Customer	Name	Revised Classification
Bharat Petroleum Corporation Ltd	Land space allotted to BPCL for Retail Petroleum Outlet	Non-Aeronautical
Bharat Petroleum Corporation Ltd	Land Lease allotted to BPCL in T3 pier area	Aeronautical

**The entry to match MIS with audited financials has been considered Aeronautical*

Table 56: Adjustments proposed to Land Space Rentals Excluding BPCL Fuel Hydrant as part of the CP

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
As per CIAL's submission (Non-Aeronautical Revenue)						
Land Space excluding BPCL Fuel Hydrant Space – As per CIAL	2.04	5.93	8.01	8.72	2.40	27.14
As per Authority's assessment						
Land to Ground Handling, Equipment Parking etc. (Considered Aero) – (A)	1.21	4.81	6.26	7.03	0.71	20.02
Land to other Aero Services (Considered Aero) – (B)	0.14	0.16	0.18	0.19	0.20	0.87
Total - Land to Ground Handling/ equipment parking and other Aero Services (Considered Aero) – (A) + (B)	1.35	4.97	6.43	7.22	0.91	20.89
Land to Non-Aero Services (Considered Non-Aero)	0.70	0.95	1.58	1.50	1.53	6.25

**Forecasted figures*

4.9.22. The Authority sought detailed breakup of all royalty revenues with details including type of contract (MMG, Fixed rentals and revenue share), MMG value, revenue share percentage and the annual escalation percentage. It was understood that the Airport Operator on account of strong impact of COVID-19 on the Non-Aeronautical business, has linked the MMG payments from Concessionaires to traffic in order to sustain the revenues from Non-Aeronautical services for the time the recovery from COVID-19 is not attained.

4.9.23. For FY 2017 – 2020, the Authority proposed to consider revenue as provided in CIAL's audited financial statements. The Authority had recomputed the royalty revenue for FY 2021, based on actual passenger traffic. The details regarding forecast basis are provided below:

- Food and Beverages – These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. The Minimum Monthly Guarantee figures for FY 2021 were computed by linking the corresponding figures of FY 2020 based on the passenger traffic growth rate obtained on the basis of actual traffic.
- Retail – These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. The Minimum Monthly Guarantee figures for FY 2021 were computed by linking the corresponding figures of FY 2020 based on the passenger traffic growth rate obtained on the basis of actual traffic.
- Hoarding Board – These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. The Minimum Monthly Guarantee figures for FY 2021 were computed by linking the corresponding figures of FY 2020 based on the passenger traffic growth rate obtained on the basis of actual traffic.
- GH Agency Space – The Authority proposed to consider revenues from GH Agency Space as Aeronautical Revenue.
- Airline Space Rentals – Airline Space Contracts follow Fixed Rental model with annual escalation rates. The Authority proposed to consider these revenues as per CIAL's submission of the same and consider them as Aeronautical revenue.
- Land Space excluding BPCL Fuel Hydrant – The Authority had noted that these spaces include those that are rented out to GH Agencies and other Aeronautical service providers. Hence, the

revenues were bifurcated into Aeronautical and Non-Aeronautical streams and were considered accordingly.

- Baggage Wrapping Space – Baggage Wrapping Space contracts follow Fixed Rental Model with annual escalation rates. The Authority proposed to consider this revenue as per CIAL's submission of the same.
- Forex Counters – Forex Counters have a Revenue Share model. The revenue for FY 2021 was computed by linking the corresponding figures of FY 2020 to passenger traffic growth obtained on the basis of actual traffic.
- Antenna Space – Antenna Space contracts follow Fixed Rental Model with annual escalation rates. The Authority proposed to consider this revenue as per CIAL's submission of the same.
- ATM Space – ATM Space contracts follow Fixed Rental Model with annual escalation rates. The Authority proposed to consider this revenue as per CIAL's submission of the same.
- Duty Free Shop Rentals – Duty Free Shop contracts follow Fixed Rental Model with annual escalation rates. The Authority proposed to consider this revenue as per CIAL's submission of the same.
- Mobile Counters – Mobile Counter contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. The Minimum Monthly Guarantee figures for FY 2021 were computed by escalating the corresponding figures of FY 2020 based on the passenger traffic growth rate obtained on the basis of actual traffic.

Duty free revenues

4.9.24. In the Second Control Period Tariff Order, the Authority had decided to consider entire profit generated by CDRSL as royalty revenue as CDRSL is a 100% subsidiary of CIAL. The Authority had decided to consider 30% as revenue share for forecast purpose at the time of tariff determination and then true up the same based on actual revenue and profit (14.6.3, Order No.07/2017-18 dated 13th July 2017). As per the agreement between CIAL and its subsidiary CDRSL, 45 % of revenues (total revenue from sale of goods and advertisements, net of discounts) is to be paid to CIAL as the royalty. CIAL had therefore considered a revenue share of 45% for the Second Control Period.

4.9.25. Based on the assessment of the financials of CDRSL, it was observed that the gross profit margin (gross profit/revenue from operations) for CDRSL excluding royalty paid to CIAL during the period FY 18-20 lies in the range 45-48%. As per the tariff order of the Second Control Period, the Authority had noted that the income would be earned by the wholly owned subsidiary of CIAL (i.e., CDRSL) from duty free operations and the Authority saw no reason in a part of the revenue earned by CIAL through its subsidiary to be kept outside the purview of being considered as Non-Aeronautical Revenue and hence, the entire profits from that activity were to be considered as Non-Aeronautical Revenue for computing the Aggregate Revenue Requirement. In line with this, for the purposes of tariff determination and true up, the Non-Aeronautical Revenue for CIAL from Duty-Free operations was proposed to be the sum of royalty received from CDRSL plus the net profits of CDRSL for any given year.

4.9.26. For FY 2021, CIAL had considered a 15% drop in per pax duty free sales. The Authority asked CIAL to provide the actual revenues during April-November 2020. It was observed that the Duty-Free revenues were nil during April and May, while for the remaining period, the average per pax sales has reduced by only 5% compared to FY 2019. Based on the factors discussed above, the Authority had recomputed the Duty-Free revenues to CIAL for FY 2021.

Interest Income

4.9.27. CIAL had considered interest income based on actuals for FY 2017-2020. For FY 2021, interest income was calculated on the average balance in deposit account that CIAL intends to maintain based on its projected internal cash accruals and capital expenditures. CIAL had forecasted Interest Income for FY 2021 by assuming an Interest Rate of 5%.

4.9.28. The Authority, based on its analysis of historic rates of interest to CIAL, proposed to consider a 10% interest rate for FY 2021. The Authority had recomputed Interest Income for FY 2021 accordingly.

Other Income

4.9.29. Other income comprises of rent and services from other activities, public admission fees and miscellaneous income. For FY 2017-2020, the Airport Operator had submitted these revenues at actuals. For FY 2021, CIAL had computed these revenues by linking actual revenues during FY 2020 to pax growth during FY 2021. Authority had revised these revenues based on actual traffic numbers for FY 21.

Revenue from golf course, trade fair centre and commercial complex

4.9.30. CIAL had submitted that for FY 2021, revenue from Golf-course was forecasted to remain the same as that in FY 2020 as this revenue is in the form of prepaid membership fees.

4.9.31. For FY 2021, CIAL had submitted that the revenue from trade fair centre was estimated to be nil as the facility was taken over by the District Administration and converted as COVID-19 treatment centre. The Authority asked CIAL if any revenue is envisaged from the District or State Administration in this regard, to which CIAL responded that no such revenue is forecasted. Additionally, CIAL had submitted that there was an ambiguity regarding the time by which the facility will be returned by the Government for resumption of commercial activities.

4.9.32. Based on its analysis, the Authority proposed Non-Aeronautical Revenue as given in the table below for true up of Second Control Period as part of the Consultation Paper.

Table 57: Non-Aeronautical Revenue proposed by the Authority for true up of Second Control Period as part of the CP

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Non-Aeronautical royalties, license fees and lease rentals	66.74	72.68	89.36	113.77	29.88	**372.43**
Duty free revenues	135.68	103.56	103.24	107.25	18.26	**468.00**
Interest Income	7.97	8.58	7.34	11.97	4.84	**40.68**
Other Income	10.48	7.39	8.25	7.18	4.10	**37.41**
Income from Golf Course, Trade Fair Centre and Commercial complex	5.12	6.14	6.25	6.41	3.09	**27.02**
Total Non-Aeronautical Revenue	**225.99**	**198.35**	**214.45**	**246.58**	**60.17**	**945.54**

**Forecasted figures*

Stakeholder comments on true up of Non-Aeronautical Revenue for the Second Control Period

4.9.33. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to true up of Non-Aeronautical Revenue for the Second Control Period. The comments by stakeholders are presented below.

CIAL's comments on true up of Non-Aeronautical Revenue for the Second Control Period:

4.9.34. CIAL has strongly objected to AERA's treatment of profits of CDRSL as part of the Non-Aeronautical Revenue on account of the following reasons which are explained in detail below:

"Arm's length transaction between CDRSL and CIAL

i. CIAL has entered into an arm's length transaction with CDRSL to derive the revenue share payable by CDRSL to CIAL. Arm's length transaction implies that the agreement between CDRSL and CIAL is independent and on an equal footing.

ii. *Therefore, transaction between CDRSL and CIAL needs to be evaluated as any other third party transaction and similar treatment needs to be accorded.*

CDRSL financial accounts are outside of AERA's jurisdiction

iii. *AERA Act, 2008 (and its amendment) and the AERA guidelines does not grant AERA with the right to evaluate the financial statements of the non-aeronautical subsidiaries.*

iv. *Therefore, AERA has no jurisdiction to review the financial accounts of CDRSL, an entity providing non-aeronautical services.*

Consistent approach for subsidiaries of all airports

Hyderabad International Airport Limited

v. *CIAL has noted that GMR Hospitality and Retail Limited is a 100% owned company of HIAL whose division is the Hyderabad Duty Free Retail Limited. In the recent Consultation Paper No. 11/2021-22 for HIAL, AERA has considered only the interest and dividend income of the subsidiary in the non-aeronautical revenues of HIAL. Below are the excerpts from the HIAL's consultation paper:*

Para 3.2.9 of the Consultation Paper No. 11/2021-22 for HIAL – "The Authority had noted that HIAL received interest and dividend income from the two subsidiaries Hyderabad Duty Free Retail Limited and Hyderabad Menzies Air Cargo Pvt. Ltd. The Authority had also examined HIAL's comment on the treatment of dividend and interest income received from cargo and duty free subsidiaries. Given that the Authority has considered cargo as an aeronautical activity, the corresponding revenues from the cargo subsidiary have also been considered as aeronautical revenues. Similarly, revenues from duty free services have been treated as non-aeronautical income and accordingly, the Authority proposes to include the dividend and interest incomes received from Hyderabad Duty Free Retail Ltd as non-aeronautical income."

Para 4.8.7 – "The Authority proposes to treat the dividend income from duty free subsidiary as nonaeronautical and cargo subsidiary as aeronautical revenue"

Bangalore International Airport Limited

vi. *CIAL has further noted that Bengaluru Airport City Limited is a 100% owned company of BIAL undertaking non-aeronautical activities at the airport. In the recent Consultation Paper No. 10/2021-22 for BIAL, AERA has considered only the revenues from BACL to BIAL in the non-aeronautical revenues of BIAL. Below are the excerpts from the BIAL's consultation paper:*

Para 8.2.49 – "The Authority has noted that BIAL has formed a subsidiary Bengaluru Airport City Limited (BACL) in January 2020 to carry out real estate activities. BIAL has submitted that the revenues from BACL to BIAL is nil in FY21. The Authority requested BIAL to submit the revenue projections from BACL to BIAL. The projections submitted by BIAL are considered as non-aeronautical revenue."

Airports Authority of India (AAI)

vii. *CIAL has noted that AAICLAS is a 100% owned subsidiary of AAI. However, during the tariff determination of AAI, AERA has not considered the profits of AAICLAS as aeronautical revenues while determining the true-up of AAI.*

viii. *CIAL requests AERA to adopt consistent treatment to CDRSL as given to subsidiaries of other private airport operators and consider only the revenue share and dividend as non-aeronautical revenues of CIAL.*

Change of decision of AERA from second control period order of CIAL

ix. *AERA has proposed a departure from its decision in the second control period. Such change of decision from one control period to the next control period does not offer the regulatory continuity required for preparing the long term strategy for the airport and leads to uncertainty in future.*

x. *Such departure in regulation creates uncertainty for investors which impacts India's position as an attractive investment destination for global investors.*

Conclusion

xi. *CDRSL has faced significant losses on account of COVID19 pandemic in FY21 due to reduction in international passenger and it is expected to post losses in the next few years. Without prejudice to the position of CIAL that CDRSL's profits or losses should not be included in the non-aeronautical revenues, CIAL has noted that AERA has conveniently limited its position to the profits of CDRSL while losses of FY21 of INR 11.7 Cr. have not been considered.*

xii. *Based on the above facts, CIAL requests AERA to not include the profits of the CDRSL in the non-aeronautical revenues of CIAL for true-up of the second control period and the ARR computation of the Third Control Period.*

4.9.35. CIAL has emphasised the need for consistent treatment of airline space rentals and has requested AERA to consider the same as Non-Aeronautical revenue. The detailed comments of CIAL in this regard are as follows:

i. *"CIAL has noted that AERA has treated the airline space rentals for all the private airports DIAL, MIAL, HIAL and BIAL as well as for AAI airports as non-aeronautical revenues.*

ii. *AERA has considered the airline space rentals in case of CIAL as aeronautical revenues. This is a clear case of discrimination against CIAL.*

iii. *CIAL strongly objects AERA's inconsistent approach on the treatment of the airline space rentals.*

iv. *CIAL's submission in the 3rd control period MYTP on the inconsistent approach have been conveniently ignored by AERA without giving any rationale.*

v. *AERA Act, 2008 and the AERA guidelines do not consider the airline space rental as a aeronautical revenues. Further, AERA does not regulate the airline space rental at Cochin Airport. Thus, the proposal of AERA does not confirm to its Act and guidelines.*

vi. *ICAO's Policies on Charges for Airports and Air Navigation mentions that airline space rentals are non-aeronautical in nature while airlines may be providing services aeronautical in nature. Below is the excerpt from the ICAO's policy:*
"Revenues from non-aeronautical sources. ***Any revenues received by an airport in consideration for the various commercial arrangements*** *it makes in relation to the granting of concessions, the rental or leasing of premises and land, and free-zone operations,* ***even though such arrangements may in fact apply to activities which may themselves be considered to be of an aeronautical character*** *(for example, concessions granted to oil companies to supply aviation fuel and lubricants and the rental of terminal building space or* ***premises to air carriers****). Also intended to be included are the gross revenues, less any sales tax or other taxes, earned by shops or services operated by the airport itself."*

vii. *CIAL emphasizes to AERA the need for consistent treatment of the airlines space rentals and requests AERA to consider the airline space rentals as non-aeronautical revenues in the true-up of the second control period and the third control period."*

4.9.36. CIAL has requested AERA to consider land lease rentals rom Coast Guard and Navy as Non-Aeronautical Revenue since these are not regulated or considered as aeronautical as per AERA Act or AERA guidelines and has proposed as follows:

i. *"CIAL has noted that AERA has considered the land lease rentals from Coast Guard and Navy as aeronautical revenues. CIAL notes that such treatment is unprecedented, arbitrary and it lacks merit.*

ii. *AERA Act, 2008 and the AERA guidelines do not consider the lease rentals form Coast Guard and Navy as an aeronautical revenue. Further, AERA does not regulate the lease rentals from Coast*

Guard and Navy at Cochin Airport. Thus, the proposal of AERA does not conform to its Act and guidelines.

iii. *ICAO's Policies on Charges for Airports and Air Navigation mentions that lease rentals are non-aeronautical in nature while the entity may be providing services essential to airport. Below is the excerpt from the ICAO's policy:*

"Revenues from non-aeronautical sources. ***Any revenues received by an airport in consideration for the various commercial arrangements*** *it makes in relation to the granting of concessions, the rental or leasing of premises and land, and free-zone operations,* ***even though such arrangements may in fact apply to activities which may themselves be considered to be of an aeronautical character*** *(for example, concessions granted to oil companies to supply aviation fuel and lubricants and the rental of terminal building space or* ***premises to air carriers****). Also intended to be included are the gross revenues, less any sales tax or other taxes, earned by shops or services operated by the airport itself."*

iv. *CIAL has noted that it is a general practice of giving the space to the Indian Army, Navy and Air Force based on their needs and the lease rentals received from these entities have been considered as non-aeronautical revenues by AERA for all major airports including AAI airports.*

v. *CIAL requests AERA to consider the land lease rentals from Coast Guard and Navy as non-aeronautical revenues in the true-up of the second control period and the ARR computation of the third control period."*

Other stakeholders' comments on true up of Non-Aeronautical Revenue for the Second Control Period:

4.9.37. APAO has strongly objected to AERA's treatment of profits of subsidiary as part of the Non-Aeronautical Revenue on account of the following reasons:

a. *"This is an Arm's length transaction between airport operator and subsidiary.*

b. *Subsidiary financial accounts are outside of AERA's jurisdiction. AERA Act, 2008 (and its amendment) and the AERA guidelines does not provide AERA with the mandate to evaluate the financial statements of the non-aeronautical subsidiaries. Therefore, AERA has no jurisdiction to review the financial accounts of CDRSL, an entity providing non-aeronautical services.*

c. *Need for consistent treatment on Subsidiaries to all private airports.*

d. *Change of decision of AERA from second control period to third control period".*

4.9.38. APAO has strongly objected to AERA's approach on treatment of airline space rentals as Aeronautical, calling it inconsistent as AERA Act or Guidelines do not consider airline space rentals as Aeronautical revenues. Further, APAO has cited ICAO's policies and emphasised the need for consistent treatment of airline space rentals.

4.9.39. APAO has stated that the treatment of land lease rentals from Coast Guard and Navy as Non-Aeronautical Revenue is unprecedented, arbitrary and lacking merit. APAO has added that AERA Act or Guidelines do not consider such rentals as Non-Aeronautical Revenue and neither does AERA regulate such rentals.

4.9.40. FIA has requested AERA to conduct an independent expert study on Non-Aeronautical Revenue in accordance with the AERA Act, 2008 (and its amendment) and ensure that no adjustments are proposed to traffic-independent Non-Aeronautical Revenue that are based on agreements with concessionaires.

4.9.41. AAI has requested AERA to consider airline space & land rentals as Non-Aeronautical Revenue as treated in the past for DIAL, MIAL, HIAL, BIAL and AAI airports, since airlines also use space for their activities including .

4.9.42. AAI has stated that land lease rentals from Coast Guard & Navy should be considered as Non-Aeronautical Revenue.

CIAL's counter-comments and response to stakeholder comments regarding true up of Non-Aeronautical Revenue for the Second Control Period

4.9.43. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the various stakeholder comments with respect to true up of Non-Aeronautical Revenue for the Second Control Period are presented below.

4.9.44. CIAL has strongly disagreed with FIA's comment on the study of the Non-Aeronautical Revenue. CIAL submitted to AERA that the AERA Act regulates only the Aeronautical businesses while the Non-Aeronautical business is unregulated. CIAL has therefore stated that AERA does not have jurisdiction to undertake studies on the Non-Aeronautical Revenue.

4.9.45. CIAL has concurred with the comments of AAI.

Authority's analysis of stakeholder comments on true up of Non-Aeronautical Revenue for the Second Control Period

4.9.46. The Authority notes the comments of CIAL, repeated by APAO, on inclusion of profits of CDRSL as part of Non-Aeronautical Revenue and finds merit in CIAL's justification of the same. The Authority has noticed that during the Second Control Period, CIAL has voluntarily considered a 45% revenue share in certain years as against the 30% revenue share projected in the tariff order for the Second Control Period. In view of this, the Authority has decided to consider the revenue share and rentals from the subsidiary as Non-Aeronautical revenue, consistent with the approach followed for other airports under the ambit of AERA. The Authority expects that CIAL would continue reckoning a higher revenue share wherever such opportunity exists, as it has done in the past, so that the additional benefits may be passed on to the airport users.

4.9.47. Regarding the comments of CIAL, APAO and AAI on treatment of airline space rentals, the Authority would like to highlight its decision as per Order No. 07/2017-18 dated 13th July 2017 regarding determination of tariffs for Aeronautical services in respect of Cochin International Airport for the Second Control Period which states that (Paragraph 14.23), *"However, as these relate to revenues realised from Aeronautical service providers, the Authority proposed to consider this revenue as part of Aeronautical Revenue. Similarly, the Authority proposed to consider revenue/rentals collected from Airlines and other agencies allied with the Aeronautical Services as Aeronautical Revenue"*. The treatment of space rentals as Non-Aeronautical Revenue could give the airport operator opportunities to increase rentals and decrease other Aeronautical charges, which could be detrimental to airport users and result in further increase of user charges. The Authority is of the view that revenues realised in any form Aeronautical service providers are to be treated as Aeronautical and doesn't see any reason to deviate from this decision at this point of time. Therefore, the Authority has decided to continue with the treatment of airline space rentals as Aeronautical, consistent with its proposal in Consultation Paper No. 08/2021-22.

4.9.48. The Authority has carefully examined the comments of CIAL, APAO and AAI regarding rentals from Coast Guard and Navy. The Authority agrees with the view of the stakeholders that the activities of Coast Guard and Navy are not regulated by AERA as they are not involved in the provision of any Aeronautical services at the airport. Accordingly, the Authority has decided to consider the land lease rentals from Coast Guard and Navy as Non-Aeronautical.

4.9.49. On the comment of FIA regarding undertaking a study on Non-Aeronautical Revenue, the Authority would like to state that AERA had commissioned three studies with respect to CIAL viz. 'Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets', 'Study on Efficient O&M Expenses' and 'Study on Determinants of Cost of Capital' for the purpose of tariff determination. In future, the Authority will continue to undertake such detailed independent studies wherever it is deemed necessary and appropriate.

4.9.50. FIA has also requested the Authority to ensure that no adjustments are proposed to traffic-independent Non-Aeronautical Revenue that are based on agreements with concessionaires. The Authority finds this comment of FIA to be counterintuitive to its own comments regarding operational expenses wherein FIA has proposed to AERA to advise CIAL to rationalise/re-negotiate all its expenses. The Authority would like to state that such re-negotiations cannot be encouraged for the benefit of only one group of stakeholders. CIAL has clarified in their submissions that interim relief has been provided to concessionaires in order to ensure their viability and sustain them at the airport as they had witnessed multiple concessionaires closing down business owing to the absence of demand on account of the pandemic. Such measures have also been taken in the case of other airports including those of AAI. The Authority has examined the nature of such measures undertaken by CIAL and has found that the relaxation on Minimum Monthly Guarantees have been provided in proportion to the drop in traffic compared to pre-COVID times. In view of the above, the Authority does not see any reason to consider any further revisions in this regard.

4.9.51. Based on the above analysis and after consideration of the actual figures for FY 2021, the Authority has recomputed the Non-Aeronautical Revenue to be considered for the true up of Second Control Period as given below.

Table 58: Non-Aeronautical Revenue considered by the Authority for true up of Second Control Period

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Duty free revenues	133.15	100.35	97.48	98.05	21.86	**450.87**
Non-Aero Royalties						
Royalty - Engineering	0.31	0.29	0.29	0.20	0.34	**1.42**
Royalty – Security	4.03	3.32	1.48	1.12	0.83	**10.78**
Royalty – Terminal Handling & Valet	1.79	0.40	0.22	0.11	0.21	**2.73**
License Fees						
License Fee – Car Park	11.19	12.06	11.54	11.56	0.73	**47.09**
License Fee – Catering	4.01	3.96	4.82	4.57	0.77	**18.14**
Other License Fees						
F&B	10.78	12.06	18.83	29.96	3.33	**74.96**
Retail Shops	9.19	9.61	11.87	23.84	2.68	**57.20**
Hoarding/Board	10.28	11.33	12.60	14.07	1.14	**49.42**
Land Space (excluding BPCL)	0.83	1.11	1.75	1.69	1.89	**7.28**
Baggage Wrapping Space	1.35	1.64	5.24	7.07	0.98	**16.28**
Forex Counter	4.48	4.14	8.18	9.77	0.21	**26.78**
Forex Counter –SBT and Federal Bank	0.00	3.15	3.92	3.59	1.08	**11.74**
Antenna Space	1.45	2.41	2.20	2.41	2.44	**10.91**
ATM	0.89	1.08	1.28	1.47	1.20	**5.93**
Duty Free Shop Rentals	4.73	3.57	0.71	0.76	0.82	**10.59**
Mobile Counter	0.93	1.88	2.06	1.67	0.24	**6.78**
Miscellaneous	0.63	0.82	2.55	0.08	1.01	**5.10**
Interest Income	7.97	8.58	7.34	11.97	3.90	**39.75**
Other Income	10.48	7.39	8.25	7.18	14.84	**48.14**
Income from Golf Course, Trade Fair Centre, and Commercial complex	5.12	6.14	6.25	6.41	2.62	**26.54**
Total Non-Aeronautical Revenue	**223.59**	**195.30**	**208.86**	**237.57**	**63.11**	**928.42**
30% for Cross Subsidisation	**67.08**	**58.59**	**62.66**	**71.27**	**18.93**	**278.53**

4.9.52. The Authority noted that the total NAR proposed by it during the consultation stage was INR 945.54 Cr (refer Table 57) and the figure considered post consultation stage is INR 928.42 Cr. The difference of INR 17.12 Cr. is on account of exclusion of the profits of CDRSL worth INR 20.72 Cr. (refer Para 4.9.46), reclassification of rentals from Coast Guard and Navy worth INR 0.87 Cr. (refer Para 4.9.48) and an increase of INR 4.47 Cr. as a result of the actual revenues in FY 2021 being higher than the projection made by CIAL in its MYTP.

4.10. True up of Aeronautical Revenue

CIAL's submission of Aeronautical Revenue for the Second Control Period

4.10.1. CIAL had submitted that the Aeronautical revenues are primarily in the form of Landing, Parking, Housing, Aerobridge charges, PSF, Royalties (Fuel Hydrant, Ground Handling, CUTE services, etc.), X-Ray inspection charges and income from cargo operations. The Airport Operator had submitted that Aeronautical revenue for FY 2017-2020 in its submission were as per actuals. For FY 2021, CIAL had forecasted these revenues on the basis of estimated traffic (passenger, ATMs and cargo) for FY 2021.

4.10.2. CIAL had submitted that it had included Airline Space Rentals and Land lease rentals for Fuel Hydrant as Aeronautical revenue as per the decision taken by the Authority in the Tariff Order for Second Control Period.

4.10.3. The Authority vide letter No. AERA/20015/FT/2010-11/Vol. II dated 15.01.2020 had advised all major airports to implement the MOCA order regarding discontinuation of levy of FTC in any manifestation at all airports (MoCA letter No:AV13030/216/2016-ER (Pt.2), dated 08.01.2020) pursuant to which the Authority had directed all the major airports to submit their proposal for compensation, if any due to discontinuation of FTC.

4.10.4. CIAL had submitted its proposal for compensation for a shortfall of INR 46.77 crores due to discontinuation of FTC (letter No. CIAL/FIN/AERA/2019-20 dated 24.01.2020) and the Authority vide Order No. 06/2020-21 dated 19th May 2020 had decided to increase the Landing charges at CIAL by 30.87% for FY2020-21 effective from 01.06.2020 to recover the shortfall in lieu of abolition of collection of FTC. The Authority had also ordered to true up the revenue on actuals while determining tariff for the Third Control Period. However, CIAL had considered a higher rate (~37%) for projection of landing charges for FY 21.

4.10.5. CIAL had submitted that it had discontinued the levy of Fuel Throughput charges as per Authority's decision and that the revenue forecasted from FTC was nil during FY 2021.

4.10.6. CIAL submitted details of Aeronautical revenue for true up of Second Control Period as given in the table below.

Table 59: Aeronautical revenue submitted by CIAL for true up of Second Control Period

Aeronautical revenues (INR Cr)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Landing Fee	62.8	92.5	108.4	102.5	43.4	**409.6**
Parking and housing fee	0.8	1.1	1.5	2.3	0.8	**6.5**
Aerobridge charges	6.3	7.1	8.4	10.6	3.4	**35.8**
Passenger service fees	36.0	39.4	39.3	37.4	6.7	**158.8**
X-ray inspection charges	1.1	1.4	1.5	0.0	0.0	**4.0**
Inline X-Ray screening charges	24.0	23.7	25.2	39.5	13.0	**125.4**
Aero Royalty						
Royalty – ATF/Fuel	6.4	22.0	29.8	28.5	0.0	**86.7**
Land space rentals- fuel hydrant	2.1	2.4	2.7	3.0	3.4	**13.6**
Airline space rentals	4.6	6.4	6.8	8.8	6.8	**33.4**
Royalty – Ground handling	55.7	75.5	85.2	83.3	22.	**322.2**
Royalty – CUTE services	33.2	41.6	41.4	39.6	8.5	**164.3**
Income from cargo operations	22.5	29.8	35.7	35.5	22.3	**145.8**
Total Aeronautical revenues	**255.5**	**342.7**	**385.9**	**391.3**	**130.7**	**1506.1**

**Forecasted figures*

Decisions taken by the Authority regarding Aeronautical Revenue as per Tariff Order for the Second Control Period

4.10.7. Relevant decisions taken by the Authority for Aeronautical revenues at the time of tariff determination for the Second Control Period were as follows:

- *"To continue with waiver of landing charges for a) aircraft with a maximum certified capacity of less than 80 seats being operated by domestic scheduled operators b) helicopters of all types (Decision No. 12.a.ii)"*
- *"Provide waiver of landing charges for flights operating under Regional Connectivity Scheme in line with Order No. 20/2016-17 dated 31st March 2017 of the authority (Decision No.12.a.iii)"*
- *"To true up the ARR and Revenues based on actuals at the end of the Control Period, in computation of tariff for the next Control Period and at the time of determination of tariff for the next Control Period (Decision No. 12.a.iv.)"*

Authority's analysis of Aeronautical Revenue submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.10.8. The Authority had verified the revenues as submitted by CIAL with the audited financial reports for FY17-20 and the actual numbers submitted by CIAL were correct. However, the allocation between Aeronautical and Non-Aeronautical Revenue required re-visiting.

4.10.9. The Authority classified Aeronautical revenue streams according to their linkage to passenger, ATM and cargo Traffic as given below:

- Pax traffic related – The revenue streams that are linked to pax traffic were Passenger Service Fee (PSF) and CUTE (Common User Terminal Exchange).
- ATM traffic related – The revenue streams that were linked to ATM traffic are Landing, Parking, Housing, Fuel Throughput, Aerobridge, X-Ray Inspection, Inline X-Ray screening charges and Ground Handling Royalties. Fuel Throughput Royalties were considered as Aeronautical revenue until FY 2020 while, the same was excluded in FY2021 as per the decisions by the Authority in this regard.
- Cargo Traffic related – All cargo related revenues were linked to cargo traffic for the purpose of estimation.

4.10.10. Fuel Throughput Charges were discontinued by MoCA vide letter F.No. AV-13030/216/2016-ER dated 08 January 2020. Therefore, these charges were not considered in the projections for FY 2021.

4.10.11. The Authority noted that CIAL had considered Ground Handling Agency royalties and land lease rentals from GH agencies and other aeronautical services (under the head – 'Land space excluding BPCL fuel hydrant rent') as NAR during the Second Control Period. As per the Tariff Guidelines and as per the previous tariff order, Ground Handling was classified as an Aeronautical Service. Hence, the Authority proposed to consider all revenues collected from Ground Handling agencies as Aeronautical revenue. Accordingly, the reclassification was made and the following revenues were considered as Aeronautical revenue:

Table 60: Reclassification of GH related revenues to Aeronautical revenues as part of the Consultation Paper

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
As per CIAL's submission (Considered as Non-Aeronautical Revenue)						
Land Space excluding BPCL Fuel Hydrant Space – As per CIAL	2.04	5.93	8.01	8.72	2.40	27.14
GH Agency Space	1.00	1.80	1.70	3.90	8.90	17.25
As per Authority's assessment (Considered as Aeronautical Revenues)						
Land to Ground Handling, Equipment Parking etc. (Considered Aero) – (A)	1.21	4.81	6.26	7.03	0.71	20.02
GH Agency Space	1.00	1.80	1.70	3.90	8.90	17.25

Forecasted figures

4.10.12. Further, there were some other revenues which had been considered as Non-Aeronautical Revenue by the Airport Operator under the head – 'Land space excluding BPCL fuel hydrant rent'. On obtaining clarifications from this aspect from CIAL, the Authority noted that land lease from Coast Guard and Navy are considered as Non-Aeronautical. The same were proposed to be reclassified as Aeronautical revenue.

Table 61: Space rental revenues reclassified to Aeronautical revenue as part of the Consultation Paper

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Other Aero revenues (Land space rentals)	0.14	0.16	0.18	0.19	0.20	0.87

Forecasted figure

Lease rentals from subsidiaries:

4.10.13. The Authority noted that CIAL hadn't considered lease rentals from subsidiaries either as Aeronautical or as Non-Aeronautical Revenue. However, the Authority had included lease rentals from CIAL Infra in its calculation of NAR in the tariff order for Second Control Period (Clause 14.2.6, Order No. 07/2017-18 dated 13 July 2017 regarding determination of tariffs for Aeronautical services with respect to Cochin International Airport for the Second Control Period), while CIAL hadn't included the same in its calculations. The Authority sought clarifications from CIAL regarding the same, to which CIAL had responded that this is excluded as equity investment in subsidiaries are excluded from FRoR calculation.

4.10.14. The Authority proposed to consider lease rentals from subsidiaries as Aeronautical revenue during the Second Control Period as the land given to the subsidiaries are considered as Aeronautical land. Accordingly, following revenues were proposed to be considered as Aeronautical revenue:

Table 62: Lease rentals from subsidiaries proposed as part of the Consultation Paper

Particulars (INR Crores)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Lease rentals from subsidiaries	0.11	0.11	0.11	0.23	0.23	0.80

Forecasted figure

4.10.15. The Authority noted that X-Ray Inspection charges for FY 2020 and FY 2021 were nil as per CIAL's submission. The Authority sought clarification from CIAL in this regard, to which CIAL had submitted that until FY 2019 X-Ray inspection charges were collected from Domestic ATMs after which they were charged for Inline X-Ray screening along with International ATMs. Hence, the revenue from X-Ray inspection charges were nil during FY 2020 and were estimated to remain the same during FY 2021.

4.10.16. The Authority observed that in the Tariff Order for the Second Control Period, Airline space rentals were proposed to be considered as Aeronautical revenue basis which the Authority proposed to consider Airline space rental as Aeronautical revenue for the Second Control Period.

4.10.17. Based on revised passenger, ATM and cargo traffic proposed by the Authority in the previous section and based on the changes proposed in the current section, the Authority proposed Aeronautical revenue for true up of Second Control Period as given in the table below.

Table 63: Aeronautical revenue proposed by the Authority for true up of Second Control Period as part of the CP

Aeronautical revenues (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Landing Fee	62.80	92.47	108.38	102.54	50.19	**416.37**
Parking and housing fee	0.81	1.11	1.53	2.33	0.97	**6.76**
Aerobridge charges	6.25	7.05	8.44	10.64	4.01	**36.40**
Passenger service fees	35.98	39.43	39.30	37.44	8.71	**160.86**
X-ray inspection charges	1.12	1.36	1.48	0.00	0.00	**3.95**
Inline X-Ray screening charges	23.97	23.67	25.21	39.54	15.78	**128.16**
Royalty – ATF/Fuel	6.35	22.00	29.78	28.55	0.00	**86.69**
Land space rentals- fuel hydrant	2.11	2.38	2.68	3.01	3.39	**13.56**
Airline space rentals	**4.58**	**6.36**	**6.84**	**8.83**	**6.76**	**33.37**
Royalty – Ground handling	**55.70**	**75.45**	**85.19**	**83.27**	**33.23**	**332.85**
Royalty – CUTE services	33.23	41.62	41.40	39.64	11.06	**166.95**
Lease rentals from subsidiaries	**0.11**	**0.11**	**0.11**	**0.23**	**0.23**	**0.80**
Ground Handling & Equipment Parking Space rentals	**2.24**	**6.60**	**7.92**	**10.94**	**9.57**	**37.27**
Lease Rentals – Other Aero agencies	**0.14**	**0.16**	**0.18**	**0.19**	**0.20**	**0.87**
Income from cargo operations	22.55	29.82	35.66	35.50	21.14	**144.67**
Total Aeronautical revenues	**257.94**	**349.59**	**394.11**	**402.65**	**165.24**	**1569.52**

**Forecasted figures*

Stakeholder comments on true up of Aeronautical Revenue for the Second Control Period

4.10.18. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to true up of Aeronautical Revenue for the Second Control Period. The comments by stakeholders are presented below.

Other stakeholders' comments on true up of Aeronautical Revenue for the Second Control Period:

4.10.19. FIA has sought clarification on the actual method of true up applied for Aeronautical revenue in view of the paragraph – *"The Authority had also ordered to true up revenue on actuals while determining tariff for the 3rd Control Period. However, CIAL has considered a higher rate (37%) for projection of landing charge for FY 21"*.

CIAL's counter-comments and response to stakeholder comments regarding true up of Aeronautical Revenue for the Second Control Period

4.10.20. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comment with respect to true up of Aeronautical Revenue for the Second Control Period is presented below.

4.10.21. On FIA's comment regarding true up of Aeronautical revenue, CIAL has responded that *"the 37% hike in landing charges is on account of the compensation for the abolishment of fuel throughput charges based on the continued request from the airline community. This has benefitted them to avail input tax credit and their overall cost could be reduced. As the fuel throughput charges remain abolished the base rate of landing charges also remain at higher levels because it is a substituted charge intended to extend the additional benefit to airlines"*.

Authority's analysis of stakeholder comments on true up of Aeronautical Revenue for the Second Control Period

4.10.22. On FIA's comment regarding true up of Aeronautical revenue for the Second Control Period, the Authority would like to clarify that the revenues were considered based on the audited financial statements for the period from FY 2017 to FY 2020. During the consultation stage, the Authority had considered projections for FY 2021 since the audited financial statements were not available at that point of time. Since the actual figures for FY 2021 are available now, the Authority has made the necessary re-computations in this regard.

4.10.23. The Authority has also made the necessary adjustments with respect to the decision taken regarding the treatment of land lease rentals from Coast Guard and Navy (refer Para 4.9.48). In view of the foregoing, the Aeronautical revenue considered by the Authority for the true up of Second Control Period is given below.

Table 64: Aeronautical revenue considered by the Authority for true up of Second Control Period

Aeronautical revenues (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Landing Fee	62.80	92.47	108.38	102.54	49.65	**415.83**
Parking and housing fee	0.81	1.11	1.53	2.33	4.20	**9.98**
Aerobridge charges	6.25	7.05	8.44	10.64	4.26	**36.65**
Passenger service fees	35.98	39.43	39.30	37.44	8.39	**160.54**
X-ray inspection charges	1.12	1.36	1.48	0.00	0.00	**3.95**
Inline X-Ray screening charges	23.97	23.67	25.21	39.54	12.27	**124.65**
Royalty – ATF/Fuel	6.35	22.00	29.78	28.55	0.00	**86.69**
Land space rentals- fuel hydrant	2.11	2.38	2.68	3.01	3.39	**13.56**
Airline space rentals	4.58	6.36	6.84	8.83	7.73	**34.34**
Royalty – Ground handling	55.70	75.45	85.19	83.27	27.55	**327.17**
Royalty – CUTE services	33.23	41.62	41.40	39.64	9.62	**165.51**
Lease rentals from subsidiaries	0.11	0.11	0.11	0.23	0.24	**0.81**
Ground Handling & Equipment Parking Space rentals	2.24	6.60	7.92	10.94	9.57	**37.27**
Lease Rentals – Other Aero agencies	0.00	0.00	0.00	0.00	15.83	**15.83**
Income from cargo operations	22.55	29.82	35.66	35.50	21.45	**144.98**
Total Aeronautical revenue	**257.80**	**349.43**	**393.93**	**402.46**	**174.16**	**1577.77**

4.10.24. The Authority noted that the total Aeronautical revenue proposed by it during the consultation stage was INR 1569.52 Cr. (refer Table 63) and the figure considered post consultation stage is INR 1577.77 Cr. The difference of INR 8.25 Cr. is on account of reclassification of rentals from Coast Guard and Navy to the extent of INR 0.87 Cr (refer Para 4.10.23) and a net increase of INR 9.12 Cr. as a result of the actual revenue in FY 2021 being higher than the projection made by CIAL in its MYTP (primarily due to rentals and electricity charges from AAI to the extent of INR 7.6 Cr. and differential rent from BPCL to the extent of INR 8.1 Cr.).

4.11. True up of Aeronautical Taxation

CIAL's submission on Aeronautical Taxes for the Second Control Period

4.11.1. CIAL submitted its calculation of Aeronautical taxes for the Second Control Period as given in the table below.

Table 65: CIAL's submission of Aeronautical tax computation for true up of Second Control Period

Particulars (INR Cr)	Formula	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Aero revenues	A	255.50	342.70	385.90	391.30	130.70	1506.06
30% non-aero revenues	B	67.70	60.60	65.00	74.60	16.80	284.66
Less: Aero OPEX	C	126.20	143.60	185.40	203.60	185.90	844.78
Less: Aero depreciation	D	31.90	92.90	94.90	111.70	125.40	456.79
Less: Interest	E	3.00	36.30	39.20	44.00	47.70	170.16
PBT	A+B-C-D-E	162.10	130.50	131.40	106.60	-211.50	319.00
Tax rate applicable (%)		34.90%	34.90%	34.90%	25.20%	25.20%	
Aero Tax	**F**	**56.60**	**45.60**	**45.90**	**26.80**	**0.00**	**174.97**

Particulars (INR Cr)	Formula	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
70% of non-aero revenues	G	164.10	150.10	160.10	183.60	39.10	696.94
Less: Non-aero OPEX	H	62.40	21.90	66.30	27.60	20.20	198.34
Less: Non-aero depreciation	I	6.90	10.70	11.30	13.40	12.30	54.62
Less: Interest	J	0.50	6.30	6.40	7.00	6.70	26.86
PBT	G-H-I-J	94.20	111.20	76.10	135.60	-0.1	417.12
Tax rate applicable (%)		34.90%	34.90%	34.90%	25.20%	25.20%	
Non-Aero tax	**K**	**32.90**	**38.90**	**26.60**	**34.10**	**0.00**	**132.52**
Aero tax (%)	F/(F+K)	63%	54%	63%	44%	0%	
Tax as per IT returns till FY20 and as per P&L statement for FY21		54.30	48.20	52.10	48.50	0.00	203.16
Aero tax for ARR		**34.30**	**26.00**	**33.00**	**21.40**	**0.00**	**114.72**

Decisions taken by the Authority regarding Aeronautical Taxes as per Tariff Order for the Second Control Period

4.11.2. The decisions taken by the Authority regarding taxation at the time of tariff determination for the Second Control Period were as given below:

- *"To consider tax outflow estimate after adjusting MAT credit for computation of ARR (Decision No.11. a.i)"*
- *"To true up projections based on actuals at the end of the Control Period, in computation of tariff for the next Control Period (Decision No.11.a. ii)"*
- *"To not consider any cost towards contingent liabilities in the computation of ARR (Decision No.11. a. iii)"*

Authority's analysis of Aeronautical Taxes submitted by CIAL for the Second Control Period as part of the Consultation Paper

4.11.3. The Authority noted that CIAL has considered 30% Non-Aeronautical Revenue in its calculation of Aeronautical PBT. The fact that a part of Non-Aeronautical Revenue is used for cross-subsidisation as per the hybrid till mechanism doesn't change the nature of such revenues to Aeronautical. Cross subsidisation as per Hybrid-Till mechanism is done in order to reduce tariff pressure on passengers and to incentivise the Airport Operator to make effective investments in Non-Aeronautical Revenue generating sources.

4.11.4. The consideration of 30% Non-Aeronautical Revenue for computation of Aeronautical tax will increase tax reimbursement beyond the requirement pertaining to Aeronautical services leading to an artificial tax benefit. The same could lead to the effective cross subsidy benefit being passed on to the airport user being less than 30% to the extent of the artificial tax benefit the airport operator receives in the event of considering 30% Non-Aeronautical Revenue as part of revenue from Aeronautical services.

4.11.5. Therefore, the Authority is of the view that:

- 30% Non-Aeronautical Revenue 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.
- Consideration of 30% Non-Aeronautical Revenue 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% of Non-Aeronautical Revenue.
- Further, this issue has been decided by AERA in Chapter 8 of DIAL Tariff Order No. 57/2020-21 dated 30th December 2020 for the Third Control Period.

4.11.6. The Authority thus proposed to consider only Aeronautical revenue and expenses in the calculation of Aeronautical PBT.

4.11.7. The Authority had recomputed the taxes based on changes proposed in the other building blocks and based on the proposal as discussed above. The Aeronautical taxes for the Second Control Period as proposed by the Authority as part of the Consultation Paper is given in the table below:

Table 66: Aeronautical Taxes as proposed by the Authority for true up of Second Control Period as part of the CP

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021*	Total
Aeronautical Taxes	21.38	16.00	21.08	14.18	0.00	**72.63**

**Forecasted figure*

Stakeholder comments on true up of Aeronautical Taxes for the Second Control Period

4.11.8. There were no stakeholder comments with respect to true up of Aeronautical Taxes for the Second Control Period.

Authority's analysis of stakeholder comments on true up of Aeronautical Taxes for the Second Control Period

4.11.9. No stakeholder comments were received regarding Taxation for the Second Control Period. In this regard, the Authority has decided to recompute Aeronautical taxes for the Second Control Period based on the actual figures of FY 2021 and after making the necessary changes on account of various decisions taken with respect to the other building blocks. Aeronautical tax considered by the Authority for true up of the Second Control Period is given below.

Table 67: Aeronautical Taxes considered by the Authority for true up of Second Control Period

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Aeronautical Taxes	21.41	16.17	21.44	12.19	0.00	**71.21**

4.12. True up of Aggregate Revenue Requirement

CIAL's submission of ARR for the Second Control Period

4.12.1. CIAL had submitted ARR for the Second Control Period as given below.

Table 68: ARR proposed by CIAL for true up of Second Control Period

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB	811.6	1382.4	1495.0	1552.7	1591.2	
FRoR	12.05%	12.05%	12.05%	12.05%	12.05%	
Return on RAB	97.8	166.6	180.2	187.2	191.8	823.7
Return on Land	11.5	11.5	10.8	10.4	9.8	54.0
Depreciation	31.9	92.9	94.9	111.7	125.4	456.8
OPEX	126.2	143.6	185.4	203.6	185.9	844.8
Tax	34.3	26.0	33.0	21.4	0.0	114.7
Working Capital Interest	0.2	1.0	0.3	1.9	5.1	8.6
Less:30% Non-Aero Revenues	67.7	60.6	65.0	74.6	16.8	284.7
ARR	234.2	381.2	439.7	461.6	501.2	2017.9
Aero Revenues	255.5	342.7	385.9	391.3	130.7	1506.1
Over Recovery/ shortfall	21.2	(38.5)	(53.8)	(70.3)	(370.5)	(511.8)
PV of over recovery/short fall	37.5	(60.6)	(75.7)	(88.3)	(415.1)	(602.2)
Total Shortfall of Second Control Period	**(602)**					

Decisions taken by the Authority regarding ARR as per Tariff Order for the Second Control Period

4.12.2. The Authority had taken the following decision regarding ARR in the Tariff Order for the Second Control Period:

- *"To true up the ARR and Revenues based on actuals, at the end of the Control Period, in computation of Tariff for the next Control Period and consider shortfall in revenue during the determination of tariff for the third Control Period (Decision No.12. a. iv)"*

Authority's analysis of ARR submitted by CIAL for the Second Control Period as per Consultation Paper

4.12.3. CIAL had considered working capital interest separately in the computation of ARR. The Authority is of the view that this should be part of O&M expenses and therefore had proceeded to analyse the same under O&M expenses (refer section 4.8).

4.12.4. Based on the analysis of various building blocks for the Second Control Period as discussed in the previous sections and the decisions taken regarding the same, the Authority proposed ARR as given in the table below for true up of Second Control Period as part of the Consultation Paper.

Table 69: ARR proposed by the Authority for true up of Second Control Period as part of the CP

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB (refer Table 20) (A)	803.69	1,363.22	1,473.82	1,536.86	1,582.47	
FRoR (refer Table 37) (B)	12.06%	12.06%	12.06%	12.06%	12.06%	
Return on RAB (C = A * B)	96.92	164.40	177.74	185.34	190.84	**815.25**
Return on Land (refer Table 40) (D)	-	-	-	-	-	**-**
Depreciation (refer Table 29) (E)	31.80	91.99	88.49	102.24	111.01	**425.54**
OPEX (refer Table 49) (F)	122.41	142.71	183.63	188.19	176.06	**812.99**
Tax (refer Table 66) (G)	21.38	16.00	21.08	14.18	-	**72.63**
Less:30% Non-Aero Revenues (refer Table 57) (H)	67.80	59.51	64.33	73.97	18.05	**283.66**
ARR (I = C+D+E+F+G-H)	204.71	355.60	406.60	415.97	459.86	**1842.74**
Aero Revenues (refer Table 63) (J)	257.94	349.59	394.11	402.65	165.24	**1569.52**
Over-recovery / Shortfall (K = J - I)	53.22	(6.00)	(12.50)	(13.32)	(294.62)	**(273.22)**
Present Value Factor (L)	1.77	1.58	1.41	1.26	1.12	
PV of Over-recovery / (Shortfall) (K * L)	94.05	(9.47)	(17.58)	(16.73)	(330.15)	**(279.89)**
Total Over-recovery / (Shortfall) of Second Control Period	**(279.89)**					

Authority's analysis of ARR for the Second Control Period post stakeholder consultation

4.12.5. The Authority, after careful analysis and examination of the stakeholder comments across various building blocks pertaining to true up of Second Control Period and after incorporation of the actual figures for FY 2021, recomputed the true up of Second Control Period.

4.12.6. The adjustments that were made over and above the true up considered at the time of issuance of Consultation Paper No. 08/2021-22 are as below:

- Considered flood mitigation expenses and CSR expenses under Aeronautical operating expenses.
- Reclassified revenues from Coast Guard and Navy as Non-Aeronautical revenue.
- Excluded the profits and losses of the subsidiary (CDRSL) from Duty Free revenue.
- Updated the figures for FY 2021 based on actuals as against projections considered at the consultation stage.

4.12.7. Based on the above, the revised ARR considered by the Authority for true up of Second Control Period is given below.

Table 70: ARR considered by the Authority for true up of Second Control Period

Particulars (INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB (refer Table 22) (A)	803.69	1363.22	1473.82	1536.86	1564.08	
FRoR (refer Table 38) (B)	12.11%	12.11%	12.11%	12.11%	12.11%	
Return on RAB (C = A * B)	97.36	165.14	178.54	186.17	189.47	**816.68**
Return on Land (refer Table 40) (D)	-	-	-	-	-	**-**
Depreciation (refer Table 30) (E)	31.80	91.99	88.49	102.24	108.35	**422.88**
OPEX (refer Table 50) (F)	124.38	144.28	185.27	199.87	164.49	**818.30**
Tax (refer Table 67) (G)	21.41	16.17	21.44	12.19	0.00	**71.21**
Less:30% Non-Aero Revenues (refer Table 58) (H)	67.08	58.59	62.66	71.27	18.93	**278.53**
ARR (I = C+D+E+F+G-H)	207.88	359.00	411.08	429.20	443.38	**1850.54**
Aero Revenues (refer Table 64) (J)	257.80	349.43	393.93	402.46	174.16	**1577.77**
Over-recovery / **(Shortfall)** (K = J - I)	49.92	(9.57)	(17.15)	(26.75)	(269.23)	**(272.77)**
Present Value Factor (L)	1.77	1.58	1.41	1.26	1.12	
PV of Over-recovery / (Shortfall) (K * L)	88.43	(15.12)	(24.17)	(33.62)	(301.84)	**(286.32)**
Total Over-recovery / (Shortfall) of Second Control Period	**(286.32)**					

4.13. Authority's decisions regarding true up of Second Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to true up of the Second Control Period:

4.13.1. Authority decides to consider the actual Passenger, ATM and Cargo traffic as detailed in Para 4.3.11 (Table 7) for true up of the Second Control Period.

4.13.2. Authority decides to consider capital additions and Aeronautical allocation of assets as suggested by the study on allocation of assets between Aeronautical and Non-Aeronautical assets for CIAL for FY 2017 to 2020 (a summary of the Study is attached as Annexure 2 to this Tariff Order, the detailed report is available along with the Tariff Order on the AERA website). Authority decides to consider aeronautical capital additions and retirements for FY 2021 based on actuals (as against the projections considered in the Consultation Paper due to unavailability of the actual data at that stage) and in line with the principles laid out in the study on allocation of assets between Aeronautical and Non-Aeronautical assets (refer Para 4.4.36 & 4.4.59).

4.13.3. Authority decides to consider RAB as detailed in Para 4.4.61 (Table 22) for true up of the Second Control Period.

4.13.4. Authority decides to revise the useful lives of assets as per AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets and recompute Depreciation considering the allocation of Gross Block as recommended by the study on allocation of assets between Aeronautical and Non-Aeronautical assets (refer Para 4.5.21).

4.13.5. Authority decides to consider Aeronautical Depreciation as detailed in Para 4.5.24 (Table 30) for true up of the Second Control Period.

4.13.6. Authority decides to provide a return equivalent to cost of debt on Refundable Security Deposits and consider Cost of Equity as 14% (refer Para 4.6.23).

4.13.7. Authority decides to consider FRoR as detailed in Para 4.6.25 (Table 38) for true up of the Second Control Period.

4.13.8. Authority decides to not provide any return on the cost of land in the Second Control Period (refer Para 4.7.7).

4.13.9. **Operating Expenses**

4.13.9.1. Authority decides to consider flood mitigation expenses under Aeronautical O&M expenses (refer Para 4.8.45).

4.13.9.2. Authority decides to consider working capital interest under O&M expenses and allocate the same in the gross fixed asset ratio (refer Para 4.8.35).

4.13.9.3. Authority decides to consider CSR expenses based on average aeronautical net profit for true up of Operating Expenses for the Second Control Period (refer Para 4.8.47).

4.13.9.4. Authority decides to consider O&M expenses and their allocation for FY 2017 – 2020 as suggested by the study on efficient O&M expenses adjusted for flood mitigation expenses and CSR expenses. Further, the Authority decides to consider Aeronautical O&M expenses for FY 2021 based on actuals (as against the projections considered in the Consultation Paper due to unavailability of the actual data at that stage) and in line with the principles laid out in the study on efficient O&M expenses (adjusted for flood mitigation and CSR expenses).

4.13.9.5. Authority decides to consider Operating Expenses as detailed in Para 4.8.49 (Table 50) for true up of the Second Control Period.

4.13.10. **Revenues**

4.13.10.1. Authority decides to continue with the treatment of airline space rentals and land lease rentals from agencies related to Aeronautical services like Ground Handling as Aeronautical revenue (refer Para 4.9.47).

4.13.10.2. Authority decides to consider the actual royalty and rents paid by CDRSL as Duty-Free revenues of CIAL (refer Para 4.9.46).

4.13.10.3. Authority decides to consider the land lease rentals paid by Coast Guard and Navy as Non-Aeronautical Revenue (refer Para 4.9.48).

4.13.10.4. Authority decides to consider Non-Aeronautical Revenue as detailed in Para 4.9.51 (Table 58) for true up of the Second Control Period.

4.13.10.5. Authority decides to consider lease rentals from subsidiaries as Aeronautical revenue (refer Para 4.10.14).

4.13.10.6. Authority decides to consider Aeronautical revenue as detailed in Para 4.10.23 (Table 64) for true up of the Second Control Period.

4.13.10.7. Authority decides to not consider 30% of Non-Aeronautical Revenue as part of Aeronautical revenue base for Aeronautical tax determination as detailed in Para 4.11.5.

4.13.11. Authority decides to consider Aeronautical Tax as detailed in Para 4.11.9 (Table 67) for true up of the Second Control Period.

4.13.12. Authority decides to consider ARR as detailed in Para 4.12.7 (Table 70) for true up of the Second Control Period and allow the Airport Operator to recover the shortfall of INR 286.32 Crores in the next control period.

CHAPTER 5. TRAFFIC FOR THE THIRD CONTROL PERIOD

5.1. CIAL's submission of Traffic for the Third Control Period

Passenger traffic

5.1.1. CIAL had submitted that the passenger traffic growth at the airport had been consistent until FY 2019. The domestic passenger traffic at Cochin International Airport had a CAGR of 13.5% while the international passenger traffic had a CAGR of 4.7% during the period FY 2015-2020.

Table 71: Passenger traffic at Cochin Airport during FY 2015 - FY 2021

Traffic (in millions)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	CAGR (FY15-20)
Domestic	2.7	3.1	3.9	4.9	5.3	5.0	1.55	13.5%
International	3.7	4.6	5.0	5.2	4.9	4.7	0.92	4.7%
Total	6.4	7.7	8.9	10.1	10.2	9.7	2.47	8.7%

5.1.2. The Airport Operator had stated that the lockdown that was imposed nationally and internationally on account of the COVID-19 pandemic had a huge impact on the aviation sector. The passenger traffic for the Third Control Period was forecasted by considering the impact of the pandemic. According to CIAL, the domestic and international passenger traffic in FY 2022 was estimated to be at 67% and 44% of their respective levels in FY 2020.

5.1.3. CIAL estimated that the domestic passenger traffic would reach pre-COVID levels by FY 2023 while the international passenger traffic would reach pre-COVID levels by FY 2024. CIAL also estimated that, post recovery, the domestic passenger traffic would grow at a rate of 12.1% (10-year CAGR 2008-2018) and international traffic would grow at a rate of 7.7% (10-year CAGR 2010-2020).

5.1.4. CIAL's estimation of passenger traffic for the Third Control Period was as given in the table below.

Table 72: Passenger traffic for the Third Control Period as submitted by CIAL

Passenger traffic (in millions)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Domestic	3.4	5.4	6.1	6.8	7.6	29.3
% recovery (Base FY 2020)	67%	108%				
International	2.1	3.5	4.7	5.1	5.5	20.9
% recovery (Base FY 2020)	44%	76%	100%			
Total	**5.4**	**9.0**	**10.8**	**11.9**	**13.1**	**50.2**

Air Traffic Movements (ATMs)

5.1.5. CIAL had submitted that the ATMs at the Airport had been on a path of steady growth until FY 2019. During the period FY 2015-2020, domestic ATMs had grown at a CAGR of 7.5% while international ATMs had grown at a CAGR of 2.4%.

Table 73: ATMs during FY 2015-2021 at Cochin International Airport

ATMs (in nos.)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	CAGR (FY 15-20)
Domestic	26,823	27,907	31,164	36,752	41,104	38,463	7.5%
International	25,970	29,861	31,653	32,909	30,762	29,267	2.4%
Total	**52,793**	**57,768**	**62,817**	**69,661**	**71,866**	**67,730**	**5.1%**

5.1.6. The passengers per ATM in FY 2020 for domestic operations was 130 and that for international was 161. According to CIAL, rattled passenger sentiments and restrictions due to COVID-19 had resulted in a slump in number of passengers per ATM both in the case of domestic and international flights. Accordingly, CIAL had estimated that the domestic pax/ATM would reach pre-COVID levels by FY 2024 while the international pax per ATM would not reach pre-COVID levels (or FY 2020 levels) in the Third Control Period.

5.1.7. CIAL had submitted pax/ATM for the Third Control Period as given in the table below.

Table 74: pax / ATM at Cochin Airport during FY 2022-2026

Pax per ATM (in nos.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Domestic	115	129	133	136	139
% recovery (Base FY 2020)	88%	99%			
International	129	150	154	155	156
% recovery (Base FY 2020)	80%	93%	96%	97%	97%

5.1.8. Based on the estimated passenger traffic and pax/ATM, CIAL had forecasted the domestic and international ATMs during the Third Control Period as given in the table below.

Table 75: ATM Traffic as submitted by CIAL for the Third Control Period

ATMs (in nos.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Domestic	29,234	42,100	45,629	50,004	54,824	221,791
% recovery (Base FY2020)	76%	109%				
International	16,157	23,695	30,543	32,767	35,074	138,235
% recovery (Base FY2020)	55%	81%	104%			
Total	**45,390**	**65,796**	**76,172**	**82,770**	**89,897**	**360,026**

Air Cargo

5.1.9. CIAL had submitted that, the domestic cargo traffic at the airport had grown at a CAGR of 7.8% during FY 2015-20 while the international cargo traffic had grown at a CAGR of 1.4% during the same period.

5.1.10. According to CIAL, air cargo traffic would witness a faster recovery owing to sustained demand and lesser restrictions on air cargo movements compared to passenger traffic. The air cargo traffic for the Third Control Period as submitted by CIAL is given in the table below.

Table 76: Air cargo traffic for the Third Control Period as submitted by CIAL

Air cargo (in MT)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Domestic						
Outbound	2,701	4,157	4,523	4,922	5,356	21,659
Inbound	7,633	11,662	12,531	13,464	14,467	59,757
Total Domestic	10,334	15,819	17,054	18,386	19,823	81,416
International						
Export	42,580	46,788	53,981	62,281	71,857	2,77,487
Import	10,292	11,718	12,619	13,588	14,633	62,850
Total International	52,873	58,505	66,600	75,869	86,490	3,40,337
Total	**63,207**	**74,324**	**83,654**	**94,256**	**1,06,313**	**4,21,753**

5.2. Authority's analysis of CIAL's submission of Traffic for the Third Control Period as part of the Consultation Paper

5.2.1. The Authority had taken into consideration the effect that COVID-19 pandemic has had on the aviation sector and the consequent disruption in air traffic demand (international and domestic) while analysing CIAL's submission of traffic forecast for the Third Control Period. The Authority also studied in detail the recent trends in air traffic (Passenger, ATMs and Cargo) for the purpose of estimation of the same.

Passenger traffic

5.2.2. Based on the study conducted by various agencies and based on its own internal assessment, CIAL had estimated that the domestic passenger traffic would reach pre-COVID levels (FY 2020 levels) by FY 2023 while the international passenger traffic would reach pre-COVID levels by FY 2024. Post recovery, CIAL had estimated that the domestic passenger traffic would grow at 12.1% (CAGR of FY 2008-2018) and international passenger traffic would grow at 7.7% (CAGR of FY 2010-2020). The growth rates submitted by CIAL for international and domestic traffic during the Third Control Period were as given below.

Table 77: Annual growth rate of pax traffic over the previous year as submitted by CIAL

Growth Rate (%)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Domestic pax	182%	62%	12%	12%	12%
International pax	193%	71%	33%	8%	8%
Total pax	187%	65%	20%	10%	10%

5.2.3. The Authority had studied the traffic at Cochin International Airport after the pandemic-induced lockdown in the country was revoked in a phased manner. The Authority noted that the domestic passenger traffic growth in FY 2021 was robust and consistent. Even in the case of international passenger traffic, the recovery vis-à-vis pre-COVID period was quicker than expected till the second wave of COVID-19. The Authority is cognizant of the impact that the second wave of COVID-19 has had on the aviation sector and accordingly had remained conservative in its estimation of traffic. The Authority had also taken into consideration the outlook, projections and reports of various international agencies like ICAO[7] and IATA[8] regarding the impact of the pandemic on the aviation industry.

5.2.4. Based on the trends observed in monthly traffic figures of FY 2021 and reconsiderations on the backdrop of potential drop in traffic in the initial months of FY 2022 due to the impact of the second wave of the pandemic, the Authority expects a 70% recovery in domestic passenger traffic and a 50% recovery in international passenger traffic to pre-COVID levels in FY 2022 (vis-á-vis FY 2020).

5.2.5. The Authority found the estimates of CIAL, with respect to full recovery (100% recovery) of domestic passenger traffic in FY 2023 and that of international passenger traffic in FY 2024 to pre-COVID levels (vis-á-vis FY 2020), to be reasonable.

5.2.6. In the case of international passenger traffic, the projections made by CIAL (using the 10-year CAGR during FY 2010-2020) from FY 2023 onwards were found to be in line with the estimates of the Authority. Hence, the Authority proposed to consider the traffic for FY 2023 to FY 2026 as submitted by CIAL.

5.2.7. With respect to domestic passenger traffic, the Authority looked at the historical growth from FY 2010 to FY 2019 (FY 2020 was not considered in order to avoid influence of COVID-19 on the trend). The growth rate (13.6%) during this period was observed to be higher than the rate used by CIAL to make projections of domestic pax traffic post full recovery to pre-COVID level. Hence the Authority proposed to revise the projections of domestic pax traffic from FY 2024 to FY 2026 considering an annual growth rate of 13.6% (as against 12.1% considered by CIAL). The recovery of passenger traffic to pre-COVID levels (FY 2020 levels) as proposed by the Authority at the consultation stage is given below.

Table 78: Recovery of passenger traffic to pre-COVID levels (FY 2020 levels) as proposed by the Authority in the CP

Recovery to pre-COVID levels (%)	FY 2020 (Million)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Domestic pax	5.01	70%	108%	123%	140%	159%
International pax	4.70	50%	76%	100%	108%	117%
Total pax	9.71	60%	92%	112%	124%	138%

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Air Traffic Movements

5.2.8. The Authority had studied the recent trends in ATM and passenger traffic in Cochin Airport and had observed that the domestic and international pax per ATM were on an upward trajectory since the restrictions on air travel was lifted in a phased manner. Based on its observations and analysis on the backdrop of the potential interim decline due to the second wave of the pandemic, the Authority conservatively estimated that the domestic and international pax per ATM would reach pre-COVID levels of 130 and 160 respectively, only in FY 2023.

5.2.9. Once pax per ATM attains pre-COVID levels, the Authority had assumed conservative growth rates for domestic and international pax per ATM for the rest of the Third Control Period. The Authority had estimated domestic and international ATM traffic for the Third Control Period based on its projections of passenger traffic and pax per ATM as discussed above.

Air Cargo

5.2.10. The Authority analysed CIAL's submission of cargo traffic for the Third Control Period in detail. The growth rates for domestic and international cargo traffic assumed by the Airport Operator for the Third Control Period are given below.

Table 79: Annual growth rate over the previous year in Cargo traffic for the Third Control Period as submitted by CIAL

Growth Rate (%)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Domestic Cargo	40.8%	53.1%	7.8%	7.8%	7.8%
International Cargo	23.1%	10.7%	13.8%	13.9%	14.0%

5.2.11. The Authority studied the historical growth rates in domestic and international cargo traffic in detail. Air cargo handled by CIAL during the period FY 2015 – FY 2020 was as given in the tables below.

Table 80: Domestic cargo at Cochin Airport during FY 2015-2020

Domestic Air cargo (in MT)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	CAGR (FY 2015-20)
Outbound	2,630	2,815	3,291	3,658	3,831	4,013	2,345	8.82%
Inbound	7,677	8,543	9,867	9,765	11,087	10,993	7,857	7.45%
Total	10,307	11,359	13,159	13,423	14,919	15,007	10,202	7.80%

Table 81: International cargo at Cochin Airport during FY 2015-2020

International Air cargo (in MT)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	CAGR (FY 2015-20)
Export	42,394	63,095	64,102	62,794	49,454	47,727	29,410	2.40%
Import	12,239	4,634	7,239	6,068	11,993	10,855	6,232	-2.37%
Total	54,633	67,729	71,250	68,862	61,447	58,582	35,643	1.41%

5.2.12. The Authority noted that, according to CIAL, the domestic cargo traffic would reach pre-COVID levels (FY 2020 levels) by FY 2023. For the period FY 2024-2026 CIAL had assumed that the domestic cargo traffic would grow at a CAGR of 7.8% (CAGR of FY 2015-2020). In the case of international cargo, the Authority noted that CIAL had assumed that the traffic would reach pre-COVID levels by FY 2023. For the period FY 2024-2026, CIAL had assumed that the international cargo traffic would grow at a rate of ~14% while, the CAGR during the period FY 2015-2020 was 1.4%.

5.2.13. CIAL had stated that they face space congestion in both export and import areas of the existing facility during peak season. The Authority observed that CIAL had already started the construction of the new import warehouse, which is expected to be completed in FY 2022. In addition, CIAL had also planned the modification of the existing cargo warehouse to an export warehouse facility, which is expected to be completed in FY 2023 by when the cargo traffic would recover to pre-COVID levels (FY 2020 levels). According to CIAL, the import and export warehouses, both of which are currently housed in the same facility, have a handling capacity of 50,000 MTPA each. Upon completion of both the projects mentioned above, the handling capacity of export would increase to 1,50,000 MTPA to meet the forecasted demand up to 2031. Hence, with the completion of these projects, the capacity constraints would be addressed, and the Airport Operator would be able to handle the projected growth in cargo volumes.

5.2.14. The Authority noted that the construction of new import warehouse and the modification of existing cargo warehouse to an exclusive warehouse facility for export would have a significant impact on the growth rate of air cargo traffic at Cochin Airport. Due, to the above reasons, the Authority is of the view that it would not be practical to apply the CAGR of past periods for projecting cargo traffic for CIAL for the Third Control Period. Further, it is pertinent to note that the traffic expected in light of the expansion of cargo facilities cannot be estimated at this stage and that the actual traffic realised might have drastic variations.

5.2.15. The Authority had analysed CIAL's submission of cargo traffic in detail and its basis for projection of the same. Also, the Authority had analysed the recent trends in the air cargo traffic at Cochin Airport and had observed that though the cargo traffic had gone down in the earlier months of FY 2021, the recovery in later months was quicker.

5.2.16. In the case of domestic cargo traffic, CIAL estimated that the recovery to FY 2020 levels would happen in FY 2023 and hence had assumed aggressive growth rates for FY 2022 and FY 2023. The Authority too expects the domestic cargo traffic to recover 100% in FY 2023 vis-à-vis FY 2020. However, the Authority, based on its analysis considering the actual traffic till April 2021, had applied suitable discount factors on CIAL's growth rates for FY 2022 and FY 2023 for the purpose of estimation. For FY 2024-2026, the Authority proposed to consider CIAL's estimation of growth rate. The Authority proposed to consider the traffic as estimated by it for the Third Control Period and true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

5.2.17. In the case of international cargo, the Authority had gone through CIAL's submission of traffic in detail and proposed to consider the same for the Third Control Period. However, the Authority noted that the estimation of cargo traffic is dependent on various factors like the commissioning of new warehouse facilities and traffic stabilisation post the pandemic. Hence, the Authority proposed to consider international cargo traffic as submitted by CIAL for the Third Control Period and true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

5.2.18. Based on its analysis of Passenger, ATM and Air Cargo Traffic and their recovery to FY 2020 levels in percentage terms (refer Table 77), the Authority proposed the traffic for CIAL for the Third Control Period as given below.

Table 82: Traffic proposed by the Authority for the Third Control Period as part of the Consultation Paper

FY ending 31st March	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Passengers (in Millions)						
Domestic	3.51	5.42	6.16	7.00	7.95	30.03
International	2.35	3.55	4.72	5.09	5.49	21.20
Total Pax	**5.86**	**8.97**	**10.88**	**12.09**	**13.44**	**51.23**
ATMs (in no's)						
Domestic	28,340	41,694	46,900	52,756	59,343	2,29,033
International	15,403	22,041	29,015	31,019	33,085	1,30,563
Total ATMs	**43,743**	**63,735**	**75,915**	**83,775**	**92,428**	**3,59,596**
Air Cargo (in MT)						
Domestic Outbound	3,193	4,718	5,086	5,483	5,912	24,392
Domestic Inbound	9,006	13,308	14,347	15,468	16,677	68,807
Domestic Total	**12,199**	**18,026**	**19,434**	**20,951**	**22,589**	**93,198**
International Export	42,580	46,788	53,981	62,281	71,857	2,77,487
International Import	10,292	11,718	12,619	13,588	14,633	62,850

FY ending 31st March	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
International Total	**52,873**	**58,505**	**66,600**	**75,869**	**86,490**	**3,40,337**
Total Cargo	**65,071**	**76,532**	**86,033**	**96,821**	**109,078**	**4,33,536**

5.3. Stakeholder comments on Traffic for the Third Control Period

5.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to Traffic for the Third Control Period. The comments by stakeholders are presented below.

Other stakeholders' comments on Traffic for the Third Control Period:

5.3.2. IATA has broadly agreed with AERA's validation of CIAL's traffic forecast projections and has opined that they seem to be in alignment with IATA's own overall forecast of recovery by 2024 for international traffic and by 2023 for domestic traffic. In the context of the uncertainties due to the pandemic, IATA has given the following comments:

- *"Scenarios are developed including a Low, Base and High growth scenario linked to government policy (and major airlines) scenarios whilst also taking account of valid industry forecasts.*
- *Identify clear "demand triggers" for any future investments in capacity, linked directly to existing capacity of facilities and traffic forecasts to determine when additional facilities are required. This is a well-established airport planning tool that involves overlaying infrastructure triggers on traffic scenario's to balance capacity and demand, while taking account of construction lead times, levels of service and minimising impacts to existing operations.*
- *As said, detailed consultation with the airline community via AUCC. All capacity enhancing project proposals for CP3 should be excluded as will not be required in CP3, or feasibly for the following period given the large-scale investments in capacity in CP2."*

5.3.3. While FIA appreciated that AERA has considered inputs/reports on traffic from agencies like IATA and ICAO, it has requested AERA to conduct an independent expert study for traffic assessment, in accordance with the AERA Act.

5.3.4. MIAL commented that in view of the COVID-19 pandemic, the traffic volumes considered by the Authority for the Third Control Period seem to be on a higher side and has requested that the traffic volumes be relooked at in view of ensuing disruption due the pandemic and its future impact due to further waves of COVID-19.

5.4. CIAL's counter-comments and response to stakeholder comments regarding Traffic for the Third Control Period

5.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL had no comments on the points raised by IATA and FIA.

5.5. Authority's analysis of stakeholder comments on Traffic for the Third Control Period

5.5.1. The Authority notes that IATA has broadly agreed with traffic estimates considered by the Authority as per Consultation Paper No. 08/2021-22. The Authority would like to clarify that before finalising the traffic estimates for the Third Control Period, the Authority had considered multiple scenarios from both optimistic and pessimistic viewpoints for arriving at a most likely scenario, which was then put forward for the stakeholder consultation process. Regarding identification of demand triggers for future investments in capacity, the Authority would like to state that it had examined the projects proposed by CIAL and made the necessary revisions and adjustments on account of the revised traffic estimates.

5.5.2. On FIA's request for conducting an independent expert study for traffic assessment, the Authority is of the view that all variables such as impact of COVID-19 pandemic, duration & impact of economic downturn, expected timeframe for revival of domestic and international travel etc. were considered while estimating the traffic for the Third Control Period. Hence, the Authority doesn't see any reason for conducting a separate study for estimation of traffic as the same would be based on the factors which have already been considered by the Authority. Also, given the uncertainties and the resultant challenges in making forecasts at this stage, such an independent assessment is not likely to add incremental value to justify the effort that would be required. Further, the Authority had commissioned three studies with respect to CIAL for the purpose of tariff determination viz. "Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets", "Study on Efficient O&M Expenses" and "Study on Determinants of Cost of Capital". The Authority will continue to carry out such detailed studies wherever it is deemed necessary and appropriate.

5.5.3. The Authority notes MIAL's opinion that the traffic figures are on a higher side, however, the Authority would like to clarify that the traffic estimates considered by the Authority are based on a balanced approach and were arrived at after thorough analysis of all the information available at its disposal and substantial deliberations. The Authority had also taken into consideration the outlook of various industry bodies and aviation expert agencies before finalising its estimates. Also, the possibility and potential impact of any new waves of infection, cannot be predicted at this stage. At present, the traffic situation is very dynamic. There is no scientific model available for traffic projections to cater to such pandemic situations. Therefore, in the absence of any further information that would necessitate a reconsideration of the estimates made during the consultation stage and in the absence of any detailed analysis furnished by MIAL to support its opinion, the Authority has decided to continue with its estimates of traffic for the Third Control Period as estimated by it in the Consultation Paper No. 08/2021-22.

5.6. Authority's decisions regarding Traffic for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to Traffic for the Third Control Period:

5.6.1. Authority decides to consider traffic projections as given in Para 5.2.18 (Table 82) for determination of tariff for the Third Control Period.

5.6.2. Authority decides to true up the traffic for the Third Control Period based on actuals, at the time of determination of tariff for the Fourth Control Period.

CHAPTER 6. REGULATORY ASSET BASE (RAB) AND DEPRECIATION FOR THE THIRD CONTROL PERIOD

6.1. CIAL's submission of RAB and Depreciation for the Third Control Period

Capital expenditure for the Third Control Period

6.1.1. CIAL had submitted the capital expenditure forecasted to be incurred during the Third Control Period. The summary of capital expenditure envisaged by CIAL for the Third Control Period is as given in the table below.

Table 83: Summary of capital expenditures forecasted by CIAL for the Third Control Period

Sl. No	Particulars	Cost Proposed (INR Crores)	Considered Aeronautical (INR Cr)
1	Construction of import warehouse	52.7	52.7
2	Modification of existing warehouse	35.9	35.9
3	Mechanisation of export warehouse after modification	10.3	10.3
4	Construction of parking bays phase 2	145.5	145.5
5	Development of northern side of T3 pier	189.9	179.0
6	Flood control measures	93.1	93.1
7	CCTV Surveillance system	43.8	43.8
8	CT based Hand baggage X-BIS T3	30.0	30.0
9	CT based Hand baggage X-BIS T1	25.1	25.1
10	Smart Lane – T3	22.5	22.5
11	Smart Lane – T1	19.9	19.9
12	Digi yatra – IT systems	30.7	30.7
13	Passenger processing IT systems	31.4	31.4
14	Perimeter intrusion detection systems	22.3	22.3
15	SOC & NOC for IT	15.9	15.9
16	Fire Tenders	68.5	68.5
17	Satellite fire station	15.5	15.5
18	Widening of roads for ACFTs	4.3	4.3
19	Emergency Rescue Tender	11.0	11.0
20	Hydraulic platform for High Rise Building	10.7	10.7
21	Construction of Parking bays 37,38,39 & 40 & Extension of Taxiway J Up to H and Construction of Taxiway K & Taxiway, West of A to Isolation parking bay	73.4	73.4
22	CISF Quarters	74.0	74.0
23	Regrading of side strips beyond 30 m	44.0	44.0
24	GPU and PCA South and North of T3	21.5	21.5
25	Security Equipment's - X-BIS, ETD, DFMD, HHMD etc.	19.1	19.1
26	Other major capital expenditures	152.4	152.4
	Total of Major Capex Items	1263.2	1252.3
27	Miscellaneous. Expenses for Third Control Period	152.9	151.7
	Grand Total	**1416.1**	**1404.1**
	Financing Allowance	46.3	36.2
	Total (including FA)	**1462.4**	**1440.3**

6.1.2. The major Non-Aeronautical capital expenditures proposed to be undertaken by CIAL during the Third Control Period is given in the table below:

Table 84: Major Non-Aeronautical capital expenditure proposed by CIAL for the Third Control Period

No.	Particulars	Cost Proposed (INR Cr.)
1	Commercial building in NDB area	111
2	Conversion of commercial building to Hotel	106
3	Transit Accommodation Hotel	52
4	Hotel with dormitory style options	32
5	Commercial complex/ hotel	-
6	Retail – Street Shopping, State Garments & Handicraft Emporiums, Traditional art	11
7	F&B facilities	11
8	Flower show (Phase 1)	11
9	Shopping, F&B, Warehouses and showrooms on both sides or under the bridges	10
10	Flower show (Phase 2)	6
11	Arts & Cultural Centre	5
	Total of major Non-Aeronautical capex	**354**
	Miscellaneous Expenses for Third Control Period	84
	Grand total	**438**

6.1.3. The total capital expenditure proposed by CIAL for the Third Control Period is shown in the table below:

Table 85: Total capital expenditure proposed by CIAL for the Third Control Period

Particulars (INR Cr)	Capital Expenditure proposed by CIAL	Financing Allowance	Capital Expenditure proposed by CIAL (including FA)
Aeronautical and Common capital expenditure	1416.1	36.2	1452.4
Non-Aeronautical capital expenditure	437.8	10.1	447.9
Total	**1854.0**	**46.3**	**1900.2**

Aeronautical allocation of assets

6.1.4. CIAL had submitted its basis for segregation of new assets proposed to be capitalised in the Third Control Period as given below:

- T3 pier expansion work and minor civil works were apportioned into Aeronautical and Non-Aeronautical based on the terminal area ratio.
- All other assets other than T3 pier expansion and minor works were apportioned based on the usage of such assets

6.1.5. Summary of Aeronautical and Non-Aeronautical allocation of new assets capitalised in the Third Control Period as per CIAL's submission is given in the table below

Table 86: Aeronautical allocation of assets proposed to be capitalised in the Third Control Period as submitted by CIAL

Particulars	Aeronautical (%)	Non-Aeronautical (%)
Buildings and civil works	44.6%	55.4%
Golf course development	0.0%	100.0%
Runways, Roads and Culverts	98.8%	1.2%
Plant and Equipment	97.2%	2.8%
Office Equipment	100.0%	0.0%
Computers and Accessories	96.7%	3.3%
Furnitures and Fixtures	94.9%	5.1%
Vehicles	100.0%	0.0%
Intangible assets	100.0%	0.0%
Total	**75.7%**	**24.3%**

6.1.6. Accordingly, the bifurcation of the proposed capital expenditure (including FA) considered by CIAL was as follows:

Table 87: Allocation of capital expenditure proposed by CIAL for the Third Control Period

Particulars	Aeronautical	Non-Aeronautical	Total
Capital expenditure	1440.3	459.9	1900.2

Depreciation

6.1.7. CIAL had submitted that, as per their company policy, a salvage value of 5% had been considered while calculating depreciation.

6.1.8. CIAL had considered useful life of assets as per Authority's order in this regard (Order No.35/2017-18, dated 12 January 2018). For the new assets, CIAL had considered 50% of the asset value while calculating depreciation during the year of capitalisation.

6.1.9. CIAL's submission of Aeronautical depreciation for various assets for the Third Control Period was as given in the table below.

Table 88: Aeronautical Depreciation for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Land	0.0	0.0	0.0	0.0	0.0	0.0
Buildings and civil works	31.4	32.9	35.6	37.6	37.0	174.5
Golf course development	0.0	0.0	0.0	0.0	0.0	0.0
Runway, roads and culverts	46.5	49.4	56.3	55.0	46.5	253.7
Plant and Equipment	58.5	59.7	68.7	77.6	80.5	344.9
Office Equipment	0.6	0.6	0.6	0.6	0.4	2.9
Computers and accessories	5.6	11.4	15.6	16.1	14.3	63.0
Furnitures and fixtures	1.5	1.8	1.9	1.7	1.6	8.5
Vehicles	1.4	1.7	1.7	1.8	1.7	8.3
Intangible assets	1.2	2.8	3.8	3.9	4.1	15.7
FA	0.9	1.3	1.8	2.1	2.3	8.3
Total Depreciation	**147.5**	**161.5**	**186.0**	**196.5**	**188.4**	**879.8**

Regulatory Asset Base

6.1.10. CIAL had considered the net closing RAB at the end of FY 2021 as the opening RAB for FY 2021. The closing RAB for an FY was calculated by adding the capital expenditures during the respective financial year and reducing the annual depreciation. Average of opening and closing RAB were used for the computation of RAB for tariff determination for the control period.

6.1.11. CIAL had submitted RAB for the Third Control Period as given in the table below.

Table 89: RAB for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Opening RAB	1653.0	1723.3	1956.9	2239.5	2301.1	
Add: Capitalisation during year	217.8	395.1	468.5	258.1	100.7	1440.3
Less: Depreciation during year	147.5	161.5	186.0	196.5	188.4	879.8
Sales/transfers/retirements	0.0	0.0	0.0	0.0	0.0	
Closing RAB	1723.3	1956.9	2239.5	2301.1	2213.4	
Average RAB	1688.2	1840.1	2098.2	2270.3	2257.3	

6.2. Authority's analysis of RAB and Depreciation for the Third Control Period as part of the Consultation Paper

Capital Expenditure for the Third Control Period

While analysing the Multi Year Tariff Proposal ('MYTP') regarding capital expenditure for the Third Control Period, AERA had taken into consideration reduced traffic due to COVID-19 pandemic and had appropriately rationalised the proposed capex as given in the following paragraphs.

6.2.1. The Authority has grouped the proposed capital expenditure into the following groups for evaluation:

Table 90: Authority's analysis of capital additions for the Third Control Period as part of the Consultation Paper

Reference	Project / Group	No.	Particulars	Proposed Cost (INR Cr)
A	Cargo Facilities	A.1	Construction of import warehouse	52.70
		A.2	Modification of existing warehouse	35.94
		A.3	Mechanisation of export warehouse after modification	10.35
		A	**Cargo Facilities (sub-total)**	**98.99**
B	Construction of parking bays phase 2 and Development of northern side of T3 pier	B.1	Construction of parking bays phase 2	145.52
		B.2	Development of northern side of T3 pier	189.86
		B	**Pier expansion & parking bays phase 2 (sub-total)**	**335.38**
C	Flood control measures			93.07
D	CISF Quarters			74.01
E	IT Systems	E.1	CCTV Surveillance system	43.81
		E.2	CT based Hand baggage X-BIS T3	29.98
		E.3	CT based Hand baggage X-BIS T1	25.12
		E.4	SOC & NOC for IT	15.92
		E.5	Digi yatra – IT systems	30.69
		E.6	Perimeter intrusion detection systems	22.35
		E.7	Smart Lane (Automated Tray Retrieval System) – T1	19.88
		E.8	Smart Lane – T3	22.48
		E.9	Passenger processing IT systems	31.40
		E	**IT Systems (sub-total)**	**241.62**
F	Fire and Safety Measures	F.1	Fire Tenders	68.51
		F.2	Satellite fire station	15.46
		F.3	Widening of roads for ACFTs	4.26
		F.4	Emergency Rescue Tender	10.95
		F.5	Hydraulic platform for High Rise Building	10.71
		F	**Fire and Safety Measures (sub-total)**	**109.89**
G	Construction of Parking bays 37,38,39 & 40 & Extension of Taxiway J Up to H and Construction of Taxiway K & Taxiway, West of A to Isolation parking bay			73.37
H	Regrading of side strips beyond 30 m			43.95
I	GPU and PCA South and North of T3			21.51
J	Security Equipment's - X-BIS, ETD, DFMD, HHMD etc.			19.05
K	Other major capital expenditures			152.36
L	**Total of Major Capex Items** (A+B+C+D+E+F+G+H+I+J+K)			**1263.21**
M	Misc. Expenses for Third Control Period			152.92
N	**Total** (L+M)			**1416.13**
O	Commercial projects – Commercial Complex, hotels, retail spaces, F&B facilities etc.			437.82
P	**Grand Total** (N+O)			**1853.95**
Q	IDC			46.26

Reference	Project / Group	No.	Particulars	Proposed Cost (INR Cr)
	Total (including IDC) (P+Q)			**1900.21**

(A) Cargo facilities

6.2.2. The capital expenditure projects for cargo facilities proposed by CIAL are discussed below. The projects were presented to and agreed upon by Stakeholders at the AUCC meeting held on 05th April 2018, the Airport Operator had submitted the minutes of the meeting vide their email dated 15th December 2020 ("Data point IV Reply to AERA Query 1"). As per the MYTP submission, the construction and modification work were under progress, though, with some delays due to the pandemic.

(A.1) Construction of import warehouse

6.2.3. The present cargo warehouse at Cochin Airport handles both Export and Import activities. CIAL had stated capacity constraints with respect to cargo handling observed over the past few years. As per CIAL, the handling capacity for export and import cargo is 50,000 MTPA each. During the period FY 2016-2018, the average export cargo traffic handled was 63,300 MTPA. Further, ~85% of the total cargo capacity at CIAL was already being utilised in 2017. The expansion plans were delayed due to drop in traffic owing to various reasons including the COVID-19 pandemic and economic slowdown in the Middle East. The construction of the new building for handling import cargo is now underway and is expected to be completed in FY 2022.

(A.2) Modification of existing warehouse

6.2.4. Post commissioning of the new import warehouse, the Airport Operator plans to convert the existing warehouse with little modifications to a dedicated facility for export cargo. With this proposed modification using the same roofing structure and no additional area requirement, CIAL expects to augment the handling capacity of exports from the present 50,000 MTPA to 150,000 MTPA such that it can meet the cargo requirement up to 2031.

(A.3) Mechanisation of export warehouse after modification

6.2.5. The Airport Operator had submitted that the current activities at cargo like unloading, moving, stacking, palletisation and loading ULD Storage are done manually using tractors and forklifts and that the proposed mechanisation would enhance efficiency, increase speed, improve quality of service, help in meeting global standards and reduce human dependency thereby reducing safety related incidents. The automated systems suggested were:

- Hydraulic loading platforms with automatic arrangement for ULD weighment.
- Hydraulic platform with castor wheels for shifting loaded ULD's.
- Automated storage system for storing stuffed cargo kept ready for the flight.
- Automated temperature & humidity control system for perishable handling area and cold rooms.
- Advanced ACIS (X Rays) with dual imaging.
- Lorry dock arrangement for easy unloading.

6.2.6. The facilities are now under construction and all projects are expected to be capitalised by FY 2023, when the cargo traffic is expected to reach pre-COVID levels (FY 2020 levels).

6.2.7. Considering that the project was approved in the previous Tariff Order and the justification given by the Airport Operator for the postponement of the plans, the Authority proposed to consider the cost estimate as submitted by CIAL as given below.

Table 91: Capital expenditure for cargo facilities proposed by the Authority as part of the Consultation Paper

Reference	Particulars	Cost Considered (INR Cr.)
A.1	Construction of import warehouse	52.70
A.2	Modification of existing warehouse	35.94
A.3	Mechanisation of export warehouse after modification	10.35
A	**Total**	**98.99**

(B) Construction of Parking Bays Phase II and Development of Northern side of T3 Pier

6.2.8. The new international terminal at Cochin Airport was designed with a pier having aircraft docking facilities at it's southern, eastern and northern sides. The southern side pier currently caters to the requirements of Code-C and Code-E Aircrafts. Apart from these, there are 4 remote bays, which are suitable for accommodating narrow body aircrafts in the eastern side of T3 Pier. The northern side of the pier was earmarked by the Airport Operator for future use.

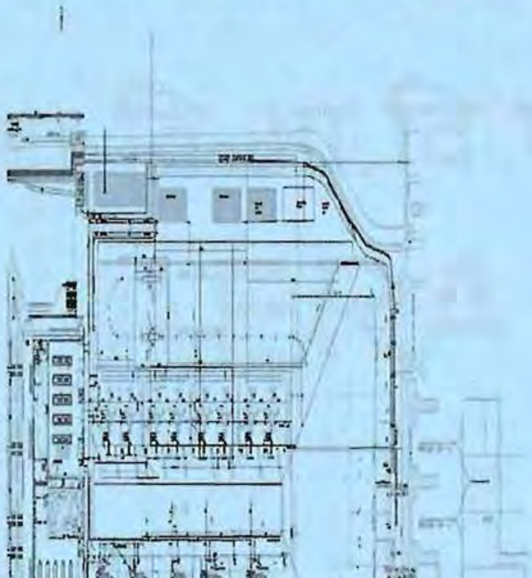
(B.1) Construction of Parking Bays Phase 2

6.2.9. The current proportion of Code C to Code E aircrafts operating from CIAL is 4:1. According to CIAL, Code-C aircrafts are mainly used for international operations and they expect that this trend would continue. To meet the forecasted growth in demand, the Airport Operator had planned to construct 8 contact bays with aerobridges and AVDGS at the northern side of T3 pier. This would result in faster turn-around times for aircrafts. CIAL had further added that the southern side would then be completely dedicated for wide body aircraft operations.

6.2.10. The Authority noted that the construction of additional parking bays was included in the capital expenditure approved by it in the tariff order for the Second Control Period. CIAL had initially planned to carry out the work in FY 2021 but has now deferred it to the Third Control Period due to the decline in traffic towards the end of the Second Control Period. The Authority had observed that from the capital expenditure approved by it in the tariff order for the Second Control Period, CIAL had deferred a cost of INR 145 Cr due to the postponement of the construction of parking bays phase 2.

6.2.11. The proposed design for construction of Parking bays phase 2 is provided in the figure below.

Figure 2: Proposed plan for Parking bays phase 2



6.2.12. The Authority referred the Project Investment File (PIF), presented to AUCC on 05 April 2018, that explains the need for the project. The proposed project was envisaged during pre-COVID times and the traffic projections considered at the time are no longer valid in the current situation. The ATM projections considered in the PIF were compared against the current projections of the Authority. The comparison is given below.

Table 92: Comparison of ATM projections considered in PIF against revised projections of the Authority

FY ending 31st March	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Total ATMs as per PIF ('000)	85	92	99	106	114	123
Peak Hour ATM as per PIF	26	28	30	34	36	38
ATM traffic projections considered by the Authority ('000)	27.02	43.74	63.74	75.92	83.78	92.43
Revised Peak Hour ATM*	8	14	20	25	27	29
ATM projections as per CIAL's MYTP ('000)	22.30	45.39	65.80	76.17	82.77	89.90

**Revised in proportion to the change in projected ATM traffic*

6.2.13. From the above it was observed that the ATM traffic levels for FY 2021, considered at the time of envisioning the project, can now be expected only in FY 2025. As per the PIF, the Airport Operator had initially planned to undertake the project in FY 2021. Though CIAL has now postponed the same to FY 2024, the Authority believes that given the current business scenario and the revised traffic projections in light of recent developments, the need for this project would not arise until FY 2025 and hence proposed to defer the timing of this project and related projects by one more year.

6.2.14. The cost and phasing plan for construction of Parking bays phase 2 as readjusted by the Authority as part of the Consultation Paper is given in the table below.

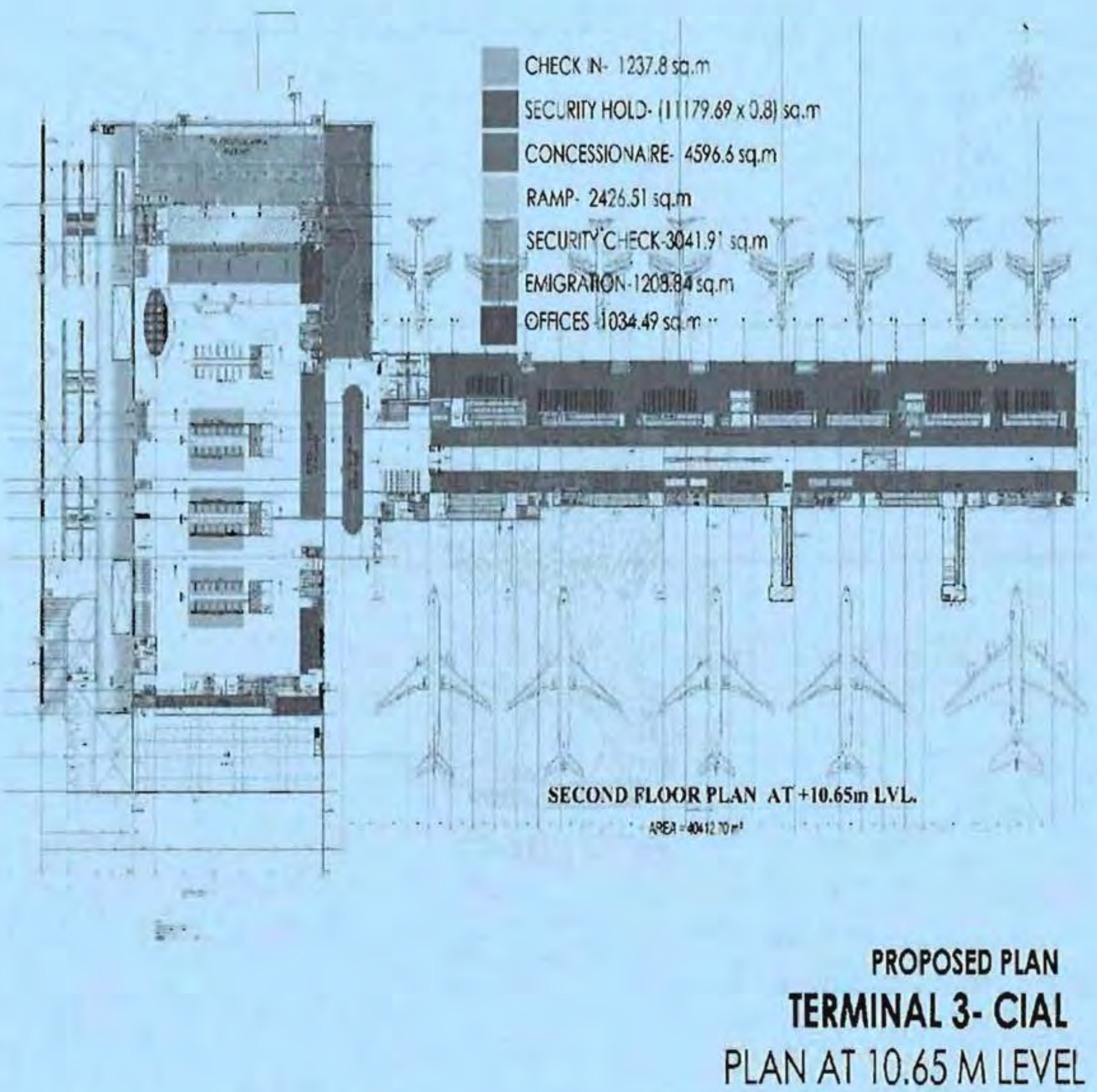
Table 93: Revision of cost and timing for Construction of parking bays phase 2 as proposed by the Authority in the CP

Particulars	FY 2023	FY 2024	FY 2025	Total
Phasing plan as per MYTP	40.8%	59.2%		100%
Cost as per AUCC for FY 21 (INR Cr.)	53.66	77.86		131.52
Phasing plan proposed by the Authority		40.8%	59.2%	100%
Cost as per AUCC for FY 21 (INR Cr.)		53.66	77.86	131.52
Inflation factor (base year FY 2021)	1.07	1.11	1.15	
Revised cost as per Authority (INR Cr.)		59.49	89.35	148.84

(B.2) <u>Development of northern side of T3 pier</u>

6.2.15. Modification of the pier, based on the feedback from two years of operations, is planned to be undertaken during this period to avoid operational closure in future. The terminal was designed for a peak hour capacity of 2000 Peak-Hour Passenger (PHP) in Departure as well as Arrival areas based on Airport Design Reference Manual (7th edition). As per the Airport Operator, based on the latest version (10th edition) of the Manual, the Departure Entry Checkpoint and Restaurant seating area are insufficient for the design capacity. The expansion of the pier from a width of 35 m to 55 m would result in enhanced peak-hour passenger boarding and seating capacity along with additional concessionaire and retail areas. The Airport Operator has planned to undertake the proposed modification alongside the construction of Parking bays phase 2, so as to avoid operational closure in future. The proposed design is provided in the figure below.

Figure 3: Proposed plan for T3 pier expansion



6.2.16. The Airport Operator had conducted AUCC meetings on 05 April 2018 and the Stakeholders had agreed to the development of northern side of T3 pier which would be undertaken in the Third Control Period. CIAL had submitted that the AUCC approved cost for development of northern side of T3 pier to be undertaken in FY 2021 was INR 149.06 crores. However, since the development would be undertaken in FY 2023 and FY 2024, the inflation adjusted cost as per the Airport Operator was INR 189.9 crores.

6.2.17. The Authority observed that since the AUCC meetings were conducted in FY 2019, the cost had been revised by CIAL in its MYTP. The Authority analysed the same and found the escalation in cost for modification of T3 to be high compared to the inflation adjustment done for other capital expenditures, and hence readjusted the cost based on the phasing plan in the MYTP and the figures agreed on by AUCC. The inflation rates proposed by the Authority at the consultation stage are given below.

Table 94: Rate of inflation proposed by the Authority[9] as part of the Consultation Paper

Financial Year	2017	2018	2019	2020	2021	2022-2026
Inflation	1.73%	2.96%	4.26%	1.67%	0.50%	3.50%

[9] Figures till FY 2020 are actual rates from - https://eaindustry.nic.in/Key_Economic_Indicators/Price_Statistics.pdf and the figures for FY 2021 and onwards are from - https://m.rbi.org.in/scripts/PublicationsView.aspx?id=20324

6.2.18. Since the expansion of the T3 pier is planned alongside the construction of Parking bays phase 2, the Authority had deferred the timing of the expansion by another year as done for the construction of Parking bays phase 2. The cost and phasing plan for T3 pier expansion as readjusted by the Authority at the consultation stage is given in the table below.

Table 95: Revised cost and phasing plan for T3 pier expansion proposed by the Authority as part of the CP

Particulars	FY 2023	FY 2024	FY 2025	FY 2026	Total
Phasing plan as per MYTP	28.1%	62.9%	9.0%		100.0%
Cost as per AUCC for FY 21 (INR Cr.)	41.89	93.76	13.41		149.06
Phasing plan proposed by the Authority		28.1%	62.9%	9%	100%
Cost as per AUCC for FY 21 (INR Cr.)		41.89	93.76	13.41	149.06
Inflation factor (base year FY 2021)	1.07	1.11	1.15	1.19	
Revised cost as per Authority (INR Cr.)		46.46	107.64	15.91	170.01

Table 96: Comparison of cost as per AUCC, MYTP submission by CIAL and as proposed by the Authority in the CP

Particulars	Cost as per AUCC for FY 2021 (INR Cr.)	Inflation adjusted cost as per MYTP (INR Cr.)	Inflation adjusted cost as per Authority (INR Cr.)
Modification of T3	149.06	189.86	170.01
Parking bays phase II	131.52	145.52	148.84

6.2.19. The Authority sought the Project Investment File for the proposed capital expenditure for modification of T3 pier. Based on the details received regarding the additional area planned to be constructed and the phasing plan of the project, it was observed that the cost for modification of T3, as revised by the Authority, was not within the inflation adjusted normative costs prescribed, as per AERA Order No. 07/2016-17 dated 13 June 2016 regarding normative approach to building blocks in economic regulation of major airports – capital costs reg., with respect to terminal buildings. The Authority computed the allowable costs for this project based on normative limits as given below.

Table 97: Comparison of inflation adjusted cost as per AUCC and the Normative costs proposed by the Authority in CP

Particulars	Based on AUCC	As per Normative Costs	Difference
FY 2024			
Area of terminal expansion (SQ. M.)	5730.30	5730.30	
Cost as revised by Authority (INR Cr.)	46.46	46.08	0.38
Cost per SQ. M. (INR)	81077.81	80413.43	
FY 2025			
Area of terminal expansion (SQ. M.)	12826.90	12826.90	
Cost as revised by Authority (INR Cr.)	107.64	106.76	0.88
Cost per SQ. M. (INR)	83917.42	83227.90	
FY 2026			
Area of terminal expansion (SQ. M.)	1835.33	1835.33	
Cost as revised by Authority (INR Cr.)	15.91	15.81	0.10
Cost per SQ. M. (INR)	86687.56	86140.88	
Total cost for T3 expansion (INR Cr.)	170.01	168.64	**1.37**
Total area of terminal expansion (SQ. M.)	20392.52	20392.52	

6.2.20. The cost and timing for Modification of T3 pier and Construction of parking bays phase 2 as proposed by the Authority at the consultation stage is given in the table below.

Table 98: Cost and timing of T3 pier modification and parking bays phase 2 as proposed by the Authority in the CP

Reference	Particulars (INR Cr)	FY of commissioning as per		Total cost as per		Difference
		CIAL	Authority	MYTP	Authority	
B.1	Parking bays phase II	2024	2025	145.52	148.84*	(3.32)
B.2	Modification of T3	2024 & 2025	2025 & 2026	189.86	168.65	21.21
B	**Total**			**335.38**	**317.49**	**17.89**

including adjustment for inflation on account of postponement

(C) Flood control measures

6.2.21. The airport operations at CIAL were hampered due to severe floods that occurred in August 2018 leading to suspension of airport operations for 15 days. CIAL was also affected by floods in 2019. To address this issue, CIAL had undertaken flood mitigation expenses recommended by KITCO in the Second Control Period and had proposed additional capital expenditure in this regard in the Third Control Period.

6.2.22. During the site visit it was observed that the flood mitigation measures are necessary for continuing operations during periods of heavy rains. However, it was also noticed that some of these measures were carried out beyond the operational area of the airport, i.e., outside the airport premises, on public land. Since it was found that the measures undertaken outside the airport also benefit the adjoining areas of the airport, including farmlands and households, the responsibility of these measures could not entirely be attributed to the Airport Operator. Therefore, only the work carried out on area belonging to the airport was considered Aeronautical. The same is discussed in the subsequent section on allocation of assets.

Table 99: Capital expenditure for Flood control measures as proposed by the Authority in the Consultation Paper

Reference	Particulars	Cost Considered (INR Cr.)
C	Flood Control Measures	93.07

(D) CISF Quarters

6.2.23. CIAL had submitted that there are 824 CISF staff working at CIAL and barrack accommodation is to be provided for 40% of the strength. Due to difficulty in finding adequate rented facilities in the vicinity of the airport, the CISF staff had requested for staff quarter facility and barrack accommodation at a single location.

6.2.24. The Authority sought the cost benefit analysis for CISF Quarters from the Airport Operator, and they had provided the same vide their email dated 15 December 2020 ("DATA POINT 1 Replies to QUERY 1-"). The analysis submitted by the CIAL is given in the table below:

Table 100: Cost benefit analysis for CISF Quarters submitted by the Airport Operator

Components	Family accommodation	Barrack accommodation	Rentals per month	Maintenance system costs	Total savings	Remarks
Average salary per month (INR)	60000	60000				
Average basic pay per month (INR)	30000	30000				
HRA (%)	18%	5%				for barrack reduction from 16% to 11%.
Monthly savings (INR)	5400	1500				
Number of accommodations for sanctioned strength	474	443				

Components	Family accommodation	Barrack accommodation	Rentals per month	Maintenance system costs	Total savings	Remarks
Savings per month (INR Lakhs)	25.6	6.6	36			
Savings per annum (INR Cr.)	3.1	0.8	4.3			
Cost per annum (INR Cr.)				1.1		
Total benefit per annum (INR Cr.)					**7.1**	
Construction cost (INR Cr.)						**74**
Recovery period of the cost (Years)						**10.5**

6.2.25. The cost benefit analysis submitted by the Airport Operator seemed to be devoid of other factors such as costs towards the return on RAB and depreciation accrued to the Airport Users as part of the ARR. Prima facie it appeared that the additional return to be provided would be higher than the benefits realised. Also, the cost benefit analysis was conditional to the capital expenditure incurred which was only on estimated basis at that stage.

6.2.26. Therefore, the Authority proposed to not consider the capital expenditure towards CISF quarters at that stage, till additional inputs as discussed above were made available.

Table 101: Capital expenditure for CISF Quarters as proposed by the Authority as part of the Consultation Paper

Reference	Particulars (INR Cr.)	Cost as per CIAL	Cost considered by the Authority
D	CISF Quarters	74.01	0.00

(E) IT Requirements

6.2.27. The capital expenditure projects proposed by CIAL towards IT systems are discussed below.

(E.1) CCTV Surveillance System

6.2.28. The Airport Operator had submitted that they have a CCTV Surveillance System as per the guidelines of Bureau of Civil Aviation Security (BCAS) that includes nearly 3,300 full HD cameras with 30 days full HD recording facility along with 7 days redundant recording facility at reduced resolution (total storage capacity of the system is 6.7 PB). The recording and management are undertaken through around 80 servers and the system runs through an independent IP network consisting of more than 200 network switches.

6.2.29. The hardware associated with the system operates 24 x 7 and has a typical life cycle of 6 to 7 years. The existing system was implemented by M/s Honeywell Automation India Ltd in March 2017 and is under a 7-year contract with M/s Honeywell wherein all the maintenance activities, including spares and replacements, are undertaken by them. This contract will end in March 2024 and therefore CIAL had proposed the revamp of the CCTV surveillance system in FY 2025.

(E.2) CT based Hand baggage X-BIS T3

6.2.30. CIAL had stated that as per current BCAS guidelines registered baggage screening is carried out using CT based Explosive Detection System. The Airport Operator had proposed to implement CT based Explosive Detection System for hand baggage screening at pre-embarkation security check at International Terminal (T3) for better screening. Accordingly, 6 single view-based X-BIS are to be replaced with CT based X-BIS in T3.

(E.3) CT based Hand baggage X-BIS T1

6.2.31. Similar to the proposed upgrade in T3, another 6 replacements, of single view-based X-BIS with CT based X-BIS, were proposed in the Domestic Terminal (T1).

(E.4) SOC & NOC for IT

6.2.32. As per the MYTP, CIAL has a total of more than 12000 IT equipment, which include critical equipment like physical and virtual servers, baggage handling system, check-in systems, network switches, firewalls, EPABX systems, TETRA radios, SCADA systems and UPS powering these. The system's external connectivity exists to places outside India like London and Atlanta (for check-in systems), New Zealand (BHS System), Singapore (AODB system), Malaysia (Tetra radios), Czechoslovakia (AFAS system), USA (CT Machines), Sweden (VDGS), Germany (SAP) etc.

6.2.33. Hence, the Airport Operator had proposed to establish a Network Operation Centre (NOC) and IT Security Operation Centre (SOC) in line with standard industry practices to monitor the security and performance of the critical network at the Airport round the clock, audit internal servers for presence of vulnerabilities and prevent external threats including hacking, viruses, ransomware etc. using latest security tools.

(E.5) Digi yatra – IT Systems

6.2.34. Ministry of Civil Aviation (MoCA) had published the Digi Yatra policy document covering guidelines for implementation of the Digi Yatra system at Airports, which would ensure paperless and hassle-free journey to all passengers and enhance the security of travel through biometric passenger authentication. Further, DGCA had published the Civil Aviation Requirement (CAR) document mandating the Airports to implement the Digi-Yatra E-Boarding system. CIAL had proposed to implement the system in the Third Control Period. AERA fully supports such digital initiatives aimed at operational efficiency and benefit of the users. However, the costs for this project are still not firmed up, which the Authority would require to evaluate the reasonableness of the cost proposed by the Airport Operator. Therefore, the Authority proposed to not consider the cost of this project in the capital expenditure for the Third Control Period but true it up on incurrence and completion basis at the time of determination of tariff for the next control period.

(E.6) Perimeter intrusion detection system

6.2.35. Vide circular 5/2017 dated 05/04/2017, BCAS had published technical specification and guidelines for implementing Perimeter Intrusion Detection System (PIDS) at airports across India. The system is intended to detect people crossing over to the airport through the restricted perimeter area.

6.2.36. CIAL had proposed to implement Non-lethal Power Fence on top of the perimeter wall (for a length of 9 km), Fibre Optic Mesh System on top of perimeter wall (on locations where power fence is not practical like ILS area and areas having vegetation, for a length of 3 km), Fibre Optic vibration sensor on the perimeter wall (to detect intrusion attempt through wall penetration, for a length of 13 km) and Intrusion Detection Grid at the outlets of the rainwater drains. The above technologies are to be integrated with a thermal camera-based CCTV Surveillance System for day and night surveillance.

(E.7) Smart Lane - T1

6.2.37. CIAL had submitted that 7 Smart Lane systems integrated with the hand baggage X-BIS are proposed to be implemented in the Third Control Period for fast and efficient passenger, baggage and tray handling at pre-embarkation security checks in the Domestic Terminal (T1). The system would consist of roller trays for automated diversion of security cleared and suspicious baggage based on the security screener's decision and would have automatic tray return feature that will eliminate the need to transport trays manually.

(E.8) Smart Lane – T3

6.2.38. Similar to the implementation in T1, another 7 Smart Lane systems are planned to be installed in the International Terminal (T3).

(E.9) Passenger processing IT systems

6.2.39. According to CIAL, the existing passenger processing IT systems that includes CUPPS, CUSS and BRS will reach their end of life by December 2022. These are major IT systems required for passenger processing at the Airport and needs to be revamped in the Third Control Period.

6.2.40. Given the criticality of the IT assets at the airport with respect to security and efficiency, the Authority proposed to consider CIAL's submission of capital additions for IT requirements (except Digi yatra – IT systems) as discussed in detail above for the Third Control Period. The capital expenditure towards IT Systems as considered by the Authority is given below.

Table 102: Capital expenditure for IT Systems as proposed by the Authority as part of the Consultation Paper

Reference	Particulars (INR Cr.)	Cost as per CIAL	Cost considered by Authority
E.1	CCTV Surveillance system	43.81	43.81
E.2	CT based Hand baggage X-BIS T3	29.98	29.98
E.3	CT based Hand baggage X-BIS T1	25.12	25.12
E.4	SOC & NOC for IT	15.92	15.92
E.5	Digi yatra – IT systems	30.69	0.0
E.6	Perimeter intrusion detection systems	22.35	22.35
E.7	Smart Lane – T1	19.88	19.88
E.8	Smart Lane – T3	22.48	22.48
E.9	Passenger processing IT systems	31.40	31.40
E	**Total**	**241.62**	**210.93**

(F) Fire and Safety measures

6.2.41. The capital expenditure projects proposed by CIAL towards Fire and Safety measures are discussed below.

(F.1) Fire Tenders

6.2.42. CIAL had proposed to procure two 12,000 litre Air Crash Fire Tenders (ACFTs) and two 10,000 litre crash fire tenders to replace the four 1998 model Rosenbauer fleet that is nearing end of life. Additionally, two more ACFTs were proposed to be procured in FY 2024 to replace the 2004 model Rosenbauer vehicle and the 2013 model Iveco Magirus vehicle due to delays faced by the Airport Operator in service support and availability of spare parts.

6.2.43. However, the Authority observed that the cost projected by CIAL for the procurement of two ACFTs in FY 2024 was much higher compared to the costs projected for the other fire tenders planned to be purchased in FY 2022 and FY 2023. The costs proposed by CIAL are given in the table below.

Table 103: Capital expenditure for crash fire tenders as proposed by CIAL

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
ACFTs (2 numbers)	0.0	0.0	37.5	0.0	0.0	37.5
Crash Fire Tenders (total 4 numbers)	15.3	15.7	0.0	0.0	0.0	31.0
Total	**15.3**	**15.7**	**37.5**	**0.0**	**0.0**	**68.5**

6.2.44. The Authority compared the inflation adjusted costs incurred at other airports in the past, for the procurement of imported ACFTs (including five-year comprehensive maintenance). The cost proposed by CIAL was found to be more than double the cost estimated by the Authority. Therefore, in the absence of further details in this regard from the Airport Operator, the Authority proposed to consider the cost for procurement of ACFTs in FY 2024 at 50% of the cost submitted by CIAL and true up the same based on the actual cost incurred. The revised cost proposed by the Authority at the consultation stage is given in the table below.

Table 104: Capital expenditure for crash fire tenders proposed by the Authority as part of the Consultation Paper

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
ACFTs (2 numbers)	0.00	0.00	18.74	0.00	0.00	18.74
Crash Fire Tenders (total 4 numbers)	15.35	15.70	0.00	0.00	0.00	31.04
Total	**15.35**	**15.70**	**18.74**	**0.00**	**0.00**	**49.78**

(F.2) Satellite fire station

6.2.45. CIAL had proposed to construct a satellite fire station at the western side of the airfield as the location of the current fire station poses a risk of delay in response due to obstructions (vehicles, equipment or aircraft) on Taxiway C in the event of emergencies at the domestic terminal building, cargo area or the city side.

(F.3) Widening of roads for ACFTs

6.2.46. The Airport Operator had proposed widening of access roads at necessary locations with sufficient strength and vertical clearance to facilitate the passage of ACFTs in both directions as per the guidelines of ICAO (Doc 9137, Part 1, Chapter 3).

(F.4) Emergency Rescue Tender

6.2.47. An emergency rescue tender was proposed to be purchased by CIAL to handle various emergency situations like infrastructure collapse, confined space rescue etc.

(F.5) Hydraulic platform for High Rise Building

6.2.48. A hydraulic platform to enable access to high rise buildings in case of fire was proposed to be procured by the Airport Operator to ensure safety.

6.2.49. The Authority had studied the requirements in detail and proposed to consider capital additions, except for ACFTs discussed above, as proposed by CIAL, towards fire and safety measures, for the Third Control Period.

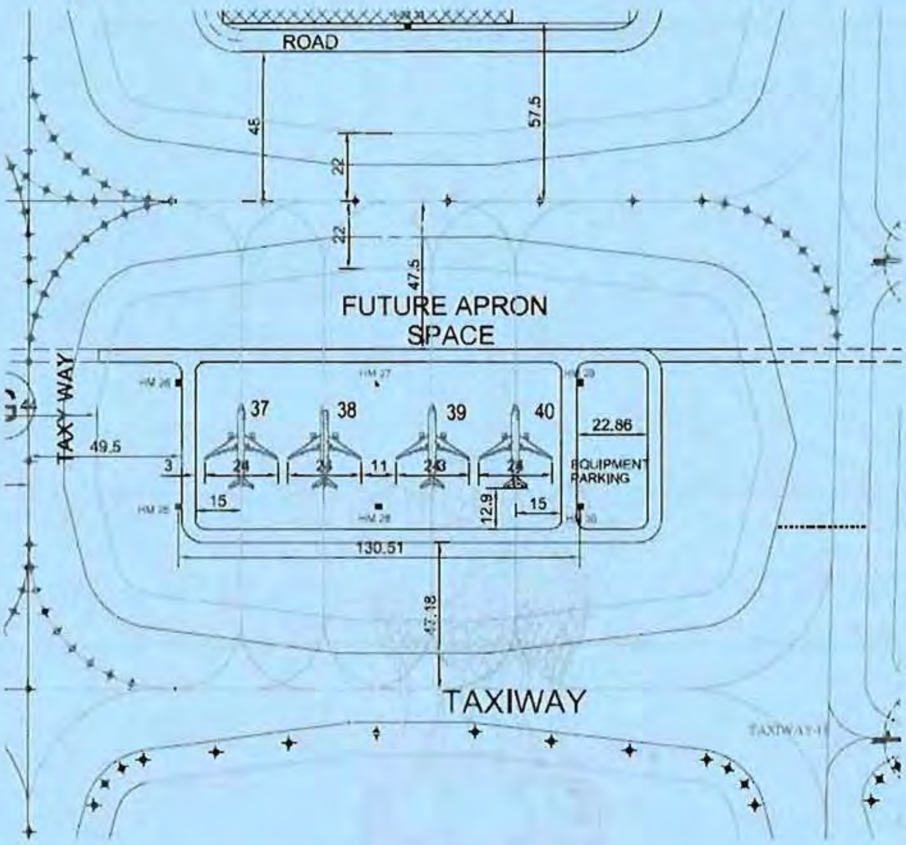
Table 105: Capital expenditure for Fire & Safety measures proposed by the Authority as part of the CP

Reference	Particulars (INR Cr.)	Cost (As per CIAL)	Cost (As per Authority)
F.1	Fire Tenders	68.51	49.78
F.2	Satellite fire station	15.46	15.46
F.3	Widening of roads for ACFTs	4.26	4.26
F.4	Emergency Rescue Tender	10.95	10.95
F.5	Hydraulic platform for High Rise Building	10.71	10.71
F	**Total**	**109.89**	**91.16**

(G) Construction of parking bays 37 to 40, extension of taxiway J up to H, construction of taxiway K and taxiway west of A to Isolation parking bay

6.2.50. CIAL had submitted that it plans to construct four parking bays (No. 37-40), extend Taxiway J up to H and construct Taxiway K & Taxiway west of A to isolation parking bay for use by Code C Aircrafts. These works are proposed to be completed by FY 2026.

Figure 4: Developing Apron 6 & adding TWY K and extension of Taxiway J from TWY G till TWY H



6.2.51. As per the DPR submitted by CIAL vide their email dated 15th December 2020 ("DATA POINT 1 Replies to QUERY 1 –"), the main feeder taxiways for Parking bays phase 2 will be Taxiway F and Taxiway G. However, once all the proposed parking bays are operational, the existing Taxiways would face congestion. Therefore, the Airport Operator had proposed the construction of Taxiway K and provision of complete interconnectivity with existing taxiways. With the addition of the new taxiway, the land between Taxiway J and Taxiway K would be completely locked for construction, hence CIAL proposed to develop this land parcel as parking stands for non-scheduled aircraft (Parking bays 37-40) thereby addressing any inadequacies in parking stands for smaller non-scheduled aircraft.

6.2.52. The Authority noted that the need for this project is subject to the commissioning of Parking bays phase 2. Since the Authority had proposed to postpone the commissioning of Parking bays phase 2 by a year, the same would be applicable to this project. Therefore, this project may now be considered to be taken up in the Fourth Control Period as the revised year of commissioning would be FY 2027. Hence, the Authority had proceeded to exclude the proposed capital expenditure for this project from the capital additions considered by it for the Third Control Period. Since this asset is not getting capitalised in the Third Control Period, the same was not considered in the additions to RAB for the Third Control Period.

Table 106: Capital expenditure for Parking bays 37-40 and associated works proposed by the Authority in the CP

Reference	Particulars (INR Cr.)	FY of commissioning as per		Cost as per	
		CIAL	AERA	CIAL	AERA
G	Construction of Parking bays 37,38,39 & 40 & Extension of Taxiway J Up to H and Construction of Taxiway K & Taxiway, West of A to Isolation parking bay	2026	2027	73.37	0.00

(H) Regrading of side strips beyond 30 m

6.2.53. CIAL had submitted that the Californian Bearing Ratio (CBR) was found to be less at some locations and the same was noted by DGCA. Stabilisation of side strip up to 30 m was completed in the Second

Control Period. The stabilisation of side strip beyond 30m is proposed to be undertaken in the Third Control Period.

Table 107: Capital expenditure for regrading of side strips proposed by the Authority in the Consultation Paper

Reference	Particulars	Cost Considered (INR Cr.)
H	Regrading of side strips beyond 30 m	43.95

(I) Ground Power Unit and Pre-Conditioned Air Unit south and north of T3

6.2.54. As per the guidelines issued by the Central Pollution Control Board, noise monitoring needs to be done at all civil airports which has more than 50,000 aircraft movements per year. Since CIAL has crossed this threshold, in accordance with DGCA order with regards to implementation of noise abatement procedures, CIAL had proposed to undertake installation of bridge-mounted electrically driven fixed GPU and PCA at the Airport to minimise the use of diesel-powered GPU and aircraft fuel powered APU.

6.2.55. Since the installations are planned for the contact bays including the ones proposed to be developed on the northern side of T3 pier, the Authority had deferred the commissioning of this project by a year, as done for Parking bays phase 2.

Table 108: Capital expenditure towards GPU and PCA proposed by the Authority as part of the Consultation Paper

Reference	Particulars	FY of commissioning as per		Cost as per (INR Cr.)	
		CIAL	Authority	CIAL	Authority
I	GPU and PCA South and North of T3	2025	2026	21.51	23.11*

**including adjustment for inflation on account of postponement*

(J) Security Equipment – DFMD, HHMD, X-BIS, ETD

6.2.56. The Authority proposed to consider the capital expenditure as submitted by the Airport Operator towards additional requirements and replacement of critical security equipment like X-BIS, ETD, DFMD, HHMD etc.

Table 109: Capital expenditure towards security equipment proposed by the Authority as part of the CP

Reference	Particulars	Cost Considered (INR Cr.)
J	Security Equipment's - X-BIS, ETD, DFMD, HHMD etc.	19.05

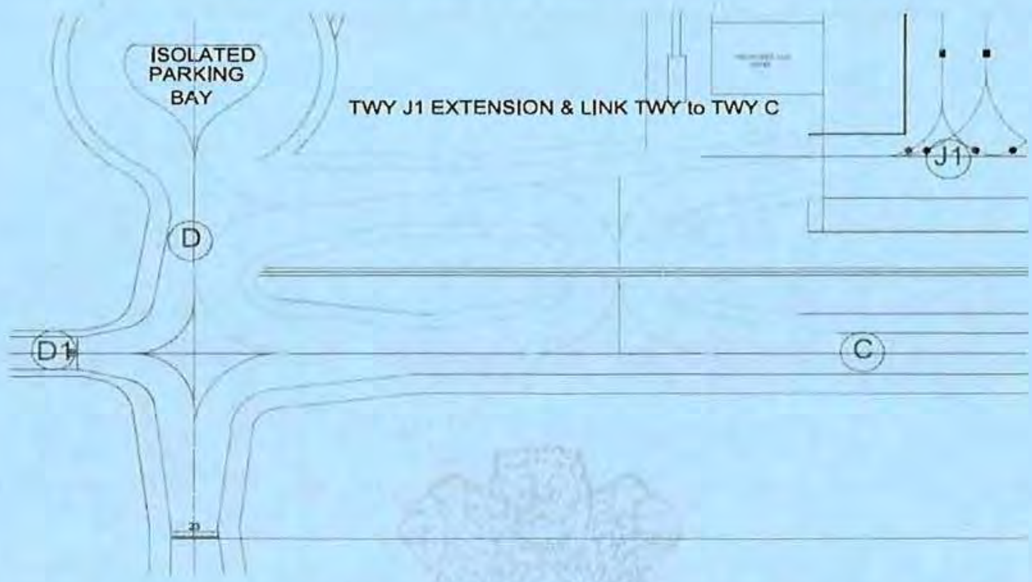
(K) Other major capital expenditures

6.2.57. CIAL, as part of its plans to venture into allied activities on cargo operations, plans to build a non-bonded warehouse as part of development of Logistics Park. Since this is not a part of the core operations of the airport the allocation of this project was revisited in the next section regarding allocation of assets.

6.2.58. Extension of Taxiway J1 up to isolated parking bay:

6.2.58.1. CIAL has planned the extension of Taxiway J1 up to isolated parking bay to provide an additional exit point for the stands in Apron 1, so as to reduce the turnaround time, the taxiway occupancy time and the taxiing distances for domestic flights.

Figure 5: Plan for extension of Taxiway J1 up to isolated parking bay



6.2.58.2. The cost submitted by CIAL for this project was INR 12.5 Cr as per the MYTP. In their email dated 15 December 2020 ("DATA POINT 1 Replies to QUERY1-"), regarding replies to queries of the Authority with respect to the MYTP submission, CIAL had requested that this figure be revised by adding the cost for pavement for code E aircraft of INR 12 Cr (not adjusted for inflation).

6.2.58.3. The Authority had analysed this additional cost submitted by CIAL against the normative costs for pavement prescribed as per AERA Order No. 7/2016-17 dated 13 June 2016 regarding normative approach to building blocks in economic regulation of major airports – capital costs reg. It was observed that the cost submitted by CIAL was beyond the normative costs prescribed by the Authority, adjusted for inflation. Hence, the Authority proposed to limit the allowable cost for the pavement for code E aircraft as detailed in the table below.

Table 110: Normative capping of cost for Extension of Taxiway J1 up to isolated parking bay as part of the CP

Particulars	As per CIAL	As per Normative Costs	Difference
Area of Pavement for Code E aircraft (Sq. m.)	14855.00	14855.00	
Cost per Sq. m. (INR)	8455.07	5617.88	
Cost of Pavement (INR Cr)	12.56	8.35	4.21

6.2.58.4. Based on the above, the Authority proposed to consider the revised cost for Extension of Taxiway J1 up to isolated parking bay as given in the table below.

Table 111: Revised cost for Extension of Taxiway J1 up to H proposed by the Authority as part of the CP

Particulars (INR Cr.)	Cost proposed by CIAL as per MYTP	Revised cost submitted by CIAL	Cost proposed by the Authority
Extension of Taxiway J1 up to isolated parking bay	12.51	25.07	20.86

6.2.59. Based on the above revision, the total change in "Other major capital expenditure" was as given below.

Table 112: Other major capital expenditure as revised by the Authority as part of the Consultation Paper

Reference	Particulars (INR Cr.)	Cost proposed by CIAL as per MYTP	Revised cost submitted by CIAL	Cost considered by the Authority
K	Other major capital expenditure	152.36	164.92	160.70

(M) Miscellaneous Expenses for Third Control Period

6.2.60. CIAL had proposed Miscellaneous expenses of INR 153 Cr for the Third Control Period and given the item-wise break-up of the same along with its phasing plan. The Authority noted that several minor general capex items (including Bird Control Management equipment, minor repair works, sweeping machines etc) that are required to meet the operational needs of the airport are clubbed under this expense. The expense also included the provision for replacement of old assets (like Information display systems, vehicles, furniture, garbage bins etc). The Authority had gone through the items in detail and noticed that the allocation of some of these assets needed to be revisited, the same had been analysed in the subsequent section on allocation of assets.

Table 113: Miscellaneous expenses as proposed by the Authority as part of the Consultation Paper

Reference	Particulars	Cost Considered (INR Cr.)
M	Misc. Expenses for Third Control Period	152.92

(Q) Interest During Construction

6.2.61. The Authority noted that financing allowance and the methodology for computation of the same was detailed in the airport guidelines and the same would need to be provided to the Airport Operator. However, the Airport Operator had computed financing allowance on the entire WIP amount being capitalised, whereas the Authority is of the view that such an allowance is essentially the IDC for a project and should be provided only on the debt portion of the project funds. Accordingly, the Authority had considered IDC to be provided based on revisions in the proposed capital expenditure discussed above and the notional gearing considered for the Third Control Period (refer Section 7). IDC as proposed by the Authority as part of the Consultation Paper is given below.

Table 114: IDC as proposed by the Authority as part of the Consultation Paper

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
As per CIAL	11.57	9.31	11.72	8.14	5.51	46.26
As recomputed by the Authority	5.55	4.47	1.79	4.55	3.52	19.87

Table 115: IDC as proposed by the Authority as part of the Consultation Paper

Reference	Particulars (INR Cr.)	As per CIAL	As considered by the Authority
Q	IDC	46.26	19.87

6.2.62. The Authority noted that other than the works related to Cargo facilities, Modification of T3 pier and Construction of parking bays phase 2, no user consultation was initiated for the other projects. The Authority expected that CIAL will carry out user consultations with all stakeholders at appropriate time for projects beyond the limit of Rs 50 Crores as detailed in the Airport Guidelines.

6.2.63. The Authority noted that the estimated project costs may undergo a change based on actual incurred amount and date of capitalisation. Thus, the Authority proposed to true up capital expenditure at the time of determining Aeronautical tariffs in the next control period after studying the reasonableness and reviewing the actual spend. The capital expenditure considered by the Authority for the Third Control Period at the consultation stage is given in the table below.

Table 116: Capital expenditure for the Third Control Period proposed by the Authority as part of the CP

Reference		Particulars (INR Cr.)	Cost Proposed by CIAL	Cost Considered by the Authority
A	A.1	Construction of import warehouse	52.70	52.70
	A.2	Modification of existing warehouse	35.94	35.94
	A.3	Mechanisation of export warehouse after modification	10.35	10.35
		Cargo Facilities (sub-total)	**98.99**	**98.99**
B	B.1	Construction of parking bays phase 2	145.52	148.84*
	B.2	Development of northern side of T3 pier	189.86	168.65
		Pier expansion and parking bays phase 2 (sub-total)	**335.38**	**317.49**
C		Flood control measures	93.07	93.07
D		CISF Quarters	74.01	0.00
		IT Systems:		
E	E.1	CCTV Surveillance system	43.81	43.81
	E.2	CT based Hand baggage X-BIS T3	29.98	29.98
	E.3	CT based Hand baggage X-BIS T1	25.12	25.12
	E.4	SOC & NOC for IT	15.92	15.92
	E.5	Digi yatra – IT systems	30.69	0.00**
	E.6	Perimeter intrusion detection systems	22.35	22.35
	E.7	Smart Lane (Automated Tray Retrieval System) – T1	19.88	19.88
	E.8	Smart Lane – T3	22.48	22.48
	E.9	Passenger processing IT systems	31.40	31.40
		IT Systems (sub-total)	**241.62**	**210.93**
		Fire and Safety Measures:		
F	F.1	Fire Tenders	68.51	49.78
	F.2	Satellite fire station	15.46	15.46
	F.3	Widening of roads for ACFTs	4.26	4.26
	F.4	Emergency Rescue Tender	10.95	10.95
	F.5	Hydraulic platform for High Rise Building	10.71	10.71
		Fire and Safety Measures (sub-total)	**109.89**	**91.16**
G		Construction of Parking bays 37,38,39 & 40 & Extension of Taxiway J Up to H and Construction of Taxiway K & Taxiway, West of A to Isolation parking bay	73.37	0.00
H		Regrading of side strips beyond 30 m	43.95	43.95
I		GPU and PCA South and North of T3	21.51	23.11*
J		Security Equipment's - X-BIS, ETD, DFMD, HHMD etc.	19.05	19.05
K		Other major capital expenditures	164.92[10]	160.70
L		**Total of Major Capex Items** (A+B+C+D+E+F+G+H+I+J+K)	**1275.77**	**1058.45**
M		Misc. Expenses for Third Control Period	152.92	152.92
N		**Total** (L+M)	**1428.69**	**1211.37**
O		Commercial projects – Commercial Complex, hotels, retail spaces, F&B facilities etc.	437.82	437.82
P		**Grand Total** (N+O)	**1866.51**	**1649.19**
Q		IDC	46.26	19.87
		Total (including IDC) (P+Q)	**1912.77**	**1669.07**

**including inflation adjustment on account of postponement*

***to be trued up on incurrence and completion basis*

6.2.64. The Authority noted that ~13% of the total asset additions were brought forward from the Second Control Period (Cargo facilities and Parking bays phase 2). Considering the quantum of capital expenditure and its impact on the tariff, the Authority had proposed to readjust the project cost by 1% and the applicable

[10] The figure is higher than CIAL's initial submission due to the revision of cost requested by CIAL as explained in Para 6.2.58

carrying cost in the ARR/target revenue at the time of determination of tariff for the Fourth Control Period in case of non-completion of projects as per proposed timelines.

Aeronautical allocation of assets for the Third Control Period:

6.2.65. The Airport Operator had classified the assets proposed to be capitalised in the Third Control Period in to Aeronautical, Non-Aeronautical and Common. The Common assets were further apportioned into Aeronautical and Non-Aeronautical using the terminal allocation ratio.

6.2.66. CIAL had considered a terminal allocation ratio of 7.19% (Non-Aeronautical portion) in its MYTP submission. The Authority observed that CIAL had considered only the specific areas used for Non-Aeronautical activities as Non-Aeronautical area and the remaining area was considered as Aeronautical. Therefore, the Common areas were not allocated into Aeronautical and Non-Aeronautical (as against the AERA's direction in paragraph 9.2.4 of Order No. 07/2017-18 dated 13th July 2017 regarding determination of tariffs for Aeronautical services in respect of Cochin International Airport for the Second Control Period) and were considered as purely Aeronautical.

6.2.67. The terminal allocation ratio was analysed in the study on allocation of assets between Aeronautical and Non-Aeronautical assets (summary of the study is given in Annexure 2, the detailed report is available along with the Tariff Order on the AERA website). The study had revised the terminal allocation ratio to 8.94% (international – 8.47% and domestic – 9.88%) after considering the detailed break-up of the terminal area, usage details and the floor plans provided by the Airport Operator.

6.2.68. The terminal allocation ratio as determined by the study on allocation of assets between Aeronautical and Non-Aeronautical assets is given in the table below.

Table 117: Terminal allocation ratio as recomputed by the Authority as part of the Consultation Paper

International Passenger Terminal		
Total Terminal Area	146528	sqm
Excluded Area	1910	sqm
Total Non-Aero Area	12247	sqm
Total Aero Area	132371	sqm
Non-Aero % in International Passenger Terminal	8.47	%
Domestic Passenger Terminal		
Total Terminal Area	74123	sqm
Total Non-Aero Area	7325	sqm
Total Aero Area	66798	sqm
Non-Aero % in Domestic Passenger Terminal	9.88	%
Combined Passenger Terminal Area of Domestic & International	220651	sqm
Excluded Area	1910	sqm
Combined Non-Aero Area	19572	sqm
Combined Aero Area	199169	sqm
Combined Non-Aero % of Terminals in CIAL	8.94	%

6.2.69. The Authority had also conducted a benchmarking of the terminal allocation proposed by CIAL against select comparable airports in the country. The details of the benchmarking exercise is discussed in detail in Annexure 5. The methodology and recommendations of the benchmarking exercise can be summarised as follows:

- For the purpose of benchmarking, eight comparable airports were selected based on the following criteria: Airports with similar passenger profile (passengers travelling to UAE/ gulf countries for jobs or visiting friends/ families); Airports having significantly high proportion of international traffic in total passenger traffic; Airports with comparable range of total traffic (8-12 MPPA)
- The comparable airports considered for benchmarking were Trivandrum, Calicut, Mangalore, Hyderabad, Lucknow, Trichy, Ahmedabad and Pune. The selected airports were assigned scores

on three parameters viz., Operational proximity (a measure of similarity in traffic profile), Ownership structure (Public /PPP) and Location of the airport (whether located in Kerala or in other states).

- Based on these parameters, a relevance/proximity score was calculated for each of the comparable airports. The proximity scores were then used to arrive at a weighted average terminal allocation ratio that would be suitable for CIAL.
- The benchmarking study (proximity analysis) suggested an allocation of at least 9.50-10.00% of terminal area towards the provision of Non-Aeronautical services/ activities, whereas the IATA and IMG norms recommend the allocation to be between 8-12%. Therefore, based on the benchmarking analysis, the Airport Operator is recommended to allocate more area for Non-Aeronautical activities in future.

6.2.70. The Authority had gone through the segregation of individual forecasted assets proposed by CIAL for the Third Control Period and was of the view that some of the proposed capital additions needed to be reclassified based on the principles given in the study on allocation of assets between Aeronautical and Non-Aeronautical assets. Accordingly, the Authority had reallocated certain capital expenditure considered as Aeronautical by the Airport Operator as explained in the table below.

Table 118: Forecasted assets for the Third Control Period reallocated by the Authority as part of the CP

S. No.	Particulars	Allocation as per the Authority
1	CBT (Computer based training)	Common (Employee)
2	Regulator cum bridge	Non - Aero
3	Alternate water Source for Airport	Common
4	Computers, servers and peripherals	Common (Employee)
5	Applications and system software	Common (Employee)
6	Information Displays (for terminal area)	Common
7	UPS Systems (terminal and office areas)	Common (Employee)
8	Local Area Networking	Common
9	Vehicle Access Control Systems	Common (Employee)
10	Presentation Systems (Commercial displays)	Non - Aero
11	Non-Bonded Warehouse – Development of Logistics Park	Non - Aero
12	Lighting and other amenities -T2	Common
13	Streetlight/ High Mast revamping - City side	Non - Aero
14	Chiller upgradation and associated electrical works- T1	Common
15	Upgradation of AHU and Fixing of UVC lights to improve IAQ	Common
16	Additional Water Cooler, water dispenser, purifier, hand drier etc. for terminals	Common
17	Additional Access platforms	Common
18	Fire Alarm system in terminals and ancillary buildings	Common
19	Terminal Fire protection system- Fire Pump house, sump, hydrant, sprinklers -installation in new buildings	Common
20	Furniture Budget	Common
21	Garbage bins for Terminals	Common
22	Office Equipment Budget	Common (Employee)
23	Terminal HK Equipment	Common
24	Training Books & CD & DGRs	Common (Employee)
25	Signage for trade centre & CGC	Non - Aero
26	CIAL Museum at T1	Non - Aero
27	Creation of Online Training Platform for employees	Common (Employee)
28	CIAL Administrative Block	Common (Employee)
29	Vehicle Procurement	Common (Employee)

6.2.71. As discussed in the previous section, only the flood mitigation measures implemented on the area belonging to the airport were considered Aeronautical. The Airport Operator was asked to share the break-up of flood control measures carried out inside and outside the airport premises. Accordingly, the Authority had classified the capital expenditures as given in the table below.

Table 119: Allocation of capital expenditure towards flood mitigation measures proposed by the Authority in the CP

Particulars	FY 2022	FY 2023	Third Control Period	Allocation
Expenditure incurred outside the airport area				
Construction of Regulator cum Bridge		41.73	**41.73**	Non-Aeronautical
Expenditure incurred inside the airport area				
Flood Control Measures on Airport Premises	23.30	28.07	**51.37**	Aeronautical
Total Flood Control Measures	23.30	69.80	**93.10**	

6.2.72. CIAL had considered the capital expenditure towards Non-Bonded warehouse as Aeronautical, as discussed in the previous section. Since this is not a core part of the operations at the airport, the Authority proposed to reclassify this asset as Non-Aeronautical.

6.2.73. Based on the above reclassification and revised terminal allocation ratio, the revised capital expenditure proposed as Aeronautical by the Authority at the consultation stage is given in the table below.

Table 120: Capital expenditure for the Third Control Period proposed as Aeronautical by the Authority as part of the CP

Reference		Particulars (INR Cr)	As per CIAL	As per Authority		
			Total Capex	Total	Aero	Non-Aero
A	A.1	Construction of import warehouse	52.70	52.70	52.70	0.00
	A.2	Modification of existing warehouse	35.94	35.94	35.94	0.00
	A.3	Mechanisation of export warehouse after modification	10.35	10.35	10.35	0.00
		Cargo facilities (sub-total)	**98.99**	**98.99**	**98.99**	**0.00**
B	B.1	Construction of parking bays phase 2	145.52	148.84*	148.84	0.00
	B.2	Development of northern side of T3 pier	189.86	168.65	157.01	11.64
		Pier expansion and parking bays phase 2 (sub-total)	**335.38**	**317.49**	**305.85**	**11.64**
C		Flood control measures in airport area	93.07	93.07	51.34	41.73
D		CISF Quarters	74.01	0.00	0.00	0.00
		IT Systems:				
E	E.1	CCTV Surveillance system	43.81	43.81	43.81	0.00
	E.2	CT based Hand baggage X-BIS T3	29.98	29.98	29.98	0.00
	E.3	CT based Hand baggage X-BIS T1	25.12	25.12	25.12	0.00
	E.4	SOC & NOC for IT	15.92	15.92	15.92	0.00
	E.5	Digi yatra – IT systems	30.69	0.00	0.00**	0.00
	E.6	Perimeter intrusion detection systems	22.35	22.35	22.35	0.00
	E.7	Smart Lane – T1	19.88	19.88	19.88	0.00
	E.8	Smart Lane – T3	22.48	22.48	22.48	0.00
	E.9	Passenger processing IT systems	31.40	31.40	31.40	0.00
		IT Systems (sub-total)	**241.62**	**210.93**	**210.93**	**0.00**
		Fire and Safety Measures:				
F	F.1	Fire Tenders	68.51	49.78	49.78	0.00
	F.2	Satellite fire station	15.46	15.46	15.46	0.00
	F.3	Widening of roads for ACFTs	4.26	4.26	4.26	0.00
	F.4	Emergency Rescue Tender	10.95	10.95	10.95	0.00
	F.5	Hydraulic platform for High Rise Building	10.71	10.71	10.71	0.00
		Fire and Safety Measures (sub-total)	**109.89**	**91.16**	**91.16**	**0.00**
G		Construction of Parking bays 37,38,39 & 40 & Extension of Taxiway J Up to H and Construction of Taxiway K & Taxiway, West of A to Isolation parking bay	73.37	0.00	0.00	0.00
H		Regrading of side strips beyond 30 m	43.95	43.95	43.95	0.00
I		GPU and PCA South and North of T3	21.51	23.11*	23.11	0.00

Reference		Particulars (INR Cr)	As per CIAL	As per Authority		
			Total Capex	Total	Aero	Non-Aero
J		Security Equipment's - X-BIS, ETD, DFMD, HHMD etc.	19.05	19.05	19.05	0.00
K		Other major capital expenditures	164.92	160.70	152.15	8.55
L		**Total of Major Capex Items** (A+B+C+D+E+F+G+H+I+J+K)	**1275.77**	**1058.45**	**996.53**	**61.92**
M		Misc. Expenses for Third Control Period	152.92	152.92	148.26	4.66
N		**Total** (L+M)	**1428.69**	**1211.37**	**1144.79**	**66.58**
O		Commercial projects – Commercial Complex, hotels, retail spaces, F&B facilities etc.	437.82	437.82	0.00	437.82
P		**Grand Total** (N+O)	**1866.51**	**1649.19**	**1144.79**	**504.40**
Q		IDC	46.26	19.87	14.57	5.30
		Total (including IDC) (P+Q)	**1912.77**	**1669.07**	**1159.38**	**509.69**

**including inflation adjustment on account of postponement*

***to be trued up on incurrence and completion basis*

6.2.74. The Aeronautical allocation of proposed capital addition considered for the Third Control Period is based on estimates, hence, the Authority proposed to true up the Aeronautical asset allocation as per efficient costs incurred and the review of line by line classification of capital additions into Aeronautical and Non-Aeronautical based on the broad framework provided by the study on allocation of assets between Aeronautical and Non-Aeronautical assets (summary of the study is given in Annexure 2, the detailed report is available along with the Tariff Order on the AERA website).

Depreciation for the Third Control Period

6.2.75. Authority had looked at CIAL's submission of Depreciation for the Third Control Period which included the depreciation on existing assets and the assets proposed to be commissioned in the Third Control Period. Considering the revised allocation of assets as per the study on allocation of assets between Aeronautical and Non-Aeronautical assets (summary of the study is given in Annexure 2, the detailed report is available along with the Tariff Order on the AERA website) and the revised useful lives for certain assets and asset classes as per AERA Order No. 35/ 2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets, the Authority had recomputed the depreciation of existing assets projected for the Third Control Period.

6.2.76. Authority had also noted in the tariff submission that the depreciation rates considered by CIAL for certain assets (and asset classes) proposed to be capitalised in the Third Control Period were not in line with the useful lives prescribed as per AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets. The Authority revised the useful lives of these assets and asset classes and recomputed the Aeronautical depreciation on assets proposed to be capitalised in the Third Control Period after considering the changes in the terminal allocation ratio, revised capital expenditure and the reallocation of forecasted assets into Aeronautical and Non-Aeronautical. The details of the proposed assets for which the useful lives were revised by the Authority at the consultation stage are given in the table below.

Table 121: Useful lives of proposed assets revised by the Authority as part of the Consultation Paper

Item Description	Useful Life (CIAL)	Revised Useful Life	Revised Asset Category
Smart-lane System	6	15	Baggage Handling Systems
Re-carpeting of runway	5	9	Runway Re-carpeting
Purchasing plastic / wooden skids	10	7	Furnitures and Fixtures other than Trolleys
Software upgradation for paperless transaction	6	5	Intangible assets
Purchase of Telescopic Forklift	10	15	Elevators, Escalators, ETV Equipment
Commercial RO water plant	15	10	Electrical Installation and equipment
Replacement of STP Equipment	15	10	Electrical Installation and equipment

Item Description	Useful Life (CIAL)	Revised Useful Life	Revised Asset Category
Modification of existing cargo to an integrated export warehouse - Building (Civil Works)	15	30	Terminal Building / Building in Operational Area
CISF Quarters (Civil Works)	20	30	Residential Building
CISF Quarters (Civil Works)	15	30	Terminal Building / Building in Operational Area
Development of northern side of T3 Pier (Civil Works)	20	30	Terminal Building / Building in Operational Area
Development of northern side of T3 Pier (Civil Works)	15	30	Terminal Building / Building in Operational Area
Minor works (Civil Works)	15	30	Terminal Building / Building in Operational Area
Roof storage on main fire station terrace (Civil Works)	15	30	Terminal Building / Building in Operational Area
ATC Tower refurbishment	15	30	Terminal Building / Building in Operational Area

6.2.77. Revised Depreciation for the Third Control Period at the consultation stage, after accounting for the changes discussed above, is provided in the table below.

Table 122: Revised Aeronautical Depreciation for the Third Control Period proposed by the Authority In the CP

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Land	0.00	0.00	0.00	0.00	0.00	0.00
Buildings and civil works	21.13	21.80	21.88	22.83	22.14	109.79
Golf course development	0.00	0.00	0.00	0.00	0.00	0.00
Runway, roads and culverts	41.80	45.02	50.77	50.29	52.80	240.69
Plant and Equipment	55.52	58.69	67.17	73.73	80.25	335.37
Office Equipment	0.57	0.53	0.55	0.57	0.39	2.61
Computers and accessories	3.04	4.73	5.56	5.31	4.67	23.30
Furnitures and fixtures	1.46	1.67	1.83	1.62	1.47	8.04
Vehicles	1.38	1.66	1.68	1.79	1.72	8.23
Intangible assets	0.48	1.53	2.50	2.69	2.85	10.05
IDC	0.33	0.48	0.53	0.73	0.81	2.87
Total Depreciation	**125.71**	**136.10**	**152.48**	**159.57**	**167.10**	**740.95**

Regulatory Asset Base for the Third Control Period:

6.2.78. Based on the revision in proposed capital expenditure, allocation of assets and depreciation discussed above, the recomputed Aeronautical RAB proposed by the Authority for tariff determination for the Third Control Period at the consultation stage was as shown in the table below.

Table 123: Revised RAB for the Third Control Period as proposed by the Authority as part of the Consultation Paper

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Opening RAB	1647.29	1702.88	1921.64	1918.60	2145.92	
Less: Depreciation during year	125.71	136.10	152.48	159.57	167.10	740.95
Add: Capitalisation during year	181.29	354.87	149.44	386.89	86.89	1159.38
Sales/transfers/retirements	0.00	0.00	0.00	0.00	0.00	0.00
Closing RAB	1702.88	1921.64	1918.60	2145.92	2065.72	
Average RAB	1675.09	1812.26	1920.12	2032.26	2105.82	

6.3. Stakeholder comments on RAB and Depreciation for the Third Control Period

6.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No.

08/2021-22 with respect to RAB and Depreciation for the Third Control Period. The comments by stakeholders are presented below.

CIAL's comments on RAB and Depreciation for the Third Control Period:

6.3.2. CIAL has requested AERA to consider the cost for regulator-cum-bridge under capital expenditure for the Third Control Period, stating that the flood related projects inside and outside the airport are interdependent. CIAL added that the decision to undertake the projects are solely to ensure safety of airport and that the benefit to adjoining communities is only incidental. The detailed comments of CIAL in this regard are provided in Para 4.8.38.

6.3.3. CIAL has stated that AERA's proposal regarding Financing Allowance only on debt portion does not confirm to AERA Guidelines and has requested AERA to consider Financing Allowance based on its Guidelines, as submitted in its MYTP. The detailed comments of CIAL in this regard are as follows:

i. "AERA has agreed in the consultation paper that the financing allowance and its methodology for computation is detailed in the airport guidelines and the same need to be given to CIAL.
ii. Further, AERA guidelines in para 5.2.7 clearly specify that the capital work in progress assets will be given return based on the computation of the financing allowance.
iii. In the previous orders of AERA, financing allowance was allowed in the second control period of CIAL, BIAL and HIAL.
iv. AERA's proposal to exclude the financing allowance does not confirm to the AERA guidelines and is a change of decision by AERA from the second control period order
v. As per the AERA guidelines, CIAL requests AERA to consider the financing allowance on the capital expenditure of INR 46.3 cr. based on its MYTP for the third control period."

6.3.4. As in the case of true up of Second Control Period, CIAL has requested the Authority to consider the useful life of assets as submitted by CIAL in its MYTP. The detailed comments of CIAL in this regard are given in Para 4.5.15.

Other stakeholders' comments on RAB and Depreciation for the Third Control Period:

6.3.5. IATA has proposed a freeze of all CAPEX projects and has requested for detailed AUCC consultations, re-assessment of capital cost estimates and stopping pre-funding/charging for assets under construction. The detailed comments of IATA in this regard are as follows:

"Freeze of Non-Essential Capital Investments: Given the extreme cost pressures on our industry collectively, minimizing all unnecessary costs is of utmost priority. It is necessary to reduce financial exposure by stopping all non-essential projects and in particular capacity enhancing projects in control period 3, particularly given the large-scale investment in capacity made in CP2.

We propose a freeze of the CAPEX portfolio across all projects pending a review of project investment files and their associated Business Cases, as these have not been re-assessed since April 2018 AUCC, including those that are under construction to ensure they are viable to proceed considering Covid-19 impacts.

We note CIAL's comments and AERA's replies regarding partially completed projects proposed to be carried forward to CP3 - such as additional parking bays. We request the requirement for the remaining 145 crores project is determined by the need for additional parking bays linked to traffic forecasts and recovery reflected in a Business Case.

For clarity, we request the following discipline is applied in advance of CP3 projects proceeding:

- *More detailed AUCC consultation in accordance with AERA's Consultation Protocol requiring project investment files (Business Case) with sufficient details for users to clearly understand costs, benefits, return on investment, depreciation, impact on user charges and other project dependencies. Part of this assessment should be a "do nothing" option as a basis to help consider the case for investment.*

- *A re-assessment of capital cost estimates and final accounts to assess their capital efficiency and ensure users receive best value in any investments, benchmarked against AERA's normative costs.*
- *Any pre-funding / charging for assets under construction should be immediately stopped. Alternatively, they can be redirected to cover any shortfall and maintain or lower other fees."*

6.3.6. Regarding the projects proposed by CIAL for the Third Control Period, IATA has commented as follows:

A) *"Cargo Facilities*
Regarding Capex proposals we note the construction of import warehouse and mechanisation of the existing warehouse are well under way. Regarding the modification of the existing warehouse we would like to review the Business Case to justify the investment, noting the following points:

- *What will be the total capacity of CIAL's cargo facilities on completion of these projects when compared to demand?*
- *A phasing strategy could spread costs for modification of the existing warehouse (35.94) across CP3and beyond, rather than construct capacity to 2031 in CP3. Has this been considered by CIAL? While we do not have the minutes of the AUCC meeting in April 2018 to present plans to the airlines, it is unlikely that a Business Case with robust financial data and qualitative explanations were reviewed in detail.*

B) *Construction of Parking Bays Phase II and Development of Northern side of T3 Pier*
The impact of Covid following the AUCC meeting held in April 2018 requires a review of the project investment files and Business case to justify these investments now, in advance of them being included in the CP3 determination. The traffic forecasts mix of aircraft types and airport planning assumptions should also be validated with the airline community.
It is concerning to read statements that are inaccurate from an airport planning perspective, resulting in the need for a review of these investments - as set-out here:

Construction of Parking Bays Phase 2:

- *PIF requires reassessment – not the case that contact gates deliver faster turnaround especially for Code C aircraft. Many airlines would disagree with a walk in walk out process.*
- *What is the overall number of stands required across the airport, terminal and by type considering post-Covid traffic forecasts / design day schedule?*
- *What level % of pier service and pax experience has been agreed with the airline community to determine the number of contact stands required within the overall stands count? This determines if contact gates are needed.*
- *Capex costs - base cost in addition to inflation should be reviewed and benchmarked versus the market for cost efficiency purposes. The construction market has potential for greater competition during current times.*

Development of Northern side of T3 Pier:

- *Reference is made to ADRM 7 and ADRM 10th edition as the latest version, which is not correct. The latest version is 11th Edition and provides updated guidance that may make a material difference (IATA can advise as required on latest best practices while noting all airports are different).*
- *There is a need to be convinced that width of the pier needs to be extended from 35m to 55m to accommodate peak hour demand – 35m width for operational purposes should be more than sufficient. Where is the bottleneck and why? Is this just the entrance or the pier itself? What planning and operational assumptions have been made regarding sub-systems, seating arrangements and integration with retail areas?*

Further analysis is required before these projects are approved to test the need for investment now, consider Covid impacts and user impacts / costs.

C) *CISF quarters*
We agree with the Authority's proposals until the case is proven for investment.

D) *IT Requirements*
There are a broad range of projects with basic scope details - from efficiency to security to regulatory. However little information is available regarding the return on investment or PIF. We request these details are shared for review and re-assessment before being considered for inclusion.

E) *Fire and Safety Measures*
Fire Tenders: We agree with the Authority's assessment of Fire Tenders to adjust the price and account for efficiency.

F) *Construction of parking bays 37 to 40, extension of taxiway J up to H, construction of taxiway K and taxiway west of A to isolation parking bay: We agree with the Authority to consider this project in CP4 subject to are-assessment of the PIF and business case.*

G) *PCA and GPU: We request an overview of the PIF and Business Case. While in principle these are positive green investment, an understanding of the investment case is welcome taking users needs into account. We request the total costs including power supply are accounted for in the PIF.*

H) *Other major capital expenditures*
We agree with the Authority's assessment following it's normative costs benchmarking exercise.

In summary, we request additional PIF details to assess the return on investment for users funding investments per our comments. We do not have the assurance at this point that all projects are justified, requiring further dialogue and consultation with the airline community.

We also reiterate that projects shared in a single session in April 2018 have not been reviewed and assessed in sufficient detail to warrant their approval. We would suggest an additional AUCC meeting is called to review subsequent to detailed PIF's being shared. A clear link to specific project outcomes, benefits and service quality would be ideal."

6.3.7. On depreciation, IATA has given the following comments:

"The building block depreciation is derived from the asset base and thus directly linked to investments. As such, rationalizing new investments would minimize increases in depreciation. Since the rate of depreciation of an asset is related to its useful life, it is recommended to pursue the lowering of the level of depreciation by extending the life of assets (where possible). Depreciation timelines could be reviewed again to ensure alignment to global recommendations as outlined in ICAO's DOC 9562, 9161, and the IATA Airport Development Reference Manual (ADRM).

In certain cases, depreciation also covers complete write-offs of existing infrastructure, e.g., with the aim to replace. Such write-offs require a full review with regards to the immediate need in order to identify the possibilities of avoiding them and to postpone such write offs into the future.

IATA supports the approach taken by AERA to revise the useful life of assets in Table 111 but would encourage CIAL to seek opportunities to extend the life of these assets where possible in the most cost efficient manner by closely monitoring their performance and maintaining them properly."

6.3.8. FIA submitted that only essential capex (safety compliance) should be approved by AERA for Third Control Period and non-essential capital expenditure should be deferred to the next control period. FIA added that capital expenditure should be at no additional expense to airlines until projects are completed and put for use by airlines. Further, FIA has submitted that AERA should not permit any deviations from the Order No. 07/2016-17 "In the matter of normative approach to building blocks in economic regulation of major airports – capital costs reg." dated 13.06.2016.

6.3.9. FIA submitted that AERA should lay down 60 years as the useful life for terminal buildings and residential buildings as practiced by some developed aviation ecosystem. The detailed comments of FIA are as follows:

(i) "Terminal Building

FIA submits that on a review of useful life of assets at various international airports like London Heathrow, Sydney airport and Amsterdam airport indicated that terminal buildings have useful life of as long as 60 years and aprons have it for as long as 99 years. FIA submits that the useful life of terminal building for Kannur and Cochin airports have been considered 60 years by AERA and therefore AERA should lay down 60 years for the Terminal Building as is practiced by some of the developed aviation ecosystem.

(ii) Residential Building

FIA submits that as per Sl. No. 8 of Annexure - I of the AERA's Order 35/2017-18 "In the matter of determination of useful life of Airport Assets" dated 12.01.2018, residential buildings have a prescribed useful life of 30/60 years. It is pertinent to note here that unlike in case of terminal buildings where option of 30 or 60 years is to be evaluated by Airport Operator, the election of 30 years or 60 years is case of residential buildings is not to be evaluated by Airport Operator but is to be derived from provisions of Companies Act.

FIA submits that Part C of Schedule II of Companies Act 2013 prescribes useful life of Buildings (other than factory buildings) having Reinforced Concrete Cement (RCC) frame structure to be 60 years. It is very unlikely that residential buildings will not be built on RCC Frame structure.

FIA submits that residential buildings should be depreciated over a period of 60 years and not 30 years.

In view of (i) and (ii) above, FIA submits that AERA should consider the useful life of Residential building and Terminal Building as 60 years as envisaged in Order 35/2017-18 read with Schedule II of Companies Act 2013, as applicable, and revise the amount of depreciation accordingly."

6.3.10. MIAL has commented that allowing only IDC is against provisions of Section 13(1)(a)(i) of AERA Act and has requested the Authority to allow financing allowance on CWIP in line with AERA guidelines. MIAL added that airport operator is being denied return on its own funds used for financing CAPEX.

6.3.11. APAO has commented that AERA's proposal on financing allowance does not confirm to AERA guidelines and has quoted Second Control Period (SCP) tariff orders for CIAL, BIAL and HIAL in this regard where such allowance was provided. APAO has requested AERA to consider financing allowance on the capital work in progress as the guidelines.

6.4. CIAL's counter-comments and response to stakeholder comments regarding RAB and Depreciation for the Third Control Period

6.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comments with respect to RAB and Depreciation for the Third Control Period is presented below.

6.4.2. CIAL has responded to the comments of IATA on capital expenditure as follows:

i. "CIAL has adopted modular terminal expansion. Therefore, CIAL always tries to scatter the investment in the upfront and airlines community has also requested CIAL to scatter the cost. Relying on CIAL's modular expansion and airline community request, we have shifted the expansion of pier width to the third control period as a separate project.

ii. In AUCC, all stakeholders have concurred and supported these capex projects and based on which CIAL has initiated the capex proposals for construction. IATA was also present in those meetings.

Therefore, the comment of IATA to freeze capex projects does not have merit. Nevertheless, CIAL has responded to the specific points related to the capital expenditure projects.

iii. *Cargo facilities*

a. *Regarding IATA's comment on the cargo capacity after the import warehouse construction and the modification of the export warehouse, CIAL submits that the handling capacity of exports is estimated to increase to 150,000 MTPA to meet the forecasted cargo requirement up to 2031.*

b. *CIAL had handled 47,727 tonnes of export cargo in FY20 before COVID-19 pandemic which is operating at the peak capacity of 50,000 tonnes. CIAL has projected that the export cargo traffic will reach 71,857 tonnes in FY26. Therefore, regarding IATA's proposal to phase the cargo capital expenditure, CIAL submits that the modification of the export warehouse is essential to handle the increase in the export cargo traffic. CIAL also submits that the PIF for cargo projects have given the details of the project options, need for the projects, proposed design capacity with the financials of the projects.*

iv. *Construction of Parking Bays Phase 2*

a. *CIAL had projected that the Code C aircraft will form the majority of aircrafts operational at the airport in the AUCC and the assumption is unchanged as on the current date even after factoring COVID impact.*

b. *Following are the objectives and needs to undertake the project:*

   i. *To earmark the southern side of T-3 exclusively for wide body aircrafts.*
   ii. *To better utilise the land available in the northern side of the T-3 pier*
   iii. *To enhance the aesthetics in the northern side of T-3 pier.*
   iv. *To develop the balance land available in eastern side and northern side of pier for creating remote parking bays.*
   v. *To meet the enhanced demand for night parking facilities in CIAL consequent to the induction of new flights by domestic carriers into the Indian Sky.*
   vi. *The metro airports are constrained in parking spaces, spillover of which is expected in tier II cities. Hence adequate facility to be constructed well in advance.*

c. *Regarding IATA's comment on the cost of the project, CIAL submits that the selection of the contractor will be as per CIAL's procurement policy of identifying contractors simply on basis of competitive bidding process to ensure efficiency.*

d. *In the post COVID times, the construction cost have started increasing due to unprecedented increase in the value of materials such as steel and cement. Cement prices have increased from INR 350 per bag to INR 460 per bag post COVID and similarly for the other materials. So, it is a wrong notion that inflation has come down in the post COVID scenario which will lower capital expenditure.*

v. *Development of T3 pier*

a. *CIAL submits that the T3 pier expansion has been approved in the AUCC held in April, 2018 and therefore, the reference is given to ADRM 10th edition.*

b. *The proposed design of a project is subject to land availability, size/ measurement of the pier, capacity requirements, utility of the area, cost, etc. and not based on an agreement with airlines on level of service. CIAL will ensure that the level of service as stipulated by regulatory agencies, government and contractual obligations are tied-in in this investment. This has been the approach in all the airports.*

c. *With regards to IATA's comment on the operational assumptions, please find below the details of the area utilization from the PIF:*

d.

	Area under modification	Additional Area	Utilization
1	10.65m level Pier	7580sqm	Passenger seating, boarding areas in security hold and retail shops
2	5.55mlevel Pier	4380sqm	Services, aerobridge connections, GSE offices
3	0.15m level Pier	150sqm	Stairs
4	10.65m level North side terrace	3187sqm	Relocated security frisking area
5	10.65m level East Side Expansion	2413sqm	Relocated Duty free Area
6	5.55m level East side Expansion	2413sqm	Services to 10.65mlvl, Immigration Area Expansion & Back offices
7	10.65m level East side Expansion	270sqm	Excess area required for final placement of Immigration & security check

e. The need for the T3 pier expansion is justified given that the overall capacity of the terminal will be achieved by upgrading PHP to 2775 (Arrival) and 2400 PHP in departure. Further, the enhanced area will specifically address the capacity limitations/ bottlenecks at immigration/emigration and security check points.

vi. CISF quarters – No comments

vii. IT requirements – CIAL has given the details of the IT projects in its MYTP submission. Further, CIAL will comply with the requirements of the AERA guidelines to conduct stakeholder consultation for the capital expenditure projects based on its eligibility.

viii. Fire and safety measures – No comments.

ix. Construction of parking bays 37 to 40 – No comments

x. PCA and GPU - CIAL has given the details of the PCA and GPU projects in its MYTP submission.

The AUCC meeting were conducted on April 2018 based on then prevailing traffic and business assumptions. Thereafter, due to COVID and floods, certain dynamics of operations have changed. Therefore, prior to the submission of MYTP, CIAL has again reviewed the timing and cost of these proposals and have already shifted the milestones to future periods. During the MYTP review stage, AERA has also shifted the project execution periods further to future years including to fourth control period. Therefore, adequate amount of due diligence has already been exercised to capture the necessary changes in the industry dynamics due to COVID and flood related issues. The goal post have already been changed. Request for a further review/ change through additional AUCC is unjustified as we cannot assume that COVID and flood related issues will sustain for years ahead."

6.4.3. CIAL has responded to the comments of IATA on depreciation as follows:

i. "CIAL disagrees with IATA's support to AERA's proposal on revision of the useful life of assets. CIAL submits that it has followed the AERA order on the useful life while also adhering to the componentization approach proposed under Ind-AS and justified its claim through technical committee report. CIAL requests AERA to approve the useful life proposed by CIAL without any revisions.

ii. CIAL has noted IATA's comment on extending the useful life of the assets. CIAL would highlight that it has considered the useful life of the terminal building – earth, pile, masonry, concrete, steel and RCC works as 60 years. CIAL also considers a residual life of assets as 5% of cost thus reducing the depreciation cost for the users. CIAL has undertaken all possible steps to extend the life of assets and minimize the depreciation cost.

iii. On top of it, depreciation is not a matter that can be decided by CIAL but is a matter regulated under Companies Act, accounting standards and regulatory orders. The role of CIAL in deciding the useful life or depreciation rate is minimal. However, wherever possible we have adopted an approach which ensures maximum utility of assets as indicated in para (ii) above."

6.4.4. CIAL has responded to the comments of FIA on RAB and capital expenditure as follows:

"CIAL submits that its costs for Terminal 3 are within the normative benchmarks approved by the Authority.

CIAL assures AERA and the stakeholders that it has proposed only the essential capital expenditure for the third control period.

CIAL disagrees with FIA's comment on not considering the capital expenditure till the project is completed. CIAL submits that such proposal is against the AERA guidelines. The ARR proposed by AERA is for a period of 5 years to ensure stability in tariffs during a control period. Therefore, the forecast of the capital expenditure is mandatory which needs to be considered while determining the ARR for the control period."

6.4.5. On the points submitted by FIA regarding consideration of useful life of buildings as 60 years, CIAL has commented that *"CIAL disagrees with FIA on the residential building useful life. As per the AERA's Order no. 35/ 2017-18, the residential building can have the useful life of 30 years or 60 years".*

6.4.6. CIAL has concurred with the comments of MIAL.

6.5. Authority's analysis of stakeholder comments on RAB and Depreciation for the Third Control Period

Financing Allowance:

6.5.1. The Authority has carefully examined the comments of CIAL, MIAL, APAO and AAI on Financing Allowance and has made the following observations:

- Providing return on capital expenditure from the very beginning of construction will significantly lower the risks for an airport operator and may require revisiting the return on equity allowed to airport operators. Further, this will disincentivise the airport operator from ensuring a timely completion of projects and delivery of services to airport users. Therefore, the Authority is of the view that a return should be provided only when the assets are made available to the airport users except in the case of certain costs like IDC that will have to be incurred in case debt is used for funding of projects.

- However, in the case of greenfield developments that inherently take longer durations to commission and operationalise, the airport operator would have to wait for a considerable length of time before getting return on the large capital outlay they have to incur. It was with this consideration that the Authority had earlier provided Financing Allowance in initial stages to such airports. Further, it may be noted that Financing Allowance has never been provided in the case of other airports such as DIAL, MIAL and KIAL. Even for the airports of BIAL, HIAL and CIAL, the Authority has provided such allowance only on the debt portion of the proposed capital expenditure for the Third Control Period.

- Financing Allowance is a notional allowance and would be different from the actual investment incurred by the Airport Operator which would include the interest during construction among other things. Therefore, the provision of Financing Allowance on the entire 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.

- AERA guidelines do not specifically state that Financing Allowance is to be provided on both equity and debt portion of project funds, whereas it does give the Authority the mandate to consider any relevant factor for exclusion or inclusion of assets.

6.5.2. In view of the above, the Authority is of the view that there is no reason to deviate from the proposal made by it regarding Financing Allowance in Consultation Paper No. 08/2021-22 and has decided to provide Financing Allowance only on the debt portion of project funds.

Flood Control Measures:

6.5.3. The Authority has carefully examined the justification given by CIAL with respect to the need for carrying out certain flood control measures beyond the airport boundary. In this regard the Authority observes the following:

- The airport and its stakeholders have suffered the impact of severe floods in the past with the floods of August 2018 leading to operational closure and damage to property.
- CIAL is situated within the basin of Periyar river, and a branch of the river (Chengalthodu) was diverted for construction of the airport. Alternate drainage facility was required to be provided which CIAL hadn't undertaken at the time citing lack of funds.
- The course of Chengalthodu lies outside the airport boundary due to which certain works had to be carried out beyond the airport boundary, however these are interdependent with the measures carried out within the airport and integral to the airport's preparedness for potential adverse events in future.
- The projects are being carried out with the primary motive of ensuring the safety of the airport and its users. The benefits accrued to adjoining communities are only incidental, however, the airport also has a responsibility to ensure that the development/existence of the airport does not put the local communities in jeopardy.
- Flood mitigation expenses are a one-time expense and could be much lower compared to the anticipated losses to all the stakeholders in the event that such incidents occur again in future. Ultimately airport users would have to bear the burden of losses if the lack of preparedness results in disasters in the future.

6.5.4. In view of the above, the Authority has decided to allow the cost of INR 41.73 Cr. towards regulator-cum-bridge as a one-time expense and has made the necessary adjustments in this regard to RAB and Depreciation considered for the Third Control Period.

Capital Expenditure:

6.5.5. The Authority has noted IATA's comments on capital expenditure and makes the following observations:

- It would neither be practical nor prudent to indiscriminately freeze all capital expenditure projects, as certain projects are related to critical factors like safety and security of airport and airport users. Without prejudice for the need to extend the life of assets wherever possible, certain end-of-life/obsolete assets would need to be replaced.
- For the capacity enhancement projects like cargo facilities, expansion of T3 pier etc, the airport operator had conducted the necessary AUCC consultations and had Suo moto made revisions with respect to the timing of such projects based on the actual demand and traffic at the airport.
- The Authority had carefully examined the capital projects proposed by CIAL for the Third Control Period, validated the need for the same, compared costs against normative limits and made the necessary additional adjustments with respect to timing of projects on account of the revised traffic scenario as a result of the pandemic, including shifting of certain projects to the Fourth Control Period.

6.5.6. In view of the above the Authority does not see any reason to make further adjustments at this stage with respect to capital expenditure for the Third Control Period. However, the Authority would like to urge the airport operator to strictly adhere to the AERA guidelines in implementation of all capital expenditure projects. The Airport Operator may also re-conduct the AUCC consultations for projects that have not yet commenced or been awarded, considering that there have been considerable changes in the business scenario compared to 2018 when the AUCC consultations were originally carried out for some of the projects planned for the Third Control Period.

6.5.7. As discussed in Para 4.4.60, the Authority has considered projects worth INR 63.6 Cr., that were initially proposed to be capitalised in FY 2021 as per CIAL's MYTP but could not be completed on account of delays due to the COVID-19 pandemic, under capital expenditure for the Third Control Period. The details of these assets/projects are provided in Annexure 6.

6.5.8. During the consultation stage, the Authority had considered the inflation for FY 2021-2026 based on the forecast by RBI in its 68th round of survey of professional forecasters on macroeconomic indicators. In order to account for the recent macroeconomic developments, the Authority revised the inflation for FY 2021 based on actuals and the forecasts for FY 2022-26 based on the results of the 69th round of RBI's survey of professional forecasters on macroeconomic indicators. Accordingly, the revised inflation rates considered by the Authority are as follows:

Table 124: Rate of inflation considered by the Authority[11]

Financial Year	2017	2018	2019	2020	2021	2022-2026
Inflation	1.73%	2.96%	4.26%	1.68%	1.20%	4.90%

6.5.9. On account of the revision in inflation rates considered, the Authority has made the necessary reconciliations to the adjustments made to proposed capital expenditure with respect to inflation and normative costs (These adjustments made at the consultation stage are detailed in Para 6.2.14, 6.2.18, 6.2.19, 6.2.20, 6.2.55 and 6.2.58). The details of such reconciliations are given below.

Table 125: Revision of cost and timing for Construction of parking bays phase 2 as considered by the Authority

Particulars	FY 2023	FY 2024	FY 2025	Total
Phasing plan as per MYTP	40.8%	59.2%		100%
Cost as per AUCC for FY 21 (INR Cr.)	53.66	77.86		131.52
Phasing plan proposed by the Authority		40.8%	59.2%	100%
Cost as per AUCC for FY 21 (INR Cr.)		53.66	77.86	131.52
Inflation factor (base year FY 2021)	1.10	1.15	1.21	
Revised cost as per Authority (INR Cr.)		61.94	94.28	156.22

Table 126: Revised cost and phasing plan for T3 pier expansion considered by the Authority

Particulars	FY 2023	FY 2024	FY 2025	FY 2026	Total
Phasing plan as per MYTP	28.1%	62.9%	9.0%		100.0%
Cost as per AUCC for FY 21 (INR Cr.)	41.89	93.76	13.41		149.06
Phasing plan proposed by the Authority		28.1%	62.9%	9%	100%
Cost as per AUCC for FY 21 (INR Cr.)		41.89	93.76	13.41	149.06
Inflation factor (base year FY 2021)	1.10	1.15	1.21	1.27	
Revised cost as per Authority (INR Cr.)		48.36	113.54	17.03	178.93

Table 127: Comparison of cost as per AUCC, MYTP submission by CIAL and as considered by the Authority

Particulars	Cost as per AUCC for FY 2021 (INR Cr.)	Inflation adjusted cost as per MYTP (INR Cr.)	Inflation adjusted cost as per Authority (INR Cr.)
Modification of T3	149.06	189.86	178.93
Parking bays phase II	131.52	145.52	156.22

[11] Figures till FY 2021 are actual rates from - https://eaindustry.nic.in/Key_Economic_Indicators/Price_Statistics.pdf and the figures for FY 2022 and onwards are from - https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=20355

Table 128: Comparison of inflation adjusted cost as per AUCC and the Normative costs decided by the Authority

Particulars	Based on AUCC	As per Normative Costs	Difference
FY 2024			
Area of terminal expansion (SQ. M.)	5730.30	5730.30	
Cost as revised by Authority (INR Cr.)	48.36	48.31	0.04
Cost per SQ. M. (INR)	84390.44	84312.35	
FY 2025			
Area of terminal expansion (SQ. M.)	12826.90	12826.90	
Cost as revised by Authority (INR Cr.)	113.54	113.45	0.09
Cost per SQ. M. (INR)	88514.31	88443.65	
FY 2026			
Area of terminal expansion (SQ. M.)	1835.33	1835.33	
Cost as revised by Authority (INR Cr.)	17.03	17.03	0.00
Cost per SQ. M. (INR)	92798.32	92777.39	
Total cost for T3 expansion (INR Cr.)	178.93	178.79	0.14
Total area of terminal expansion (SQ. M.)	20392.52	20392.52	

Table 129: Cost and timing of T3 pier modification and parking bays phase 2 as considered by the Authority

Reference	Particulars (INR Cr)	FY of commissioning as per		Total cost as per		Difference
		CIAL	Authority	MYTP	Authority	
B.1	Parking bays phase II	2024	2025	145.52	156.22*	(10.70)
B.2	Modification of T3	2024 & 2025	2025 & 2026	189.86	178.79	11.07
B	**Total**			**335.38**	**335.01**	**0.37**

including adjustment for inflation on account of postponement

Table 130: Capital expenditure towards GPU and PCA as considered by the Authority

Reference	Particulars	FY of commissioning as per		Cost as per (INR Cr.)	
		CIAL	Authority	CIAL	Authority
I	GPU and PCA South and North of T3	2025	2026	21.51	24.46*

including adjustment for inflation on account of postponement

Table 131: Normative capping of cost for Extension of Taxiway J1 up to isolated parking bay considered by the Authority

Particulars	As per CIAL	As per Normative Costs	Difference
Area of Pavement for Code E aircraft (Sq. m.)	14855.00	14855.00	
Cost per Sq. m. (INR)	8455.07	5811.66	
Cost of Pavement (INR Cr)	12.56	8.63	3.93

Table 132: Revised cost for Extension of Taxiway J1 up to H considered by the Authority

Particulars (INR Cr.)	Cost proposed by CIAL as per MYTP	Revised cost submitted by CIAL	Cost proposed by the Authority
Extension of Taxiway J1 up to isolated parking bay	12.51	25.07	21.14

Table 133: Other major capital expenditure as revised by the Authority

Reference	Particulars (INR Cr.)	Cost proposed by CIAL as per MYTP	Revised cost submitted by CIAL	Cost considered by the Authority
K	Other major capital expenditure	152.36	164.92	160.99

6.5.10. Based on the above, the revised capital expenditure for the Third Control Period as considered by the Authority is given below.

Table 134: Capital Expenditure for the Third Control Period considered by the Authority

Reference		Particulars (INR Cr)	As per CIAL	As per Authority		
			Total Capex	Total	Aero	Non-Aero
A	A.1	Construction of import warehouse	52.70	52.70	52.70	0.00
	A.2	Modification of existing warehouse	35.94	35.94	35.94	0.00
	A.3	Mechanisation of export warehouse after modification	10.35	10.35	10.35	0.00
		Cargo facilities (sub-total)	**98.99**	**98.99**	**98.99**	**0.00**
B	B.1	Construction of parking bays phase 2	145.52	156.22	156.22	0.00
	B.2	Development of northern side of T3 pier	189.86	178.79	166.45	12.34
		Pier expansion and parking bays phase 2 (sub-total)	**335.38**	**335.01**	**322.67**	**12.34**
C		Flood control measures in airport area	93.07	93.07	93.07	0.00
D		CISF Quarters	74.01	0.00	0.00	0.00
		IT Systems:				
E	E.1	CCTV Surveillance system	43.81	43.81	43.81	0.00
	E.2	CT based Hand baggage X-BIS T3	29.98	29.98	29.98	0.00
	E.3	CT based Hand baggage X-BIS T1	25.12	25.12	25.12	0.00
	E.4	SOC & NOC for IT	15.92	15.92	15.92	0.00
	E.5	Digi yatra – IT systems	30.69	0.00	0.00*	0.00
	E.6	Perimeter intrusion detection systems	22.35	22.35	22.35	0.00
	E.7	Smart Lane – T1	19.88	19.88	19.88	0.00
	E.8	Smart Lane – T3	22.48	22.48	22.48	0.00
	E.9	Passenger processing IT systems	31.40	31.40	31.40	0.00
		IT Systems (sub-total)	**241.62**	**210.93**	**210.93**	**0.00**
		Fire and Safety Measures:				
F	F.1	Fire Tenders	68.51	49.78	49.78	0.00
	F.2	Satellite fire station	15.46	15.46	15.46	0.00
	F.3	Widening of roads for ACFTs	4.26	4.26	4.26	0.00
	F.4	Emergency Rescue Tender	10.95	10.95	10.95	0.00
	F.5	Hydraulic platform for High Rise Building	10.71	10.71	10.71	0.00
		Fire and Safety Measures (sub-total)	**109.89**	**91.16**	**91.16**	**0.00**
G		Construction of Parking bays 37,38,39 & 40 & Extension of Taxiway J Up to H and Construction of Taxiway K & Taxiway, West of A to Isolation parking bay	73.37	0.00	0.00	0.00
H		Regrading of side strips beyond 30 m	43.95	43.95	43.95	0.00
I		GPU and PCA South and North of T3	21.51	24.46	24.46	0.00
J		Security Equipment's - X-BIS, ETD, DFMD, HHMD etc.	19.05	19.05	19.05	0.00
K		Other major capital expenditures	164.92	160.99	152.43	8.56
L		**Total of Major Capex Items** (A+B+C+D+E+F+G+H+I+J+K)	**1275.77**	**1077.61**	**1056.71**	**20.90**
M		Misc. Expenses for Third Control Period	152.92	152.92	148.25	4.67
N		**Total** (L+M)	**1428.69**	**1230.53**	**1204.96**	**25.58**
O		Commercial projects – Commercial Complex, hotels, retail spaces, F&B facilities etc.	437.82	437.82	0.00	437.82
P		**Grand Total** (N+O)	**1866.51**	**1668.35**	**1204.96**	**463.39**
Q		IDC	46.26	22.49	15.37	7.12
R		Projects postponed from FY 2021 (Refer Annexure 6)	63.56	63.56	54.85	8.71
		Total (including IDC) (P+Q)	**1976.33**	**1754.40**	**1275.18**	**479.22**

**To be trued up on incurrence and completion basis*

Depreciation:

6.5.11. The comments of IATA and FIA on depreciation and useful lives of assets have been noted, however, the Authority would like to state that it had conducted extensive consultation on this matter and documented its decisions in Order No. 35/2017-18. Wherever CIAL had considered a useful life different from that specified in Order No. 35/2017-18, the Authority had made the necessary revisions in useful lives during the consultation stage. Accordingly, depreciation was recomputed as explained in Section 4.5 and Section 6.2 of Consultation Paper No. 08/2021-22. Therefore, the Authority has decided to not consider any further revisions in this regard. The Authority agrees with IATA's comment that the airport operator should seek avenues to extend the life of assets wherever such opportunity exists.

6.5.12. Regarding CIAL's comment on revision of useful lives of certain assets/asset classes and runway re-carpeting, the Authority, consistent with its decision for true up of Second Control Period (refer Para 4.5.21 and 4.5.22), has decided to continue with the revision considered by it during the consultation stage.

6.5.13. Based on the above and the revised capital expenditure considerations, the Authority recomputed the depreciation after incorporating the actual figures for FY 2021 (as against projections considered at the consultation stage) into its analysis. Accordingly, Aeronautical Depreciation considered by the Authority for the Third Control Period is given below.

Table 135: Aeronautical Depreciation for the Third Control Period considered by the Authority

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Land	0.00	0.00	0.00	0.00	0.00	**0.00**
Buildings and civil works	21.17	22.44	22.61	23.34	22.92	**112.48**
Golf course development	0.00	0.00	0.00	0.00	0.00	**0.00**
Runway, roads and culverts	35.90	50.70	55.53	55.86	58.87	**256.86**
Plant and Equipment	51.80	55.37	63.81	70.42	77.15	**318.55**
Office Equipment	0.37	0.55	0.58	0.60	0.63	**2.74**
Computers and accessories	2.24	4.44	5.80	5.69	4.66	**22.82**
Furnitures and fixtures	1.45	1.66	1.82	1.62	1.48	**8.04**
Vehicles	1.35	1.66	1.68	1.79	1.72	**8.20**
Intangible assets	0.47	1.53	2.50	2.68	2.85	**10.04**
IDC	0.50	0.76	0.81	1.03	1.10	**4.19**
Total Depreciation	**115.26**	**139.11**	**155.14**	**163.03**	**171.38**	**743.92**

Regulatory Asset Base:

6.5.14. Based on the changes in capital expenditure and depreciation discussed above, the revised RAB for the Third Control Period as considered by the Authority is given below.

Table 136: RAB for the Third Control Period considered by the Authority

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Opening RAB	1610.51	1732.06	1989.78	1984.06	2222.52	
Less: Depreciation during year	115.26	139.11	155.14	163.03	171.38	**743.92**
Add: Capitalisation during year	236.80	396.83	149.42	401.49	90.63	**1275.18**
Sales/transfers/retirements						
Closing RAB	1732.06	1989.78	1984.06	2222.52	2141.77	
Average RAB	**1671.29**	**1860.92**	**1986.92**	**2103.29**	**2182.14**	

6.6. Authority's decisions regarding RAB and Depreciation for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to Regulatory Asset Base and Depreciation for the Third Control Period:

6.6.1. Authority decides to consider the cost of INR 41.73 Cr towards regulator-cum-bridge (flood control measure) as Aeronautical capital expenditure (refer Para 6.5.4).

6.6.2. Authority decides to consider capital expenditure for the Third Control Period as given in Para 6.5.10 (Table 134) and true up the same based on actuals after studying the reasonableness and reviewing the actual spend and line by line classification of capital additions into Aeronautical and Non-Aeronautical based on the broad framework provided by the study on allocation of assets between Aeronautical and Non-Aeronautical assets, undertaken for the Second Control Period (a summary of the Study is attached as Annexure 2 to this Tariff Order, the detailed report is available along with the Tariff Order on the AERA website).

6.6.3. Authority decides to readjust the project cost by 1% and the applicable carrying cost in the ARR/ target revenue at the time of determination of tariff for the Fourth Control Period in case of non-completion of projects as per proposed timelines (refer Para 6.2.64).

6.6.4. Authority decides to revise the useful lives of assets as per AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets and consider Aeronautical Depreciation as given in Para 6.5.13 (Table 135).

6.6.5. Authority decides to consider RAB as given in Para 6.5.14 (Table 136) for determination of tariff for the Third Control Period.

6.6.6. Authority decides to true up RAB and Depreciation based on actuals at the time of tariff determination for the Fourth Control Period subject to reasonable justifications and efficiency.

CHAPTER 7. FAIR RATE OF RETURN FOR THE THIRD CONTROL PERIOD

7.1. CIAL's submission of FRoR for the Third Control Period

Debt and Cost of Debt

7.1.1. CIAL had submitted that they would require debt for capital expenditures that are envisaged to be taken up during the Third Control Period. Based on their estimates, CIAL had submitted the outstanding debt (existing and forecasted long-term borrowings) during each financial year of the next control period.

7.1.2. According to CIAL's submission, cost of debt was assumed to be 7.8% based on the actual cost of debt in FY 2021.

7.1.3. CIAL's submission of outstanding debt and cost of debt for the Third Control Period were as given in the table below.

Table 137: CIAL's submission of Debt and Cost of Debt for the Third Control Period

Particulars (in INR Crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Total Closing Debt	896.3	1203.5	1130.1	958.6	787.2
Average Debt	822.4	1049.9	1166.8	1044.4	872.9
Cost of Debt	7.8%	7.8%	7.8%	7.8%	7.8%

Equity and Cost of Equity

7.1.4. CIAL had made the following submissions regarding equity and cost of equity for the Third Control Period:

- *"The impact of COVID 19 on the aviation sector has led to increased riskiness of the investments made in the Airport. This increased riskiness has led to the investors requiring a higher Cost of Equity"*
- *"CIAL had charged low tariffs during the initial years due to which the returns given to the investors had been lower than their expected RoE "*
- *"CIAL would require funds to acquire land for future expansion of the Airport"*
- *"Shareholders including the GoK and the PSU's have been demanding higher dividends and this has led to lower retained earnings for CIAL"*
- *"Due to the reasons mentioned above, CIAL proposes to consider a 16% Cost of Equity during the 3rd Control Period"*

7.1.5. CIAL had excluded equity investments in subsidiaries and grants received from GoK from the calculation of FRoR for the Third Control Period in line with the decision taken by the Authority at the time of tariff determination for the Second Control Period regarding the same.

7.1.6. CIAL in its submission of MYTP for the Third Control Period had projected equity as given in the table below.

Table 138: Equity computation for the Third Control Period as submitted by CIAL

Particulars (INR Cr)	Formula	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Share Capital	A	382.6	382.6	382.6	382.6	382.6
Reserves and Surplus	B	561.0	792.3	1164.5	1634.7	2236.0
Share Premium	C	306.1	306.1	306.1	306.1	306.1
Grant	D	0.0	0.0	0.0	0.0	0.0
Investment in Subsidiaries	E	239.5	239.5	239.5	239.5	239.5

Particulars (INR Cr)	Formula	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Equity without investment in subsidiaries and grant	A+B+C-D-E	1010.1	1241.4	1613.6	2083.8	2685.1
Average Equity without investment in subsidiaries and grant	**F**	**958.3**	**1125.8**	**1427.5**	**1848.7**	**2384.4**

Security Deposit

7.1.7. CIAL had considered security deposit of INR 150 crores deposited by the fuel farm operator at cost of debt in the calculation of FRoR during the Third Control Period for the airport. Regarding consideration of RSD in FRoR, CIAL had stated thus, *"In line with the TDSAT order dated 23 April 2018, CIAL has also considered refundable security deposit of INR 150 Cr. for computation of FRoR.. While CIAL requests AERA for cost of equity to be applied on refundable security deposits, CIAL has considered cost of debt as the return on the security deposits for the purpose of calculation."*

Weighted Average Gearing

7.1.8. CIAL had submitted weighted average gearing for the Third Control Period as given in the table below.

Table 139: Computation of Weighted Average Gearing as submitted by CIAL

Particulars (In INR Crores)	Formula	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Equity	A	958.3	1125.8	1427.5	1848.7	2384.4
Debt	B	822.4	1049.9	1166.8	1044.4	872.9
Security Deposit	C	150.0	150.0	150.0	150.0	150.0
Total Funds	A+B+C	1930.7	2325.7	2744.3	3043.0	3407.3
Weighted Average Gearing		**42.42%**				

Fair Rate of Return (FRoR)

7.1.9. Based on the factors discussed above, CIAL had computed Fair Rate of Return (FRoR) for the Third Control Period and submitted the same as given in the table below.

Table 140: FRoR computation as submitted by CIAL

Weighted average gearing (SD included)	42.42%
Weighted average cost of debt	7.80%
Cost of security deposit	7.80%
Share of Equity	57.58%
Cost of Equity	16.00%
FRoR	**12.52%**

7.2. Authority's analysis of CIAL's submission of FRoR as part of the Consultation Paper

Cost of Debt

7.2.1. The Authority had studied the capital requirements of CIAL during the Third Control Period and its current and forecasted sources of funds (Equity, Debt and Security Deposits), based on which the debt forecasted by CIAL for the Third Control Period was understood.

7.2.2. The Authority noted that the cost of debt submitted by CIAL for the Third Control Period was 7.8%. The Authority sought documents in support of assumption of cost of debt. CIAL had submitted relevant bank documents in this regard, on the basis of which the Authority proposed to consider cost of debt as 7.80% and true up the same based on actuals at the time of tariff determination for the next control period.

Cost of Equity and Weighted Average Gearing

7.2.3. In its submission of FRoR for the Third Control Period, CIAL had considered 16% as its cost of equity.

7.2.4. The Authority had commissioned an independent study for the evaluation of cost of equity for CIAL. The study carried out by Indian Institute of Management Bangalore (IIM-B) had used a set of comparable international airports to estimate the systematic risk exposure of the Aeronautical assets of CIAL under a target gearing ratio. The study had also taken into consideration the specific attributes of CIAL such as revenue till structure, ownership structure and scale of operations to determine its closeness to the set of comparable airports. The Study on Determinants of Cost of Capital of CIAL had recommended a cost of equity of 15.16% as shown in the table below (summary of the study is given in Annexure 4, the detailed report is available along with the Tariff Order on the AERA website).

Table 141: Computation of cost of equity as per independent study

Variables	CIAL
Asset Beta based on Proximity Score Weights of comparable set	0.572651
Target gearing ratio (Debt/Debt/Equity)	48.00%
Target gearing ratio (Debt/Equity)	0.9231
Equity Beta	0.9427
Risk Free Rate	7.56%
Equity Risk Premium	8.06%
Cost of Equity	**15.16%**

7.2.5. The Authority proposed to adopt the recommendations of the independent Study on Determinants of Cost of Capital of CIAL in the tariff determination for the Third Control Period.

Weighted Average Gearing

7.2.6. The independent study had looked into select infrastructure firms in India and analysed their market value of Debt Equity Ratio (MDE) and book value of Debt Equity Ratio (BDE) in order to estimate notional Debt – Equity Ratio (DER) for CIAL. Based on its analysis the notional DER proposed by the independent study was 48%:52%, which was also close to the gearing ratio used on average by the international airports compared in the study. The Authority proposed to consider the notional DER recommended by the independent study on determinants of cost of capital of CIAL for computing the FRoR for the Third Control Period.

Refundable Security Deposits

7.2.7. Since the RSD of INR 150 crores deposited by the fuel farm operator was utilised by CIAL for the creation of assets, the Authority proposed to provide a return on RSD at the cost of debt in line with the judgement of TDSAT in the case of DIAL.

7.2.8. According to the notional gearing ratio considered for calculation of FRoR for the third controlling period, the composition of debt in the total funds was 48%. As refundable security deposits are treated as debt, they were effectively included in the notional gearing ratio of 48% and hence did not require any separate treatment.

Fair Rate of Return

7.2.9. Based on the factors discussed above, the Authority proposed Fair Rate of Return for the Third Control Period as computed in the table below.

Table 142: FRoR proposed by the Authority for the Third Control Period as part of the Consultation Paper

Weighted average gearing (SD included)	48.00%
Weighted average cost of debt	7.80%
Cost of security deposit	Treated as debt
Share of Equity	52.00%
Cost of Equity	15.16%
FRoR	**11.63%**

7.3. Stakeholder comments on FRoR for the Third Control Period

7.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to FRoR for the Third Control Period. The comments by stakeholders are presented below.

CIAL's comments on FRoR for the Third Control Period:

7.3.2. CIAL commented that the use of normative gearing is arbitrary and has strongly objected to the inconsistent treatment compared to CHIAL for which AERA has allowed actual gearing ratio. CIAL proposed to AERA to consider actual gearing while truing up at end of Third Control Period (TCP) as it might also benefit the airport users. The detailed comments of CIAL in this regard are as follows:

i. *"CIAL has noted that AERA has applied a normative gearing (debt to equity) ratio of 48%:52% as per the study on determinants of cost of capital of CIAL.*

ii. *The existing cost of debt of CIAL is 7.8%, which is among the lowest in the airport operators. CIAL has been able to lower its cost of debt through its prudent cost management and its established record of creditworthiness. Airport users have benefitted from the lower cost of debt of CIAL.*

iii. *CIAL has always thrived to adopt the efficient capital structure and it has financed the construction of the international terminal through debt.*

iv. *Given the above facts, normative gearing ratio of 48%:52% is arbitrary and it does not correctly depicts the financing options available to CIAL. AERA is penalizing the shareholders of CIAL for their prudent management of finances by adopting the normative gearing ratio.*

v. *CIAL has noted that AERA in the recent consultation paper for Chandigarh Airport had allowed actual gearing ratio:*

Para 6.3.1 – "To consider FRoR at 14% for Second Control Period considering that it would have sufficient internal accruals to fund proposed additions to RAB during the control period but advises CHIAL to evaluate efficient means of financing."
Para 6.3.2 – "To true up the FRoR based on actual debt-equity ratio and the cost of debt and equity as determined at the time of determination of aeronautical tariff for the third control period."

vi. *CIAL strongly objects to the inconsistent treatment adopted by AERA when compared with Chandigarh airport.*

vii. *CIAL assures that it will fund the capital expenditure through efficient means of capital so that the costs are lower for the airport users.*

viii. *CIAL proposes to AERA to apply consistent approach and consider the actual gearing ratio of CIAL while truing up the weighted average cost of capital at the end of the third control period. CIAL would like to clarify to AERA that the actual gearing ratio for the third control period might also benefit the airport users in case it is higher than the normative gearing ratio."*

Other stakeholders' comments on FRoR for the Third Control Period:

7.3.3. IATA has commented that the continuation of true-up approach eliminates risks faced by the airport operator and that the WACC should reflect the same. Therefore, IATA has recommended that WACC should be lowered in recognition of the fact that there is no significant risk for the airport operator.

7.3.4. IATA has stated that RSD is essentially finance at zero cost and what is received by CIAL at no cost cannot be used to earn a return for its own benefit. IATA added that such benefits should be to the aviation community rather than to prop up CIAL's profit. However, IATA understands that the Tariff Order would be subject to outcome of adjudication.

7.3.5. FIA appreciated AERA for considering a lower FRoR of 11.63% for TCP and conducting a study on cost of equity. However, FIA has commented that such fixed return for the Airport Operator creates an imbalance against airlines which are already suffering from huge losses and that operators have no incentive to improve productivity since they are fully covered for all the cost plus their returns. FIA added that such a scenario may result in inefficiencies and higher costs, which are ultimately borne by the airlines. Therefore, FIA has requested AERA to cap the assured post-tax returns on investment to a maximum of three percent (FD return) in the present scenario.

7.3.6. AAI has requested to consider cost of equity of 16% for TCP in line with its previous practice.

7.4. CIAL's counter-comments and response to stakeholder comments regarding FRoR for the Third Control Period

7.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comments with respect to FRoR for the Third Control Period is presented below.

7.4.2. CIAL has strongly disagreed with IATA's comment on WACC and stated that *"Airport industry has external risks to air traffic due to pandemic like COVID-19, technological advances in other transportation, trade restrictions, slowdown in global economy, wars, natural calamities, competition, land restrictions, regulations, etc. These risks are taken by the airports and the role of the regulator in mitigating these risks even through a true-up approach is minimal as the market forces dominates the regulator's role. IATA has not considered these risks in its comment. The very purpose of true-up approach has originated from the fact that all the variables of the airport operator are volatile and cannot be pre-determined for a pre-defined period. The true-up approach ensures that the over-recovery or shortfall of the airport operators is considered so that the tariff determination exercise is fair to all the stakeholders including the airlines".*

7.4.3. Further, CIAL disagreed with IATA's comment on RSD and proposed to AERA to consider 16% return on the RSD stating that RSD is essentially in the form of equity to fund the airport capital expenditure.

7.4.4. CIAL also disagreed with the comments of FIA on FRoR and submitted that *"AERA has determined the fair rate of return as per the AERA guidelines and after undertaking a detailed study on fair rate of return. FIA's comment on no incentive for increase in efficiency is flawed as the reduction in cost increases the return on the unregulated non-aeronautical business under the hybrid till model.*
The proposed 3% FRoR is lesser than the 30 days bank FD rate which is illogical and lacks substance".

7.5. Authority's analysis of stakeholder comments on FRoR for the Third Control Period

7.5.1. The Authority has noted CIAL's comment regarding gearing and would like to highlight that it had commissioned an independent study on the determinants of cost of capital of CIAL, based on the outcome of which AERA has considered a Cost of Equity of 15.16% for CIAL. The cost of equity was finalised for a target gearing of 48%:52% which was determined in the study to reflect an efficient long-term steady state gearing ratio. The provision of the cost of equity of 15.16% is subjective to this normative gearing ratio and in this regard the Authority expects CIAL to follow an efficient capital structure and strive to achieve the normative gearing as specified by the independent study.

7.5.2. The Authority agrees with CIAL's response to IATA that the true-up approach is followed to ensure that the tariff determination exercise is fair to all the stakeholders and not to eliminate risks faced by any particular stakeholder/group of stakeholders. The independent study has taken into account all such factors (including the true of prior period over-recovery/shortfalls) that impact the risks faced by the airport operator before arriving at the cost of equity for CIAL.

7.5.3. Regarding IATA's comment on return on RSD, the Authority wishes to highlight that it had made its proposal regarding the same in light of the TDSAT order dated 23rd April 2018 in the case of DIAL. Since there has been no further developments or directives in this regard, the Authority sees no reason to deviate from the stance taken during the consultation stage. On the counter-comment of CIAL wherein CIAL has proposed a 16% return on the RSD, the Authority would like to state that CIAL can consider investing the funds pertaining to RSD elsewhere and not utilise it for capital expenditure related to the airport, if CIAL is of the view that it is not getting the adequate return on RSD.

7.5.4. On the comment of FIA, the Authority is of the view that the suggestion to consider a rate of return equivalent to FD is arbitrary and lacks merit. The Authority agrees with the response of CIAL that the fair rate of return has been determined as per the AERA guidelines and after undertaking a detailed study on the same.

7.5.5. Regarding the request of AAI to consider the cost of equity as 16%, the Authority would like to highlight that as per the tariff order for the Second Control Period, AERA had decided to commission an independent study in order to determine the cost of equity for CIAL . The Authority has now considered the CoE based on the outcome of the independent study. Therefore, the Authority feels that the suggestion of AAI lacks merit.

7.5.6. Based on the above, the Authority has decided to consider FRoR for the Third Control Period consistent with its proposal in the Consultation Paper No. 08/2021-22.

7.6. Authority's decisions regarding FRoR for the Third Control Period

Based on the material before it and based on its analysis, the Authority decides the following with respect to Fair Rate of Return for the Third Control Period:

7.6.1. Authority decides to consider cost of equity as 15.16 % as recommended by the Study on Determinants of Cost of Capital of CIAL (refer Para 7.2.4).

7.6.2. Authority decides to consider cost of debt as 7.8% as submitted by CIAL and true up the same based on actuals at the time of tariff determination for the next control period (refer Para 7.2.2).

7.6.3. Authority decides to consider a notional debt equity ratio of 48%:52% for the Third Control Period as recommended by the Study on Determinants of Cost of Capital of CIAL. The debt equity ratio will not be trued up during the tariff determination for the Fourth Control Period (refer Para 7.5.1).

7.6.4. Authority decides to consider RSD as part of the notional debt to arrive at FRoR for the Third Control Period (refer Para 7.5.3).

7.6.5. Authority decides to consider the Fair Rate of Return as given in Para 7.2.9 (Table 142) for the Third Control Period based on the above-mentioned cost of debt, cost of equity and notional debt equity ratio.

CHAPTER 8. RETURN ON LAND FOR THE THIRD CONTROL PERIOD

8.1. CIAL's submission of Return on Land for the Third Control Period

8.1.1. As per the tariff order for the Second Control Period, the Authority had decided to provide return on land based on the study that would be conducted in this regard.

8.1.2. The Authority had passed an Order (Order No.42/2018-19, dated 05th March 2019) wherein the mechanism for calculation of FRoR to be provided on the cost of land was laid down. The relevant decisions taken by the Authority were as given below:

- *"The return will be given only on the cost of land used for Aeronautical activities (Decision No. 4.1.2)"*
- *"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. The equated annual instalment is to be calculated as per the following formula.*

  $$Equated\ annual\ installment = [Cost * Rate(1 + Rate)^{30}]/[(1 + Rate)^{30} - 1]$$

  Where,

  Cost = Actual cost of land

  Rate = Actual cost of debt or SBI base rate plus 2% whichever is lower (Decision No. 4.1.4)"

8.1.3. CIAL had submitted that the cost of land had been bifurcated into Aeronautical and Non-Aeronautical based on actual usage. The Aeronautical portion of land according to CIAL was estimated to be 89.6%. Accordingly, CIAL had submitted return on land for the Third Control Period as given in the table below.

Table 143: Return on land calculation as submitted by CIAL for the Third Control Period

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Cost of Land	125.0	125.0	125.0	125.0	125.0	
Aero Ratio (%)	89.6%	89.6%	89.6%	89.6%	89.6%	
Aero Land	112.1	112.1	112.1	112.1	112.1	
Actual cost of debt (%)	7.8%	7.8%	7.8%	7.8%	7.8%	
Return on cost of land	**9.8**	**9.8**	**9.8**	**9.8**	**9.8**	**48.8**

8.2. Authority's analysis of CIAL's submission of Return on Land for the Third Control Period as part of the Consultation Paper

8.2.1. The Authority had carefully analysed CIAL's submission regarding bifurcation of land, land cost and the rate of return.

8.2.2. In order to understand the land acquisition process and the cost of acquisition, the Authority sought clarification from CIAL in this regard and CIAL had submitted thus,

"To develop an International Airport at Cochin, the Govt. of Kerala, based on the report of the then District Collector of Ernakulam Shri.V.J. Kurian IAS, approved the formation of a Special Purpose Vehicle (SPV, Kochi International Airport Society (KIAS). The Govt. of Kerala appointed Shri.V.J. Kurian IAS, as the Special Officer for the project and he was appointed as the Managing Director of KIAS. The KIAS has acted as the land requisitioning entity for airport.

Based on the request made by the KIAS, Govt. of Kerala notified the land for the construction of the Airport by issuing 4(1) notification under the LA Act.

As the Airport was being developed by a SPV other than the Govt., it was necessary that the land acquisition expenditure be borne by the SPV and not by the Govt.

The Govt. of Kerala also appointed Special Tahsildar - Land acquisition, along with staff and the expenses for the Revenue Staff thus appointed had to be borne by KIAS on a reimbursement model.

Meanwhile, the Cochin International Airport Ltd (CIAL) was formed under companies Act, with the objective of construction, operation and maintenance of the airport at Kochi.

Therefore, the entire expense of land acquisition namely the acquisition cost of the land and buildings, trees, structures , development costs , registration expenses, increased compensation cost as directed by the Courts, cost of acquisition staff and all related expenses had been borne by CIAL and this was paid as advance to KIAS, which in turn paid the amount to the Special Tahsildar – LA, (who is the Revenue Officer- Govt. of Kerala, representing the District Collector) who distributed the amount after following the due land acquisition proceedings.

Details of the advances for land acquisition as made by CIAL to KIAS and as evidenced by the Annual Accounts of CIAL is attached as annexure – 1. These were basically paid towards settlement of awards issued by Tahsildar (Copy of one award is attached). There were around 3824 such land acquisition instances were involved. In many cases, the evictees has approached various courts against the awards and additional compensation were allowed by courts, which had been remitted by CIAL directly to courts. The aggregate value of land thus acquired and paid out of CIAL funds amounts to Rs 125.02 crores until 31.03.2020.

The Govt. of Kerala vide G.O. dated 30/2000/Tran dated 23.10.2000 has approved the transfer of land from KIAS to CIAL. (enclosed). The copy of sale /transfer document no 1377/2005 dated (dated 31.3.2005) registered with the Sub-Registrar Office, Sreemoolanagaram, Ernakulam District from KIAS to CIAL is also enclosed.

The land for the airport project amounting to 478.4965 Hectares of land was transferred to the name of CIAL through sale/transfer document No. 1377 / 2005 (dated 31.3.2005) registered with the Sub-Registrar Office, Sreemoolanagaram, Ernakulam District.

Tahsildar issues the Land acquisition awards to evictees. (copy of one such award is attached). The value of such awards was settled by KIAS from the advance payments."

8.2.3. The Authority asked CIAL to submit all the relevant documents in support of the land acquisition process and CIAL submitted the deed of transfer executed between the Kochi International Airport Society (KIAS) and CIAL and also the audited financial reports in support of cost of land.

8.2.4. The Authority had gone through deed of transfer and it was found that the extent of land transferred to CIAL as per the deed of transfer was 1183.5 acres while the land as per the MYTP submission of CIAL was 1261 acres. The Authority sought clarifications from CIAL regarding the difference of ~77 acres between the MYTP and transfer deed and CIAL clarified that the remaining land was acquired by KIAS on behalf of CIAL, but a transfer deed has not been executed in this regard.

8.2.5. The Authority asked CIAL to submit all the relevant documents in support of land acquisition other than the deed of transfer and CIAL has submitted the same. Based on its analysis of further clarifications and documents provided by CIAL, the Authority understood that additional land to the extent of 76.65 acres was acquired by KIAS on behalf of Cochin International Airport.

8.2.6. The Authority had enquired CIAL about the difference in cost as given in the deed of transfer and as per the financial statements. CIAL had clarified that the cost as per the deed is the fair value of the extent of land transferred while the Airport Operator had also paid compensation to the landowners for all such possession like houses, buildings/shops, compound walls etc. The Airport Operator further clarified that some of the compensations were statutory in nature and the same were also included in the total cost of land. The Authority had gone through the audited financial statements of the Airport Operator and validated the cost of land based on the same.

8.2.7. The Authority asked CIAL to submit detailed map of the airport marking all the areas and current usage of these areas. The Authority had also made observations regarding land utilisation by CIAL during the site visit to the airport. Authority's analysis of classification of land is discussed below.

Table 144: Authority's analysis of classification of land as part of the Consultation Paper

Description	Area (Acres)	Classification as per CIAL	Reclassification by the Authority
Approach road including all the land area on either side of the approach road till the ATC building	63.90	Aero	
DVOR installation and influence zone	72.26	Aero	
Golf excluding DVOR Influence area	59.66	Non-Aero	
12 MW solar farm near Cargo	51.90	Aero	
7.5MW ground mounted solar farm A (near IT carpark)	4.58	Aero	
7.5MW ground mounted solar farm B (near IT carpark)	13.00	Aero	
New solar farm opposite trade fair centre	23.00	Aero	
Solar area in the southern side and the vacant land (deducting cemetery)	10.00	Aero	
Existing cargo complex (including CPC, domestic cargo) and airlines building	9.00	Aero	
CISF and customs kennel	0.86	Aero	
IT car park	10.61	Non-Aero	
Domestic car park	7.59	Non-Aero	
BPCL aviation tank	5.57	Aero	
IOC land	1.06	Aero	Non-Aero
IOC retail outlet	1.36	Aero	Non-Aero
DVOR 11 Thattekad	5.00	Aero	
Outer marker Koovapadi	0.95	Aero	
Middle marker Kaladi	0.15	Aero	
NDB Cheranallor	0.87	Aero	
Sewage treatment plant and adjoining farming area	1.70	Aero	
ATC building	1.66	Aero	
Trade fair centre	5.50	Non-Aero	
Federal bank building	0.20	Non-Aero	
Rehabilitation land Nayathode	22.95	Aero	Non-Aero
Rehabilitation land Akaparambu	5.41	Aero	Non-Aero
Operational area within the compound wall	662.00	Aero	
110KV substation	1.58	Aero	
Canteen and prepaid restroom	2.23	Non-Aero	
CIASL area (including hanger, solar farm and incinerator)	34.14	Aero	
CHA building and yard	2.60	Aero	
Navy	6.53	Aero	
Import cargo complex (new)	4.10	Aero	Non-Aero
Air India GSE	0.36	Aero	
Duty free warehouse and yard	4.50	Non-Aero	
T1 terminal building including canopy	10.90	Aero	Common
T2 building including connecting corridor	4.66	Aero	Common
T3 building including flyover and gate house	17.09	Aero	Common
Future T3 apron expansion	33.63	Aero	Non-Aero
Internal roads	24.81	Aero	

Description	Area (Acres)	Classification as per CIAL	Reclassification by the Authority
Star Hotel	1.91	Non-Aero	
Additional area for star hotel car park	3.09	Non-Aero	
Pump house and water tank area	0.92	Aero	
Future development area (near ROB)	33.00	Non-Aero	
Airport museum	2.50	Non-Aero	
Utility substation	0.48	Aero	
Service building T3	1.80	Aero	Common
GSE building	2.77	Aero	
Diversion Canal	26.90	Aero	
TOTAL AREA	**1261.24**		

8.2.8. The Authority had observed that land to the extent of 2.5 acres had been leased out to Indian Oil Corporation for setting up a retail outlet. This parcel of land was classified by the Airport Operator as Aeronautical. The Authority proposed to reclassify this area as Non-Aeronautical.

8.2.9. The Authority noted that the land for New Import Cargo Complex (4.1 acres), Future T3 apron expansion (33.6 acres) and the land for CISF quarters (5.4 acres at Akaparambu) were considered in the computation of land cost for Aeronautical purposes. However, the Authority noted that according to Clause 3.5.3 of Order No. 42/2018-19 dated 05 March 2019 regarding FRoR to be provided on cost of land, the Authority only considers capitalised assets for providing a return and on the same lines would consider only value of land put to use by the Airport operator. The remaining land would be considered as and when the land is put to use. The Authority proposed to exclude such land earmarked for future use from the computation of return on land and proposed to true up the same based on actual usage.

8.2.10. Land to the extent of 23 acres (at Nayathode) was earmarked by the Airport Operator for rehabilitation activities. The Authority noted that as per Clause 3.6.1 of Order No. 42/2018-19 dated 05 March 2019 regarding FRoR to be provided on cost of land, return would be provided on land for rehabilitation and resettlement if the state government is involved in the process and that such return would only be provided on lands purchased after the issuance of the said order. Since in the case of CIAL, the land had already been purchased prior to the issue of the Order No. 42/2018-19 dated 05 March 2019 regarding FRoR to be provided on cost of land, the Authority proposed to provide no return on the land that is earmarked for rehabilitation activities.

8.2.11. The Authority observed that land utilised for terminal building and associated areas like canopy, connecting corridor, flyover, and gate house were considered as Aeronautical by the Airport Operator. The Authority proposed to bifurcate such land, into Aeronautical and Non-Aeronautical, using the terminal allocation ratio.

8.2.12. On account of the above revisions, the Authority recomputed the return to be provided by amortising the revised cost (of land considered Aeronautical) over a period of 30 years at the cost of debt in accordance with AERA Order No. 42/2018-19 dated 05 March 2019 regarding determination of FRoR to be provided on Cost of Land incurred by various Airport Operators in India. The cost of debt of 7.8% submitted by CIAL was found to be within the limit of SBI base rate plus 2% prescribed in the order (The SBI base rate[12] was 7.4% as on 10 March 2021). Accordingly, the equated annual instalments were computed using the formula given below.

$$\text{Equated annual installment} = [\text{Cost} * \text{Rate}(1 + \text{Rate})^{30}]/[(1 + \text{Rate})^{30} - 1]$$

Where,

Cost = Actual cost of land used for Aeronautical purposes as considered by the Authority

[12] https://sbi.co.in/web/interest-rates/interest-rates/base-rate-historical-data

Rate = Actual cost of debt or SBI base rate plus 2% whichever is lower

8.2.13. Based on the above, the Authority proposed to provide a return on the cost of land in the Third Control Period as given in the table below.

Table 145: Return on land proposed by the Authority for the Third Control Period as part of the Consultation Paper

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Land Cost	125.00	125.00	125.00	125.00	125.00	
Aero Ratio (%)	83.95%	83.95%	83.95%	83.95%	83.95%	
Aero Land	104.96	104.96	104.96	104.96	104.96	
Actual cost of debt (%)	7.80%	7.80%	7.80%	7.80%	7.80%	
Return on cost of land	**9.15**	**9.15**	**9.15**	**9.15**	**9.15**	**45.74**

8.3. Stakeholder comments on Return on Land for the Third Control Period

8.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to Return on Land for the Third Control Period. The comments by stakeholders are presented below.

CIAL's comments on Return on Land for the Third Control Period:

8.3.2. CIAL has requested AERA to provide return on land earmarked for future use since otherwise airport operators are disincentivized from acquiring land in advance for future phases. Alternatively, if AERA proposes to consider only the land for capitalized assets, CIAL requested AERA to give return at fair value of land at the time when it is put to use instead of its book value. CIAL also noted that entire lease rent is allowed as passthrough if it is agreed between government and airport operator even if the land is partially used. CIAL stated that it considers the view of AERA in this regard as favouring the arrangement of state/central government with the airport operator while penalising airport operator for acquiring land.

Other stakeholders' comments on Return on Land for the Third Control Period:

8.3.3. APAO has requested AERA to provide return on land earmarked for future use as acquiring land in future is not viable due to high land cost and that it otherwise disincentivises the airport operator to acquire land now for future phases. Alternatively, APAO has suggested that if AERA proposes to consider only land for capitalized assets, return should be given on fair value of the land at the time of utilization instead of its book value.

8.3.4. FIA has recommended to not provide any return on investment in land since land does not depreciate.

8.3.5. MIAL has commented that not providing return on land for future use is not ideal as incidence on users would be much higher if airport waits for purchase of land as the price would be higher and availability of land would be a challenge; if return is provided from when the land is put to use, such return should be on fair value of land at time of utilization. Hence MIAL has urged AERA to allow return from time of purchase is the future usage is aeronautical.

8.3.6. IATA has supported AERA's proposal to not provide any return on land earmarked for future use.

8.4. CIAL's counter-comments and response to stakeholder comments regarding Return on Land for the Third Control Period

8.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comments with respect to Return on Land for the Third Control Period is presented below.

8.4.2. CIAL disagreed with IATA on AERA's proposal to give return on the value of land put to use by the airport operator and responded as follows:

i. *"The proposal of AERA is impractical for following reasons:*

   a. *acquiring land in future is not viable due to high land cost*

   b. *it disincentivizes the airport operator to acquire land now for future phases*

ii. *If AERA proposes to consider only the land for the capitalized assets, CIAL requests AERA to give return at the fair value of the land at the time when it is put to use instead of its book value.*

iii. *CIAL has noted that the entire lease rent is allowed as passthrough (4.1.3) if it is agreed between govt. and airport operator even if the land is partially used. CIAL considers the view of AERA in this regard favouring the arrangement of state/ central government with the airport operator while penalizing airport operator for acquiring land.*

iv. *Based on the above facts, CIAL requests AERA to give the return on the entire land including the land earmarked for future aeronautical expansion."*

8.4.3. CIAL strongly disagreed with FIA's comment on the return on land and submitted that FIA's comment is against the Order no. 42/2018-19 dated 5 March 2019 of AERA on the return on land cost which gave the methodology for determination of return on land.

8.4.4. CIAL concurred with the comments of MIAL regarding return on land earmarked for future use.

8.5. Authority's analysis of stakeholder comments on Return on Land for the Third Control Period

8.5.1. The Authority has noted the comments of CIAL, MIAL and APAO on land earmarked for future use, however, the Authority had noted in its Consultation Paper No. 08/2021-22 that *"according to Clause 3.5.3 of Order No. 42/2018-19 dated 05 March 2019 regarding FRoR to be provided on cost of land, the Authority only considers capitalised assets for providing a return and on the same lines would consider only value of land put to use by the Airport operator. The remaining land would be considered as and when the land is put to use"*. The proposal of the Authority was strictly based on its Guidelines and is intended to incentivise efficient land utilisation. Providing return on unutilised land is unreasonable as the airport operator may procure/acquire land which may not be used at all. Therefore, the Authority doesn't see any need to consider deviating from the treatment followed at the consultation stage. Accordingly, the Authority has decided to provide no return on land that is not currently put to use. If any such land parcel is used for an Aeronautical activity during the Third Control Period, the same shall be considered in true up while determining the tariff for the Fourth Control Period.

8.5.2. On the recommendation of FIA to not provide any return on the cost of land on account of land being a non-depreciating asset, the Authority wishes to clarify that the Authority conducted extensive consultation on this matter before finalising its decision in Order No. 42/2018-19 dated 05 March 2019 in the matter of determination of FRoR to be provided on Cost of Land incurred by various Airport Operators in India. The Authority's proposals regarding return on land during the consultation stage were strictly based on Order No. 42/2018-19, therefore, the Authority is of the view that the recommendation of FIA in this regard lacks merit.

8.6. Authority's decisions regarding Return on Land for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to Return on Land for the Third Control Period:

8.6.1. Authority decides to consider the total cost of land as submitted by CIAL (refer Para 8.2.6).

8.6.2. Authority decides to consider the land leased out to IOCL retail outlet as Non-Aeronautical (refer Para 8.2.8).

8.6.3. Authority decides to not provide return on the cost of land earmarked for future use, until the same is put to use (refer Para 8.5.1).

8.6.4. Authority decides to not consider the land reserved for rehabilitation in the computation of return on cost of land (refer Para 8.2.10).

8.6.5. Authority decides to apportion the land for terminal buildings and associated areas in the terminal allocation ratio (refer Para 8.2.11).

8.6.6. Authority decides to consider the return on land for the Third Control Period as given in Para 8.2.13 (Table 145) and true up the same based on the actual year of capitalisation of assets on the land earmarked for future expansion.

CHAPTER 9. OPERATING EXPENSES FOR THE THIRD CONTROL PERIOD

9.1. CIAL's submission of Operations and Maintenance expense for the Third Control Period

9.1.1. CIAL had submitted operations and maintenance expenses under three major heads viz., Employees' Cost, Operational Expenses and Admin expenses. For the purpose of estimation of these future expenses, CIAL had considered cost drivers such as passenger traffic, increase in manpower, inflation etc. The details regarding projections of individual cost heads submitted by CIAL are provided below.

Details of expenses as submitted by CIAL:

Employee Expenses

9.1.2. With respect to employee expenses CIAL had submitted the following:

- Employee cost was forecasted based on the increase in salary per employee and the number of employees.
- During the Third Control Period, the employee salary is expected to grow at 7% annually, in line with the 5-year CAGR (2015-2020) of 7.4%.
- The pay revision, that is done every five years, scheduled in FY 2023 was considered while forecasting the employee costs for the Third Control Period. CIAL had requested the Authority to true up the pay revision on actuals.
- The total number of employees was assumed to remain a constant at 496.

9.1.3. CIAL had submitted the total employee expenses for the Third Control Period as given in the table below.

Table 146: Total employee costs for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total employee costs	88.3	94.5	101.1	108.1	115.7	507.6

Operational Expenses

9.1.4. **Repairs and Maintenance expense:** CIAL, in its MYTP for the Third Control Period, had submitted the following regarding R&M expenses:

- R&M expenses for buildings, runways, roads and culverts were forecasted as a percentage share of gross block of these assets.
- The percentage share was determined on the basis of historical trends and technical estimates for new assets.
- For the Third Control Period, based on the actual expenses in FY 2020, the Airport Operator had assumed that the repairs costs for 'Buildings' would be 1.2% of gross block of buildings.
- In the case of "Runways, Roads and Culverts" and "Plant and Equipment" it was assumed to be 1.4% of gross block of these assets.

9.1.5. The total Repairs and Maintenance expense for the Third Control Period submitted by CIAL is given in the table below.

Table 147: Total R&M expenses for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total Repairs cost	31.4	33.8	38.4	44.3	49.8	197.7

9.1.6. **Power charges:** The power charges for the Third Control Period were estimated by CIAL as follows:

- Power charges were forecasted based on estimated power consumption, unit power charges and contract demand charges (of KSEB) for each year.
- During the period from April to May 2020, when the passenger traffic was almost nil, the fixed consumption was approximately 75,000 units a day. CIAL estimated that the variable consumption is 0.079 units per pax per day.
- Based on the above and the projections of traffic, the Airport Operator had computed the total power consumption for each year.
- As per the Power Purchase Agreement with CIAL Infra, the unit rate for solar power supplied by the subsidiary is INR 6.8.
- The subsidiary is expected to meet all the power requirements of CIAL for the Third Control Period, except in FY 2026. Any such shortfall would be supplied by the Kerala State Electricity Board (KSEB) at the prevailing tariffs.
- Also, regardless of consumption, KSEB bills CIAL for 75% of the contract demand of 9000 KVA as Contract Demand Charges.

9.1.7. The effective unit rates of power supplied by CIAL Infra and KSEB and the total power charges for the Third Control Period as submitted by CIAL are as given in the table below.

Table 148: Power charges for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Power consumption	Lakh units	403	488	533	558	587	2569
Capacity of CIAL Infra	Lakh units	566	566	566	566	566	
Power supplied by KSEB	Lakh units	0	0	0	0	21	21
Effective unit rate – CIAL Infra	INR	6.8	6.8	6.8	6.8	6.8	
Effective unit rate – KSEB	INR	7.9	7.9	7.9	8.6	8.6	
Total Power charges	INR crores	31.1	36.8	39.9	42.0	44.3	194.1

9.1.8. **Water charges:** The Airport Operator had escalated the water consumption for each year of the Third Control Period at the same rate as that of power consumption. CIAL had assumed per unit water charges to grow 20% in FY 2023 and to remain a constant afterwards. The total water charges as forecasted by CIAL for the Third Control Period is given in the table below.

Table 149: Water charges for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Water consumption	Lakh Litres	2703	3270	3573	3741	3936	17222
Unit charges	INR per KL	40	48	48	48	48	
Total water charges	INR crores	1.08	1.57	1.72	1.80	1.89	8.05

9.1.9. **Fuel generator charges:** CIAL had forecasted the growth in fuel consumption at the same rate as that of power consumption. Unit fuel charges were assumed to grow at 10% annually. Fuel generator charges for the Third Control Period as submitted by CIAL is given in the table below.

Table 150: Fuel generator charges for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total fuel generator charges	INR crores	0.5	0.67	0.80	0.92	1.07	3.96

9.1.10. **Utility service charges:** As per the direction of AERA in the tariff order for CIAL for the Second Control Period (Para 13.2.14, AERA order No. 07/2017-18, dated 13th July 2017), CIAL had netted off utility service charges recovered from concessionaires against the utility expenses. For the Third Control Period, the Airport Operator had forecasted utility service charges as a % of utility expenses. CIAL's submission of utility service charges for the Third Control Period was as given in the table below.

Table 151: Utility service charges for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Utility service charges	INR crores	4.9	6.7	7.3	7.7	8.2	34.8
% of utility expenses	%	15.0%	17.2%	17.2%	17.2%	17.2%	

9.1.11. **Safety and security expenses:** The Airport Operator had forecasted safety and security expenses to reach pre-COVID levels (FY 2020 levels) by FY 2022 and then grow annually at a rate of 10% from FY 2023 to FY 2026. Total safety and security expenses as submitted by CIAL for the Third Control Period is given in the table below.

Table 152: Safety and security expenses for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total safety and security expenses	INR crores	8.8	9.7	10.7	11.7	12.9	53.7

9.1.12. **Vehicle running and maintenance expenses:** CIAL had estimated vehicle running and maintenance expense to reach pre-COVID levels by FY 2022 and to then grow annually at a rate of 10% during the period FY 2023-2026. The total vehicle running and maintenance expense for the Third Control Period as submitted by CIAL is given in the table below.

Table 153: Vehicle running and maintenance expense for the Third Control Period as submitted by CIAL

Particulars	UoM	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Total Vehicle running and maintenance expense	INR crores	0.98	1.08	1.19	1.31	1.44	5.99

9.1.13. **Housekeeping expense:** CIAL had submitted that the housekeeping expenses would reach pre-COVID levels by FY 2022 and then grow at 10% annually for the rest of the Third Control Period. The total housekeeping expenses for the Third Control Period as submitted by CIAL is given in the table below.

Table 154: Housekeeping expenses for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total Housekeeping expense	INR crores	11.59	12.75	14.03	15.43	16.97	70.78

9.1.14. **Consumables expense:** During the Third Control Period, CIAL expects the consumables expense to grow annually at 6.6%, in line with the 5-year CAGR during the period 2015-2020. CIAL's submission of consumables expense for the Third Control Period was as given in the table below.

Table 155: Consumables expenses for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total consumables expense	INR crores	4.05	4.32	4.60	4.91	5.23	23.10

9.1.15. **CUTE operating expenses:** The Airport Operator had submitted that it has entered into contracts with SITA and Glidepath for CUTE services. The contract with SITA would expire in FY 2022, post which CIAL had assumed a 10% annual growth in the contract charges. The contract with Glidepath is valid up to FY 2026 and CIAL had considered the contractual value in its submission of expenses for the

Third Control Period. The CUTE operating expenses for the Third Control Period as submitted by CIAL is given in the table below.

Table 156: CUTE operational expenses for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
CUTE operating expenses – SITA	INR crores	2.38	2.62	2.88	3.17	3.48	14.53
CUTE operating expense – Glidepath	INR crores	3.95	4.14	4.34	4.54	4.75	21.71
Total CUTE operational expenses	INR crores	6.33	6.76	7.22	7.71	8.23	36.24

9.1.16. **Other operational expenses:** CIAL had submitted the following with respect to Other operational expenses:

- Other operational expenses included miscellaneous and CSR expenses.
- As directed by AERA in the tariff order for CIAL for the Second Control Period (Para 13.2.15, AERA order No. 07/2017-18, dated 13 July 2017), CSR expenses were excluded from the Aeronautical operational expenditure.
- The miscellaneous expenses during FY 2022-2026 are expected to grow at 4.1% annually based on the 5-year CAGR from FY 2015-2020.

9.1.17. CIAL's submission of Other operational expenses for the Third Control Period is given in the table below.

Table 157: Other operational expenses for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total other operational expenses	INR crores	9.80	9.41	11.26	17.44	22.18	70.09

Administrative and general expenses

9.1.18. CIAL's submission with respect to the components of administrative and general expenses were as given below:

- Repairs to office equipment: Repairs to office equipment for the Third Control Period was estimated based on actual R&M expense as a % of gross block of such assets during FY 2020.
- Rents: Rents during FY 2022-2026 were estimated to grow at 8% annually.
- Rates and taxes: Rates and taxes were kept constant during the Third Control Period.
- Printing and stationery: Printing and stationery expense in FY 2022 is estimated to reach its respective level in FY 2020 and to then grow annually at the rate of inflation for the rest of the Third Control Period.
- Telephone and postage: Telephone and postage expense were projected to increase at 10.3% annually based on the 5-year CAGR from FY 2015 - 2020.
- Travelling expense: In FY 2022, travelling expense were assumed to reduce by 25% of its level in FY 2020 due to the impact of COVID-19. Post attaining pre-COVID levels in FY 2023, travelling expenses are expected to grow annually at a rate of 10%.
- Insurance: For the Third Control Period, insurance expense was estimated based on the forecasted gross block by using the average ratio of insurance expenses to gross block for the last three years.
- Advertisement: It is expected that the advertisement expense would reach pre-COVID levels by FY 2022 and then grow at 10% annually.

- Bank charges: Bank charges were forecasted at the average of the last five years.
- Auditor's remuneration: It is estimated that the Auditor's remuneration would grow at a CAGR of 8% during the Third Control Period.
- Professional charges: Professional charges were projected to increase by 10% annually after reaching pre-COVID levels (FY 2020 levels) in FY 2022.
- Flood mitigation expenses: Flood mitigation expenses were forecasted based on the recommendations of the KITCO study regarding the same. These are capital expenditure items for construction of bridges which would be expensed out in the P&L as per the accounting treatment.
- Provision for doubtful debts: Provision for doubtful debt was not considered as part of Aeronautical O&M expenses.
- Bad debts written off: Forecasted as 50% of the provision for doubtful debt.
- Foreign exchange losses: Foreign exchange losses were projected to remain constant at FY 2020 levels throughout the Third Control Period.
- Director sitting fees: Projected to increase by 10% annually.

9.1.19. Summary of O&M expenses submitted by CIAL for the Third Control Period were as given in the table below.

Table 158: Total O&M expenses for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Employee costs – Total	88.3	94.5	101.1	108.1	115.7	507.6
Operational expenses – Total	105.6	116.8	129.8	147.5	164.0	663.7
Admin and general expense – Total	23.1	32.9	24.4	25.7	27.1	133.2
O&M expense – Total	**217.0**	**244.2**	**255.2**	**281.4**	**306.9**	**1304.6**

Aeronautical allocation of Operations and Maintenance expense

9.1.20. CIAL had submitted the rationale for Aeronautical allocation of various expense heads for the Third Control Period as given in the table below.

Table 159: CIAL's submission of basis of Aeronautical allocation of O&M expenses for the Third Control Period

Expense Item	Rationale for Aero Allocation
Employee costs	• Employees were bifurcated into direct Aero, direct Non-Aero and common based on the nature of services provided by them. • Common employees like MD's office, finance, HR etc. were apportioned into Aero and Non-Aero in the proportion of direct Aero and Non-Aero. • Out of 496 employees CIAL had submitted that 477 employees are providing aeronautical services based on which the aero ratio is 96.10% • Total employee costs were apportioned into aero at 96.10%
Admin and general expense	• Flood mitigation expenses were apportioned as 100% aeronautical • Remaining expenses were apportioned in the same manner as employee cost i.e., Aero ratio of 96.10%
Utilities cost	• Utilities expense net recoveries from concessionaires were considered 100% Aeronautical
Repairs and Maintenance costs	• Repairs and maintenance costs were apportioned in the ratio of aero gross block to total gross block of assets
Other operational expenses	• Allocated in the same manner as that of employee costs
CUTE operational expenses	• CUTE operational expenses were considered as 100% Aeronautical in nature

9.1.21. Based on the rationale given above, CIAL had submitted the Aeronautical allocation of various heads under operations and maintenance expense as given in the table below.

Table 160: Aeronautical allocation of O&M expenses for the Third Control Period as submitted by CIAL

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Payment to employees	96.1%	96.1%	96.1%	96.1%	96.1%
Operational Expenses					
Total repairs cost	87.9%	87.2%	86.8%	87.0%	84.9%
Safety and security expenses	96.1%	96.1%	96.1%	96.1%	96.1%
Utility charges (Net recoveries)	100.0%	100.0%	100.0%	100.0%	100.0%
Vehicle R&M expense	96.1%	96.1%	96.1%	96.1%	96.1%
House Keeping expenses	96.1%	96.1%	96.1%	96.1%	96.1%
Consumables	96.1%	96.1%	96.1%	96.1%	96.1%
Other operational expenses	96.1%	96.1%	96.1%	96.1%	96.1%
CUTE operational expenses	100.0%	100.0%	100.0%	100.0%	100.0%
Admin expense					
Admin expenses except flood mitigation	96.1%	96.1%	96.1%	96.1%	96.1%
Flood mitigation expenses	100.0%	100.0%	100.0%	100.0%	100.0%

9.1.22. Aeronautical O&M expenses for the Third Control Period as submitted by CIAL is given in the table below.

Table 161: Aeronautical O&M expenses for the Third Control Period as submitted by CIAL

Particulars (in INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Payment to Employees	84.9	90.8	97.2	104.0	111.2	488.0
Repairs and Maintenance	27.6	29.4	33.4	38.5	42.3	171.2
Utility costs	27.8	32.3	35.1	37.0	39.1	171.3
Safety and Security expenses	8.5	9.3	10.2	11.3	12.4	51.7
Vehicle Repairs and Maintenance	0.9	1.0	1.1	1.3	1.4	5.8
Housekeeping expenses	11.1	12.3	13.5	14.8	16.3	68.0
Consumables	3.9	4.1	4.4	4.7	5.0	22.2
Other operational expenses	7.6	7.9	8.2	8.6	8.9	41.3
CUTE operational expenses	6.3	6.8	7.2	7.7	8.2	36.2
Admin and General expense	20.3	30.1	22.4	23.8	25.1	121.7
Total O&M expenses	**198.9**	**224.1**	**232.8**	**251.6**	**270.0**	**1177.4**

9.2. Authority's analysis of CIAL's submission of Operations and Maintenance expense for the Third Control Period as part of the Consultation Paper

9.2.1. The Authority had studied CIAL's submission of O&M expenses under various heads in detail and had made the following observations:

Employee Expenses

9.2.2. The Authority sought clarifications from CIAL regarding consideration of departments like Electrical Engineering and Civil engineering as Aeronautical and not as Common. CIAL responded vide their email dated 02 January 2021 ("Reply to queries 2and gaps") that these departments are completely engaged for Aeronautical activities and that the concessionaires (Non-Aeronautical service providers) cannot avail services from these departments. Also, the wages of the employees of CIAL Duty-Free are paid by the subsidiary (CDRSL) that manages the Duty-Free shop and these expenses do not form a part of the employee expenses of CIAL.

9.2.3. The Airport Operator had considered a 7% annual escalation in employee costs during the Third Control Period. The Authority analysed the historical trend in employee costs at Cochin Airport and had observed that the CAGR during the period FY 2015-2020 was 7.4%, while the 3-year CAGR during FY 2017-2020 was 13.9%. The 3-year CAGR was higher due to the pay revision done in FY 2019. Based on its observation of historical growth rate in employee costs, the Authority found the growth rate used by CIAL for projection of employee expenses for the Third Control Period to be reasonable.

Table 162: Growth rate for employee expenses

Particulars	Growth rate considered by CIAL	5-year CAGR (FY 2015-2020)	3-year CAGR (FY 2017-2020)
Employee expenses	7.00%	7.42%	13.93%

9.2.4. The Authority had noted that CIAL had not considered the impact of pay revision (done once in five years) in its projections. The actual expenses incurred would depend on the timing of the pay revision and the increase in wages. Given the above, the Authority proposed to consider employee costs as submitted by CIAL for the Third Control Period and then true up the same based on actuals at the time of tariff determination for the next control period.

Operational expenses

Repairs and Maintenance Expense

9.2.5. The Airport Operator had forecasted R&M expenses for individual assets classes as a percentage of its respective gross block. The costs were further adjusted for inflation to account for the replacement value. The percentage share of gross block considered as R&M expenses is 1.2% for "Buildings and civil works" and 1.4% for "Runways, roads and culverts" and "Plant and Equipment". The Authority compared the rates considered by CIAL against the average of last five years, the details of the same are given below.

Table 163: Analysis of R&M expense projections as part of the Consultation Paper

R&M expense as % of gross block	% considered by CIAL	5-year average % (FY 2016-2020)
Buildings and civil works	1.22%	1.49%
Plant and Equipment	1.38%	1.63%
Runways, roads and culverts	1.38%	1.63%

9.2.6. For estimating the repair cost of new assets proposed to be capitalised in the Third Control Period, CIAL had considered different percentages than the ones used for existing assets. These percentages were lower compared to the percentages used for existing assets, as would be expected, since newer assets would require lesser repairs compared to existing ones.

9.2.7. Based on the above, the Authority found the estimates made by the Airport Operator to be reasonable. However, the repair costs would depend on actual value and time of capitalisation of assets. Hence, the Authority proposed to consider R&M expenses as submitted by CIAL and true up the same based on actuals at the time of tariff determination for the next control period.

Power, water, and fuel charges

9.2.8. CIAL had computed power charges based on unit power consumption and unit rates that were estimated for the Third Control Period. The Airport Operator had forecasted power consumption to grow in proportion to the traffic.

9.2.9. The per unit power charges for the solar power supplied by CIAL Infra were kept constant at the rate of INR 6.8 per unit throughout the Third Control Period (based on the Power Purchase Agreement with the subsidiary). However, the contract demand charges and unit power charges from KSEB were escalated by 10% in both FY 2022 and FY 2024. The Authority had observed that after the revision in FY 2014 the tariffs were revised by KSEB only in FY 2020. Considering that these rates are not frequently revised by KSEB, the Authority proposed to consider an escalation of 10% on contract demand charges and unit costs of KSEB only in FY 2026.

9.2.10. CIAL had considered utilities costs as net of utility service charges after setting off the recoveries from the concessionaires in line with the decision taken by the Authority regarding the same in the Second Control Period.

9.2.11. As in the case of power consumption, the Airport Operator had projected water and fuel consumption to grow in proportion to the traffic. The Authority enquired about the rationale behind considering fuel consumption to grow in proportion to the traffic, to which CIAL responded vide their email dated 02 January 2021 ("Replies to queries 2and gaps") that, *"the DG sets are used as a last alternative source of power and its usage depends on the non-availability of power. Therefore, the growth rate adopted is similar to that of power consumption which appears to be the best fit".*

9.2.12. For FY 2022, CIAL had considered utilities service charges as 15% of utilities cost, while for FY 2023-2026, it was considered as 17.2% of utilities cost (same as in FY 2020). The Authority sought clarifications from CIAL regarding lower utility service charges in FY 2022 compared to the remaining years. CIAL responded vide their email dated 02 January 2021 that some concessionaires had closed their businesses starting from FY 2021 due to losses induced by the COVID-19 crisis and hence a lower recovery is expected from concessionaires for the period until FY 2023. Further, CIAL added that the utilities charges are expected to reach pre-COVID levels by FY 2023.

9.2.13. CIAL had also stated that the utility service charges were projected to be 10% of utility cost in FY 2021, however, the actual charges recovered during April-September 2020 was only 7.4% of the utility cost during the same period.

9.2.14. The projections made by the Airport Operator regarding the consumption of power, water and fuel seemed reasonable. The Authority proposed to revise the escalation of power costs of KSEB as discussed above and consider "Power, water and fuel charges" for the Third Control Period as given in the table below, and true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

Table 164: Utility expenses proposed by the Authority for the Third Control Period as part of the Consultation Paper

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Power, water and fuel charges	27.47	32.05	34.83	36.41	38.70	169.46

Other operational expenses

9.2.15. The Authority had compared the growth rates used by CIAL for projecting operational expenses against the actual growth in the last 5 years. The details are given below.

Table 165: Analysis of growth of operational expenses as part of the Consultation Paper

Expense Item	Growth rate considered by CIAL	5-year CAGR (FY 2015-2020)
Safety & Security	10.00%	24.31%
Housekeeping	10.00%	17.18%
Consumables	6.61%	6.61%
Miscellaneous	4.09%	4.09%

9.2.16. The Authority noted that CIAL had used 5-year CAGR for forecasting "Consumables" and "Miscellaneous" expenses. Further, the Airport Operator had used an annual growth rate of 10% in the case of "Safety and Security" and "Housekeeping" expenses despite their actual growth rate in the past being higher than 10%. Therefore, the Authority proposed to consider these expenses as submitted by CIAL for the Third Control Period and true up the same based on actuals at the time of tariff determination for the next control period.

9.2.17. Post FY 2022, the Airport Operator had considered 10% growth rate for CUTE operational expenses pertaining to SITA. CIAL in their MYTP for the Third Control Period had stated that the contract with SITA will expire in FY 2022 because of which it had assumed such a growth rate. The Authority noted that the actual escalation can only be understood after an agreement in this regard has been entered into with the concessionaire. Hence, the Authority proposed to consider the growth rate as per CIAL's submission for the Third Control Period and then true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

9.2.18. The Authority noted that CIAL had excluded CSR expenses for the Third Control Period, which was in line with the decision taken by the Authority in this regard in the previous tariff order.

Administrative expenses

9.2.19. The Authority observed that there was no clear trend in the overall administrative and general expenses over the last 5 years. A comparison of the average annual A&G expenses submitted by CIAL for the second and third control periods is given below.

Table 166: Comparison of average annual A&G expenses as part of the Consultation Paper

Expense Item	Second Control Period	Third Control Period
Average Admin & General expenses (INR Cr.)	36.48	26.64

9.2.20. The Airport Operator had excluded the "Provision for doubtful debts" from Aeronautical O&M expenses in its MYTP submission. However, it was noticed that the figures of the preceding year were deducted from O&M expenses of each year instead of deducting the "Provision for doubtful debts" figure of the same year. The Authority proceeded to rectify this year.

9.2.21. The Authority noted that CIAL had forecasted various flood mitigation expenses for the Third Control Period. The Airport Operator was asked to submit the details of these expenses including locations in which these expenses are proposed to be incurred. The Authority observed that similar to the expenses incurred in the Second Control Period, these expenses are proposed to be undertaken outside the Airport premises. Since these measures also benefit the adjoining areas of the airport, the responsibility for the same could not be entirely attributed to the Airport Operator, hence the Authority proposed to exclude the expenses incurred outside the area belonging to the airport from the ARR calculation.

Aeronautical allocation of Operations and Maintenance expense

9.2.22. The Authority had decided to conduct a study on efficient O&M costs for CIAL for the Second Control Period (the summary of the study is given in Annexure 3; the detailed report is available along with the Tariff Order on the AERA website). In addition to the examination of allocation of expenses, the study was also conducted to examine baseline operating levels and also for the benchmarking of O&M expenses incurred by the Airport Operator during the Second Control Period.

9.2.23. For the Third Control Period, the Authority proposed to consider the basis for allocation of expenses as proposed by the study on efficient O&M expenses for CIAL for the Second Control Period. Basis for Aeronautical allocation of O&M expenses as submitted by CIAL and as proposed by the study on efficient O&M expenses for CIAL are as given below.

Table 167: Basis for Aeronautical allocation of O&M expenses proposed by the study on efficient O&M expenses for CIAL

Item	Basis according to CIAL	Basis according to the study on efficient O&M expenses
Employee costs	Employees were bifurcated into direct Aeronautical, direct Non-Aeronautical and common. Common employees were further bifurcated in the proportion of direct Aeronautical and direct Non-Aeronautical employees. Total employee costs were then bifurcated into Aero and Non-Aero in the respective proportion of their numbers.	Same as according to CIAL.
Repairs cost	Repairs and maintenance expenses were bifurcated based on the ratio approved by the Authority in the Tariff Order.	Bifurcated based on revised ratio of Aeronautical Gross Block to Total Gross Block.
Safety and security expenses	Safety and security expenses were bifurcated in proportion of number of	As the security expenses are incurred for the whole of Terminal building and the

Item	Basis according to CIAL	Basis according to the study on efficient O&M expenses
	employees providing Aeronautical and Non-Aeronautical services.	Airport, the same were bifurcated using the terminal allocation ratio.
Utilities cost	Utilities costs were considered as net of revenues from concessionaires and the net amount so obtained have been considered as 100% aeronautical.	Same as according to CIAL.
Vehicle running and maintenance expenses	Vehicle running and maintenance expenditure was bifurcated in the proportion of number of employees providing Aeronautical and Non-Aeronautical services.	Same as according to CIAL.
Housekeeping expenses	Housekeeping expenses were bifurcated in the proportion of number of employees providing Aeronautical and Non-Aeronautical services.	As the housekeeping expenses are incurred for the upkeep and cleanliness of the Terminal building and the areas surrounding them, the same were bifurcated using the terminal allocation ratio.
Consumables expenses	Consumables expenses have been bifurcated in the proportion of number of employees providing Aeronautical and Non-Aeronautical services.	As the consumables are used across the Terminal building by employees and passengers alike, consumable expenses were bifurcated using the terminal allocation ratio.
CUTE operational expenses	CUTE operational expenses were considered as 100% aeronautical.	Same as according to CIAL.
Other operational expenses	Other operational expenses were segregated in the proportion of employees providing Aeronautical and Non-Aeronautical services.	As the other operational expenses pertains to the overall Airport operations, the same were bifurcated using the terminal allocation ratio.
Administrative and general expenses	All admin and general expenses except flood related expenses were segregated in the proportion of employees providing Aeronautical and Non-Aeronautical services. Flood mitigation expenses were considered as 100% Aeronautical while loss on sale of assets due to flood was bifurcated in the ratio of Aero gross block to total gross block.	Components of Admin and general expenses related to Terminal building were segregated using the terminal allocation ratio, those related to employees were segregated in the employee ratio and the remaining in the ratio of average aeronautical assets to total assets. The flood mitigation expenses were found to be incurred outside the airport area and were excluded from O&M expenses.

9.2.24. The Aeronautical allocation of operations and maintenance expenses as proposed by the Authority for the Third Control Period at the consultation stage, based on the principles outlined in the study on efficient O&M expenses for CIAL, was as given in the table below.

Table 168: Aeronautical allocation of Operating expenses for the Third Control Period proposed by the Authority in the CP

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Payment to employees	96.13%	96.13%	96.13%	96.13%	96.13%
Operational Expenses					
Total repairs cost	82.37%	81.53%	80.62%	81.73%	79.95%
Safety and security expenses	91.06%	91.06%	91.06%	91.06%	91.06%
Utility charges (Net recoveries)	100.00%	100.00%	100.00%	100.00%	100.00%
Vehicle R&M expense	96.13%	96.13%	96.13%	96.13%	96.13%
House Keeping expenses	96.13%	96.13%	96.13%	96.13%	96.13%
Consumables	96.13%	96.13%	96.13%	96.13%	96.13%
Other operational expenses	96.13%	96.13%	96.13%	96.13%	96.13%
CUTE operational expenses	100.00%	100.00%	100.00%	100.00%	100.00%
Admin expense					
Admin expenses except flood mitigation	88.55%	87.98%	87.63%	88.17%	87.42%
Flood mitigation expenses	0.00%	0.00%	0.00%	0.00%	0.00%

Working Capital Interest

9.2.25. CIAL had not considered "Working Capital Interest" under O&M expenses and had included it separately in the computation of ARR. The Authority had noted that CIAL had computed working capital interest based on the forecasted repayment schedule of the overdraft facility which was enhanced to INR 125 Cr. in FY 2021 in the light of low revenues due to the pandemic. The Airport Operator had considered the entire expense as Aeronautical.

9.2.26. The Authority had considered working capital interest under O&M expenses and proposed to allocate the same in the ratio of gross fixed assets since working capital is a general corporate requirement and this expense cannot be solely attributed to Aeronautical activities.

9.2.27. Based on the above, Aeronautical O&M expenses proposed by the Authority for the Third Control Period, at the consultation stage, were as given in the table below.

Table 169: Aeronautical O&M expenses as proposed by the Authority for the Third Control Period as part of the CP

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Payment to Employees	84.86	90.80	97.15	103.95	111.23	488.00
Repairs and Maintenance	25.88	27.52	31.09	35.08	39.46	159.04
Utility costs	27.47	32.05	34.83	36.41	38.70	169.46
Safety and Security expenses	8.02	8.82	9.70	10.67	11.74	48.93
Vehicle Repairs and Maintenance	0.94	1.04	1.14	1.26	1.38	5.76
Housekeeping expenses	10.56	11.61	12.77	14.05	15.46	64.45
Consumables	3.69	3.93	4.19	4.47	4.76	21.04
Other operational expenses	7.21	7.50	7.81	8.13	8.46	39.11
CUTE operational expenses	6.33	6.76	7.22	7.71	8.23	36.24
Admin and General expense	17.66	18.83	19.84	21.46	22.45	100.24
Working Capital Interest	7.62	4.47	0.00	0.00	0.00	12.08
Total O&M expenses	**200.23**	**213.33**	**225.75**	**243.18**	**261.88**	**1144.36**

9.3. Stakeholder comments on Operating Expenses for the Third Control Period

9.3.1. Subsequent to the stakeholder consultation process, the Authority had received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to Operating Expenses for the Third Control Period. The comments by stakeholders are presented below.

CIAL's comments on Operating Expenses for the Third Control Period:

9.3.2. CIAL requested the Authority's support to mitigate the future floods by approving the operational expenses on flood mitigation expenses of INR 11.49 Cr. in the Third Control Period. The detailed comments and justification of CIAL in this regard are provided in Para 4.8.38.

9.3.3. CIAL requested the Authority to maintain consistency in approach and allow CSR expenses in the aeronautical operational expenditure for the computation of ARR for the Third Control Period. The detailed comments of CIAL on this matter are given in Para 4.8.39.

Other stakeholders' comments on Operating Expenses for the Third Control Period:

9.3.4. IATA has commented that CIAL has maintained its costs at pre-COVID levels while airlines have managed 45% reduction in OPEX and has suggested to consider outsourcing or re-evaluation of staff function to ensure efficient OPEX. IATA has also suggested greater scrutiny of cost-cutting measures and contracted services like CUTE expenses.

9.3.5. IATA has recommended that AERA should determine a level of efficient OPEX aligned with current level of traffic after considering any cost optimization measures by CIAL in response to the pandemic wherein a baseline based on past expense levels could be set and expectation of reduction in expenses per pax could be built-in going forward. The detailed comments of IATA are as follows:

"Deep and sustainable cost reductions are the necessary starting point for the industry's economic recovery. Airlines have managed to dramatically reduce their operating costs by 45%, including a 39% reduction in employment costs and a 54% reduction in maintenance cost.

Globally, most airport costs are associated with operating expenses. We have seen positive examples of cost reductions among airports so the argument that most airport costs are fixed is not correct. Some have been able to reduce their operating expenses by 30%. The majority of these savings are a result of third-party expenses, linked to traffic volume being reduced, as well as receipt of government aid in the form of wage subsidies. Operating expenses reductions in 2020 for some large European Airports in the range of -28% - 48%: AMS group -28%; AdP group -43%; AENA -20%; DAA group -47%; Fraport group -40%; CPH -43%; VIE -48%; ZRH group -35%; and Malaysia Airports -36.3%.

Para 6.3.3: We also noted that despite the much lower traffic during the pandemic, CIAL has maintained its cost level at pre-COVID level. With staff costs representing a major element of an airport's cost base (34% according to ACI), additional sustainable cost reduction measures are required moving forward. This may include elements linked to outsourcing or re-evaluation of function as demonstrated by some airports restructuring programs.

Ensuring operating costs are efficiently incurred (and in line with the current levels of traffic).

Airport infrastructure also needs to be re-thought and optimized after this crisis as well as the deferral or cancellation of unwarranted investments to increase capacity, until demand returns. A lack of focus on efficiency over the past several years has led to airports that are not fit for purpose, costly and larger than they need to be. Instead, airports need to double down and focus on maximizing the capacity of their existing infrastructure.

We would query on how much OPEX has been adjusted on account of the downturn? Greater scrutiny of contracted services from suppliers e.g. CUTE operating expenses which is being assumed to escalate 10% annually. Given the challenges brought by the COVID-19 crisis, it is imperative that CIAL re-negotiates the best deal and seek for lower costs from its suppliers (e.g. the contract with Glidepath valid up to FY2026).

IATA would expect CIAL to rationalize its expenses (including staffing level) to correspond to its operation in degraded capacity mode during the pandemic and the subsequent recovery period. There is a need for airport to optimize its operation and reduce costs (without compromising safety) in light of the crisis. A year-to-year projected increase is simply not justifiable under current environment. IATA is keen to learn more about any cost optimization measures by CIAL in response to the pandemic as *practiced by other major airport operators in the region and the reduction in OPEX. AERA should then determine a level of efficient OPEX that is aligned with the current level of traffic. A number of airports around the world have been taking measures to minimize costs and CIAL should be no exception.*

Para 7.2.2: O&M expense per pax comparison with comparable airports such as Goa Airport which has a similar traffic level (9.75m vs 8.32m) shows a significant difference (INR169 vs INR46). It was noted in the consultation paper that when a similar comparison is done based on terminal area, the employee expense per sqm of terminal area is higher for CIAL only when compared with Goa Airport but is lower when compared to other airports in Table 18.

Para 7.2.6.2: "On overall basis, CIAL airport is seen to have a lowest O&M expenses per sqm of terminal area when compared with remaining airports"

However, this could also reflect overprovision which resulted in large terminal area, low passenger numbers and high O&M costs per pax or ATM overall.

Para 7.4.2: "However, due to the variability in factors between different airports, regulation of expenses based on external benchmarking does not seem appropriate."

This could be true to a degree but still is useful to trigger reviews of areas of concern and opportunity for improvement. IATA recommends that a baseline based on past expenses levels is set and an expectation of a reduction in expenses per pax (and per ATM) is built-in going forward to better reflect the efficiency opportunities resulting from increasing traffic and economies of scale. The baseline should also take into consideration the corresponding reductions in expenses expected as a result of the pandemic and lower traffic."

9.3.6. APAO has requested AERA to implement the TDSAT judgement dated 16 December 2020 on all tariff determination processes and allow CSR expenses as part of aeronautical OPEX.

9.3.7. FIA stated that costs incurred by CIAL are borne by airlines by way of tariffs. FIA has requested AERA to advise CIAL to rationalize its costs including employee costs as deemed fit and to not allow any escalations under items or heads.

9.3.8. MIAL has stated that AERA should honour the Hon'ble TDSAT judgement dated 16 December 2020 and Suo moto allow CSR expenses for tariff determination for TCP.

9.3.9. AAI has commented that AERA may consider CIAL's requests and allow CSR expenses in aeronautical operational expenses for computation of ARR for the Third Control Period in line with the approach in recent Consultation Papers for Hyderabad and Bangalore Airport.

9.4. CIAL's counter-comments and response to stakeholder comments regarding Operating Expenses for the Third Control Period

9.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comments with respect to Operating Expenses for the Third Control Period is presented below.

9.4.2. CIAL responded to IATA's comments on Operating Expenses for the Third Control Period as follows:

i. *"COVID-19 pandemic has severely affected CIAL's financials and CIAL has acted proactively by taking steps to maintain efficient O&M costs, deferment of non-essential capital expenditure, deferment of debt repayment as per RBI policy, etc. to conserve cash and survive the crisis.*

ii. *In principle, employees should not be sacked or unpaid during these COVID times as it involves socio-economic and motivational issues. Some of the industries including airlines might have resorted to such practices but ideally the cost of such actions would have to be supported through fiscal measures of the government and not through thrusting such measures on other stakeholders in the industry.*

iii. *CIAL is committed to the operational efficiency at the airport and has undertaken all possible steps which is reflected in reduced costs of FY21. Steps include:*

   a. *Freeze on new hiring*

   b. *Nil annual increments in salaries, non-release of DA and medical allowances of FY21 was resorted.*

   c. *Reduction in utilities cost by 29% in FY21*

   d. *Reduction in housekeeping by 24% in FY21 and city-side security costs in FY21*

   e. *Reduction in consumption of stores, spares and consumables by 41% in FY21*

   f. *Staff relocation have been done for efficient operations*

   g. *Renegotiated all annual maintenance contracts*

   h. *Suspended all special repair and maintenance works in FY21*

   i. *Very minimal business travel*

   j. *No non-essential consultancy services availed in FY21*

iv. *CIAL would highlight that it has forecasted the operating costs for the third control period based on conservative growth rates which accounts for the factor of operational efficiency. For e.g., CIAL has considered a growth rate in salaries of 7% each year for the third control period which does not account for the pay revision undertaken once every 5 years. CIAL has also linked the utilities cost to the recovery in traffic forecast for the third control period. The existing cost of debt of CIAL is 7.8%, which is among the lowest in the airport operators. CIAL has been able to lower its cost of debt through its prudent cost management and its established record of creditworthiness. Airport users have benefitted from the lower cost of debt at CIAL.*

v. *With regards to the repair and maintenance costs, CIAL would highlight that these are governed through the long-term maintenance contracts with the service providers. Since, the contractual costs are driven by market forces and the negotiation power of CIAL is limited. CIAL has still undertaken the negotiation with for all AMC contracts. Accordingly, the expenses are incurred by CIAL. To clarify, the growth rate for Glidepath contract is 5%.*

vi. *The difference in the O&M cost per pax and employee cost per sq. m. between Goa Airport and Cochin Airport is on account of the fact that Goa Airport is a civil enclave. AAI only operates the landside at Goa Airport while the airside which includes the runway, taxiway and apron among other things is operated by the Indian Air Force. The total operational expenditure and the employee cost used in the efficient O&M report includes only the cost incurred by AAI, that is, only for landside portion of the airport. Therefore, the comparison between Goa Airport and CIAL is incorrect and the results are impractical. Further, the independent study conducted by AERA also indicates that O&M of CIAL is the among the efficient one in the industry. They have extensively benchmarked the figures with various airports. By selectively comparing one naval airport and concluding that CIAL's operating cost is high, is objectionable.*

vii. *The costs at an airport are a function of the inhouse activities undertaken by the airport operator (for e.g., CIAL is also responsible for the cargo operations which is not the case for other airports), activities outsourced to third party, area of the airport, cost levels of the city, typical layout of the airport, operational constraints on account of the weather, air space restrictions, etc. Therefore, CIAL does not agree with the piecemeal approach undertaken by IATA while comparing the costs with other airports.*

viii. *CIAL does not agree with IATA's recommendation to set a baseline for expenses per pax/ ATM. The airport's traffic handling capacity increases in staggered manner while the growth in traffic happens on a long-term which can be approximated to a linear growth for simplicity. During the* *initial period after the capacity enhancement, the expenses per pax are expected to rise as the traffic growth will take time to reach the airport capacity. Once the airport's traffic reaches the airport capacity, the expenses per pax are expected to fall as the asset is completely utilized. The increase and decrease in expenses per pax is thus cyclical and therefore, it cannot be fixed. CIAL would also argue that whether the professed methodology can be adopted in the airline industry to determine efficient opex."*

9.4.3. CIAL disagreed with FIA's comment on no escalations for operational expenditure and stated that *"CIAL has undertaken cost reductions as can be seen from the actual operational expenditure of FY21. CIAL's operational cost are governed by the market forces and external factors such as growth in the economy. CIAL has proposed conservative growth rates for its operational cost factoring in the proposed operational efficiency (detailed response to operating expenses is also been furnished against IATA's response in this regard)"*.

9.4.4. CIAL concurred with the comments of MIAL and AAI.

9.5. Authority's analysis of stakeholder comments on Operating Expenses for the Third Control Period

9.5.1. Consistent with its decision for the true up of Second Control Period, the Authority has decided to allow the flood mitigation expenses proposed by CIAL under Aeronautical operational expenses for the Third Control Period. The Authority has examined this matter in detail in Section 4.8 on true up of operating expenses for the Second Control Period (refer Para 4.8.44) and has accordingly made the necessary adjustments in this regard while recomputing operating expenses for the Third Control Period.

9.5.2. Regarding CSR expenses, the Authority has detailed its decision in Section 4.8 while truing up operating expenses for the Second Control Period (refer Para 4.8.47). Accordingly, the Authority has made necessary adjustments for inclusion of eligible CSR expenses under operating expenses for the Third Control Period. The same would be trued up based on actuals and CSR expense eligibility determined on Aeronautical net profit.

9.5.3. The Authority noted IATA's comments on determining efficient operating expenses. The Authority had undertaken a thorough review of the cost escalations considered by CIAL and had found that CIAL has considered lower growth rates compared to the actual trends observed in past for most of the expense items. CIAL has also considered certain COVID-reduction factors in its cost projections as part of the MYTP. Further, the Study on Efficient O&M expenses had found the operating costs of CIAL to be reasonable. Therefore, in the absence of any further information in this regard, the Authority is of the view that no further revision is required in this regard.

9.5.4. For FY 2021, the Authority observed that CIAL has managed to achieve a lower cost than projected initially in its MYTP on account of the measures listed in CIAL's response to IATA's comments. The same has been considered by the Authority in the revised true up of the Second Control Period. Accordingly, adjustments were made to the projections for the Third Control Period in line with the reductions achieved by CIAL in FY 2021. AERA urges CIAL to continue its efforts in reducing operating expenses for the future years as well.

9.5.5. The Authority has noted FIA's request and would advise CIAL to further seek avenues to reduce costs in view of the state of reduced capacity that the airport is operating in. The Authority understands that CIAL does not wish to reduce manpower due to its HR policy, however, the airport operator may consider other ways of reducing employee costs or at least avoiding any escalations in the same.

9.5.6. Based on the above analysis, the Authority recomputed the Operating Expenses for the Third Control Period as given below.

Table 170: Aeronautical Operating Expenses considered by the Authority for the Third Control Period

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Payment to Employees	80.84	86.50	92.55	99.03	105.97	**464.90**
Repairs and Maintenance	25.70	27.97	31.36	35.71	40.21	**160.96**
Utility costs	27.46	32.03	34.81	36.38	38.67	**169.35**
Safety and Security expenses	8.02	8.82	9.70	10.67	11.74	**48.93**
Vehicle Repairs and Maintenances	0.94	1.04	1.14	1.25	1.38	**5.75**
Housekeeping expenses	10.56	11.61	12.77	14.05	15.46	**64.45**
Consumables	2.17	2.31	2.46	2.62	2.80	**12.36**
Other operational expenses	3.83	3.99	4.15	4.32	4.50	**20.79**
CUTE operational expenses	6.33	6.76	7.22	7.71	8.23	**36.24**
Admin and General expenses	15.39	26.57	17.08	18.66	19.62	**97.32**
Working Capital Interest	7.71	4.54	0.00	0.00	0.00	**12.25**
CSR Expenses	0.01	0.00	0.00	1.06	3.57	**4.64**
Total O&M expenses	**188.96**	**212.14**	**213.25**	**231.46**	**252.14**	**1097.94**

9.5.7. The Authority noted that the O&M expenses proposed by it during the consultation stage was INR 1144.36 Cr. (refer Table 169) and the figure considered post consultation stage is INR 1097.94 Cr. The difference of INR 46.42 Cr. is on account of inclusion of INR 11.49 Cr. towards flood mitigation (refer Para 9.5.1), inclusion of INR 4.64 Cr. towards CSR expenses (refer Para 9.5.2) and a decrease of INR 62.55 Cr. as a result of the revised projections in light of the lower costs achieved in FY 2021 (refer Para 9.5.4) as against the projections made by CIAL in its MYTP.

9.6. Authority's decisions regarding Operating Expenses for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to Operations and Maintenance expenses for the Third Control Period:

9.6.1. Authority decides to consider allocation of costs based on the principles laid out in the in the study on efficient O&M expenses for CIAL, undertaken for the Second Control Period (refer Para 9.2.23).

9.6.2. Authority decides to consider an escalation of 10% in contract demand charges and unit rates of KSEB only in FY 2026 for the projection of Utilities cost (refer Para 9.2.9).

9.6.3. Authority decides to consider flood mitigation expenses under Aeronautical O&M expenses (refer Para 9.5.1).

9.6.4. Authority decides to consider eligible CSR expenses (based on Aeronautical net profit) under Aeronautical Operating Expenses for the Third Control Period and true up the same based on actual Aeronautical profits and expenses and the resultant eligibility (refer Para 9.5.2).

9.6.5. Authority decides to consider Working Capital Interest under O&M expenses and allocate the same in the gross fixed asset ratio (refer Para 9.2.26).

9.6.6. Authority decides to consider Aeronautical O&M expenses as given in Para 9.5.6 (Table 170) for the Third Control Period and true up the same based on actuals at the time of tariff determination for the Fourth Control Period, subject to efficiency of the actual costs incurred.

CHAPTER 10. NON-AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

10.1. CIAL's submission of Non-Aeronautical Revenue for the Third Control Period

10.1.1. CIAL had submitted that Non-Aeronautical Revenue for the third control were forecasted based on contractual agreements entered with various vendors, traffic projections and inflation. CIAL had submitted NAR under the following streams:

i. Non-Aeronautical royalties, license fees and lease rentals

ii. Revenue from Duty-Free

iii. Interest income

iv. Miscellaneous income, that includes Public Admission Fees and rent etc.

v. Other income, revenue from golf course, trade centre and other commercial activities

10.1.2. The details of the Non-Aeronautical revenue streams as submitted by CIAL for the Third Control Period are discussed below.

License fees

10.1.3. Car Park: For FY 2022-2024, license fees for car park was forecasted by linking it to passenger traffic growth rate. The license fee in FY 2025 is assumed to recover to pre-COVID levels or FY 2020 levels, post which it is assumed to grow at 10% annually.

10.1.4. Catering: CIAL had forecasted license fees for catering services for the Third Control Period by linking it to passenger traffic growth rate.

Table 171: License fees for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
License fee – Car Park	3.2	6.4	8.4	11.6	12.7	42.3
License fee – Catering	2.6	4.2	5.1	5.6	6.2	23.7
Total	**5.8**	**10.6**	**13.5**	**17.2**	**18.9**	**65.9**

Royalty

10.1.5. CIAL had submitted that Royalty from engineering, security and terminal handling is estimated to grow 10% annually during the Third Control Period.

Table 172: Royalties for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Royalty –Engineering	0.21	0.24	0.26	0.29	0.31	1.31
Royalty – Terminal handling and valet services	0.12	0.14	0.15	0.17	0.18	0.76
Royalty – Security	1.23	1.35	1.49	1.64	1.80	7.52
Total	**1.57**	**1.73**	**1.90**	**2.09**	**2.30**	**9.59**

Other license fees

10.1.6. CIAL had submitted that revenue received from licensees for the categories F&B, Retail, GH agency space, Hoarding, Airline Space, Land space excluding BPCL Fuel Hydrant space, Baggage wrapping service, FOREX counter, Antenna Space, ATM, Duty free shops, mobile counter and others were forecasted based on contracts that CIAL has entered into with the individual parties. According to CIAL there are three different contractual models viz., Fixed Rental, Minimum Monthly Guarantee and revenue share that it has with these concessionaires. CIAL had submitted the forecast methodology it has adopted in these cases as detailed below:

- Fixed Rentals – Lease rentals from BPCL were forecasted to increase by 12.5% per annum as per contract. CIAL had indicated that lease rental from BPCL had been considered as Aeronautical revenues as per Authority's order in this regard in the tariff order for the Second Control Period. As per the contract with concessionaires for petrol pump spaces, the annual escalation in lease rentals was considered to be 12.5%. CIAL had submitted that it had considered Airline space rentals as Non-Aeronautical Revenue, in line with decisions taken by the Authority in the case of AAI airports, DIAL, BIAL, GHIAL and MIAL. CIAL had considered 10% annual escalation in the case of airline space rentals.
- Minimum Monthly Guarantee – CIAL had submitted that it has MMG contracts mainly with retail concessionaires and that it had decided to discount contractual MMG in proportion with the drop in passenger traffic (compared to FY 2020) during the Third Control Period in order to provide interim relief to the concessionaires. It had further submitted that the contractual MMG will be reinstated once the traffic reaches pre-COVID levels.
- Revenue share - CIAL had submitted that it has revenue sharing contracts in the case of FOREX counters and for the purpose of forecasting revenue from FOREX counters during the Third Control Period the Airport Operator had pegged revenue to passenger traffic growth rates.

10.1.7. CIAL had submitted that the rentals from subsidiaries were deducted from the total lease rentals for the purpose of calculation of other license fees. This, according to CIAL, was done because the equity investments in subsidiaries was not considered for FRoR computation.

Table 173: Other license fees for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
F&B	14.5	26.9	34.2	38.6	42.3	156.5
Retail shops	11.9	20.5	25.5	28.4	31.3	117.5
GH Agency Space	11.4	12.8	13.9	12.8	13.8	64.7
Hoarding/board	11.2	19.2	21.8	24.0	26.4	102.6
Airline space	8.7	9.8	10.7	11.8	13.0	54.0
Land space excluding BPCL fuel hydrant space	2.8	3.1	3.4	3.8	4.1	17.1
Baggage wrapping space	5.3	5.9	6.5	7.1	7.8	32.6
Forex Counter	4.1	7.3	10.1	11.1	11.7	44.4
Forex counter – SBT and federal bank	2.0	3.3	4.0	4.4	4.9	18.6
Antenna space	2.3	2.5	2.7	3.0	3.3	13.9
ATM	1.6	1.8	1.9	2.1	2.4	9.8
Duty free shops – rentals	0.9	0.9	1.0	1.1	1.2	5.1
Mobile counters	0.6	1.1	1.6	1.8	2.0	7.1
Miscellaneous	1.9	2.4	2.6	2.8	3.1	12.8
Total	**79.3**	**117.3**	**140.0**	**152.9**	**167.3**	**656.8**

Duty-free revenues

10.1.8. CIAL had assumed an 8% drop in per pax sales in FY 2022 compared to that in FY 2020. CIAL had assumed that the per pax sales would reach FY 2020 levels in FY 2023 and then it would grow at 3.1% based on the 5-year CAGR of per pax sales during FY 2015-2020.

10.1.9. CIAL had entered into a revenue sharing agreement with its subsidiary CDRSL for a period of 5 years starting from 2016. As per the agreement, CIAL could claim a share of revenue generated by CDRSL.

For the Second Control Period the revenue share was 45%, while for the Third Control Period CIAL had considered a 30% revenue share.

Table 174: Duty-free revenues for the Third Control Period as submitted by CIAL

Particulars	UoM	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Per pax duty free sales	INR	473.85	515.06	531.14	547.73	564.83	2632.62
International passengers	Millions	2.08	3.55	4.72	5.09	5.49	20.93
Duty free sales	INR Cr.	98.39	182.78	250.60	279.04	309.99	1120.81
Add: Ad revenues	INR Cr.	1.47	1.47	1.47	1.47	1.47	7.37
Less: Discounts	INR Cr.	9.68	17.99	24.67	27.46	30.51	110.31
Net Duty-Free revenues	INR Cr.	90.18	166.26	227.41	253.05	280.96	1017.86
Revenue share	%	30%	30%	30%	30%	30%	
Duty free revenues to CIAL	**INR Cr.**	**27.06**	**49.88**	**68.22**	**75.91**	**84.29**	**305.36**

Interest income

10.1.10. CIAL had submitted that interest income for the Third Control Period was forecasted on the basis of estimated cash balance and interest rate. As per CIAL's submission, cash balance forecasted to be maintained during the Third Control Period was INR 20 crores and the interest rate considered was 5%.

Table 175: Interest income for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Interest income	0.99	0.88	0.88	5.90	20.63	29.27

Other income

10.1.11. CIAL had categorised rent and services from other activities, public admission fees and miscellaneous income under the head "Other income".

10.1.12. CIAL had submitted that rent and services from other activities and public admission fees were forecasted to grow at the same rate as projected traffic during the Third Control Period. Miscellaneous income was forecasted to reach pre-COVID levels by FY 2022, after which it is assumed to grow annually at the rate of inflation.

Table 176: Other income during the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Income from rent and services from other activities	0.45	0.74	0.89	0.98	1.08	4.13
Public admission fees	0.66	1.09	1.32	1.45	1.60	6.13
Miscellaneous income	5.19	5.31	5.44	5.56	5.69	27.20
Total	**6.30**	**7.15**	**7.64**	**7.99**	**8.37**	**37.45**

Revenue from golf-course, trade-fair centre and commercial complex

10.1.13. CIAL had made the following submissions regarding estimation of Income from golf-course, trade-fair centre and commercial complex for the Third Control Period:

10.1.13.1. Income from golf-course was considered a constant throughout the Third Control Period as this revenue is mainly in the form of pre-paid membership fees. Income from golf-course was assumed to be same as that in FY 2021.

10.1.13.2. Income from trade-fair centre during FY 2022 revenue was estimated to drop by 50% of FY 2020 levels due to the impact of COVID-19 and it was assumed to reach FY 2020 level by FY 2023. During the period FY 2024-2026, an annual growth rate of 10% was assumed.

10.1.13.3. Revenue from commercial complex was envisaged to be realised from FY 2023 post completion of construction works.

Table 177: Income from golf-course, trade-fair centre & commercial complex for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Income from golf course and facilities	3.09	3.09	3.09	3.09	3.09	15.46
Income from trade fair centre	1.66	3.32	3.65	4.02	4.42	17.06
Income from commercial complex	0.00	1.20	2.51	3.95	5.54	13.20
Total	**4.75**	**7.61**	**9.25**	**11.06**	**13.05**	**45.73**

Summary of Non-Aeronautical Revenue as submitted by CIAL for the Third Control Period

10.1.14. CIAL's submission of Non-Aeronautical Revenue for the Third Control Period is summarised and given in the table below.

Table 178: Non-Aeronautical Revenue for the Third Control Period as submitted by CIAL

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Non-Aero Royalties, license fees and lease rentals	86.6	129.7	155.4	172.1	188.5	732.3
Duty free revenues	27.1	49.9	68.2	75.9	84.3	305.4
Interest Income	1.0	0.9	0.9	5.9	20.6	29.3
Other Income	6.3	7.1	7.6	8.0	8.4	37.5
Income from golf-course and facilities, trade fair centre and commercial complex	4.8	7.6	9.3	11.1	13.0	45.7
Total	**125.7**	**195.2**	**241.4**	**273.0**	**314.8**	**1150.1**

10.2. Authority's analysis of CIAL's submission of Non-Aeronautical Revenue for the Third Control Period as part of the Consultation Paper

License Fees

10.2.1. The Authority noted that CIAL had used COVID reduction factors during FY 2022-24 (50%, 40% and 35% respectively) for forecasting license fees for car park. The Authority noted that since the car park license fee is forecasted by linking it to passenger growth, no further COVID reduction factor was required. The Authority had recomputed license fees for the Third Control Period by linking it to the growth in passenger traffic.

10.2.2. CIAL had forecasted license fee for catering services using the passenger traffic growth rates. The Authority recomputed this license fee for the Third Control Period considering the revised traffic estimates.

Royalty – Engineering, Terminal Handling & Valet, and Security

10.2.3. The Authority noted that CIAL had considered an annual growth rate of 10% for the estimation of royalty revenues from Engineering, Terminal Handling & Valet services, and Security. The Authority sought clarification from CIAL with regards to the nature of transactions and the parties involved. CIAL responded that it collects 15% from airlines that avail engineering and security services from third parties. CIAL also collects royalty from airlines that provide valet services and city side facilitation to preferred passengers.

10.2.4. According to CIAL, revenues in the form of royalties have been declining due to increased self-reliance of airlines for engineering and security services. As per actuals during the period FY 2015-2020 and FY 2017-2020, the CAGR of total royalties received from airlines were -22.5% and -39.8% respectively However, CIAL had considered 10% growth rate for projection during the Third Control Period. The Authority noted that the Airport operator has considered a higher growth rate for the Third Control Period despite decline in actual revenues in the last control period. Hence, the Authority proposed to consider royalties from engineering, terminal handling and security as submitted by CIAL and true up the same based on actuals during tariff determination for the Fourth Control Period.

Other royalties and license fees

10.2.5. The Authority noted that CIAL had considered rentals received from Ground Handling agencies as Non-Aeronautical Revenue in the Third Control Period. The Authority proposed to consider all rentals received from Ground Handling agencies as Aeronautical revenue.

10.2.6. For the Third Control Period, the Authority proposed to forecast license fees following the same approach used by CIAL after considering the impact of revised traffic figures. The details regarding forecast basis are provided below:

- Food and Beverages – These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. For the period until when the pax traffic is forecasted to reach pre-COVID levels i.e., FY 2020 levels, MMG was calculated by projecting corresponding figures of FY 2020 using the passenger traffic growth rate. After pax traffic attains pre-COVID levels, MMG follows contractual escalation.
- Retail – These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. For the period until when the pax traffic is forecasted to reach pre-COVID levels i.e., FY 2020 levels, MMG was calculated by projecting the of figures of FY 2020 using passenger traffic growth rate. After pax traffic attains pre-COVID levels, MMG follows contractual escalation.
- Hoarding/Board - These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. For the period until when the pax traffic is forecasted to reach pre-COVID levels i.e., FY 2020 levels, MMG was calculated by linking corresponding of figures of FY 2020 to traffic growth rate. After pax traffic attains pre-COVID levels, MMG follows contractual escalation.
- GH Agency Space – The Authority proposed to consider revenues from GH Agency Space as Aeronautical revenue.
- Airline Space Rentals –The Authority proposed to consider all rentals collected from Airlines as Aeronautical revenue.
- Land Space excluding BPCL Fuel Hydrant – In the true up of the Second Control Period, the Authority had noted that these spaces included those that are rented out to GH Agencies and other Aeronautical service providers. Hence, the revenues were bifurcated into Aeronautical and Non-Aeronautical streams and were considered accordingly. Rentals were projected based on the existing contracts. The details of reclassification are provided in the table below.

Table 179: Details of land space rentals reclassified by the Authority as part of the Consultation Paper

Details of land space allotted	Classification as per Authority
Airside space allotted to Indigo in the Airside, East end	Aeronautical
Equipment charging area at Northern side of T3 pier	Aeronautical
Equipment parking area in the eastern side of T3 pier	Aeronautical
Equipment parking space allotted to Celebi in front of Bay #15	Aeronautical
Equipment parking space allotted to Celebi in the eastern side	Aeronautical
Land Lease allotted to BPCL for setting up Fuel Hydrant	Aeronautical
Land Lease allotted to BPCL in T3 pier area	Aeronautical
Land Lease allotted to IOCL for setting up of Auto LPG Dispenser	Non-Aeronautical
Land Lease Deed - Indian Coast Guard	Aeronautical
Land space allotted to BPCL for Retail Petroleum Outlet	Non-Aeronautical
Space allotted to Idea for laying optical fibre through CIA	Non-Aeronautical
Space allotted to Indian Navy for laying optical fibre thro	Aeronautical
Space allotted to Reliance Jio along the VIP road for laying	Non-Aeronautical

Details of land space allotted	Classification as per Authority
Space allotted to Reliance Jio for laying optical fibre thro	Non-Aeronautical

- Baggage Wrapping Space - Baggage wrapping space contracts follow fixed rental model with annual escalation rates. The Authority proposed to consider these revenue as per CIAL's submission of the same.
- Forex Counters – These contracts follow a revenue share model. For the period until when the pax traffic is forecasted to reach pre-COVID levels i.e., FY 2020 levels, revenue was calculated by projecting the corresponding figures of FY 2020 using passenger traffic growth rate. After pax traffic attains pre-COVID levels, revenue share follows contractual escalation.
- Antenna Space - Antenna Space contracts follow fixed rental model with annual escalation rates. The Authority proposed to consider these revenue as per CIAL's submission of the same.
- ATM Space – ATM Space contracts follow fixed rental model with annual escalation rates. The Authority proposed to consider these revenue as per CIAL's submission of the same.
- Duty Free Shop Rentals - Duty Free Shop contracts follow fixed rental model with annual escalation rates. The Authority proposed to consider these revenue as per CIAL's submission of the same.
- Mobile Counters – These contracts follow a Minimum Monthly Guarantee Model with annual escalation rates. For the period until when the pax traffic is forecasted to reach pre-COVID levels i.e., FY 2020 levels, MMG was calculated by linking corresponding of figures of FY 2020 to traffic growth rate. After pax traffic attains pre-COVID levels, MMG follows contractual escalation.

10.2.7. The Authority proposed to consider other royalties, license fees and rentals as per the basis given above for the Third Control Period and then true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

Duty-Free Revenues

10.2.8. CIAL had assumed that the per pax sales would decrease by 8% in FY 2022 (base FY 2020) and then reach pre-COVID level by FY 2023. However, based on its analysis of actual revenues during the initial six months of FY 2021, the Authority estimated that the per pax sales would reach pre-COVID levels by FY 2022. For the period FY 2023 – 2026, the Authority had considered a growth rate of 3.1% (CAGR of per pax sales during FY 2015-2020).

10.2.9. CIAL had considered a 30% revenue share from CDRSL for the Third Control Period. The Authority noted that based on the decision taken regarding Duty-Free revenue in the Second Control Period Tariff Order, the entire profit of CDRSL should go to the CIAL (100% holding company of CDRSL). However, since forecasting profit of the subsidiary was difficult at that stage, the Authority proposed to consider a 30% revenue share during FY 2022 and FY 2023, owing to decline in international traffic due to COVID-19 pandemic. Further, the Authority proposed to consider 45% revenue share during the period FY 2024-2026 and true up the same based on actual revenues and profits.

Interest Income

10.2.10. The Airport Operator had considered an interest rate of 5% for the calculation of interest income for the Third Control Period. The Authority had looked at the prevailing interest rates of major scheduled banks for term deposits and found CIAL's assumption of 5% to be reasonable. Accordingly, the Authority proposed to consider interest rate for the Third Control Period as submitted by CIAL. Based on the revisions in the other building blocks, the Authority had recomputed the interest income and proposed to true up the same based on actuals at the time of determination of tariff for the next control period.

The prevailing interest rates of select major banks examined by the Authority at the consultation stage are given below.

Table 180: Prevailing interest rates of select major banks during the consultation stage

Bank	Interest rates on Fixed Deposits
State Bank of India	4.40-4.90%
HDFC Bank	4.40-4.90%
Federal Bank	4.00-5.10%
ICICI	4.40-4.90%
Axis Bank	4.40-5.20%

Note: Rates for tenure in the range of 6-18 months have been considered. The rates as per the official websites of the banks as on 07/05/2021

Other Income

10.2.11. Other income comprises of income from rent and services, miscellaneous income and public admission fees. These revenue streams were forecasted as per the basis given below:

- Income from rent and services from other activities –Income from rent and services from other activities for a year was forecasted by linking pax traffic growth to revenue in the preceding year.
- Miscellaneous income – The items included in the calculation of miscellaneous income were observed to have no link to passenger growth. Hence, the miscellaneous income was forecasted to grow at the revised rate of inflation.
- Public Admission fees – Public admission fees for a year was forecasted by linking pax traffic growth to revenue.

Income from Golf Course, Trade Fair Centre and Commercial Complex

10.2.12. Income from Golf Course, Trade Fair Centre and Commercial Complex were forecasted as given below:

- Income from Golf Course – The Authority noted that CIAL had assumed income from golf-course to remain constant during the Third Control Period. The Authority sought clarification from CIAL regarding the reason for assumption of nil growth in membership revenues, to which CIAL responded vide their email dated 02 January 2021 ("Reply to queries 2and gaps"), that issuance of new memberships is closed at the facility and hence the revenue would remain constant. The Authority thus proposed to consider income from golf course facility as submitted by CIAL.
- Income from Trade Fair Centre – According to CIAL, the facility had been taken over by the District Administration and converted as COVID treatment centre. The Airport operator had submitted that there's an ambiguity with regards to the time period by which the facility would be returned for commercial purposes. Hence, CIAL had forecasted that the income from the trade fair centre would reach FY 2020 levels or pre-COVID levels by FY 2023, after which CIAL had assumed an annual growth rate of 10%. The Authority noted that the 3-year CAGR during the period FY 2017-2020 was 8.3% and the 5-year CAGR during the period FY 2015-2020 was 10.5%. The growth rate assumed by CIAL was in line with the historical growth rates as per actuals. Hence, the Authority proposed to consider income from trade fair centre as submitted by CIAL and true up the same based on actuals at the time of tariff determination for the next control period.
- Income from commercial complex – The commercial complex was expected to commence operations from FY 2023, and the revenue was estimated on the basis of rentals per sqm and an annual escalation of 5%. CIAL had submitted the area that are planned to be leased out after completion of work of the facility. The Authority noted that the lease rentals from the commercial complex can only be approximated at a high level at this point, while the actuals might witness drastic changes once the facility becomes operational. Hence, the Authority proposed to consider lease rentals from commercial complex as submitted by CIAL and true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

10.2.13. The Authority had noted that CIAL Infrastructures Limited, the subsidiary that owns and manages the solar power plant assets at the airport, is a profitable entity. The subsidiary had not declared any dividends to CIAL during the period from FY 2017 to FY 2020 and had reinvested the profits in the growth of the business. Therefore, the Authority had not considered any notional income from the subsidiary for the Third Control Period at this stage. However, the same would be reviewed in detail at the time of true up of the Third Control Period and accordingly suitable income from the subsidiary will be considered as revenue to CIAL for the purpose of tariff determination.

10.2.14. Based on the above, the Non-Aeronautical Revenue proposed by the Authority for the Third Control Period at the consultation stage were as given in the table below:

Table 181: Non-Aeronautical Revenue for the Third Control Period as proposed by the Authority as part of the CP

Particulars (in INR crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Non-Aero Royalties, license fees and lease rentals	76.28	113.54	135.45	146.20	160.26	631.73
Duty free revenues	33.18	51.42	105.51	117.41	130.36	437.88
Interest Income	1.64	0.88	0.88	0.88	6.59	10.85
Other Income	6.40	7.21	7.79	8.23	8.71	38.35
Income from Golf-course and facilities, Trade fair centre and commercial complex	4.75	7.61	9.25	11.06	13.05	45.73
Total	**122.24**	**180.66**	**258.89**	**283.78**	**318.96**	**1164.53**

10.3. Stakeholder comments of Non-Aeronautical Revenue for the Third Control Period

10.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to Non-Aeronautical Revenue for the Third Control Period. The comments by stakeholders are presented below.

CIAL's comments on Non-Aeronautical Revenue for the Third Control Period:

10.3.2. CIAL noted that AERA has considered higher revenues share of 45% during FY 2024 to FY 2026 in place of the profits of CDRSL. Based on CIAL's request of not considering the CDRSL profits, CIAL requested AERA to consider only the projected revenue share of 30% from CDRSL and the lease rentals for the entire Third Control Period. The detailed comments of CIAL regarding profits of CDRSL are provided in Para 4.9.34.

10.3.3. CIAL requested AERA to consider airline space rentals as Non-Aeronautical. The detailed comments of CIAL in this regard are given in Para 4.9.35.

10.3.4. CIAL requested AERA to consider land lease rentals form Coast Guard and Navy as Non-Aeronautical Revenue in the ARR computation of the Third Control Period. The complete justification of CIAL is detailed in Para 4.9.36.

Other stakeholders' comments on Non-Aeronautical Revenue for the Third Control Period:

10.3.5. APAO objected to the treatment of Duty-Free revenues from the subsidiary CDRSL (refer Para 4.9.37).

10.3.6. APAO strongly objected AERA's approach on treatment of airline space rentals as Aeronautical, calling it inconsistent as AERA Act or Guidelines do not consider airline space rentals as Aeronautical revenues.

10.3.7. APAO stated that the treatment of land lease rentals from Coast Guard and Navy as Non-Aeronautical revenue is unprecedented, arbitrary, and lacking merit. APAO has added that AERA Act or Guidelines do not consider such rentals as Non-Aeronautical revenue and neither does AERA regulate such rentals.

10.3.8. AAI has requested AERA to consider airline space & land rentals as Non-Aeronautical Revenue as treated in the past for DIAL, MIAL, HIAL, and BIAL.

10.3.9. AAI has stated that land lease rentals from Coast Guard & Navy should be considered as Non-Aeronautical Revenue.

10.3.10. FIA has requested AERA to conduct an independent expert study on Non-Aeronautical Revenue and suggested to ensure that no adjustments should be made to traffic-independent revenues that are based on agreements.

10.3.11. FIA has stated that royalty rates under various headings at some airports including CIAL are as high as 46%, which are passed on to airlines by service providers. FIA added that market access fee is not practiced in most global economies including EU, Australia etc. FIA has urged AERA to abolish such royalty.

10.4. CIAL's counter-comments and response to stakeholder comments regarding Non-Aeronautical Revenue for the Third Control Period

10.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comments with respect to Non-Aeronautical Revenue for the Third Control Period is presented below.

10.4.2. CIAL reiterated that it disagrees with FIA on study on Non-Aeronautical Revenue stating that AERA has no jurisdiction under AERA Act to conduct study on the unregulated Non-Aeronautical business.

10.4.3. Regarding FIA's comment on royalty, CIAL highlighted that the revenue share to CIAL from ground handling is considered as Aeronautical revenue by AERA and thus cross-subsidises the other Aeronautical charges at the airport. CIAL added that *"it is thus part of the airport charges to recover the ARR. In case some charges are reduced, the loss of revenue will have to be recovered through an increase in other charges. For e.g., when the fuel throughput charges were abolished, the landing charges were increased to compensate the loss of revenues".*

10.4.4. CIAL concurred with the comments of AAI.

10.5. Authority's analysis of stakeholder comments on Non-Aeronautical Revenue for the Third Control Period

10.5.1. The Authority has carefully examined the comments of CIAL regarding revenues from CDRSL in the section on true up of Non-aeronautical Revenue (refer Para 4.9.46). In line with the decision taken with respect to Non-Aeronautical Revenue for the Second Control Period, the Authority has decided to consider a 30% revenue share from CDRSL for projection of NAR for the Third Control Period based on the agreement with the subsidiary. The Authority has made the necessary adjustments in this regard, to NAR considered for the Third Control Period. The Authority expects that CIAL will recognise a higher revenue share wherever such opportunity exists, as done in the past, so that the resultant benefits may be passed on to the airport users.

10.5.2. Regarding the comments of CIAL, APAO and AAI on treatment of airline space rentals, the Authority would like to highlight its decision as per Order No. 07/2017-18 dated 13th July 2017 regarding determination of tariffs for Aeronautical services in respect of Cochin International Airport for the Second Control Period which states that (Paragraph 14.23), *"However, as these relate to revenues realised from Aeronautical service providers, the Authority proposed to consider this revenue as part of Aeronautical Revenue. Similarly, the Authority proposed to consider revenue/rentals collected from Airlines and other agencies allied with the Aeronautical Services as Aeronautical Revenue"*. The Authority is of the view that revenues realised in any form Aeronautical service providers are to be treated as Aeronautical and doesn't see any reason to deviate from this decision at this point of time. Therefore, the Authority has decided to continue with the treatment of airline space rentals as Aeronautical, consistent with its proposal in Consultation Paper No. 08/2021-22.

10.5.3. The Authority has carefully examined the comments of CIAL, APAO and AAI regarding rentals from Coast Guard and Navy. The Authority agrees with the view of the stakeholders that the activities of Coast Guard and Navy are not regulated by AERA as they are not involved in the provision of any Aeronautical services at the airport. Accordingly, the Authority has decided to consider the land lease rentals from Coast Guard and Navy as Non-Aeronautical.

10.5.4. On the comment of FIA regarding undertaking a study on Non-Aeronautical Revenue, the Authority would like to state that AERA had commissioned three studies with respect to CIAL viz. 'Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets', 'Study on Efficient O&M Expenses' and 'Study on Determinants of Cost of Capital' for the purpose of tariff determination. In future, the Authority will continue to undertake such detailed independent studies wherever it is deemed necessary and appropriate.

10.5.5. FIA has also requested the Authority to ensure that no adjustments are proposed to traffic-independent Non-Aeronautical Revenue that are based on agreements with concessionaires. The Authority finds this comment of FIA to be counterintuitive to its own comments regarding operational expenses wherein FIA has proposed to AERA to advise CIAL to rationalize/re-negotiate all its expenses. The Authority would like to state that such re-negotiations cannot be encouraged for the benefit of only one group of stakeholders. CIAL has clarified in their submissions that interim relief has been provided to concessionaires in order to ensure their viability and sustain them at the airport as they had witnessed multiple concessionaires closing down business owing to the absence of demand on account of the pandemic. Such measures have also been taken in the case of other airports including those of AAI. The Authority has examined the nature of such measures undertaken by CIAL and has found that the relaxation on Minimum Monthly Guarantees have been provided in proportion to the drop in traffic compared to pre-COVID times. In view of the above, the Authority does not see any reason to consider any further revisions in this regard.

10.5.6. The Authority agrees with CIAL's response that the royalties collected from providers of regulated services are treated as Aeronautical revenues, therefore any changes in the same would have to be compensated by revision of other charges. Hence, there would not be any net impact on the airlines on account of revisions in the charges highlighted by FIA. However, the Authority expects the airport operator to ensure that the other Non-Aeronautical royalties are maintained at reasonable levels and at par with industry standards.

10.5.7. Based on the above analysis, the Authority has recomputed the Non-Aeronautical Revenue for the Third Control Period as given below.

Table 182: Non-Aeronautical Revenue considered by the Authority for the Third Control Period

Particulars (INR Crores)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Duty free revenues	33.18	51.42	70.34	78.27	86.90	**320.12**
Non-Aero Royalties						
Royalty - Engineering	0.37	0.41	0.45	0.49	0.54	**2.25**
Royalty – Security	0.91	1.00	1.10	1.21	1.34	**5.57**
Royalty – Terminal Handling & Valet	0.23	0.25	0.28	0.30	0.33	**1.39**
License Fees						
License Fee – Car Park	6.97	10.68	12.95	11.56	12.72	**54.88**
License Fee – Catering	1.82	2.79	3.38	3.76	4.17	**15.91**
Other License Fees						
F&B	16.90	28.11	34.84	38.58	42.31	**160.74**
Retail Shops	13.73	21.40	25.85	28.42	31.26	**120.67**
Hoarding/Board	12.79	19.83	21.81	23.99	26.39	**104.81**
Land Space (excluding BPCL)	1.90	2.09	2.29	2.53	2.79	**11.59**
Baggage Wrapping Space	5.34	5.87	6.46	7.11	7.82	**32.59**
Forex Counter	4.93	7.77	10.52	11.14	11.74	**46.08**
Forex Counter–SBT and Federal Bank	2.56	3.93	4.76	5.29	5.88	**22.42**
Antenna Space	2.31	2.50	2.74	3.01	3.31	**13.87**
ATM	1.61	1.77	1.95	2.14	2.36	**9.82**
Duty Free Shop Rentals	0.88	0.95	1.02	1.09	1.18	**5.12**
Mobile Counter	0.74	1.20	1.64	1.81	1.99	**7.37**
Miscellaneous	1.90	2.36	2.59	2.83	3.10	**12.78**
Interest Income	1.34	0.88	0.88	0.88	6.44	**10.41**
Other Income	6.40	7.21	7.79	8.23	8.71	**38.35**
Income from Golf Course, Trade Fair Centre, and Commercial complex	4.28	7.13	8.78	10.59	12.57	**43.36**
Total Non-Aeronautical Revenue	**121.09**	**179.53**	**222.41**	**243.24**	**273.85**	**1040.11**
30% for Cross Subsidisation	**36.33**	**53.86**	**66.72**	**72.97**	**82.16**	**312.03**

10.5.8. The Authority noted that the NAR proposed by it during the consultation stage was INR 1164.53 Cr. (refer Table 181) and the figure considered by the Authority post consultation stage is INR 1040.11 Cr. The difference of INR 124.42 Cr. is primarily on account of reduction of INR 117.76 Cr. due to consideration of only 30% revenue share from CDRSL during FY 2023-26 (refer Para 10.5.1) and reduction of INR 1.26 Cr due to reclassification of rentals from Coast Guard and Navy (refer Para 10.5.3). The remaining net difference of INR 5.40 Cr is on account of the revised revenue projections based on the actual revenue achieved in FY 2021 as against projections considered by CIAL in its MYTP.

10.6. Authority's decisions regarding Non-Aeronautical Revenue for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to Non-Aeronautical Revenue for the Third Control Period:

10.6.1. Authority decides to consider airline space rentals and land lease rentals from agencies related to Aeronautical services like Ground Handling as Aeronautical revenue (refer Para 10.5.2).

10.6.2. Authority decides to consider the contractual royalty and rents paid by CDRSL as Duty-Free revenues of CIAL and true up the same based on actuals and after due diligence at the time of determination of tariff for the Fourth Control Period (refer Para 10.5.1).

10.6.3. Authority decides to consider lease rentals paid by Coast Guard and Navy as Non-Aeronautical revenue (refer Para 10.5.3).

10.6.4. Authority decides to consider Non-Aeronautical Revenue as detailed in Para 10.5.7 (Table 182) for determination of tariff for the Third Control Period.

10.6.5. Authority decides to true up Non-Aeronautical Revenue for the Third Control Period based on actuals, at the time of determination of tariff for the next control period.

CHAPTER 11. TAXATION FOR THE THIRD CONTROL PERIOD

11.1. CIAL's submission of Taxation for the Third Control Period

11.1.1. CIAL had submitted that it had calculated Aeronautical taxes for the Third Control Period based on the Authority's direction to Hyderabad Airport in this regard (Order No. 34/2019-20 dated 27th March 2020). CIAL had bifurcated total taxes (at actuals) into Aeronautical and Non-Aeronautical in the same proportion as that of Aeronautical and Non-Aeronautical PBT.

11.1.2. The detailed computation of Aeronautical taxes for the Third Control Period as per CIAL's submission is given in the table below.

Table 183: Aeronautical taxes for the Third Control Period as submitted by CIAL

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical Tax						
Aeronautical Revenues	376.6	788.8	971.8	1096.3	1235.9	4559.3
30% Non-Aero Revenues	37.7	58.6	72.4	81.9	94.4	345.0
Aeronautical OPEX	198.9	224.1	232.8	251.6	270.0	1177.4
Aeronautical Depreciation	147.5	161.5	186.0	196.5	188.4	879.8
Interest	64.1	74.5	77.9	70.1	57.5	344.1
PBT	93.9	387.3	547.5	659.9	814.5	2503.0
Tax Rate applicable (%)	25.0%	25.0%	25.0%	25.0%	25.0%	
Aeronautical Tax	**23.6**	**97.5**	**137.8**	**166.1**	**205.0**	**630.0**
Non-Aeronautical Tax						
70% of Non-Aero Revenues	88.0	136.6	169.0	191.1	220.4	805.1
Non-Aeronautical OPEX	18.1	20.1	22.4	29.7	36.8	127.2
Non-Aeronautical Depreciation	13.3	15.2	16.7	14.8	17.1	77.1
Interest	11.8	13.5	13.8	12.0	11.2	62.4
PBT	44.7	87.9	116.1	134.6	155.2	538.4
Tax rate applicable (%)	25.0%	25.0%	25.0%	25.0%	25.0%	
Non-Aeronautical Tax	**11.3**	**22.1**	**29.2**	**33.9**	**39.1**	**135.5**
Aeronautical Tax %	**68.0%**	**82.0%**	**83.0%**	**83.0%**	**84.0%**	
Tax as per P&L	**34.9**	**119.6**	**167.0**	**199.9**	**244.0**	**765.5**
Aeronautical Tax for ARR	**23.6**	**97.5**	**137.8**	**166.1**	**205.0**	**630.0**

11.2. Authority's analysis of CIAL's submission of Taxation for the Third Control Period as part of the Consultation Paper

11.2.1. The Authority had studied CIAL's submission of aeronautical taxation for the Third Control Period and had noted that CIAL had considered 30% Non-Aeronautical Revenue in the estimation of Aeronautical PBT, which was then used in the computation of Aeronautical taxes.

11.2.2. The fact that a part of Non-Aeronautical Revenue is used for cross-subsidisation as per the hybrid till mechanism doesn't change the nature of such revenues to Aeronautical. Cross subsidisation as per Hybrid-Till mechanism is done in order to reduce tariff pressure on passengers and to incentivise the Airport Operator to make effective investments in Non-Aeronautical Revenue generating sources.

11.2.3. The consideration of 30% Non-Aeronautical Revenue for computation of Aeronautical tax will increase tax reimbursement beyond the requirement pertaining to aeronautical services leading to an artificial tax benefit. The same could lead to the effective cross subsidy benefit being passed on to the airport user being less than 30% to the extent of the artificial tax benefit the airport operator receives in the event of considering 30% Non-Aeronautical Revenue as part of revenue from Aeronautical services.

11.2.4. Therefore, the Authority is of the view that:

- 30% Non-Aeronautical Revenue 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 Revenue 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.
- Further, this issue had been decided upon by AERA in Chapter 8 of DIAL Tariff Order No. 57/2020-21 dated 30 December 2020 for the Third Control Period.

11.2.5. The Authority thus proposed to consider only Aeronautical revenue and expenses in the calculation of Aeronautical PBT.

11.2.6. The Authority had recomputed the taxes based on changes proposed in the other building blocks and based on the proposal as discussed above. The Aeronautical taxes for the Third Control Period as proposed by the Authority at the consultation stage is given in the table below:

Table 184: Aeronautical tax proposed by the Authority for the Third Control Period as part of the Consultation Paper

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical Tax						
Aeronautical Revenues	363.72	576.33	723.34	832.26	957.28	3452.92
30% Non-Aero Revenues	-	-	-	-	-	-
Aeronautical OPEX	200.23	213.33	225.75	243.18	261.88	1144.36
Aeronautical Depreciation	125.71	136.10	152.48	159.57	167.10	740.95
Interest	54.53	67.76	76.13	72.95	63.18	334.54
PBT	(16.75)	159.13	268.99	356.56	465.13	1233.06
Tax Rate applicable (%)	25.17%	25.17%	25.17%	25.17%	25.17%	
Aeronautical Tax	**0.00**	**40.05**	**67.70**	**89.75**	**117.07**	**314.58**
Non-Aeronautical Tax						
Non-Aero Revenues	122.24	180.66	258.89	283.78	318.96	1164.53
Non-Aeronautical OPEX	26.03	35.70	26.90	32.41	39.38	160.42
Non-Aeronautical Depreciation	19.31	20.34	20.47	21.40	17.52	99.04
Interest	11.67	15.35	18.30	16.31	15.84	77.47
PBT	65.23	109.27	193.22	213.66	246.22	827.60
Tax rate applicable (%)	25.17%	25.17%	25.17%	25.17%	25.17%	
Non-Aeronautical Tax	**16.42**	**27.50**	**48.63**	**53.78**	**61.97**	**208.31**
Aeronautical Tax %	0.00%	59.29%	58.20%	62.53%	65.39%	
Total Tax Projected	**12.20**	**67.55**	**116.33**	**143.51**	**179.03**	**518.63**
Aeronautical Tax for ARR	**0.00**	**40.05**	**67.70**	**89.74**	**117.06**	**314.55**

11.3. Stakeholder comments on Taxation for the Third Control Period

11.3.1. There were no stakeholder comments with respect to Taxation for the Third Control Period.

11.4. Authority's analysis of stakeholder comments on Taxation for the Third Control Period

11.4.1. No stakeholder comments were received regarding Taxation for the Third Control Period. In this regard, the Authority has decided to recompute Aeronautical taxes for the Third Control Period based on the changes made on account of various decisions taken with respect to the other building blocks. Aeronautical tax considered by the Authority for the Third Control Period is given below.

Table 185: Aeronautical tax considered by the Authority for the Third Control Period

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical Tax						
Aeronautical Revenues	276.51	494.42	651.95	763.66	832.11	**3018.64**
30% Non-Aero Revenues	-	-	-	-	-	-
Aeronautical OPEX	188.96	212.14	213.25	231.46	252.14	**1097.94**
Aeronautical Depreciation	115.26	139.11	155.14	163.03	171.38	**743.92**
Interest	64.37	85.87	90.01	84.37	72.46	**397.07**
Aeronautical PBT	(92.07)	57.30	193.55	284.79	336.13	**779.70**
Tax Rate applicable (%)	25.17%	25.17%	25.17%	25.17%	25.17%	
Aeronautical Tax	**0.00**	**14.42**	**48.72**	**71.68**	**84.60**	**219.42**
Non-Aeronautical Tax						
Non-Aero Revenues	121.09	179.53	222.41	243.24	273.85	**1040.11**
Non-Aeronautical OPEX	19.76	21.86	23.35	24.71	28.11	**117.79**
Non-Aeronautical Depreciation	24.39	16.82	18.13	15.37	16.35	**91.05**
Interest	13.89	18.07	20.23	17.65	17.10	**86.94**
Non-Aeronautical PBT	63.05	122.78	160.71	185.50	212.30	**744.33**
Tax rate applicable (%)	25.17%	25.17%	25.17%	25.17%	25.17%	
Non-Aeronautical Tax	**15.87**	**30.90**	**40.45**	**46.69**	**53.44**	**187.35**
Aeronautical Tax %	0.00%	31.82%	54.64%	60.56%	61.29%	
Total Tax Projected	**0.00**	**45.32**	**89.16**	**118.36**	**138.03**	**390.87**
Aeronautical Tax for ARR	**0.00**	**14.42**	**48.71**	**71.68**	**84.60**	**219.41**

11.5. Authority's decisions regarding Taxation for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to Taxation for the Third Control Period:

11.5.1. Authority decides to not consider 30% Non-Aeronautical Revenue as part of the Aeronautical revenue base for Aeronautical tax determination as detailed in Para 11.2.4.

11.5.2. Authority decides to consider Aeronautical tax as detailed in Para 11.4.1 (Table 185) above for the Third Control Period and true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

CHAPTER 12. INFLATION FOR THE THIRD CONTROL PERIOD

12.1. CIAL's submission regarding Inflation for the Third Control Period

12.1.1. The rate of inflation considered by CIAL was the WPI Inflation as per RBI's Survey of Professional Forecasters on Macroeconomic Indicators dated 9 October 2020. WPI Inflation rates for the Third Control Period as submitted by CIAL is given below.

Table 186: CIAL's submission of Inflation for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
WPI Inflation	2.3%	2.3%	2.3%	2.3%	2.3%

12.2. Authority's analysis of CIAL's submission of Inflation for the Third Control Period as part of the Consultation Paper

12.2.1. The Authority had analysed the submission made by CIAL regarding inflation for the Third Control Period.

12.2.2. The Authority had noted that CIAL had considered mean WPI from the RBI survey conducted in October 2020 as inflation for the Third Control Period. The Authority proposed to consider the recent inflation forecast by RBI in its 68th round of survey of professional forecasters on macroeconomic indicators, so as to account for the recent macroeconomic developments.

12.2.3. Based on the above, at the stage of consultation, the Authority proposed to consider inflation of 3.5%, i.e., the mean WPI inflation for FY 2022.

Table 187: Inflation proposed by the Authority for the Third Control Period as part of the Consultation Paper

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
WPI Inflation	3.50%	3.50%	3.50%	3.50%	3.50%

12.3. Stakeholder comments on Inflation for the Third Control Period

12.3.1. There were no stakeholder comments with respect to Inflation for the Third Control Period.

12.4. Authority's analysis of stakeholder comments on Inflation for the Third Control Period

12.4.1. No stakeholder comments were received regarding Inflation for the Third Control Period. However, it was noticed that the mean WPI projections had significantly changed in the 69th round of RBI's survey (as against 68th round considered at the consultation stage). Therefore, the Authority decided to revise inflation based on the results of the 69th round of RBI's survey of professional forecasters on macroeconomic indicators so as to account for the subsequent macroeconomic developments since the consultation stage. The impact of this revision on the ARR is not very significant (~INR 2 Cr.).

Table 188: Inflation considered by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
WPI Inflation	4.90%	4.90%	4.90%	4.90%	4.90%

12.5. Authority's decision regarding Inflation for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to Inflation for the Third Control Period:

12.5.1. Authority decides to consider the WPI inflation of 4.9% based on the RBI survey of professional forecasters on macroeconomic indicators – 69th round, for the Third Control Period (refer Para 12.4.1).

CHAPTER 13. QUALITY OF SERVICE FOR THE THIRD CONTROL PERIOD

13.1. CIAL's submission regarding Quality of Service for the Third Control Period

13.1.1. CIAL had not made any submissions related to Quality of Service as part of its MYTP submission made in October 2020.

13.2. Authority's analysis of Quality of Service for the Third Control Period as part of the Consultation Paper

13.2.1. The Authority noted that:

- As per section 13(1) (a)(ii) of the AERA Act, 2008, the Authority shall determine the tariff for aeronautical services taking into consideration - *"the service provided, its quality and other relevant factors"*
- 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"*

13.2.2. In the tariff order for CIAL for the Second Control Period, the Authority had noted that it will review the Quality-of-Service parameters based on the ASQ ratings obtained by CIAL.

13.2.3. The Airport Operator was asked to submit the ASQ ratings obtained during the Second Control Period. The Airport Operator had shared the details regarding the same vide their email dated 17 May 2021 ("ASQ Ratings and Service Quality | CIAL"). The Authority had noted that the ASQ ratings awarded by ACI to CIAL during FY 2017-2020 is in the range of 4.55 - 4.96. The Airport Operator had also clarified that no ASQ survey was conducted in FY 2021 due to the pandemic.

13.2.4. Further, the Airport Operator had stated that CIAL was ranked the third Best Airport by Size in the category of 5 to 15 million passengers by ACI in FY 2017 and was the winner of Ministry of Civil Aviation's Swachhatha Awards 2019 in the category of private airports.

13.2.5. Hence, the Authority did not propose any adjustment towards tariff determination for the Third Control Period on account of quality of service maintained by CIAL.

13.3. Stakeholder comments on Quality of Service for the Third Control Period

13.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to Quality of Service for the Third Control Period. The comments by stakeholders are presented below.

Other stakeholders' comments on Quality of Service for the Third Control Period:

13.3.2. IATA has highlighted a need for improving the existing framework that is driven by ASQ standards, which is qualitative and perception-based, while completely overlooking quantitative and objective measurement of CIAL's actual performance and customer-supplier relationship.

13.3.3. IATA has encouraged adoption of IATA's policy based on which it provides industry guidance regarding Airport Service Level Agreements.

13.4. CIAL's counter-comments and response to stakeholder comments regarding Quality of Service for the Third Control Period

13.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comment with respect to Quality of Service for the Third Control Period is presented below.

13.4.2. Responding to IATA's comment, CIAL stated that *"as per the Indian statute, the regulator is empowered to monitor the service standards of major airports and accordingly, they have issued the qualitative and quantitative standards which cannot be substituted with a recommendatory industry standards of international organisation. Further, even if an industry standard is adopted it may be based on the standards developed by the industry concern, that is, in the instance case, the airport industry, not a standard developed by a stakeholder of that industry. The ASQ standards are proposed by ACI which has been used for ascertaining the qualitative standards"*.

13.5. Authority's analysis of stakeholder comments on Quality of Service for the Third Control Period

13.5.1. The Authority has noted IATA's comments regarding the need for improving the quality-of-service framework. However, such a revision in framework cannot be carried out at an airport level and should be uniformly implemented across all airports. AERA may in future revise its tariff determination philosophy and guidelines, wherein the matter of quality of service would also be clarified appropriately. The Authority would encourage IATA to take up quality performance review in consultation with airports in India as ACI is currently doing for ASQ ratings.

13.6. Authority's decision regarding Quality of Service for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to Quality of Service for the Third Control Period:

13.6.1. Authority decides to not consider any adjustment towards tariff determination for the Third Control Period on account of quality of service and notes that it will continue to review the Quality-of-Service parameters based on the ASQ ratings obtained by CIAL (refer Para 13.2.5).

CHAPTER 14. AGGREGATE REVENUE REQUIREMENT FOR THE THIRD CONTROL PERIOD

14.1. CIAL's submission regarding ARR for the Third Control Period

14.1.1. CIAL had arrived at the Aggregate Revenue Requirement for the Third Control Period based on the submissions made regarding the building blocks discussed in the previous sections. The ARR as submitted by CIAL is given in the table below.

Table 189: CIAL's submission of ARR for the Third Control Period

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Average RAB	1688.2	1840.1	2098.2	2270.3	2257.3	
FRoR	12.5%	12.5%	12.5%	12.5%	12.5%	
Return on RAB	211.4	230.4	262.7	284.3	282.6	1271.4
Return on Land	9.8	9.8	9.8	9.8	9.8	48.8
Depreciation	147.5	161.5	186.0	196.5	188.4	879.8
O&M Expenses	198.9	224.1	232.8	251.6	270.0	1177.4
Tax	23.6	97.5	137.8	166.1	205.0	630.0
Working Capital Interest	9.4	5.5	0.0	0.0	0.0	14.9
Less: 30% of NAR	37.7	58.6	72.4	81.9	94.4	345.0
True up of Second Control Period	602.2					602.2
Aggregate Revenue Requirement (including true up)	**1165.0**	**670.2**	**756.7**	**826.4**	**861.3**	**4279.6**
Yield per passenger (INR)	859.7	879.5	899.7	920.4	941.6	
Aero Revenues	466.5	788.8	971.8	1096.3	1235.9	4559.3
Over-recovery / (Shortfall)	-698.4	118.6	215.1	269.9	374.6	
PV of over-recovery / (shortfall)	-698.4	105.4	169.9	189.5	233.7	0.0
Sum of PV of over-recovery / (shortfall)	0.0					

14.2. Authority's analysis of CIAL's submission of ARR for the Third Control Period as part of the Consultation Paper

14.2.1. Based on the submissions made by CIAL and the Authority's analysis of the same, the ARR for the Third Control Period as recomputed by the Authority at the consultation stage is given in the table below.

Table 190: ARR for the Third Control Period Proposed by the Authority as part of the Consultation Paper

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Average RAB (refer table 122) (A)	1675.09	1812.26	1920.12	2032.26	2105.82	
FRoR (refer table 141) (B)	11.63%	11.63%	11.63%	11.63%	11.63%	
Return on RAB (C= A * B)	194.77	210.72	223.26	236.30	244.85	1109.88
Return on Land (refer table 145) (D)	9.15	9.15	9.15	9.15	9.15	45.74
Depreciation (refer table 122) (E)	125.71	136.10	152.48	159.57	167.10	740.95
O&M Expenses (refer table 169) (F)	200.23	213.33	225.75	243.18	261.88	1144.36
Tax (refer table 184) (G)	0.00	40.05	67.70	89.74	117.06	314.55
Less: 30% of NAR (refer table 181) (H)	36.67	54.20	77.67	85.13	95.69	349.36
Revenue Requirement (I = C+D+E+F+G-H)	493.18	555.15	600.67	652.79	704.34	3006.13
Add: True up of previous control period (refer table 68) (J)	279.89					
Aggregate Revenue Requirement (including True up) (K = I + J)	**773.07**	**555.15**	**600.67**	**652.79**	**704.34**	**3286.02**
Present Value Factor (L)	1.00	0.90	0.80	0.72	0.64	

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Present Value of ARR (M = K * L)	773.07	497.32	482.05	469.32	453.63	2675.39
Total Pax Traffic (Million passengers) (refer table 82) (N)						51.23
Yield per passenger (INR) (M/N)						522.22

14.2.2. Based on the above analysis, the Authority estimated that the Aggregate Revenue Requirement of the Airport Operator for the Third Control Period is INR 2675.39 Cr in present value terms. The Authority noted that if the existing tariffs are retained throughout the Third Control Period, the expected shortfall in recovery of ARR in the Third Control Period would be INR 956 Cr (in present value terms).

14.2.3. The Authority noted that CIAL has not submitted the Annual Tariff Plan for the years in the Third Control Period. The Authority also noted that it would be necessary to have the individual year-wise tariff card laying down the different Aeronautical charges and the workings for the Aeronautical Revenue, in order to have a constructive stakeholder discussion.

14.2.4. CIAL was directed to submit the detailed Annual Tariff proposal and tariff rate card in line with the ARR and Yield arrived at by the Authority within 7 days of issue of the Consultation Paper, which would be reviewed and issued by the Authority.

14.3. Stakeholder comments on ARR for the Third Control Period

14.3.1. Subsequent to the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 08/2021-22 with respect to ARR for the Third Control Period. The comments by stakeholders are presented below.

CIAL's comments on ARR for the Third Control Period:

14.3.2. CIAL has requested AERA to allow CIAL to undertake an interim review of tariffs at the end of FY 2023 to reduce the impact of uncertainties in forecasting building blocks at this stage. The detailed comments of CIAL in this regard are as follows:

i. *"COVID-19 pandemic has significantly affected the aviation sector and the trajectory of COVID-19 pandemic is uncertain. During February, 2021, when it was thought that India has seen the last of COVID-19, we were hit by the second wave which was worse than the first wave. Second wave has again affected the once improving domestic air traffic and pushed forward the recovery period of international traffic.*

ii. *AERA will appreciate that during these uncertain times it is exceedingly difficult to forecast the traffic and the building blocks for the determination of the ARR of the third control period. Though CIAL has taken the assumptions to the best of its knowledge based on the information available today, these assumptions are most likely to undergo a change.*

iii. *Given these unprecedented situation, it is a humble request to AERA to allow CIAL to undertake an interim review of tariffs at the end of FY23. CIAL would like to clarify that it does not expect the interim review to be a detailed exercise of tariff determination but expects it to be a simplified version of tariff determination to quickly revise the aeronautical tariffs based on the actuals of FY22 and FY23.*

iv. *AERA will appreciate that the interim review will surely reduce the uncertainty faced by the airport operator and will go a long will in building confidence and resilience in the entire airport operator community,*

Other stakeholders' comments on ARR for the Third Control Period:

IATA's comments

14.3.3. IATA has urged AERA to consider postponing recovery of losses to the Fourth Control Period, similar to the decision taken for Trichy airport, or spread it over multiple control periods. IATA added that it is essential to maintain current charges for next 2-3 years if there is no scope for reductions in the TCP since airport operators have better access to economical financing options as airports are perceived as safe investments. The detailed comments of IATA are as follows:

"Airport operators need to also adjust to the new market realities and be mindful that increased charges will hinder the industry recovery and prevent us from realizing the full potential of aviation and its overall benefits to the wider economy. Shareholders of airport have the obligations (as you would expect for any other commercial entities) to provide the necessary capital injection to sustain the business. In a competitive environment, shareholders of an efficient company can benefit from dividends, but are also expected to invest into the company during off years. The concept of revenue loss recovery does not exist, and any potential financing risk should be a subject addressed by the airport shareholder, not the consumer.

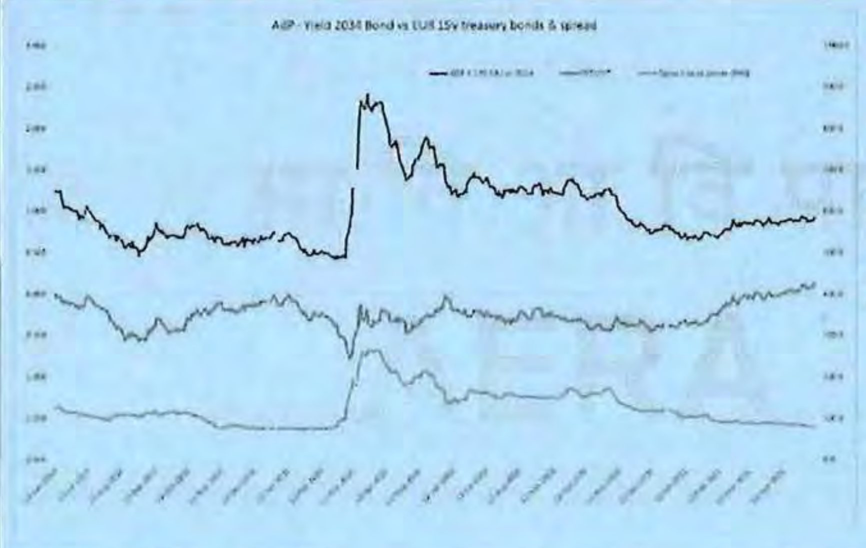
In addition, given that airport operators have better access to more economical financing options, we would expect that this is considered more earnestly, to minimize the short- and medium-term cost impact to users.

According to our analysis of key airport groups, the majority managed to access private sector financing and especially regulated airports have no difficulties accessing capital markets. There are various examples of airports funding their cash shortfalls through debt provided by bank loans or bonds in the market.

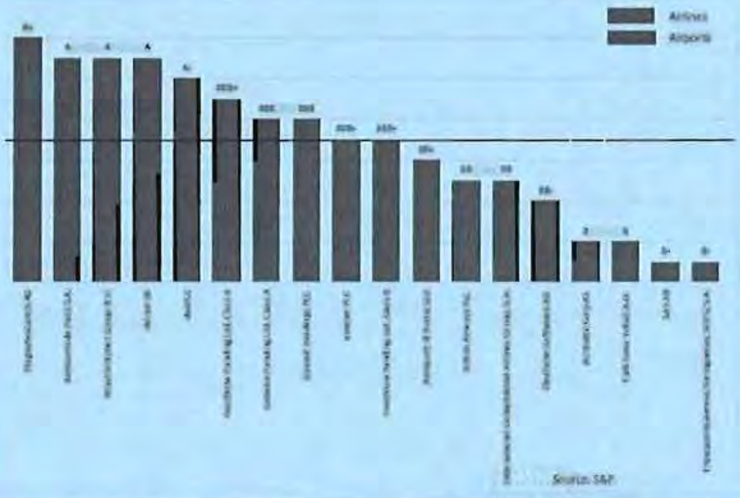
Key examples:

- *Fraport has issued a bond worth 1.15bn € at an annual yield below 2%.*
- *Schiphol issued a 750m € green bond with a 2% yield.*
- *Aeroporti di Roma issued a 500m € sustainability linked bond with a yield of 1.8%*

This demonstrates that airports can finance short-term losses without increasing costs to the customer. For those airports analysed, the average cost of debt actually decreased, which confirms that airports are perceived as safe investments for the market.



This is further expressed in the **<u>yield evolution of airport bonds</u>** (e.g. the implied interest rate an investor would earn from a bond given the purchase value and the established "coupon") as shown in the graph for the example of the Aeroports de Paris (AdP) bond.



While some minor adjustments were made in airport <u>credit ratings</u>, airports are clearly still perceived as safe investments

We would urge AERA to consider the merit of postponing the recovery of losses or shortfall to the 4th Control Period – similar to the decision taken for the 1st Control Period (4/2020-3/2025) of Tiruchirappalli International Airport (TRZ) in December 2020. Alternatively, spreading it over multiple control periods will also help to minimize the impact on users and aid the recovery of traffic. It is essential that charges are maintained at current level in the next 2-3 years if there is no scope for reductions in the 3rd Control Period."

14.3.4. IATA has requested clarity on funding aspects of costs of security function and CIAL's obligations given that a separate ASF is collected from passengers, following removal of PSF (SC), administered by central authority. IATA added that there has been significant increase in ASF in a shot span of time and has stated that all costs related to security function must be excluded from calculation of target revenue, as done in the case of Raipur airport for First Control Period whereby security costs have been excluded in the determination of ARR.

14.3.5. Regarding UDF, IATA has commented that the approach to introduce UDF and remove PSF (FC) is acceptable but has requested to minimise the gap between international and domestic rates from the very start or in phases over the control period while delivering the targeted revenue for CIAL.

14.3.6. IATA has stated that TDSAT Order no. 18/2018-19 finds the practice of permitting different treatment to airlines in respect of tariffs to be discriminatory and impermissible and has therefore requested AERA to equalise Aeronautical charges for domestic and international flights.

<u>FIA's comments</u>

14.3.7. FIA submitted that they have always advocated a single till model across airports in India and that AERA has followed the same approach while laying down the procedure to determination of ARR in its Guidelines. FIA added that the benefit of Non-Aeronautical Revenue should be passed on to consumers through lower aeronautical charges which will create a productive chain reaction. The detailed comments of FIA in this regard are as follows:

"FIA submits that as per para 3.1.2 of the Consultation Paper, it is stated that the AERA shall determine tariffs for CoK using the Hybrid Till model. It is to be noted that FIA has from time to time advocated the application of a Single Till model across the airports in India. FIA submits that AERA should adopt Single Till basis the following legal framework being:

In the Single Till Order, AERA has strongly made a case in favor of the determination of tariff on the basis of 'Single Till'. It is noteworthy that the AERA has inter alia in its Single Till Order:

i. Comprehensively evaluated the economic model and realities of the airport – both capital and revenue elements.

ii. Taken into account the legislative intent behind Section 13(1)(a)(v) of the AERA Act.

iii. Concluded that the Single Till is the most appropriate for the economic regulation of major airports in India.

iv. The criteria for determining tariff after taking into account standards followed by several international airports (United Kingdom, Australia, Ireland and South Africa) and prescribed by ICAO.

AERA in its AERA Guidelines (Clause 4.3) has followed the Single Till approach while laying down the procedure for determination of ARR for Regulated Services.

The fundamental reasoning behind 'Single Till' approach is that if the consumers/passengers are offered cheaper air-fares on account of lower airport charges, the volume of passengers is bound to increase leading to more foot-fall and probability of higher non-aeronautical revenue. The benefit of such non aeronautical revenue should be passed on to consumers/passengers and that can be assured only by way of lower aeronautical charges. It is a productive chain reaction which needs to be taken into account by the AERA."

14.3.8. FIA has requested AERA to not implement any increase in aeronautical tariff in the Third Control Period and defer any increase to the subsequent control period so as not to precipitate any further adverse financial impact on airlines.

14.3.9. FIA has submitted that exemptions from levy of UDF should be in line with the directions/Guidelines given by Ministry of Civil Aviation and Directorate General of Civil Aviation.

14.3.10. On eligibility to claim collection charges, FIA has submitted that 'Collection charges' do not have any correlation with payment of utilities/rentals to airport operators and it should be treated on a standalone basis. FIA added that the payments should not be held back on account of other overdues.

DACAAI's comments

14.3.11. DACAAI commented that domestic cargo faces competition from road/rail since terminal charges are very high over which when air freight, first and last mile cost is added domestic consignments become unviable. DACAAI has suggested to freeze cargo terminal charges till FY 2024 by when the aviation sector is likely to recover, so that the industry can consolidate and bring back the lost tonnage.

14.3.12. DACAAI has suggested clubbing of multiple heads under terminal charges into a single "Terminal Handling Charge (per kg)" component for standardisation and ease of calculation.

14.3.13. DACAAI observed that there is a vast difference in terminal charges at different cargo terminals for the same service and stated that such arbitrary increases made by CTOs resembles a monopolistic position. DACAAI suggested that since services and process of domestic air cargo handling is similar at every cargo terminal, Cargo Terminal Operators (CTOs) must have a similar single per kg terminal charge to help promote domestic air cargo.

14.3.14. DACAAI has requested that CTOs must charge 50% of normal charges on Agri-horticultural produce and perishables (aqua, fish culture, shrimps etc.) to promote the movement and volume of such goods which will benefit all stakeholders.

Other comments

14.3.15. APAO has requested AERA to allow CIAL to undertake interim review of tariffs at end of FY 2023 to quickly revise tariffs based on actuals of FY 2022 and FY 2023 as there is difficulty in forecasting traffic and building blocks at this time.

14.3.16. BAOA commented that in line with the GH policy being followed by AAI, the royalty on GH charges should be restricted to 15% or the permissible FRoR on each public airport. BAOA added that GH charges require greater attention now from a safety/security point of view and these should be decided on a cost-plus basis and not by soft touch approach as has been happening hitherto.

14.4. CIAL's counter-comments and response to stakeholder comments regarding ARR for the Third Control Period

14.4.1. Subsequent to the stakeholder comments received by CIAL as part of the stakeholder consultation process, CIAL's response to the stakeholder comment with respect to ARR for the Third Control Period is presented below.

CIAL's response to comments of IATA

14.4.2. CIAL countered IATA's comment on postponement of recovery of shortfall and stated that it has achieved a balance through its tariff card between ARR recovery and the impact on stakeholders. CIAL opined that if IATA's proposal of postponing the tariffs to the Fourth Control Period is considered, the very purpose of tariff determination on a control period basis gets defeated. The detailed response of CIAL in this regard is as follows:

i. *CIAL submits that it has kept all the airport charges unchanged for FY22 except for the introduction of UDF which has replaced the PSF charges. UDF charges proposed by CIAL are least among the Kerala airports.*

ii. *Further, to support the international airline stakeholders, CIAL has kept their landing charges unchanged till FY23.*

iii. *CIAL disagrees with IATA to postpone the recovery of shortfall to the next control period. CIAL would submit that it had a shortfall in the second control period which has resulted in severe financial distress. CIAL needs to recover its operational expenses, service its debt, develop essential infrastructure and pay statutory dues during the third control period.*

iv. *CIAL has proposed a tariff card such that the impact on the stakeholders is minimized. CIAL is aware of the challenges faced by the stakeholders and therefore, it has postponed the recovery of the ARR towards the end of the third control period once the traffic recovers to the pre-COVID levels.*

v. *CIAL hopes that AERA would appreciate the balance achieved through its tariff card between ARR recovery and the impact on the stakeholders.*

vi. *If the IATA's proposal of postponing the tariffs to fourth control period is considered, the very purpose of tariff determination on a control period basis gets defeated. Ideally, an annualized exercise is what is suggested. However, due to administrative limitations and practical issues the 5-year control period cycle was established. If we further increase the years within the control period, the very existence of airports will be at stake. We are certain that if such requests are entertained, we will soon receive requests to extend the control period to 10-years or to even true-up after 10-years and so on and so forth.*

14.4.3. Regarding IATA's comment on ASF, CIAL responded that the security related revenues expenditures of CISF personnel does not form part of the MYTP submissions. The clarification of CIAL is given below.

"The determination of rate and collection of ASF is done by Ministry of Civil Aviation (MoCA). MoCA collects this fees and predominantly use it to meet the security related expenditure of the CISF deployed at airports. Now, a National Aviation Security Fee Trust has been constituted by MoCA and all collections goes to this central agency and they directly meet the security related expenditures of CISF. The only limited role that CIAL plays is to generate the invoices through the NASFT systems based on the passenger figures given by the airlines. The airlines directly remit the ASF to NASFT. The periodical rate revision is decided by MoCA based on the deficit reported in the central pooled accounts vis-à-vis the expected expenditure for meeting pan India airport CISF expenditures. The security related revenue expenditures of CISF personnel does not form part of the MYTP submissions."

14.4.4. CIAL did not agree with the proposal of IATA to minimise the difference between UDF for domestic and international passengers and commented that the difference in charges between international and domestic passengers is a general practice worldwide including at Indian airports on account of different services availed by them. CIAL added that the services rendered by the airport operator to the international passengers are much more than domestic in the form of security, immigration, customs, extended holding times in terminal resulting in larger capacity creation, etc. and opined that this may also be the reason why the airlines also levy higher per km charges from international passengers than that from domestic passengers.

14.4.5. CIAL did not agree with IATA's recommendations of applying equal tariffs for domestic and international flights and clarified that the Hon'ble TDSAT judgement dated 16 December 2020 has adjudged the variable tariff plan proposed by BIAL for the airlines and that it was not related to the difference in tariffs between international and domestic flights. CIAL added that *"since all the international carriers are charged the same tariff, the charges cannot be termed as discriminatory. Classification of domestic and international flights cannot be termed as discriminatory. If this analogy is extended to the entire sector, the airline ticket prices cannot be varying for even different passengers as it is discriminatory".*

CIAL's response to comments of FIA

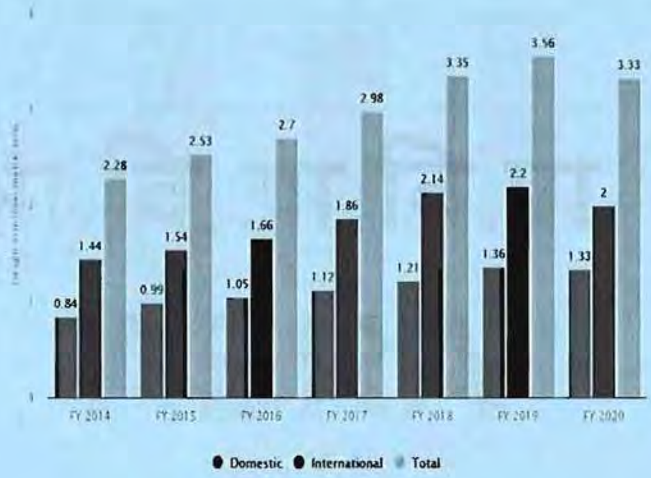
14.4.6. CIAL disagreed with FIA on the methodology for tariff determination and stated that "*AERA has approved the shared till mechanism in its Order no. 14/ 2016-17 dated 23 Jan 2017 based on the National Civil Aviation Policy, 2016*".

14.4.7. CIAL disagreed with FIA on the collection charges and proposed eligibility for claiming the collection charges stating that CIAL only intends to discourage the tendency of utility and rental charges being kept pending while continuing to claim collection charges on UDF.

CIAL's response to comments of DACAAI

14.4.8. Regarding DACAAI's comment on competition from road and rail transport, CIAL responded as follows:

"With the development of express highways connecting cities and removal of check posts at state borders due to introduction of GST it is obvious that freight movement through road has become smoother. But despite the increased freight movements through any other mode, air cargo always finds its own share which is proven from the statistics. Chart showing the growth of air cargo sector in India is shown below:



(million metric tons)

Only the shippers who need faster and safer transportation of the goods depends on air cargo mode and such category of cargo will always come to air cargo since that advantages cannot be attained if transported through any other mode. Cost of air mode will certainly be higher than other mode due to the heavy investment required for infrastructure, security arrangements, skilled manpower cost etc. but the cost difference is vindicated by its advantages.

14.4.9. CIAL responded to DACAAI's suggestion on freezing of terminal charges until FY 2024 by stating that unlike some other CTOs where there is increase in charges every year, handling charges at CIAL was fixed since FY 2017. CIAL argued that their administration and maintenance cost have increased considerably and that they have invested for expansion of infrastructural facilities also. Further, the proposed charges are also for the next 5 years which is also fixed. CIAL claimed that the proposed increase in the charges is only nominal and still much below compared to the actual expenses.

14.4.10. Regarding clubbing of multiple heads of terminal charges, CIAL commented that charging under multiple heads is a necessity for financial accounting as different charges are imposed to different agencies. The response of CIAL was as follows:

"Different charges are charged under different heads in most of the CTOs. This is necessary for management of accounts since the charges are imposed to different agencies. For e.g. at CIAL, TSP is charged to shipper / consignee whereas X Ray and stuffing charges are charged to the airline.

Stuffing and de-stuffing charges are collected for the cost of manpower involved for loading and unloading of cargo from the bulk containers or ULDs. Whether it is a ULD or a bulk container the labour involved is almost same, in fact more for bulk containers, as the no. of units to be handled is more. Moreover, wide-bodied flights are also operating in domestic sector, like in CIAL, for which stuffing, de-stuffing charges are collected at the same rates.

Though some consignments are delivered immediately most of the shipments, especially arriving in night time, are kept in the warehouse. And hence we have to maintain the warehouse including provisions for storage of valuable, DG, radioactive materials etc. Demurrage charge will be applicable only after 24 hours and the cargo can be kept in the warehouse only paying the TSP charges. TSP is not only charged for storage, but involves the processing charge, as the shipment has to be counted and segregated when taken in and out of the warehouse."

14.4.11. On the concern regarding different rates being charged by various CTOs, CIAL commented that *"though the services provided are similar in nature, handling charges are decided based on the capital investment like manpower, infrastructure, equipment, warehouse facilities also. It is not logical to have a uniform handling charge at all CTOs since the operating cost will vary depending upon the location. As far as CIAL is concerned handling charge is reasonably low compared to other private airports. Decisions on regulatory charges are to be taken by AERA. Regarding lack of facilities and infrastructure no complaints were raised about CIAL. CIAL always ensure to provide the best facilities to all our stakeholders and necessary modifications are made periodically in order to meet the future space requirements.".*

14.4.12. On the matter of offering discounts on movement of perishables, CIAL clarified that the volume of perishables handled by them through domestic is very low and the handling charges are the same as that of general cargo. CIAL assured that they always prioritise and ensure speedy delivery to the consignees. CIAL added that they have provided temperature and humidity-controlled facility for perishable cargo at no extra cost at the international cargo terminal. CIAL opined that since the percentage of terminal charges is very nominal, the impact of the total cost by a reduction in the terminal charges will be negligible.

14.5. Authority's analysis of stakeholder comments on ARR for the Third Control Period

14.5.1. The Authority takes note of IATA's comments regarding postponement of recovery of shortfalls. The Authority is also of the view that users should not be burdened with steep revisions in tariffs, especially at a time when the industry is struggling to revitalize demand. However, at the same time, the Authority acknowledges that passing on the entire burden to the next control period could impact the cash flows for the airport operator in the current control period and might require an abrupt increase in charges in the Fourth Control Period, which may not be sustainable. Further, one group of stakeholders must not be protected at the cost of others. Therefore, it is equally important to ensure that the Airport Operator can make adequate recoveries such that their cash flows are not detrimentally affected.

14.5.2. In view of the above, the Authority would take a balanced approach regarding tariffs and recovery of ARR after making the necessary revisions on account of the actual financial figures of FY 2021 and various decisions taken in this Tariff Order with respect to each building block.

14.5.3. On IATA's query regarding ASF it may be noted that the same is levied as per the directions of MoCA from time to time and the expenses from the same do not form part of the tariff determination exercise.

14.5.4. The Authority agrees with CIAL's comment that the classification of domestic and international flights cannot be termed as discriminatory. AERA also agrees with the comments of CIAL that observations in Honourable TDSAT judgement is in a different context and not in the way in which IATA is interpreting. Therefore, it may not be practical to equalise the charges for domestic and international services.

14.5.5. Regarding FIA's comment on single till model, the Authority would like to clarify that this is a long-settled matter and the Authority had finalised its decision on the same vide Order No. 14/2016-17 dated 23rd January 2017 after extensive stakeholder consultation. Since then, the Authority has adopted the same approach for every airport while determining tariffs. Therefore, the Authority is of the view that FIA's comments regarding single till cannot be accepted.

14.5.6. With respect to FIA's comment on eligibility for collection of charges, the Authority would like to state that it doesn't interfere in the day-to-day business activities of the Airport Operator and such matters related to payments terms may be mutually negotiated between the service providers and airport operators. The Authority has appropriately modified the note in the Tariff Card.

14.5.7. The Authority has noted the DACCAI's comments on the prevailing tonnage situation and has considered the impact of the pandemic in its detailed analysis of each building block. Accordingly, after considering the proposals/comments of all stakeholders the Authority has arrived at the ARR against which the tariff rates have been rationalised while staying conscious of the business scenario and the situation faced by the industry and its stakeholders.

14.5.8. The Authority finds that the clarification of CIAL regarding clubbing of multiple charges is rational and reasonable. Allowing only a single charge could disincentivise CTOs from providing value added services or result in users having to pay for services that they don't necessarily use or require.

14.5.9. The Authority finds the justification of CIAL in the matter of differences in rates across CTOs to be rational and reasonable. Given that there are inherent differences between airports and their cost structures, it may not be feasible/viable to enforce a similar charge across all CTOs. Further, a single charge could disincentivise CTOs from providing value added services or result in users having to pay for services that they don't necessarily use or require.

14.5.10. The Authority has noted DACCAI's request for discounts on movement of perishable cargo. However, AERA cannot mandate the airport operator to provide discounts on specific services unless directed by the Government. Further, the Authority understands that this is a general request of DACCAI and not specific to CIAL.

14.5.11. The Authority takes note of BAOA's comments regarding royalty on GH charges. However, the Authority would like to highlight that this issue is currently sub-judice.

14.5.12. The Authority takes note of CIAL's suggestion, repeated by APAO, for an interim review of tariffs post FY 2023. However, it is to be noted that the Authority, during the process of tariff determination, has remained fully cognizant of the impact of the pandemic and its multiple waves on the recovery of air traffic as well as the economy. Consequentially, the Authority has taken a conservative view on the airport traffic and financial projections. There could be two scenarios of deviation in projections based on the actual traffic materialising at Major Airports. In the event that the actual traffic realised is better than the estimated figures considered by AERA, there wouldn't be any requirement for an interim review from the Airport Operator's perspective, given that such a situation would be favourable for the Airport Operator. Alternatively, if the recovery of traffic is slower than what is currently expected, a hike in tariffs might be warranted to compensate for the revenue loss if the approved ARR is to be completely recovered in the Third Control Period itself. In the latter scenario, the Airport Operator should acknowledge that an under-recovery would most likely be a sign of ongoing disruptions and unabating challenges caused by the pandemic. Amidst such circumstances, any further increase in tariffs would be detrimental to the recovery of passenger traffic and be counter-productive to both the airport and its users. Given the bankability of their assets, the airport operator would be better equipped to absorb such short-term shortfalls if any, as the same would be trued up in subsequent control periods. Whereas the other stakeholders, particularly airlines, do not enjoy this benefit and would struggle to manage losses if all losses are passed on to them and/ or passengers in the form of increased UDF. Hence, the Authority after evaluating the probable outcomes of these scenarios from a balanced viewpoint on behalf of all stakeholders, has come to the decision that in any case, an interim review may not be fruitful.

14.5.13. Based on the above and the tariff plan approved by the Authority, the recomputed ARR for the Third Control Period is given below.

Table 191: ARR considered by the Authority for the Third Control Period

Particulars (INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Average RAB (refer table 136) (A)	1671.29	1860.92	1986.92	2103.29	2182.14	
FRoR (refer table 142) (B)	11.63%	11.63%	11.63%	11.63%	11.63%	
Return on RAB (C= A * B)	194.32	216.37	231.02	244.55	253.72	**1140.00**
Return on Land (refer table 145) (D)	9.15	9.15	9.15	9.15	9.15	**45.74**
Depreciation (refer table 135) (E)	115.26	139.11	155.14	163.03	171.38	**743.92**
O&M Expenses (refer table 170) (F)	188.96	212.14	213.25	231.46	252.14	**1097.94**
Tax (refer table 185) (G)	0.00	14.42	48.71	71.68	84.60	**219.41**
Less: 30% of NAR (refer table 182) (H)	36.33	53.86	66.72	72.97	82.16	**312.03**
Revenue Requirement (I = C+D+E+F+G-H)	471.36	537.34	590.55	646.90	688.83	**2934.98**
Add: True up of previous control period (refer table 70) (J)	286.32					**286.32**
Aggregate Revenue Requirement (including True up) (K = I + J)	757.68	537.34	590.55	646.90	688.83	**3221.30**
Present Value Factor (L)	1.00	0.90	0.80	0.72	0.64	
Present Value of ARR (M = K * L)	757.68	481.37	473.93	465.08	443.64	**2621.70**
Projected Aeronautical Revenue (N)	276.51	494.42	651.95	763.66	832.11	**3018.64**
PV of Projected Aeronautical Revenue (O = L * N)	276.51	442.92	523.21	549.02	535.92	**2327.57**
PV of Shortfall (P = N – M)	481.17	38.45	(49.28)	(83.94)	(92.28)	**294.12**
Total Pax Traffic (Million passengers) (refer table 82) (Q)						51.23
Yield per passenger (INR) (M/Q)						511.74

14.6. Authority's decisions regarding ARR for the Third Control Period

Based on the material before it and its analysis, the Authority decides the following with respect to ARR for the Third Control Period:

14.6.1. Authority decides to consider the eligible ARR for the Third Control Period for CIAL as detailed in Para 14.5.13 (Table 191).

14.6.2. Authority decides to allow CIAL to recover the expected shortfall of INR 294.12 Cr. (as on 31st March 2022) in the Fourth Control Period subject to true up of the Third Control Period.

CHAPTER 15. NOTE ON KEY ISSUES ARISING FROM UNPRECEDENTED COVID-19 IMPACT

15.1. Background

15.1.1. The outbreak of COVID-19 has severely impacted the aviation industry globally and likewise in India. The lockdown and travel restrictions imposed by various Governments/Countries have brought down air travel substantially during FY 2020-21, both domestic and international. The domestic and international combined passenger throughput in FY 2020-21 was 33.8% compared to FY 2019-20. Even during the first quarter of FY 2021-22 the passenger throughput is 27.7% compared to the same period of FY 2019-20. With this effect of COVID-19 pandemic, the total passenger traffic for the Third Control Period in CIAL is estimated to be 51 million. Assuming there was no pandemic and normal growth had taken place on the growth trajectory witnessed from FY 2014 to 2019-20, the passenger traffic during the Third Control Period would have been estimated to be around 70 million. Capacity expansion was planned by the Airport Operator based on this pre-COVID normal traffic growth with an investment of INR 1400 Cr. mainly between FY 2020-21 to FY 2023-24.

15.1.2. The expansion programme of the Airport started before the pandemic set in and as such the ongoing project could not be stopped midway. This heavy Capital Expenditure has resulted in higher ARR for the Third Control Period, while the actual traffic is going to be much less than that was estimated at the start of the expansion project before the pandemic. The impact of higher ARR and lower traffic would lead to increased tariff over the current control period. If the entire ARR is proposed to be recovered during the Third Control Period itself, tariff rates would be exceptionally high due to double impact of increased ARR and decreased traffic and the same may be counter-productive for the revival of aviation industry.

15.1.3. AERA as a regulator is expected to look into the interest of all the stakeholders while determining the tariff of the Airport. It is also expected to look into the economic and viable operation of the Airport. Section 13 (1) (a) (vii) of the AERA act allows AERA to consider any other factor relevant for the determination of the Tariff. In the background of the above stated facts arising out of unprecedented, once in a century situation beyond the control of all stakeholders, the Authority while determining the tariff of the Airport and considering the viability and the cash flow requirement for the sustainability of the airport, has decided to take following decisions while determining the tariff for the Third Control Period.

15.2. No increase of Tariff in FY 2022

15.2.1. The air traffic demand in the first quarter of FY 2021-22 has been deeply impacted by the challenges posed by the COVID-19 pandemic and the resultant slowdown in the economy. The first year is expected to be the most affected year of the Third Control Period and any increase in tariffs or additional charges at this stage is likely to be detrimental for the recovery of traffic and the recovery of the sector as a whole.

15.2.2. The regulatory guidelines allow for true-up of any shortfalls in recovery, thereby placing the airport operators in a better position to absorb short-term financial shortfalls as compared to other airport users/ service providers who are facing huge losses. Also, largely middle-class passenger base is expected to suffer shrinkage in disposable incomes owing to the economic slowdown.

15.2.3. As per the estimates of the Authority, there wouldn't be a cash deficit in the first year especially from the perspective of cash requirements to meet the operational expenses and debt servicing. In the event of a cash deficit, it is expected to be of the small magnitude which the Airport Operator can easily tide over by renegotiating long-term loan repayment schedules and look at other innovative ways to manage cash or avail relevant credit lines.

15.2.4. The Authority has noted that CIAL has not proposed any increase in aeronautical tariff in FY 2022 except for the introduction of UDF. Though the proposal to not increase the current tariffs is welcome, the

Authority feels that the introduction of additional charges in the form of UDF in the first year might not be favourable for user confidence. While the Authority recognises the needs for levy of UDF in the short term in order to meet revenue targets, the Authority is of the view that such a levy should be postponed to the next financial year by when the recovery of passenger traffic is expected to be stronger and more stable.

15.3. Recovery of certain portion of ARR in Fourth Control Period

15.3.1. As highlighted above, air traffic demand has been deeply impacted by the challenges posed by the COVID-19 pandemic and the resultant slowdown in the economy. Moreover, airport operators have on-going capital expenditure projects and other planned works, which have resulted in a higher ARR. Whereas, the existing traffic base is not sufficient for the complete recovery of ARR (which included prior period losses being trued up) in the current control period, as this would require a significant increase in tariffs. But the increase in tariffs during present times is likely to adversely impact the recovery of air traffic.

15.3.2. During the stakeholder consultation process, the Authority received various comments from stakeholders regarding the postponement of recovery of prior period losses in the light of disruptions caused by the COVID-19 pandemic. The Authority has examined such comments and is of the considered view that keeping the tariff at present level for the entire control period and postponing the entire recovery of shortfalls to the next control period would create a huge recovery burden and lead to steep upward revision of tariffs in the Fourth Control Period. Further, this would also adversely affect the cash flows of the Airport Operator in the present control period. Nevertheless, the Authority understands that targeting a full recovery at time when the aviation industry is struggling to recover from the perils of the COVID-19 pandemic would not be fair to all the stakeholders and be counterproductive to the efforts to revive demand. The Authority finds that airport operators are relatively better placed in such a situation due to provision for true up of any shortfalls in revenue recovery in the next control period, whereas the other stakeholders do not have such an option.

15.3.3. Further, it would be pertinent to note that considerable investments in capacity have already been made which should 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. Further, the Authority believes that it has considered conservative traffic estimates based on prevailing situation and the actual traffic might be better. Hence, the Authority has taken a balanced approach in this regard and had decided that the recovery of a certain portion of the ARR would be postponed to the Fourth Control Period in view of the prevailing conditions.

15.4. Reduction in tariffs in the final year of Third Control Period (FY 2026)

15.4.1. The Authority has agreed for tariff increases and additional charges in the form of UDF but at the same time it believes that the subsequent control period would be better in the context of lesser capital requirements and larger passenger base owing to the recovery in aviation sector and revival of the economy from the COVID-19 pandemic. Hence, the tariff rates for the subsequent control period are expected to be lower. In view of this, the Authority has reduced the tariff rates in the last quarter of the final year of the Third Control Period, i.e., FY 2026, which may also continue till tariff determination for the Fourth Control Period, due to following factors:

(a) To prevent abrupt correction in the tariffs starting next (Fourth Control Period) rather following a graded decrease for benefit of all stakeholders.

(b) To avoid legal complications as faced by AERA in the past under circumstances where significant decrease in tariffs was expected in the succeeding control period and tendency of some stakeholders to use delaying tactics in tariff determination.

(c) Authority has taken a conservative view on the airport traffic and financial projections (have largely agreed with Airport Operator's projections) and believes the actual recovery is likely to be better leading to higher revenue recovery than projection for the Third Control Period.

(d) Also, by the second half of the last year of the Third Control Period (FY 2026), the tariff determination exercise for the Fourth Control Period would be well underway. Therefore, the Authority would be able to appropriately reconcile the actual recoveries against the current projections and suitable decisions as per AERA's Tariff determination methodology can be taken for the Fourth Control Period.

CHAPTER 16. SUMMARY OF AUTHORITY'S DECISIONS

The summary of the Authority's decisions with respect to tariff determination for the Third Control Period is given below:

16.1. True up of the Second Control Period

16.1.1. Authority decides to consider the actual Passenger, ATM and Cargo traffic as detailed in Para 4.3.11 (Table 7) for true up of the Second Control Period.

16.1.2. Authority decides to consider capital additions and Aeronautical allocation of assets as suggested by the study on allocation of assets between Aeronautical and Non-Aeronautical assets for CIAL for FY 2017 to 2020 (a summary of the Study is attached as Annexure 2 to this Tariff Order, the detailed report is available along with the Tariff Order on the AERA website). Authority decides to consider aeronautical capital additions and retirements for FY 2021 based on actuals (as against projections considered in the Consultation Paper due to unavailability of the actual data at that stage) and in line with the principles laid out in the study on allocation of assets between Aeronautical and Non-Aeronautical assets (refer Para 4.4.36 & 4.4.59).

16.1.3. Authority decides to consider RAB as detailed in Para 4.4.61 (Table 22) for true up of the Second Control Period.

16.1.4. Authority decides to revise the useful lives of assets as per AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets and recompute Depreciation considering the allocation of Gross Block as recommended by the study on allocation of assets between Aeronautical and Non-Aeronautical assets (refer Para 4.5.21).

16.1.5. Authority decides to consider Aeronautical Depreciation as detailed in Para 4.5.24 (Table 30) for true up of the Second Control Period.

16.1.6. Authority decides to provide a return equivalent to cost of debt on Refundable Security Deposits and consider Cost of Equity as 14% (refer Para 4.6.23).

16.1.7. Authority decides to consider FRoR as detailed in Para 4.6.25 (Table 38) for true up of the Second Control Period.

16.1.8. Authority decides to not provide any return on the cost of land in the Second Control Period (refer Para 4.7.7).

16.1.9. **Operating Expenses**

16.1.9.1. Authority decides to consider flood mitigation expenses under Aeronautical O&M expenses (refer Para 4.8.45).

16.1.9.2. Authority decides to consider working capital interest under O&M expenses and allocate the same in the gross fixed asset ratio (refer Para 4.8.35).

16.1.9.3. Authority decides to consider CSR expenses based on average aeronautical net profit for true up of Operating Expenses for the Second Control Period (refer Para 4.8.47).

16.1.9.4. Authority decides to consider O&M expenses and their allocation for FY 2017 – 2020 as suggested by the study on efficient O&M expenses adjusted for flood mitigation expenses and CSR expenses. Further, the Authority decides to consider Aeronautical O&M expenses for FY 2021 based on actuals (as against projections considered in the Consultation Paper due to unavailability of the actual data at that stage) and in line with the principles laid out in the study on efficient O&M expenses (adjusted for flood mitigation and CSR expenses).

16.1.9.5. Authority decides to consider Operating Expenses as detailed in Para 4.8.49 (Table 50) for true up of the Second Control Period.

16.1.10. **Revenues**

16.1.10.1. Authority decides to continue with the treatment of airline space rentals and land lease rentals from agencies related to Aeronautical services like Ground Handling as Aeronautical revenue (refer Para 4.9.47).

16.1.10.2. Authority decides to consider the actual royalty and rents paid by CDRSL as Duty-Free revenues of CIAL (refer Para 4.9.46).

16.1.10.3. Authority decides to consider the land lease rentals paid by Coast Guard and Navy as Non-Aeronautical Revenue (refer Para 4.9.48).

16.1.10.4. Authority decides to consider Non-Aeronautical Revenue as detailed in Para 4.9.51 (Table 58) for true up of the Second Control Period.

16.1.10.5. Authority decides to consider lease rentals from subsidiaries as Aeronautical revenue (refer Para 4.10.14).

16.1.10.6. Authority decides to consider Aeronautical revenue as detailed in Para 4.10.23 (Table 64) for true up of the Second Control Period.

16.1.10.7. Authority decides to not consider 30% of Non-Aeronautical Revenue as part of Aeronautical revenue base for Aeronautical tax determination as detailed in Para 4.11.5.

16.1.11. Authority decides to consider Aeronautical Tax as detailed in Para 4.11.9 (Table 67) for true up of the Second Control Period.

16.1.12. Authority decides to consider ARR as detailed in Para 4.12.7 (Table 70) for true up of the Second Control Period and allow the Airport Operator to recover the shortfall of INR 286.32 Crores in the next control period.

16.2. Traffic for the Third Control Period

16.2.1. Authority decides to consider traffic projections as given in Para 5.2.18 (Table 82) for determination of tariff for the Third Control Period.

16.2.2. Authority decides to true up the traffic for the Third Control Period based on actuals, at the time of determination of tariff for the Fourth Control Period.

16.3. Regulatory Asset Base and Depreciation for the Third Control Period

16.3.1. Authority decides to consider the cost of INR 41.73 Cr towards regulator-cum-bridge (flood control measure) as Aeronautical capital expenditure (refer Para 6.5.4).

16.3.2. Authority decides to consider capital expenditure for the Third Control Period as given in Para 6.5.10 (Table 134) and true up the same based on actuals after studying the reasonableness and reviewing the actual spend and line by line classification of capital additions into Aeronautical and Non-Aeronautical based on the broad framework provided by the study on allocation of assets between Aeronautical and Non-Aeronautical assets, undertaken for the Second Control Period (a summary of the Study is attached as Annexure 2 to this Tariff Order, the detailed report is available along with the Tariff Order on the AERA website).

16.3.3. Authority decides to readjust the project cost by 1% and the applicable carrying cost in the ARR/ target revenue at the time of determination of tariff for the Fourth Control Period in case of non-completion of projects as per proposed timelines (refer Para 6.2.64).

16.3.4. Authority decides to revise the useful lives of assets as per AERA Order No. 35/2017-18 dated 12 January 2018 regarding determination of useful lives of airport assets and consider Aeronautical Depreciation as given in Para 6.5.13 (Table 135).

16.3.5. Authority decides to consider RAB as given in Para 6.5.14 (Table 136) for determination of tariff for the Third Control Period.

16.3.6. Authority decides to true up RAB and Depreciation based on actuals at the time of tariff determination for the Fourth Control Period subject to reasonable justifications and efficiency.

16.4. Fair Rate of Return for the Third Control Period

16.4.1. Authority decides to consider cost of equity as 15.16 % as recommended by the Study on Determinants of Cost of Capital of CIAL (refer Para 7.2.4).

16.4.2. Authority decides to consider cost of debt as 7.8% as submitted by CIAL and true up the same based on actuals at the time of tariff determination for the next control period (refer Para 7.2.2).

16.4.3. Authority decides to consider a notional debt equity ratio of 48%:52% for the Third Control Period as recommended by the Study on Determinants of Cost of Capital of CIAL. Further, the Authority decides to not true up the notional debt equity ratio during the tariff determination of the Fourth Control Period (refer Para 7.5.1).

16.4.4. Authority decides to consider RSD as part of the notional debt to arrive at FRoR for the Third Control Period (refer Para 7.5.3).

16.4.5. Authority decides to consider the Fair Rate of Return as given in Para 7.2.9 (Table 142) for the Third Control Period based on the above-mentioned cost of debt, cost of equity and notional debt equity ratio.

16.5. Return on Land for the Third Control Period

16.5.1. Authority decides to consider the total cost of land as submitted by CIAL (refer Para 8.2.6).

16.5.2. Authority decides to consider the land leased out to IOCL retail outlet as Non-Aeronautical (refer Para 8.2.8).

16.5.3. Authority decides to not provide return on the cost of land earmarked for future use, until the same is put to use (refer Para 8.5.1).

16.5.4. Authority decides to not consider the land reserved for rehabilitation in the computation of return on cost of land (refer Para 8.2.10).

16.5.5. Authority decides to apportion the land for terminal buildings and associated areas in the terminal allocation ratio (refer Para 8.2.11).

16.5.6. Authority decides to consider the return on land for the Third Control Period as given in Para 8.2.13 (Table 145) and true up the same based on the actual year of capitalisation of assets on the land earmarked for future expansion.

16.6. Operating Expenses for the Third Control Period

16.6.1. Authority decides to consider allocation of costs based on the principles laid out in the in the study on efficient O&M expenses for CIAL, undertaken for the Second Control Period (refer Para 9.2.23).

16.6.2. Authority decides to consider an escalation of 10% in contract demand charges and unit rates of KSEB only in FY 2026 for the projection of Utilities cost (refer Para 9.2.9).

16.6.3. Authority decides to consider flood mitigation expenses under Aeronautical O&M expenses (refer Para 9.5.1).

16.6.4. Authority decides to consider eligible CSR expenses (based on Aeronautical net profit) under Aeronautical Operating Expenses for the Third Control Period and true up the same based on actual Aeronautical profits and expenses and the resultant eligibility (refer Para 9.5.2).

16.6.5. Authority decides to consider Working Capital Interest under O&M expenses and allocate the same in the gross fixed asset ratio (refer Para 9.2.26).

16.6.6. Authority decides to consider Aeronautical O&M expenses as given in Para 9.5.6 (Table 170) for the Third Control Period and true up the same based on actuals at the time of tariff determination for the Fourth Control Period, subject to efficiency of the actual costs incurred.

16.7. Non-Aeronautical Revenue for the Third Control Period

16.7.1. Authority decides to consider airline space rentals and land lease rentals from agencies related to Aeronautical services like Ground Handling as Aeronautical revenue (refer Para 10.5.2).

16.7.2. Authority decides to consider the contractual royalty and rents paid by CDRSL as Duty-Free revenues of CIAL and true up the same based on actuals and after due diligence at the time of determination of tariff for the Fourth Control Period (refer Para 10.5.1).

16.7.3. Authority decides to consider lease rentals paid by Coast Guard and Navy as Non-Aeronautical revenue (refer Para 10.5.3).

16.7.4. Authority decides to consider Non-Aeronautical Revenue as detailed in Para 10.5.7 (Table 182) for determination of tariff for the Third Control Period.

16.7.5. Authority decides to true up Non-Aeronautical Revenue for the Third Control Period based on actuals, at the time of determination of tariff for the next control period.

16.8. Taxation for the Third Control Period

16.8.1. Authority decides to not consider 30% Non-Aeronautical Revenue as part of the Aeronautical revenue base for Aeronautical tax determination as detailed in Para 11.2.4.

16.8.2. Authority decides to consider Aeronautical tax as detailed in Para 11.4.1 (Table 185) for the Third Control Period and true up the same based on actuals at the time of tariff determination for the Fourth Control Period.

16.9. Inflation for the Third Control Period

16.9.1. Authority decides to consider the WPI inflation of 4.9% based on the RBI survey of professional forecasters on macroeconomic indicators – 69th round, for the Third Control Period (refer Para 12.4.1).

16.10. Quality of Service for the Third Control Period

16.10.1. Authority decides to not consider any adjustment towards tariff determination for the Third Control Period on account of quality of service and notes that it will continue to review the Quality-of-Service parameters based on the ASQ ratings obtained by CIAL (refer Para 13.2.5).

16.11. Aggregate Revenue Requirement for the Third Control Period

16.11.1. Authority decides to consider the eligible ARR for the Third Control Period for CIAL as detailed in Para 14.5.13 (Table 191).

16.11.2. Authority decides to allow CIAL to recover the expected shortfall of INR 294.12 Cr. (as on 31st March 2022) in the Fourth Control Period subject to true up of the Third Control Period.

CHAPTER 17. ORDER

17.1.1. In exercise of powers conferred by Section 13(1)(a) of the AERA Act, 2008 and based on the above decisions, the Authority hereby determines the aeronautical tariffs to be levied at Cochin International Airport, Kochi for the Third Control Period (01st April 2022 to 31st March 2026), as seen in Annexure 1 to the Order.

17.1.2. In exercise of powers conferred by Section 13(1)(b) of the AERA Act, 2008 read with Rule 89 of the Aircraft Rules, 1937, the Authority hereby determines the rate of UDF as indicated in the rate card at Annexure 1 to the Order for the current Control Period.

17.1.3. The tariff order shall be made effective from 01st October 2021.

17.1.4. The tariffs determined herein are the ceiling rates, exclusive of taxes, if any.

17.1.5. CIAL shall submit its MYTP submission to the Authority for the Fourth Control Period in a timely manner as per Authority's Regulatory Guidelines, 2011.

By the order of and in the name of the Authority

(Col. Manu Sooden)
Secretary, AERA

To

Shri. Suhas S, IAS
Managing Director,
Cochin International Airport Limited,
Kochi Airport P.O., Nedumbassery,
Ernakulam, Kerala – 683 111

Copy to,

1. **Secretary, Ministry of Civil Aviation**
   Rajiv Gandhi Bhavan,
   Safdarjung Airport,
   New Delhi – 110 003
2. **Directorate General of Civil Aviation**, for issue of AIC

CHAPTER 18. LIST OF ANNEXURES

18.1. Annexure 1 – Tariff Card Pertaining to Cochin International Airport, Kochi for the Third Control Period as approved by the Authority – Effective from 01st October 2021 to 31st March 2026

Existing tariff shall continue up to 31st March 2022

APPROVED TARIFF RATE WILL BE EFFECTIVE FROM 01ST OCTOBER 2021

S.No.	Tariff	Unit	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
			Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025	Tariff w.e.f. 01.01.2026
1	**Landing Charges**							
	International							
	Up to 100 MT	INR per MT	531	555	605	650	705	580
	Above 100 MT	INR per MT	53100 + 714 per MT in excess of 100 MT	55500 + 745 per MT in excess of 100 MT	60500 + 815 per MT in excess of 100 MT	65000 + 870 per MT in excess of 100 MT	70500 + 950 per MT in excess of 100 MT	58000 + 770 MT in excess of 100 MT
	Other than international							
	Up to 100 MT	INR per MT	386	386	415	445	480	405
	Above 100 MT	INR per MT	38600 + 517 per MT in excess of 100 MT	38600 + 517 per MT in excess of 100 MT	41500 +560 per MT in excess of 100 MT	44500 + 595 per MT in excess of 100 MT	48000 + 640 per MT in excess of 100 MT	40500 + 545 per MT in excess of 100 MT
	Notes							
1a			A minimum fee of Rs. 2000/- shall be charged per single landing	A minimum fee of Rs. 4000/- shall be charged per single landing	A minimum fee of Rs. 4000/- shall be charged per single landing	A minimum fee of Rs. 4000/- shall be charged per single landing	A minimum fee of Rs. 4000/- shall be charged per single landing	A minimum fee of Rs. 4000/- shall be charged per single landing
1b		INR per MT	Aircrafts operating domestic flights with an all-up weight of 21 MT and below will be charged @					
			179	190	205	230	250	215
1c	For flight operations with Aircraft registered in India, the flight is classified Domestic or International based on the immediate previous station, irrespective of the flight number assigned to such flights.							
1d	All flight operations with Aircraft not having India as state of registry will be considered International for calculation of aero charges irrespective of immediate previous station.							
1e	All domestic legs of international routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number assigned to such flights.							
1f	No landing charges shall be payable in respect of a) aircraft with a maximum certified passenger capacity of less than 80 seats, being operated by domestic scheduled operators at airport and b) helicopters of all types. (not applicable to non-scheduled operators)							

S.No.	Tariff	Unit	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
			Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025	Tariff w.e.f. 01.01.2026
1g	Charges shall be calculated on the basis of nearest MT (i.e., 1000 kg)							
2	**Parking Charges**							
	Up to 100 MT	INR per hour per MT	7	7	8	9	10	9
	Above 100 MT	INR per hour per MT	700 + 9 per MT in excess of 100 MT	700 + 10 per MT in excess of 100 MT	800 + 11 per MT in excess of 100 MT	900 + 12 per MT in excess of 100 MT	1000 + 13 per MT in excess of 100 MT	900 + 11 per MT in excess of 100 MT
	Notes							
2a	When an aircraft is parked in the open, parking charges specified above shall be levied, provided that no parking charges shall be levied for the first two and half hours							
2b	For calculating chargeable parking time, part of an hour shall be rounded off to the next hour							
2c	Charges shall be calculated on the basis of nearest MT.							
2d	Charges for each period of parking shall be rounded off to nearest Rupee.							
2e	At the in- contact stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.							
2f	No landing charges will be levied in respect of Military Aircraft (Government of India) including para-military forces such as BSF, Coast Guard etc. Military aircrafts as mentioned above are also exempted from payment of parking charges.							
2g	Parking time will be calculated from the time of touchdown till the take-off at the Airport.							
2h	While calculating free parking time, standard time of 15 minutes is added on account of time taken between touch down and actual parking time on the parking stand. Another standard time of 15 minutes is added on account of taxiing time of aircraft from parking stand to take off point.							
3	**Night parking charges (between 2200 hours to 0600 hours)**							
	Up to 100 MT	INR per hour per MT	4	4	4.5	5	5.5	4.5
	Above 100 MT	INR per hour per MT	400 + 5.0 per MT in excess of 100 MT	400 + 5.0 per MT in excess of 100 MT	450 + 5.5 per MT in excess of 100 MT	500+ 6.0 per MT in excess of 100 MT	550 + 6.5 per MT in excess of 100 MT	450 + 5.5 per MT in excess of 100 MT
	Notes							
3a	Night parking charges are not applicable on turnaround operating flights during 2200 hours to 0600 hours.							
3b	Parking beyond 0600 hours will be charged at normal rates.							
4	**Aerobridge charges**							
	International							
	Single Aerobridge used by an aircraft							
	Up to 90 minutes	USD	60	62	64	67	70	60
	For every 30 minutes beyond 90 minutes	USD	20	21	21	22	23	20

S.No.	Tariff	Unit	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
			Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025	Tariff w.e.f. 01.01.2026
	Two Aerobridges used by an aircraft							
	Up to 90 minutes	USD	90	93	96	101	105	89
	For every 30 minutes beyond 90 minutes	USD	30	31	32	34	35	30
	Domestic							
	Up to 90 minutes	INR	2500	2565	2690	2825	2965	2520
	For every 30 minutes beyond 90 minutes	INR	1000	1025	1075	1130	1185	1010
	Notes							
4a	Aerobridge charges are payable by Airline Operators to Cochin International Airport Ltd.							
4b	The Aerobridge charges are payable based on the time of usage.							
4c	Usage charges will be billed on the basis of the data recorded by the Aerobridge operator.							
4d	For conversion of US$ to INR the RBI reference conversion rate as on the last day of the previous month for tickets issued in the first fortnight and rate as on 15th of the month for tickets issued in the second fortnight shall be adopted.							
4e	No exemptions.							
5	**Inline X ray screening charges**							
	International							
	Aircraft Capacity							
	1-100	USD	150	154	161	169	178	151
	101-150	USD	180	185	194	204	214	182
	151-180	USD	220	226	237	249	261	222
	181-300	USD	250	256	269	282	297	252
	Above 300	USD	300	308	323	339	356	303
	Domestic							
	Aircraft Capacity							
	1-100	INR	5000	5125	5385	5650	5935	5045
	101-150	INR	7000	7175	7535	7915	8310	7065
	151-180	INR	9000	9225	9690	10175	10685	9080
	181-300	INR	11000	11280	11845	12435	13060	11100
	Above 300	INR	13000	13330	13995	14695	15435	13120
	Notes							
5a	For conversion of US$ to INR the RBI reference conversion rate as on the last day of the previous month for tickets issued in the first fortnight and rate as on 15th of the month for tickets issued in the second fortnight shall be adopted.							

S.No.	Tariff	Unit	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
			Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025	Tariff w.e.f. 01.01.2026
6	**CUTE/CUSS/BRS**							
	Domestic	INR per dep pax	86	86	86	86	86	86
	International (for tickets issued against INR tariff)	INR per dep pax	94	94	94	94	94	94
	International (for tickets issued against foreign currency tariff)	USD per dep pax	1.25	1.25	1.25	1.25	1.25	1.25
	Notes							
6a	For conversion of US$ to INR the RBI reference conversion rate as on the last day of the previous month for tickets issued in the first fortnight and rate as on 15th of the month for tickets issued in the second fortnight shall be adopted.							
7 (i)	**User Development Fee**							
	Domestic embarking passenger	INR	-	180	230	270	270	230
	International embarking passenger for tickets issued against INR tariff	INR	-	400	500	570	570	480
	International embarking passenger for tickets issued against foreign currency tariff	USD	-	5.35	6.70	7.60	7.60	6.40
7 (ii)	**Passenger Service Fee (FC)**							
	For tickets issued against INR tariff	INR	70	-	-	-	-	-
	For tickets issued against foreign currency tariff	USD	1.75	-	-	-	-	-
	Notes							
7a	UDF is applicable on tickets issued (booking date) on or after 1st April 2022. Existing PSF (FC) shall be applicable for FY 21 and is proposed to be subsumed under the UDF from 1st Apr 2022.							
7b	For conversion of US$ to INR the RBI reference conversion rate as on the last day of the previous month for tickets issued in the first fortnight and rate as on 15th of the month for tickets issued in the second fortnight shall be adopted.							
7c	Collection Charges: If payment is made within 15 days from receipt of invoice, then collection charges per departing passenger shall be paid by CIAL as per the policy pertaining to such charges between the Airport Operator and the airlines. No collection charges shall be paid in case the airline fails to pay the UDF invoice to CIAL within the credit period of 15 days or in case of any part payment.							
7d	In terms of DGCA AIC No. 14/2019 dated 16.05.2019 and AIC No. 20/2019 dated 06.11.2019 (decision of Ministry of Civil Aviation, Govt. of India vide order no. AV 29012/39/2018-AD dated 10.04.2019/30.1.2019) the following categories of persons are exempted from levy and collection of UDF/PSF.							
	1. Children (under the age of 2 years)							

	2. Holders of Diplomatic Passport
	3. Airlines crew on duty including sky marshals and airline crew on board for particular flight only (this would not include Dead Head Crew or Ground Personnel)
	4. Persons travelling on official duty on aircraft operated by Indian Armed Forces
	5. Persons travelling on official duty for United Nations Peace Keeping Missions
	6. Transit/transfer passengers (this exemption may be granted to all the passengers transiting up to 24 hours. A passenger is treated in transit only if onward travel journey is within 24 hours from arrival into airport and is part of the same ticket, in case 2 separate tickets are issued, it would not be treated as transit passengers)
	7. Exemption to passengers departing from the Indian airports due to involuntary re-routing i.e., technical problems or weather conditions.
8	Aviation Security Fee (ASF) (previously Passenger Service Fee (PSF) - Security) shall be applicable as prescribed by Ministry of Civil Aviation from time to time
9	**General Conditions**
9a	Flight operating under **Regional Connectivity Scheme** will be completely exempted from charges as per Order No. 20/2016-17 dated 31.03.2017 of the Authority from the date the scheme is operationalised by the GoI as amended from time to time.
9b	All applicable taxes, including Goods and Services Tax (GST), shall be payable over and above the above charges at the prevailing rates from time to time.

TARIFF RATE CARD FOR CARGO SERVICES AT COCHIN INTERNATIONAL AIRPORT, KOCHI

Rate Card – Domestic Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
	Departure Cargo				
1	**Terminal Storage & Processing (TSP) Charges (chargeable to the consignor):**				
	General Cargo / perishable Cargo / Courier /PO mails etc	Minimum Rate INR per Consignment	100	150	128
		INR per KG	0.75	1	0.85
	#Special Cargo	Minimum Rate INR per Consignment	200	300	255
		INR per KG	2	2	2
	Valuable	Minimum Rate INR per Consignment	750	1000	850
		INR per KG	5	6	5
2	**Demurrage Charges (chargeable to the consignor):**				
	First day	Free	0	0	0
	Second day onwards:				
	General cargo / Special cargo / Perishable cargo	Minimum Rate INR per Consignment	150	200	170
		INR per KG	1	1.5	1.3
	Valuable cargo	Minimum Rate INR per Consignment	300	400	340
		INR per KG	2	3	2.6
3	**X Ray Machine Usage Charges (chargeable to Airline):**				
	For all cargo	Minimum Rate INR per Consignment	100*	100	100
		INR per KG	2*	1.25	1.25
	*Now 50% of the tariff is collected as the screening is not done by CIAL. In proposed rate, 100% as shown will be collected				
4	**X-Raying Charges if screening done by CIAL (Chargeable to Airline)**				
	For all cargo	Minimum Rate INR per Consignment	0	200	170
		INR per KG	0	2.5	2.1
	Arrival Cargo				
1	**Terminal Storage & Processing (TSP) Charges (chargeable to the consignee):**				
	General Cargo / perishable Cargo / Courier /PO mails etc	Minimum Rate INR per Consignment	100	150	128
		INR per KG	0.75	1	0.85
	#Special Cargo	Minimum Rate INR per Consignment	200	300	255
		INR per KG	2	2	2
	Valuable	Minimum Rate INR per Consignment	750	1000	850
		INR per KG	5	6	5

Rate Card – Domestic Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
2	**Demurrage Charges (chargeable to the consignee)**				
	First day	Free	0	0	0
	Second day onwards:				
	General cargo / Special cargo / Perishable cargo	Minimum Rate INR per Consignment	150	200	170
		INR per KG	1	1.5	1.3
	PO Mail	Minimum Rate INR per Consignment	NIL	200	170
		INR per KG	NIL	1.5	1.3
	Valuable cargo	Minimum Rate INR per Consignment	300	2000	1700
		INR per KG	2	3	2.6
	Other Charges				
1	**Stuffing / De-stuffing Charges (Chargeable to Airlines):**				
	Stuffing/De-stuffing Charges	Minimum Rate INR per Consignment	100	200	170
		INR per KG	1	2	1.7
2	**Handling charges on transit and misrouted cargo, PO mail and company store (Chargeable to the Airline)**				
	For Company store	Minimum Rate INR per Consignment	100	150	128
		INR per KG	0.75	1	0.85
	For Mis-routed / transit / PO Mail	Minimum Rate INR per Consignment	100	150	128
		INR per KG	1	1	1
	Note: Will be charged separately for Inbound and Outbound cargo including for PO Mail				
3	**Demurrage charges on Transit and Misrouted cargo, PO mail and Company store (Chargeable to the Airline)**				
	First day	Free	0	0	0
	Second day onwards:				
	For all types of company cargo	Minimum Rate INR per Consignment	150	170	150
		INR per KG	1	1.2	1
	For Transit cargo, Misrouted cargo and PO mail	Minimum Rate INR per Consignment	Not mentioned	170	150
		INR per KG	Not mentioned	1.2	1
4	**Documentation Charges for Arrival (segregation report) and Departure (manifestation & envelope) (chargeable**	INR per flight	0	250	213
5	**Cold room charges (if kept in International cargo cold storage with the permission of customs)**	Minimum Rate INR per Consignment	350*	700	595
		INR per KG per day	2*	2.5	2.1
	* International cargo cold room rates				

Rate Card – Domestic Cargo	
S.No.	
	Note: Common for Outbound, Inbound and Airlines.
(a)	TSP Charges and Demurrage Charges will be levied on the " gross weight " or the " chargeable weight " of the consignment, whichever is higher.
(b)	For mis-declaration of weight of 2% and above of declared weight penal charges at double the applicable TSP charges will be levied.
(c)	# Special cargo consists of live animals, hazardous goods, Ornamental fish, Chicks, Etc.
(d)	X-Ray and Unitization Charges will be levied on gross weight
(e)	All taxes will be charged extra at applicable rates
(f)	Consignments of human remains in coffin/ashes including unaccompanied baggage of deceased are exempted from the purview of TSP & Demurrage Charges
(g)	Demurrage free period shall be as per Government orders issued and in force from time to time.
(h)	The rates approved herein are ceiling rates, excluding taxes, if any, and, as applicable

Rate Card – International Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
	Export Cargo				
1	**Terminal Storage & Processing Charges**				
	General Cargo	Minimum Rate INR per Consignment	150	165	150
		INR per KG	0.95	1	0.95
	#Special Cargo	Minimum Rate INR per Consignment	300	330	300
		INR per KG	2	2	2
	Perishables	Minimum Rate INR per Consignment	150	165	150
		INR per KG	0.70	1	0.85
	Valuable cargo	Minimum Rate INR per Consignment	1000	1200	1020
		INR per KG	5	6	5
2	**Demurrage Charges**				
	General Cargo / Perishable cargo	Minimum Rate INR per Consignment	150	180	153
		INR per KG	0.95	1	0.95
	#Special Cargo	Minimum Rate INR per Consignment	300	360	306
		INR per KG	1.9	2	1.9
	Valuable cargo	Minimum Rate INR per Consignment	600	720	612
		INR per KG	3.8	4	3.8
	Notes:				
(a)	Demurrage free period shall be as per Government orders issued and in force from time to time.				
(b)	Consignments of human remains coffin including unaccompanied baggage of deceased, human ashes and human eyes are exempted from the purview of TSP & Demurrage Charges.				
(c)	Special cargo consists of live animals, hazardous goods, Ornamental fish, Chicks, Etc.				
(d)	Charges will be levied on the " gross weight " or the " chargeable weight " of the consignment, whichever is higher. Wherever the " gross weight " and (or) " volume weight " is wrongly indicated on the Airway Bill and is found more, charges will be levied on the " actual gross weight " or " actual volumetric weight ", whichever is higher.				
(e)	For mis-declaration of weight above 2% and up to 5% of declared weight penal charges at double the applicable TSP charges will be levied. For variation above 5%, the penal charges will be leviable at five (5) times the applicable TSP charges of the differential weight.				
3	**X Ray machine usage charges**				
	General Cargo	Minimum Rate INR per Consignment	150*	100	100
		INR per KG	2*	1.25	1.25
	Perishable Cargo	Minimum Rate INR per Consignment	150*	100	100
		INR per KG	1.5*	1.25	1.25
	P.O. Mails	Minimum Rate INR per Consignment	150*	100	100

Rate Card – International Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
		INR per KG	2*	1.25	1.25
	*Now 50% of the tariff is collected as the screening is not done by CIAL. In proposed rate, 100% as shown will be collected				
4	**X-Raying Charges if screening done by CIAL**				
	For all cargo	Minimum Rate INR per Consignment	Not mentioned	200	170
		INR per KG	Not mentioned	2.5	2.1
5	**AWB Amendment charges**	INR per AWB	100	150	128
	Import Cargo				
1	**Delivery Order Charges**				
	MAWB General Cargo	INR	1500	2000	1700
	MAWB Baggage	INR	1500	2000	1700
	MAWB Baggage - Consolidation	INR	1500	2000	1700
2	**Break Bulk Charges**	INR 1st HAWB	2500	2500	2500
		INR for each additional	1000	1300	1105
3	**Terminal Storage & Processing (TSP) Charges**				
	General Cargo/Unaccompanied Baggage/Courier/Perishables	Minimum Rate INR per Consignment	200	250	213
		INR per KG	4.5	6	5.1
	#Special Cargo	Minimum Rate INR per Consignment	250	300	255
		INR per KG	9	12	10.2
	Valuable	Minimum Rate INR per Consignment	1000	1200	1020
		INR per KG	12	15	13
4	**Strapping Charges**	INR per packet	10	10	10
5	**Demurrage Charges (chargeable to the consignee)**				
	General Cargo/Unaccompanied Baggage/Courier/Perishables	Minimum Rate INR per Consignment	295	320	295
	Up to 4 days including free period	INR per KG per day	1.3	1.5	1.3
	From 5th to 30th day	INR per KG per day	2.6	3	2.6
	Beyond 30 days	INR per KG per day	3.9	4.5	3.9
	#Special Cargo	Minimum Rate INR per Consignment	580	640	580
	Up to 4 days including free period	INR per KG per day	2.6	3	2.6

Rate Card – International Cargo					
S.No.	Tariff	Unit	Existing Rates	Revised Rates	
			Valid up to 31.03.2022	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.01.2026
	From 5th to 30th day	INR per KG per day	5.2	6	5.2
	Beyond 30 days	INR per KG per day	7.8	9	7.8
	Valuable	Minimum Rate INR per Consignment	1160	1250	1160
	Up to 4 days including free period	INR per KG per day	5.2	6	5.2
	From 5th to 30th day	INR per KG per day	10.4	12	10.4
	Beyond 30 days	INR per KG per day	15.6	18	15.6
	Notes:				
(a)	Consignments of human remains coffin including baggage of deceased, human ashes and human eyes will be exempted from the purview of TSP, demurrage and DO charges.				
(b)	Charges will be levied on the "gross weight" or the "chargeable weight" of the consignment whichever is higher. Wherever the "gross weight" and (or) volume weight is wrongly indicated on the Airway Bill and is actually found more, charges will be levied on the "actual gross weight" or "actual volumetric weight" or "chargeable weight" whichever is higher.				
(c)	# Special import Cargo consists of Live Animals, Hazardous Goods, Ornamental Fish, Live Chicks, Etc.				
(d)	Valuable cargo consists of gold, bullion, currency notes, securities, shares, share coupons, traveller's cheques, diamonds (including diamonds for industrial use), diamond jewellery, jewellery and watches made of silver, gold, platinum, Computer parts, mobile phones and items valued at USD 1000 per Kg. & above.				
(e)	GST will be charged extra at applicable rates.				
(f)	Demurrage free period shall be as per Government orders issued and in force from time to time.				
6	**AWB Amendment charges**	INR per AWB	100	150	128
	Other Rates				
1	**Palletisation / Depalletization & Containerization / Decontainerization (Charges to Airline)**				
	Stuffing Charges	Rate per Kg	1.5	2.5	2.1
		Minimum rate	500	650	553
	De-stuffing Charges	Rate per Kg	1.5	2.5	2.1
		Minimum rate	500	650	553
2	**Cold storage charges**				
	For Company store	Minimum Rate INR per Consignment	350	700	595
		INR per KG per day	2	2.5	2.1
3	**Transhipment Cargo Handling**				
a)	**Air to Road**				
	Storage Charges	Minimum Rate INR per Consignment	150	200	170
		INR per KG	2	2.2	2
	Stuffing	Minimum Rate INR per Manifest	Not mentioned	1000	850

Rate Card – International Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
		INR per KG	2.5	3	2.6
	De-stuffing	Minimum Rate INR per Manifest	500	650	553
		INR per KG	1.5	2.5	2.1
	Demurrage charges	Minimum Rate INR per Consignment	250	300	255
		48 hours after completion of segregation (INR per KG per day)	1	1.5	1.3
b)	**Road to Air**				
(i)	**Terminal storage and processing charges**				
	General cargo	Minimum Rate INR per Consignment	150	165	150
		INR per KG	0.95	1	0.95
	# Special cargo	Minimum Rate INR per Consignment	300	330	300
		INR per KG	2	2	2
	Perishables	Minimum Rate INR per Consignment	150	165	150
		INR per KG	0.70	1	0.85
	Valuable cargo	Minimum Rate INR per Consignment	1000	1200	1020
		INR per KG	5	6	5.1
(ii)	**X Ray usage charges**				
	General cargo	Minimum Rate INR per Consignment	150*	100	100
		INR per KG	2*	1.25	1.25
	Perishable cargo	Minimum Rate INR per Consignment	150*	100	100
		INR per KG	1.5*	1.25	1.25
(iii)	**X Raying charges if screening done by CIAL**	Minimum Rate INR per Consignment	Not mentioned	200	170
		INR per KG	Not mentioned	2.5	2.1
(iv)	**Stuffing**	Minimum Rate INR	500	650	553
		INR per KG	1.5	2.5	2.1
(v)	**Demurrage**				
	General cargo	Minimum Rate INR per Consignment	150	180	153
		INR per KG per day	0.95	1	0.95
	# Special cargo	Minimum Rate INR per Consignment	300	360	306
		INR per KG per day	1.9	2	1.9
	Valuable cargo	Minimum Rate INR per Consignment	600	720	612
		INR per KG per day	3.8	4	3.8
	Note:				

Rate Card – International Cargo					
S.No.	Tariff	Unit	Existing Rates	Revised Rates	
			Valid up to 31.03.2022	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.01.2026
(a)	Demurrage free period shall be as per Government orders issued and in force from time to time.				
(b)	Consignments of human remains coffin including unaccompanied baggage of deceased, human ashes and human eyes are exempted from the purview of TSP & Demurrage Charges.				
(c)	# Special cargo consists of live animals, hazardous goods, Ornamental fish, Chicks, Etc.				
(d)	Charges will be levied on the " gross weight " or the " chargeable weight " of the consignment, whichever is higher. Wherever the " gross weight " and (or) " volume weight " is wrongly indicated on the Airway Bill and is found more, charges will be levied on the " actual gross weight " or " actual volumetric weight ", whichever is higher.				
(e)	For mis-declaration of weight above 2% and up to 5% of declared weight penal charges at double the applicable TSP charges will be levied. For variation above 5%, the penal charges will be leviable at five (5) times the applicable TSP charges of the differential weight.				
	*Now only 50% of the rate is collected as screening is not done by CIAL. In proposed rate 100% of the shown rates will be collected				
c)	**Air to Air**				
	Storage Charges (Charges to First Carrier)	Minimum Rate INR per Consignment	150	200	170
		INR per KG	2	2.2	2.0
	Stuffing	INR per KG	1.5	2.5	2.1
		Minimum Rate INR per Manifest	500	650	553
	De-stuffing	INR per KG	1.5	2.5	2.1
		Minimum Rate INR per Manifest	500	650	553
	Demurrage charges (Charges to First Carrier)	Minimum Rate INR per Consignment	250	300	255
		After 48 hours from the completion of segregation INR Per KG per day	1	1.5	1.3
d)	**Road to Road (Import)**				
(i)	**De-stuffing charges**	Minimum Rate INR per Consignment	150	150	150
		INR per KG	2.5	2.5	2.5
(ii)	**Terminal Storage & Processing (TSP) Charges**				
	General Cargo/Unaccompanied Baggage/Courier/Perishables	Minimum Rate INR per Consignment	200	250	213
		INR per KG	4.5	6	5.1
	#Special Cargo	Minimum Rate INR per Consignment	250	300	255
		INR per KG	9	12	10.2
	Valuable	Minimum Rate INR per Consignment	1000	1200	1020
		INR per KG	12	15	13
(iii)	**Strapping Charges**	INR per packet	10	10	10
(iv)	**Demurrage Charges**				
	General Cargo/Unaccompanied Baggage/Courier/Perishables	Minimum Rate INR per Consignment	295	320	295

Rate Card – International Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
	Up to 4 days including free period	INR per KG per day	1.3	1.5	1.3
	From 5th to 30th day	INR per KG per day	2.6	3	2.6
	Beyond 30 days	INR per KG per day	3.9	4.5	3.9
	#Special Cargo	Minimum Rate INR per Consignment	580	640	580
	Up to 4 days including free period	INR per KG per day	2.6	3	2.6
	From 5th to 30th day	INR per KG per day	5.2	6	5.2
	Beyond 30 days	INR per KG per day	7.8	9	7.8
	Valuable	Minimum Rate INR per Consignment	1160	1250	1160
	Up to 4 days including free period	INR per KG per day	5.2	6	5.2
	From 5th to 30th day	INR per KG per day	10.4	12	10.4
	Beyond 30 days	INR per KG per day	15.6	18	15.6
	Note:				
(a)	Consignments of human remains coffin including baggage of deceased, human ashes and human eyes will be exempted from the purview of TSP, demurrage and DO charges.				
(b)	Charges will be levied on the "gross weight" or the "chargeable weight" of the consignment whichever is higher. Wherever the "gross weight" and (or) volume weight is wrongly indicated on the Airway Bill and is actually found more, charges will be levied on the "actual gross weight" or "actual volumetric weight" or "chargeable weight" whichever is higher.				
(c)	# Special import Cargo consists of Live Animals, Hazardous Goods, Ornamental Fish, Live Chicks, Etc.				
(d)	Valuable cargo consists of gold, bullion, currency notes, securities, shares, share coupons, traveller's cheques, diamonds (including diamonds for industrial use), diamond jewellery, jewellery and watches made of silver, gold, platinum, Computer parts, mobile phones and items valued at USD 1000 per Kg. & above.				
(e)	GST will be charged extra at applicable rates.				
(f)	Demurrage free period shall be as per Government orders issued and in force from time to time.				
e)	**Road to Road (Export)**				
	Stuffing (Supervision charges) – Chargeable to Truck operator	Minimum Rate INR per Manifest	NIL	500	425
		INR per KG	NIL	1.25	1.00
	Stuffing charge if done by CIAL	Minimum Rate INR per Manifest	NIL	650	553
		INR per KG	NIL	2.5	2.1
	Terminal Storage and processing Charges				
	General cargo	Minimum Rate INR per Consignment	150	165	150
		INR per KG	0.95	1	0.95
	# Special cargo	Minimum Rate INR per Consignment	300	330	300
		INR per KG	2	2	2
	Perishables	Minimum Rate INR per Consignment	150	165	150

Rate Card – International Cargo					
S.No.	**Tariff**	**Unit**	**Existing Rates**	**Revised Rates**	
			Valid up to 31.03.2022	**Tariff w.e.f. 01.04.2022**	**Tariff w.e.f. 01.01.2026**
		INR per KG	0.70	1	0.85
	Valuable cargo	Minimum Rate INR per Consignment	1000	1200	1020
		INR per KG	5	6	5.1
	Demurrage Charges				
	General cargo/Perishable cargo	Minimum Rate INR per Consignment	150	180	153
		INR per KG per day	0.95	1	0.95
	# Special cargo	Minimum Rate INR per Consignment	300	360	306
		INR per KG per day	1.9	2	1.9
	Valuable cargo	Minimum Rate INR per Consignment	600	720	612
		INR per KG per day	3.8	4	3.8
	Notes:				
(a)	Demurrage free period shall be as per Government orders issued and in force from time to time.				
(b)	Consignments of human remains coffin including unaccompanied baggage of deceased, human ashes and human eyes are exempted from the purview of TSP & Demurrage Charges.				
(c)	# Special cargo consists of live animals, hazardous goods, Ornamental fish, Chicks, Etc.				
(d)	Charges will be levied on the " gross weight " or the " chargeable weight " of the consignment, whichever is higher. Wherever the " gross weight " and (or) " volume weight " is wrongly indicated on the Airway Bill and is found more, charges will be levied on the " actual gross weight " or " actual volumetric weight ", whichever is higher.				
(e)	For mis-declaration of weight above 2% and up to 5% of declared weight penal charges at double the applicable TSP charges will be levied. For variation above 5%, the penal charges will be leviable at five (5) times the applicable TSP charges of the differential weight.				
4	ULD Transfer	INR per ULD	500	500	500
5	Forklift charges				
	For works inside I-ACC				
	(To the exporters/Importers only)	Minimum Rate INR per Consignment	300	300	300
		INR per KG	0.3	0.5	0.4
	For works outside within the Airport premises	INR per hour	2000	2500	2125
6	Documentation charges (Export and Import Both)	INR per flight	500	500	500
	To be paid by Airlines at Exports for providing manifest & envelopes. Services provided _Export : Cargo Manifest, Envelope, Import Segregation Report				

18.2. Annexure 2 – Summary of Study on Allocation of Assets between Aeronautical and Non-Aeronautical Assets

18.2.1. Background

RAB is one of the fundamental elements in the process of tariff determination. The return to be provided on the RAB forms a considerable portion of the Aggregate Revenue Requirement (ARR) for an Airport Operator. Airports require capital intensive investments. To safeguard the interests of the airport users, it must be ensured that the capital additions are efficient, their needs justified, and the return is provided solely on the assets related to the core operations (i.e., aeronautical services/ activities) of the airport. Any consideration of assets, which are not directly related to the provision of aeronautical services, may have a significant impact on the ARR and would result in increased charges for the users. Given this, the allocation of assets into aeronautical and non-aeronautical components becomes an important part of the tariff determination process.

RAB evolves on a continuous basis, primarily due to the addition of capital assets required to meet the growing demand/ ensure optimum level of service, replacement of obsolete assets at end of life, sales or transfers of assets to other entities in some cases, and assets' depreciation. The allocation of an asset towards RAB depends upon the type of asset (building & civil works, plant & machinery, equipment, etc.), the usage (provision of various services – aeronautical, non-aeronautical, common) of the asset, ownership (airport operator, concessionaire or subsidiary), and useful life of the asset. Based on these factors, the rationale for allocation of each asset into the appropriate category needs to be determined diligently.

The Authority had commissioned a study on allocation of assets between Aeronautical and Non-Aeronautical assets for CIAL for the Second Control Period.

18.2.2. Segregation of Assets

The study has been undertaken to allocate the total assets of the airport into the following:

- **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 and 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 golf course 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.

18.2.3. Summary of Reclassifications

Terminal buildings and related works:

- **Details of asset:** Civil, mechanical, plumbing and electrical works of new international terminal T3 building and modifications to the old terminals.
- **Allocation proposed by CIAL:** Common, however, some of the assets in this category were considered Aeronautical
- **Issue:** The allocation of new terminal building, modification of the existing terminals and other related civil, engineering, consultancy, electrical, plumbing and mechanical works is based on the terminal area usage ratio (between the area towards aeronautical and non-aeronautical activities). However, some line items in this segment were found to be classified as Aeronautical by the Airport Operator. Accordingly, such items have been reclassified as Common.

- **Allocation proposed by the Authority:** Common
- **Impact:** Reclassifying these assets from Aeronautical to Common reduces the RAB to the extent of **INR 0.41 Cr.**

IT Assets – Hardware and Software:

- **Details of Asset:** End User Devices, Printers, Copiers, LAN, Software Licenses etc.
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** End user devices such as laptops and software like ERP licenses, operating systems, DTP etc., and their supporting hardware are to be classified based on the nature of activity performed by the department where the asset is deployed. Due to unavailability of further usage related information of some of these assets, such items have been reclassified as Common. Wherever it was identified that such items are being utilised for purely aeronautical purposes, those assets have been classified accordingly.
- **Allocation proposed by the Authority:** Common
- **Impact:** Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of **INR 0.11 Cr.**

Common Terminal Assets:

- **Details of Asset:** Consumer electronics, other devices, furniture and fixtures in the terminal buildings
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** Certain assets like Televisions, Fans, Ovens, Dining Tables etc, which are generally used for common purposes, their location and exact usage could not be determined from the available information, have been reclassified as Common. Wherever it was clear that such items are being utilised for purely aeronautical or non-aeronautical purposes, the assets have been classified accordingly.
- **Allocation proposed by the Authority:** Common
- **Impact:** Reclassifying these assets from Aeronautical to Common reduces RAB to the extent of **INR 0.39 Cr.**

Assets for Commercial Activities:

- **Details of Asset:** Assets at Commercial Areas like Food Court, or Retail Spaces
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** It was observed that there are certain assets including furniture and appliances that are either used by the Commercial Department or at areas like Food Court and other retail spaces which were classified as either Aeronautical or Common. Such assets have been reclassified as Non-Aeronautical.
- **Allocation proposed by the Authority:** Non-Aeronautical
- **Impact:** Reclassifying these assets from Aeronautical or Common to Non-Aeronautical reduces RAB to the extent of **INR 2.81 Cr.**

Assets at MD's Office and Other Administrative Offices:

- **Details of Asset:** Assets including interior works, furniture and other devices at MD's Office and other administrative offices

- **Allocation proposed by CIAL:** Aeronautical
- **Issue:** Certain assets in the MD's office were found to be classified as Aeronautical. CIAL had bifurcated the operational expenses related to the MD's office into Aeronautical and Non-Aeronautical since the office is responsible for all activities at the airport. Hence the assets at this office must also be considered as Common. Such assets were bifurcated in the Employee Ratio (Aeronautical to Non-Aeronautical).
- **Allocation proposed by the Authority:** Common (Employee)
- **Impact:** Reclassifying these asserts from Aeronautical to Common reduces RAB to the extent of **INR 0.09 Cr.**

Duty-Free and Golf Course Assets:

- **Details of Asset:** Assets of Duty-Free, Duty-Free Warehouse and Golf Course
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** Some assets procured for the Duty Free, the Duty-Free Warehouse and the Golf Course & Country Club were incorrectly classified as either Aeronautical or Common. Such line items have been identified and reclassified as Non-Aeronautical since Duty Free and Golf Course are Non-Aeronautical ventures.
- **Allocation proposed by the Authority:** Non-Aeronautical
- **Impact:** Reclassifying these assets from either Aeronautical or Common to Non-Aeronautical reduces RAB to the extent of **INR 1.37 Cr.**

Passenger Handling and Flight Information Systems:

- **Details of Asset:** Equipment and software for passenger handling
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** Certain Flight Information Systems, Q Managers, and Immigration Counters were classified as Common. However, this is believed to be a mistake as these are related to passenger handling and must therefore be considered Aeronautical. Hence these assets have been reclassified as Aeronautical.
- **Allocation proposed by the Authority:** Aeronautical
- **Impact:** Reclassifying these assets from Common to Aeronautical increases the RAB to the extent of **INR 0.59 Cr.**

Airport Security:

- **Details of Asset:** Assets for CISF
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** It was observed that certain assets procured for CISF and for airport security related activities were classified as Common. Since airport security is an Aeronautical matter, these assets must be treated similarly and hence, have been reclassified to Aeronautical.
- **Allocation proposed by the Authority:** Aeronautical
- **Impact:** Reclassifying these assets from Common to Aeronautical increases RAB to the extent of **INR 0.13 Cr.**

Butterfly Canteen:

- **Details of Asset:** Assets at the Butterfly Canteen in front of T3
- **Allocation proposed by CIAL:** Aeronautical / Common
- **Issue:** The Butterfly canteen outside the Terminal 3 building is a commercial space, hence the assets related to the same must be treated as Non-Aeronautical. Some of these assets were classified by CIAL as Aeronautical and some others were considered Common. The classification for such assets has been revised to Non-Aeronautical.
- **Allocation proposed by the Authority:** Non-Aeronautical
- **Impact:** Reclassifying these assets from either Aeronautical or Common to Non-Aeronautical reduces the RAB to the extent of **INR 5.1 Cr.**

Vehicles:

- **Details of Asset:** Vehicles
- **Allocation proposed by CIAL:** Aeronautical
- **Issue:** CIAL has considered all vehicles as Aeronautical. The classification of these assets should be dependent upon the specific usage. However, in the absence of the details regarding the exact usage (for aeronautical or general purposes) of some of these assets, they have been reclassified as Common and bifurcated in the employee ratio.
- **Allocation proposed by the Authority:** Common (Employee)
- **Impact:** Reclassifying these assets from either Aeronautical to Non-Aeronautical reduces the RAB to the extent of **INR 0.05 Cr.**

Asset allocation assessment and reclassification for forecasted additions (FY 21):

- **Details of Asset:** Assets forecasted to be capitalised in FY 2021
- **Allocation proposed by CIAL:** Aeronautical
- **Issue:** Certain assets, including UV-C systems and IT Assets, that are projected to be capitalised in FY 2021, have been re-allocated based on the same principles specified above and the analysis of the information available
- **Allocation proposed by the Authority:** Common / Non-aeronautical
- **Impact:** Reclassifying these assets reduces the RAB to the extent of **INR 0.72 Cr**

18.2.4. Impact of revised terminal allocation ratio

The Aeronautical and Non-Aeronautical additions consider a certain percentage of Common Assets, which is a function of terminal area ratio (ratio of terminal area allocated for the provision of aeronautical and non-aeronautical activities).

The Airport Operator had proposed 6.28% and 9.00% of terminal area for the provision of Non-Aeronautical services/ activities in International and Domestic terminals respectively, which is 7.19% of total terminal area. However, based on the assessment of actual area allocated towards the Non-Aeronautical activities, it is found that with the reclassification of areas, especially the ones which are recognised as 'Common' by AERA and were considered as Aeronautical by the Airport Operator, the actual area allocation percentage has changed.

Accordingly, the actual allocation of area (in %) towards Non-Aeronautical activities, viz. 8.47% and 9.88% for the International and Domestic terminals respectively, has been proposed by the study for the purposes of the tariff determination for the Second Control Period.

This changes the percentage of area allocated for Non-Aeronautical activities to 8.94% from 7.19% for the entire terminal area.

For the Second Control Period, the impact of revision in terminal allocation ratio for Common assets results in a reduction of INR 15.9 Cr. in the Aeronautical additions.

18.2.5. Summary of adjustments to RAB

The following table summarises the total proposed adjustments for the aeronautical additions submitted by the Airport Operator.

Table 192: Proposed Adjustments to Aeronautical Asset Base Additions in Second Control Period

Fixed Asset Adjustment	INR Cr.
Aeronautical Additions in Second Control Period as per CIAL (Excluding FA)	**1,847.1**
Adjustments to RAB	
Exclusion of Assets Capitalised in 2016	(3.17)
	1,843.9
Airport Security	0.13
Assets for Commercial Activities	(2.81)
Butterfly canteen	(5.10)
Common Assets at MD's Office	(0.09)
Common Terminal Assets	(0.39)
Duty Free & Golf Course	(1.37)
IT Assets	(0.11)
Passenger Handling	0.59
Terminal Building Works	(0.41)
Vehicles	(0.05)
Reallocation of Forecasted Assets in 2021	(0.72)
Total adjustments to RAB (for the Second Control Period) *(on the basis of asset reclassification and exclusion of some expenses from RAB, without considering the impact of revised terminal ratio)*	**(13.47)**
Impact on capital additions in Second Control Period due to revised terminal allocation	(15.9)
Revised additions to Aeronautical Gross Block in Second Control Period	**1,817.7**

As can be seen from the table above, the total reduction in Aeronautical capital additions during the Second Control Period is **INR 29.4 Cr** as per the study commissioned by the Authority.

18.3. Annexure 3 – Summary of Study on Efficient Operations and Maintenance Expenses for CIAL

18.3.1. Background

Establishing efficient Operation and Maintenance expenses and their reasonableness is pivotal to the effective execution of tariff determination for aeronautical services. Across airports in India, the O&M expenditure has consistently been increasing, driven by investments in expanding, modernising and improving operational efficiency of the airports.

Assessment of Operation and Maintenance expense requires examination of financial information submitted by the airport operator, and also independent examination of the baseline operating expense levels, expense reduction, efficiency initiatives and conduct of benchmarking exercises.

The Authority had commissioned a study to determine efficient Operations and Maintenance expenses of CIAL for the Second Control Period.

18.3.2. Allocation of O&M expenses

The principle for segregation of costs followed by the study is as follows:

- **Aeronautical:** The expenses which are incurred for operation and maintenance of Aeronautical assets have been categorised as Aeronautical expenses.
- **Non-Aeronautical:** Expenses which are incurred for operation and maintenance of Non-Aeronautical assets have been categorised as Non-Aeronautical expenses.
- **Common:** Expenses primarily incurred for provision of Aeronautical services but are also used for provision of Non-Aeronautical services and expenses which are used for general corporate purposes including legal, administration and management affairs. Common expenses have been further apportioned into Aeronautical and Non-Aeronautical using an appropriate ratio.

18.3.3. Reallocation of Common expenses

The study has assessed CIAL's proposition of allocation basis of common expenses along with categorisation of expenses between Aeronautical and Non-Aeronautical services. The study has suggested reallocation of Operation and Maintenance expenses to determine efficient O&M expenses and has proposed the following adjustments:

Safety & Security Expenses:

- Allocation proposed by CIAL – Aeronautical/Common
- Basis of Allocation proposed by CIAL – Employee Ratio
- **Issue** - The security personnel are being deployed for the security of the whole terminal building and airport. Therefore, the logic for segregating the safety & security expenses on the basis of employee ratio may not be appropriate.
- Allocation proposed by the Authority - Weighted average terminal allocation ratio
- **Impact** – Reallocation of these expenses reduces the Aeronautical portion of safety & security expenses by INR 1.64 crore for the Second Control Period

Housekeeping Expenses:

- Allocation proposed by CIAL – Aeronautical/Common
- Basis of Allocation proposed by CIAL – Employee Ratio

- **Issue** - The housekeeping expenses are expensed majorly for the upkeep and cleanliness of the terminal building and areas surrounding the terminal building. Therefore, allocating these expenses considering the employee ratio may not be appropriate.
- Allocation proposed by the Authority - Weighted average terminal allocation ratio
- **Impact** – Reallocation of these expenses reduces the Aeronautical portion of housekeeping expenses by INR 2.32 crore for the Second Control Period.

Consumables:

- Allocation proposed by CIAL – Aeronautical/Common
- Basis of Allocation proposed by CIAL – Employee Ratio
- **Issue** - The consumables are used across the terminal building and airport and allocating it on basis of employee expenses means they primarily pertains only to the office expenses. However, these consumables are used across the terminal building by the passengers as well. Therefore, it will not be appropriate to allocate the same on the basis of employee ratio.
- Allocation proposed by the Authority - Weighted average terminal allocation ratio
- **Impact** – Reallocation of these expenses reduces the Aeronautical portion of consumables by INR 0.77 crore for the Second Control Period.

Other Operational Expenses:

- Allocation proposed by CIAL – Aeronautical/Common
- Basis of Allocation proposed by CIAL – Employee Ratio
- **Issue** - The nature of other operational expenses was not provided, however, allocating the other operational expenses based on employee expenses implies that these expenses only pertain to the employee. Therefore, it will not be appropriate to allocate the same in the proportion of the employee ratio.
- Allocation proposed by the Authority - Weighted average terminal allocation ratio
- **Impact** – Reallocation of these expenses reduces the Aeronautical portion of other operational expenses by INR 1.77 crore for the Second Control Period.

Administrative & General Expenses (except Flood Mitigation expenses):

- Allocation proposed by CIAL – Aeronautical/Common
- Basis of Allocation proposed by CIAL – Employee Ratio
- **Issue** – The administrative & general expenses suggests part of the expenses such as rent, rates & taxes, insurance costs, bank charges etc. pertain to the airport premises; some of these expenses such as consultancy fees, travelling & conveyance, communication expenses etc. relates to employees; and remaining part of these expenses pertaining to advertisements, general charges etc. relates to the airport terminal building, therefore, it will not be appropriate to allocate the entire administrative & general expenses in the proportion of the employee ratio. Further, corrections have been made in the numbers of Provision for Doubtful Debts/Advances (this line item is excluded from Aeronautical expenses, however, the numbers excluded by the Airport Operator were for a different year), while computing the Aeronautical component of Administrative & General expenses in any given year.
- Allocation proposed by the Authority - The components of the administrative & general expenses related to the terminal building is proposed to be allocated using the terminal allocation ratio; components related to employee is proposed to be allocated in the employee ratio and the

remaining components are proposed to be allocated in the ratio of average Aeronautical assets to the total assets.

- **Impact** – Reallocation of these expenses reduces the Aeronautical portion of Administrative & General expenses by INR 7.77 crore (The total difference is INR 31.31 crore which when subtracted by INR 23.54 crore of flood mitigation expenses outside airport is INR 7.77 crore) for the Second Control Period.
- The flood mitigation expenses, which were found to be carried out outside the Airport premises have been excluded.

18.3.4. Efficient O&M expenses

Based on the above adjustments, the study has proposed the revised efficient Operations and Maintenance expenses for the Second Control Period as follows:

Table 193: O&M expenses proposed by the Authority in the true up of Second Control Period

FY ending March 31 (INR crore)	2017	2018	2019	2020	2021	Total
Payment to employees	50.44	54.92	76.70	75.13	79.31	336.49
Admin Expenses	19.36	12.98	25.53	20.01	15.75	93.62
Repairs Expenses	14.87	18.89	20.55	24.99	20.35	99.64
Safety & Security expenses	3.59	6.13	7.81	8.02	6.41	31.96
Power, water & fuel Charges	17.03	26.31	27.78	31.25	23.45	125.83
Vehicle Running & Maintenance expenses	0.85	0.87	1.38	0.94	0.57	4.61
House Keeping expenses	6.64	9.09	9.35	10.56	9.50	45.13
Consumables	1.87	3.01	3.03	3.46	3.46	14.83
Other operational expenses	6.58	7.57	6.73	6.92	6.92	34.72
CUTE operational expenditure	1.03	2.07	4.48	5.30	6.15	19.03
Total	**122.24**	**141.84**	**183.35**	**186.58**	**171.86**	**805.87**

18.4. Annexure 4 – Summary of Study on Determinants of Cost of Capital of CIAL

18.4.1. Background

Traditionally, airports have been managed by governments the world-over with private participation limited to fuel farms, cargo handling, etc. However, more recently, with demanding passengers (looking for better quality infrastructure with contemporary amenities), private participation has become imperative. It has been observed from experience in other sectors (e.g., ports, roads, etc.) that this mode of operation maximizes efficiency. Also, the government gains monetarily by selling its stake. A variety of uncertain factors, such as accurate demand estimation, regulatory environment, macro-economic environment, etc., play a major role in determining the economic viability of running an airport. Hence, private players demand some level of guaranteed returns on the equity they invest.

Determination of Cost of Equity and Gearing is pivotal in the tariff determination process as the Fair Rate of Return should account for the reasonable return expectation of all investors in the project.

The Authority had commissioned an independent study for determining the cost of equity for CIAL for the Third Control Period.

18.4.2. Scope

The study proposes to build on the previous experiences of AERA to determine an appropriate CAPM rate for the Cost of Equity (CoE) for Cochin International Airport Ltd. (CIAL) for the third control period (FY2021-22 to FY2025-26). The scope of work involves:

a) Study of relevant environment, trends in airport capitalization

b) Study airport-specific determinants of Cost of Capital with specific focus on the Cost of Equity

c) Recommendations on Cost of Equity

d) Follow-on activities

18.4.3. Comparable Airports

The study has assessed the proximity of CIAL with 12 airports in four regions deemed relevant to the study viz. Europe, South East Africa, South East Asia and Australia based on the following parameters:

- Revenue till structure:
  1. Single Till or where information is not available
  2. Dual Till
  3. Hybrid Till
- Ownership structure:
  1. if 100% Government Owned/Funded
  2. if Government / private owned/funded, not being Public Private Partnership
  3. if Public Private Partnership Funded
- Operations Scale (OpS): For each comparable airport, the study computed the ratios of passenger, cargo, and aircraft movement of these airports to that of CIAL in each of the years from FY 2015 to FY 2017. An equal weighted sum for these airports is computed using average of the ratios under each category (passenger, cargo and air traffic).

The proximity score of CIAL with the selected comparable airports is given in the table below.

Table 194: Proximity scores of CIAL with comparable airports

Airport	Revenue Till	Ownership Structure	Operations	Proximity Scores
Cochin	0.00	0.00	0.00	0.00
Auckland	1.00	1.00	-4.20	4.4327
Dublin	2.00	2.00	-5.11	5.8415
Johannesburg	2.00	1.00	-6.51	6.8793
Gatwick	2.00	1.00	-7.95	8.2589
Melbourne	1.00	1.00	-8.69	8.8047
Sydney	1.00	1.00	-13.37	13.4477
Amsterdam	1.00	1.00	-34.60	34.6272
Heathrow	2.00	1.00	-35.42	35.4896
Changi	0.00	2.00	-35.64	35.6955
MAHB	2.00	1.00	-36.13	36.2019
AoT	1.00	1.00	-42.95	42.9706
Incheon	2.00	2.00	-44.06	44.1513

18.4.4. Determination of Cost of Equity

The study has relied on the Capital Asset Pricing Model (CAPM), which is a theoretical model based on assumptions that do not necessarily hold in the real world, however, its simplicity and intuitive appeal have made it the on-going favourite model for determining cost of equity in any market-based economy. The three components to estimate the CoE are the risk-free rate (Rf), equity beta and the equity risk premium (ERP). Rf and ERP are mostly macro-economic in nature and thus one can rely on time-series data to estimate these variables. The steps followed by the study are as follows:

1. Un-lever the betas of listed Comparable Airports
2. Estimate Asset Betas for CIAL with Proximity Distance Scores as inputs
3. Re-lever Asset Betas to get Equity Betas for CIAL with Target Gearing Ratios as inputs
4. Obtain the CoE using Equity Risk Premium or ERP and Risk-Free Rate as inputs
5. Illustrate the computation of the FRoR

Step 1: Un-levering the Betas of the Listed firms in the Comparable Airports' Set

The study considered the comparable set that consists of 6 airports – viz. Auckland, Airports of Thailand (AoT), Dublin, Gatwick, Malaysia Airports Holdings Berhad (MAHB) and Sydney. For AoT, MAHB and Sydney, which are listed airports, equity betas were computed based on market data. For the other three airports (Auckland, Dublin, and Gatwick), the study has relied on the estimates of asset beta provided by the relevant regulatory authorities. The asset betas for the comparable airports are given below.

Table 195: Asset betas of comparable airports

Airport	Asset Beta	Asset beta based on
Sydney	0.4000	Market price data
MAHB	0.7693	Market price data
AoT	0.8582	Market price data
Auckland	0.6000	Regulatory authority's estimate
Dublin	0.5500	Regulatory authority's estimate
Gatwick	0.5600	Regulatory authority's estimate

Step 2: Estimation of Asset Betas for CIAL

The study first computed the asset betas for CIAL using two different techniques, viz. equally weighted and proximity score weighted .The proximity score weighted (PSW) beta better represents the true asset beta as compared to the equally weighted counterpart as they account for the similarity between the Indian airport and the airport in the comparable set. The proximity score weighted beta for CIAL was determined to be **0.572651**.

Step 3: Re-levering Asset Betas of CIAL

The study re-levered the asset betas to estimate the equity betas for CIAL by assuming a target gearing ratio. The study examined the Indian infrastructure space and found that infrastructure firms employ, on average, a market debt to (debt + equity) ratio of 47.86%. The estimate is reasonably close to the 48% gearing ratio used on average by international airports compared in the study. Accordingly, the study has recommended that the average gearing ratio (D/D+E) of 48% can be used to a proxy for the gearing ratio of CIAL to estimate their Cost of Equity and Fair Rate of Return.

Using the target gearing ratio of 48%, the study re-levered the proximity score weighted (PSW) asset betas and arrived at the optimal equity beta for CIAL as **0.9427**.

Step 4: Cost of Equity (CoE)

Using the equity betas, the study computed the CoE using the CAPM. The variable used for the same are given below.

Table 196: Variables to compute Cost of Equity

Variable	Source	Value
Asset Beta (Proximity score weighted)	Analysis of the study	0.572651
Gearing Ratio (Debt/Debt+Equity)	Benchmarking conducted by the study	48%
Equity Beta	As computed by the study	0.9427
Risk-free rate	10-year GoI bonds, 18-year daily average	7.56%
Equity Risk Premium	Simple average of estimates from four studies	8.06%

The cost of equity for CIAL as recommended by the study based on the above analysis is **15.16%**.

Step 5: Computation of Fair Rate of Return (FRoR)

Based on the above, the study has illustrated the computation of FRoR by using an illustrative cost of debt of 10.05%. However, this is purely for illustrative purposes and is not a recommendation of the study.

18.4.5. Recommendations of the study

- Target Gearing Ratio: **48%**
- Cost of Equity: **15.16%**

18.5. Annexure 5 – Benchmarking with Similar Airports in India for Assessment of Suitable Terminal Allocation Ratio

Context:

Kerala is the first state in India to have four international airports. Around 6% of the population (which is more than 15% of the entire workforce) of the state works abroad providing both skilled and unskilled labour, largely in Gulf countries. Close to 90% of this non-resident Keralite population is accounted for by Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE[13]. The needs of this working-class population to visit their homes and families results in a strong demand for international air-travel to the state especially from the regions mentioned above. Emigration is strongest from the districts of Malappuram, Thrissur, Thiruvananthapuram, Kozhikode, Palakkad and Ernakulam.

At Cochin airport, a significant part of air traffic is driven by the strong state domiciled Non-Resident Indian (NRI) community residing in the Middle East and attractiveness of the state as an international and domestic tourist destination. It is also the closest airport for the large population of NRIs hailing from the districts of Thrissur, Palakkad and Ernakulam.

As observed over the last decade, the contribution of international passenger traffic in the total traffic has been significant, ranging between 50-60% till FY18. For the last couple of years, this percentage has been around ~48%. Middle east/ gulf countries accounted for most of the international passenger traffic at Cochin Airport. It can also be established based on the total international air traffic movements (ATMs) at Cochin Airport, of which about 70%[14] of the ATMs are to gulf countries.

Benchmarking Analysis:

18.5.1. In the context of Indian aviation market, the airports considered for benchmarking purposes include the following:

- Airports with similar passenger profile (passengers travelling to UAE/ gulf countries for jobs or visiting friends/ families);
- Airports having significantly high proportion of international traffic in total passenger traffic;
- Airports with comparable range of total traffic (8-12 MPPA);

18.5.2. The following table illustrates the list of airports considered for benchmarking.

Table 197: Details of airports considered for benchmarking

S.N.	Airport	State/ UT	Total Pax Traffic* (in Mn)	Remarks
1.	Trivandrum	Kerala	4.43	• Strong passenger base to gulf countries (about 70% of total international ATMs are to gulf countries)/ similar traffic profile of passengers – airport in the same state, catering to common hinterland • High proportion of international passengers in the total traffic (around 57%)
2.	Calicut	Kerala	3.36	• Strong passenger base to gulf countries (almost all international ATMs are to gulf countries)/ similar traffic profile of passengers – airport in the same state, catering to common hinterland

[13] Kannan, K.P., Hari, K.S. Revisiting Kerala's Gulf Connection: Half a Century of Emigration, Remittances and Their Macroeconomic Impact, 1972–2020. Ind. J. Labour Econ. (2020). https://doi.org/10.1007/s41027-020-00280-z

[14] This is approximated based on the assessment of latest flight schedule (Indian and international carriers) available on the website of DGCA. Similarly, the percentage is computed for other airports covered in this section.

				• High proportion of international passengers in the total traffic (around 82%)
3.	Kannur	Kerala	0.22	• Strong passenger base to gulf countries (almost all international ATMs are to gulf countries)/ similar traffic profile of passengers – airport in the same state, catering to common hinterland • High proportion of international passengers in the total traffic (around 40%)
4.	Mangalore	Karnataka	2.24	• Strong passenger base to gulf countries (almost all international ATMs are to gulf countries)/ similar traffic profile of passengers – catering to overlapping hinterland of Kerala
5.	Hyderabad	Telangana	21.40	• Strong passenger base to gulf countries (above 70% of total international ATMs are to gulf countries)/ comparable traffic profile of passengers
6.	Lucknow	Uttar Pradesh	5.53	• Strong passenger base to gulf countries (around 84% of total international ATMs are to gulf countries)/ comparable traffic profile of passengers
7.	Trichy	Tamil Nadu	1.59	• High proportion of international passengers (around 79%)
8.	Ahmedabad	Gujarat	11.17	• Total passenger traffic in comparable range with the traffic at Cochin airport
9.	Pune	Maharashtra	9.07	• Total passenger traffic in comparable range with the traffic at Cochin airport

** The details provided in this table correspond to the financial year 2019.*

18.5.3. The following table provides the details of terminal area allocated/ approved by AERA for the provision of Non-Aeronautical activities:

Table 198: Allocation of area for Non-Aeronautical activities among various airports in India

S.N.	Airport	Area towards Non-Aeronautical activities (% of total terminal area)	International Pax Traffic (% of total pax traffic)
1.	Trivandrum	10.00%	~57%
2.	Calicut	7.70%	~82%
3.	Kannur	5.00%	~40%
4.	Mangalore	9.00%	~32%
5.	Hyderabad	15.40%	~19%
6.	Lucknow	7.50%	~15%
7.	Trichy	9.89%	~79%
8.	Ahmedabad	7.50%	~19%
9.	Pune	8.63%	~3%

18.5.4. It may be noted that only 5% of the terminal area is allocated for the Non-Aeronautical activities for Kannur Airport. As per the tariff order for the Kannur Airport for the First Control Period dated 09 Nov 2018, it is observed that the Authority had tentatively accepted the allocation of assets into Aeronautical and Non-Aeronautical in the ratio of 95:5 in the absence of sufficient information and proposed to true up based on a detailed study. Hence, Kannur Airport has not been considered further for the benchmarking analysis.

18.5.5. The allocation ratios proposed by the CIAL are as follows:

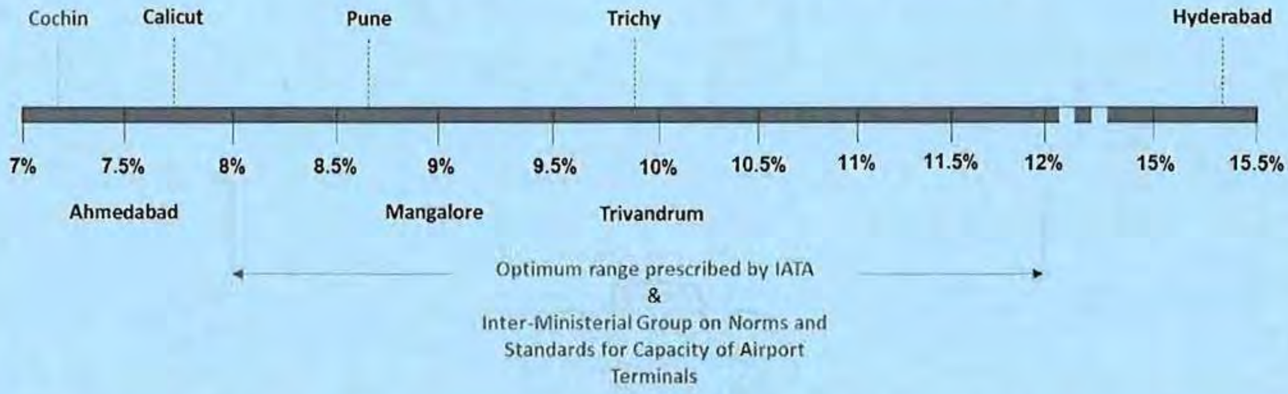
Table 199: Terminal allocation ratio proposed by CIAL

Old Terminal (Domestic)	9.00%	
New Terminal (International)	6.28%	

Total	7.19%

18.5.6. Based on the above data, the relative allocation (%) of area towards Non-Aeronautical Activities is presented below:

Figure 6: Comparison of terminal allocation ratios across select airports



18.5.7. It may be noted from the above that when benchmarked with the comparable airports (based on passenger profile, similar traffic range, etc.), Cochin Airport has been found to have proposed the least percentage allocation (average) of area for the Non-Aeronautical activities. While the allocation percentage of area for Non-Aero for Domestic Terminal (Old) appears to be in the range, the allocation for the International terminal (New) is lower, to the tune of ~6.3%. Cochin airport has close of 50% of the passenger traffic contributed by international passengers, which signals a strong potential for the Non-Aeronautical revenue at the airport. Therefore, on a benchmarking basis, the proposed allocation appears to be on the lower side.

18.5.8. Further, the report of the Inter-Ministerial Group on Norms and Standards for Capacity of Airport Terminals states that Commercial or Retail area will normally require 8-12 % of the overall area at Indian Airports and should be planned and provided accordingly. In bigger airports, i.e., with passenger traffic exceeding 10 million, commercial area could be up to 20% of the overall area.

18.5.9. Global agencies such as IATA have also prescribed an optimum range of area allocation towards Non-Aeronautical activities to be 8-12% of the total terminal area for any airport.

18.5.10. In view of the above, it is proposed that the Airport Operator is required to enhance the percentage of its international terminal area allocated towards the provision of the Non-Aeronautical services. In order to arrive at the suitable allocation percentage, following quantitative analysis has been undertaken.

<u>Quantitative analysis</u>

18.5.11. For the purpose of benchmarking Non-Aeronautical area within the terminal building, average of Non-Aeronautical area ratios within the terminal buildings of airports that are comparable with CIAL were computed. The weights used for the purpose of calculation were the proximity score of respective airports, which were calculated based on different parameters. The detailed methodology adopted for the computation of proximity scores and non-aeronautical terminal ratio based on it are as discussed below

Methodology:

18.5.12. Selection of parameters and assignment of scores: The different parameters selected (with equal weights), and the scores assigned to them are:

a. <u>Operational Proximity</u>: This parameter is composed of three components viz-a-viz; Ratio of international pax % (international pax % of an airport/international pax % of CIAL), Ratio of total pax (Total pax at an Airport/Total pax at CIAL) and Ratio of % of ATMs to middle east (% of ATMs to middle east in an Airport/% of ATMs to middle east in CIAL), where the percentage is calculated with total international ATMs as the base. This parameter is intended to measure the operational characteristics/ proximity of airports selected for benchmarking with CIAL.

- The pax numbers considered for calculation are the average of actual numbers[15] during FY 2017-FY 2019 for individual airports. The ATMs to middle east have been approximated based on DGCA's international schedule for the period 27th October 2019 to 28th March 2020.
- All the three ratios mentioned above have been calculated for an individual airport and subsequently, average has been taken. The most proximate airport would obtain a score of 2. The average of the three ratios calculated for different airports are as given in the table below

Table 200: Operational proximity of comparable airports

Airport	Ratio of % of international pax (A)	Ratio of total pax (B)	Ratio of % of ATMs to middle east (c)	Average (average of A, B and C)
Trivandrum	2.21	0.87	1.90	1.66
Calicut	3.18	0.62	2.76	2.19
Mangalore	1.37	0.43	2.76	1.52
Hyderabad	0.78	3.73	1.98	2.16
Lucknow	0.60	0.97	2.31	1.29
Trichy	3.28	0.30	0.08	1.22
Ahmedabad	0.80	1.89	2.10	1.60
Pune	0.13	1.64	2.76	1.51
CIAL	2.00	2.00	2.00	2.00

b. Ownership structure: The airports have been classified as Public and PPP/ private based on its ownership and operational model during FY 2019. The scores used for ownership structure are as given below.

Table 201: Ownership structure proximity criteria

Ownership / management structure	Score
Public	1
PPP/Private	2

The airports under consideration for benchmarking obtain the following scores as per this classification

Table 202: Ownership structure (basis status as in FY 19 [16]) proximity scores

Airport	Ownership/ Management structure	Score
Trivandrum	Public	1
Calicut	Public	1
Mangalore	Public	1
Hyderabad	PPP/Private	2
Lucknow	Public	1
Trichy	Public	1
Ahmedabad	Public	1
Pune	Public	1
CIAL	PPP/Private	2

[15] AAI Traffic News

[16] Though Ahmedabad, Lucknow and Mangalore have recently been privatised, it would not be fair to treat them as PPP/Private since significant developments are yet to be happen. Therefore, their status as in FY 2019 has been considered for this exercise.

c. Location of the airport: The airports have classified into the ones that are in Kerala and the ones located outside Kerala. This parameter provided an approximation to the similarity of passenger profile in each region. The scores assigned to the parameter for different inputs are as given below.

Table 203: Location proximity criteria

State	Score
Other states	1
Kerala	2

Accordingly, the scores for airports considered for benchmarking are as follows:

Table 204: Location proximity scores

Airport	State	Score
Trivandrum	Kerala	2
Calicut	Kerala	2
Mangalore	Karnataka	1
Hyderabad	Telangana	1
Lucknow	Uttar Pradesh	1
Trichy	Tamil Nadu	1
Ahmedabad	Gujarat	1
Pune	Maharashtra	1
CIAL	Kerala	2

Calculation of proximity score

- For an individual airport, the difference between the score obtained by CIAL and that airport for a parameter is calculated.
- The relevance or proximity score for an airport is then calculated as below

  Relevance/ Proximity score of an airport = $\sqrt{X_i^2 + Y_i^2 + Z_i^2}$

  where,

  X_i = Difference of score obtained by the airport i and CIAL in the parameter operational proximity

  Y_i = Difference of score obtained by CIAL and the airport i in the parameter ownership/management structure

  Z_i = Difference of score obtained by CIAL and the airport i in the parameter location (state)

Table 205: Relevance/ proximity scores for various airports

Airport	Operational Proximity (X_i)	Ownership/management structure (Y_i)	State (Z_i)	Relevance/ Proximity score
Trivandrum	(0.34)	1	0	1.06
Calicut	0.19	1	0	1.02
Mangalore	(0.48)	1	1	1.49
Hyderabad	0.16	0	1	1.01
Lucknow	(0.71)	1	1	1.58
Trichy	(0.78)	1	1	1.61
Ahmedabad	(0.40)	1	1	1.47
Pune	(0.49)	1	1	1.50

Calculation of weighted average terminal allocation

The allocation of total terminal area (international and domestic combined) in the case of comparable airports have been used for calculation of average allocation area for Non-Aeronautical activities. The weighted and simple average of area allocated to Non-Aeronautical activities for the comparable airports are given in the table below. Inverse of proximity scores given in the table above are considered as weights for calculation of weighted average terminal allocation.

Table 206: Weights for various airports

S. No. (i)	Name of the Airport	Weights (inverse of relevance/ proximity score) (W_i)	Area allocated for non-aeronautical activities (% total terminal area) (A_i)
$i = 1$	Trivandrum	0.947	10.00%
$i=2$	Calicut	0.983	7.70%
$i=3$	Mangalore	0.699	9.00%
$i=4$	Hyderabad	0.987	15.40%
$i=5$	Lucknow	0.633	7.50%
$i=6$	Trichy	0.620	9.89%
$i=7$	Ahmedabad	0.680	7.50%
$i=8$	Pune	0.668	8.63%
	Weighted average $= \frac{\sum_{i=1}^{8} W_i \, x \, A_i}{\sum_{i=1}^{8} W_i}$	**9.70%**	

Therefore, as per the benchmarking study, based on proximity scoring technique, it is found that the Airport Operator should allocate at least ~9.50-10.00% of its total area for the Non-Aeronautical activities.

18.5.13. **Conclusion**: The benchmarking study (proximity analysis) suggests an allocation of at least 9.50-10.00% of terminal area towards the provision of Non-Aeronautical services/ activities, whereas, the IATA and IMG norms recommend the allocation to be between 8-12%. Therefore, based on the benchmarking analysis, the Airport Operator is recommended to allocate more area for Non-Aeronautical activities in future.

18.6. Annexure 6 – List of Projects/Procurements postponed to FY 2022 on account of delays due to COVID-19

18.6.1. The details of procurements/capital projects initially proposed to be capitalised in FY 2021 but postponed to FY 2022 on account of delays due to the COVID-19 pandemic are as given below.

S.No.	Department	Sub-Category	Capex Items	Proposed Capitalisation	Classification
1	Civil	Flood Control Measures - CWIP	Flood Control Measures (Civil Works)	23.39	Aeronautical
2	Civil	Flood Control Measures - CWIP	Widening of storm water drain Avanamcode to Neduvannoor (Civil Works)	6.48	Aeronautical
3	Civil	Reconstruction of compound wall and providing concertina coils (southern side)	Reconstruction of compound wall and providing concertina coils (southern side) - Civil Works	4.20	Aeronautical
4	Civil	Service Road and other miscellaneous - CWIP	Service Road and other miscellaneous CWIP (Civil Works)	2.79	Aeronautical
5	IT		UV-C Systems - T1 & T3	2.50	Common
6	IT	Access control - CWIP	Access control & Attendance management System	2.24	Common (Employee)
7	Civil	Minor works	Minor works (Civil Works)	2.00	Common
8	Civil		Lounge Expansion in T3	2.00	Non- Aero
9	IT		Datacenter Revamp at ATC	1.00	Aeronautical
10	IT		BDDS	1.00	Aeronautical
11	IT		IT systems for Cargo revamping	1.00	Aeronautical
12	IT		Information Displays	1.00	Common
13	Electrical		Upgradation of Restaurant and other F&B at CGC - Electrical	1.00	Non-Aero
14	Civil		Commercial zone in front of Butterfly Restaurant - Civil	1.00	Non-Aero
15	Civil		Upgradation of Restaurant and other F&B at CGC - Civil	1.00	Non-Aero
16	Civil		Building & Parking near Athani - Civil	1.00	Non-Aero
17	Civil	Office complex - CWIP	Construction of new convention centre	0.99	Non-Aero
18	Civil		Commercial RO water plant	0.75	Common
19	Electrical		Additional Access platforms	0.70	Common
20	Civil	Civil works for Aerobridge Phase II - CWIP	Civil works for Aerobridge Phase II	0.59	Aeronautical
21	IT		Redundant cabling System	0.58	Common
22	Civil	PET ground Infront of fire station	PET ground Infront of fire station (Civil Works)	0.50	Aeronautical
23	Fire		Procurement of Triage equipments	0.50	Aeronautical
24	Fire		BA set air compressor and containment fill station	0.50	Aeronautical
25	Fire		Fire Alarm system in terminals and ancillary buildings	0.50	Common
26	Electrical		Commercial zone in front of Butterfly Restaurant - Electrical	0.50	Non-Aero
27	IT	Biometric - CWIP	Biometric Access Control System for AEP	0.39	Common (Employee)

28	Cargo	Vehicles	Replacing diesel tractors with electrical tractors	0.35	Aeronautical
29	Civil	CIAL quarters at Thuravumkara - CWIP	CIAL quarters at Thuravumkara	0.31	Common (Employee)
30	IT		Local Area Networking	0.30	Common
31	Fire		Procurement of Nomex fire protective jackets	0.30	Aeronautical
32	Fire		Procurement of fire and rescue equipments	0.25	Aeronautical
33	Fire		High expansion foam generator (02 Nos)	0.25	Aeronautical
34	Electrical		Building & Parking near Athani - Electrical	0.25	Non-Aero
35	Civil	Roof storage on main fire station terrace	Roof storage on main fire station terrace (Civil Works)	0.20	Aeronautical
36	IT		UPS Systems	0.20	Common (Employee)
37	Cargo		Replacing old equipments	0.20	Aeronautical
38	Cargo		Weighing Machines	0.20	Aeronautical
39	Fire		Fire extinguisher procurement to replace expired ones	0.20	Aeronautical
40	Fire		Procurement of new vehicles to replace Bolero, Gypsy, etc	0.15	Aeronautical
41	Civil	Foam filling system at Fire Station building roof for ACFTs	Foam filling system at Fire Station building roof for ACFTs (Civil Works)	0.10	Aeronautical
42	IT		Presentation Systems	0.10	Non-Aero
43	Cargo		Purchasing plastic / wooden skids	0.05	Aeronautical
44	Cargo		Software upgradation for paperless transaction	0.05	Aeronautical
		Total		**63.56**	