F. No. AERA/20010/MYTP/BIAL/CP-III/2021-22

ORDER NO: 11/2021-22

सत्यमेव जयते

AIRPORTS ECONOMIC REGULATORY AUTHORITY OF INDIA

IN THE MATTER OF DETERMINATION OF AERONAUTICAL TARIFF FOR KEMPEGOWDA INTERNATIONAL AIRPORT, BENGALURU (BLR) FOR THE THIRD CONTROL PERIOD (01.04.2021 - 31.03.2026)

DATE OF ISSUE: 28 AUGUST, 2021

AERA BUILDING
ADMINISTRATIVE COMPLEX
SAFDARJUNG AIRPORT
NEW DELHI 110 003

List of Abbreviations

Abbreviation	Expansion
AAI	Airports Authority of India
ACI	Airport Council International
AERA	Airports Economic Regulatory Authority of India
AHU	Air Handling Unit
AISATS	Air India SATS
AOC	Airline Operator's Committee
AOD	Airport Opening Date
APAO	Association of Private Airport Operators
APM	Automatic Passenger Movement
ARFF	Aviation Rescue and Fire Fighting
ARR	Aggregate Revenue Requirement
ASQ	Airport Service Quality
ASRS	Automated Storage & Retrieval System
ASSOCHAM	Associated Chambers of Commerce and Industry of India
ATC	Air Traffic Control
ATM	Air Traffic Movement
BACL	Bengaluru Airport City Limited
BAHL	Bangalore Airport Hotels Limited
BCAS	Bureau of Civil Aviation Security
BHS	Baggage Handling System
BIAL	Bangalore International Airport Limited
BMRCL	Bengaluru Metro Rail Corporation Limited
BMTC	Bangalore Metropolitan Transport Corporation
CA	Concession Agreement
CAGR	Compounded Annual Growth Rate
CCTV	Closed Circuit Television
CFT	Crash Fire Tender
CGF	Cargo, Ground handling & Fuel farm
CIC	Common Infrastructure Charges
CII	Confederation of Indian Industry
CISF	Central Industrial Security Force
CNS	Communication, Navigation and Surveillance
CP	Control Period
CPI	Consumer Price Index
CSR	Corporate Social Responsibility
CUSS	Common User Self Service
CUTE	Common User Terminal Equipment
CWIP	Capital Work in Progress
D/E	Debt/Equity
DACAAI	Domestic Air Cargo Agents Association of India
DFMD	Door Frame Metal Detector
DG	Diesel Generator
DGCA	Directorate General of Civil Aviation
DIAL	Delhi International Airport Limited

Abbreviation	Expansion
EAC	Estimate at Completion
EBITDA	Earnings before Interest, Tax, Depreciation and Amortization
ECT	Eastern Connectivity Tunnel
EIL	Engineers India Limited
EoI	Expression of Interest
ETV	Elevating Transfer Vehicles
F&B	Food and Beverages
FA	Financing Allowance
FFFAI	Federation of Freight Forwarders' Association in India
FIA	Federation of Indian Airlines
FRoR	Fair Rate of Return
FY	Financial Year
GHIAL	GMR Hyderabad International Airport Limited
GoI	Government of India
GoK	Government of Karnataka
GSE	Ground Support Equipment
GST	Goods and Services Tax
HHMD	Hand-Held Metal Detector
HIAL	Hyderabad International Airport Limited
HR	Human Resource
HRA	House Rent Allowance
HVAC	Heat, Ventilation and Air Conditioning
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICT	Information and Communication Technology
IDC	Interest During Construction
IDD	Infrastructure Development Department
IGAAP	Indian Generally Accepted Accounting Principles
IIM	Indian Institute of Management
INR	Indian Rupee
IoT	Internet of Things
IRR	Internal Rate of Return
IT	Income Tax
ITI	Industrial Training Institute
KIA	Kempegowda International Airport
KL	Kilo Litres
KSIIDC	Karnataka State Industrial and Infrastructure Development Corporation
kVA	Kilo Volt Amperes
kWH	Kilowatt Hour
LED	Light Emitting Diode
LLA	Land Lease Agreement
MABB	Menzies Aviation Bobba Bangalore Private Limited
MAG	Minimum Annual Guarantee
MAR	Main Access Road
MAT	Minimum Alternative Tax

Abbreviation	Expansion
MCLR	Marginal Cost of Funds based Lending Rate
MIAL	Mumbai International Airport Limited
MLCP	Multi-Level Car Parking
MMTH	Multi Modal Transport Hub
MoCA	Ministry of Civil Aviation
MoEF	Ministry of Environment, Forest and Climate Change
MPPA	Million Passengers per Annum
MRO	Maintenance, Repair & Overhaul
MT	Metric Tonne
MYTO	Multi Year Tariff Order
MYTP	Multi Year Tariff Proposal
NAR	Non – Aeronautical Revenue
NHAI	National Highways Authority of India
NSPR	New South Parallel Runway
O&M	Operations & Maintenance
ORAT	Operational Readiness and Airport Transfer
P&L	Profit and Loss
PBB	Passenger Boarding Bridges
PBT	Profit Before Tax
PIDS	Perimeter Intrusion Detection System
PLF	Passenger Load Factor
PMC	Project Management Consultancy
PMO	Prime Minister's Office
PSF	Passenger Service Fee
PTB	Passenger Terminal Building
PV	Present Value
RAB	Regulatory Asset Base
RBI	Reserve Bank of India
RFP	Request for Proposal
RFQ	Request for Quotation
RITES	Rail India Technical and Economic Service
RWH	Rainwater Harvesting
SAP	Systems Applications and Products
SAR	Secondary Access Road
SCP	Second Control Period
SLA	Service Level Agreement
SLM	Straight Line Method
SPOC	Single Point of Contact
SPRH	Service Provider Right Holder Agreement
SSA	State Support Agreement
STP	Sewerage Treatment System
SWAR	South West Access Road
SWM	Solid Waste Management
TCP	Third Control Period
TDSAT	Telecom Disputes Settlement and Appellate Tribunal

Abbreviation	Expansion
UDF	User Development Fee
UPS	Uninterruptible Power Supply
VDGS	Visual Docking Guidance System
VFR	Visiting family and relatives
VHT	Vapour Heat Treatment System
VIP	Very Important Person
VUP	Vehicular Underpass
WACC	Weighted Average Cost of Capital
WC	Working Capital
WPI	Wholesale Price Index
WTP	Water Treatment Plants

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1 BACKGROUND

1.1 Introduction

1.1.1 Bangalore International Airport Limited (also referred as "Bangalore Airport" or "BIAL") is one of the major airports notified by Airports Economic Regulatory Authority of India ("AERA" or the "Authority") under the provisions of the AERA Act 2008. It was formed as a joint venture of private and public sector agencies in order to develop and operate the airport. The Karnataka State Industrial and Infrastructure Development Corporation (KSIIDC), a Public sector undertaking of the Government of Karnataka (GoK) and Airports Authority of India (AAI), a Government of India (GoI) undertaking, together hold 26% equity and the strategic joint venture partners hold the remaining 74%.

1.1.2 The GoI signed a concession agreement (CA) with BIAL on 5th July 2004. The CA defined the terms and conditions under which BIAL, as a private company, is entitled to build and run the airport. The term of the concession is for a period of 30 years from the Airport Opening Date, i.e., 24 May 2008, extendable by a further period of 30 years at the option of BIAL. As per the CA, the activities of customs, immigration, quarantine, security and meteorological service will be performed by the relevant government agencies at the airport and the Communication, Navigation and Surveillance (CNS) and air traffic management (ATM) will be performed by AAI. BIAL shall, in consideration for the grant of concession by GoI, pay to GoI a fee amounting to four percent (4%) of the gross revenue annually.

1.1.3 The GoK extended a soft loan of Rs. 350 crores to BIAL as a state support for which a State Support Agreement (SSA) was executed by GoK with BIAL. Further, GoK has also provided 4008 acres of land on rent and a Land lease agreement (LLA) was also executed in this regard.

1.1.4 At the time of financial closure and commencement of construction, the initial phase of Bengaluru International Airport (renamed as Kempegowda International Airport on 17th July 2013) was designed for handling about 4.5 million passengers per annum and the project cost was Rs. 1411.79 crore. However, owing to significant increase in aviation traffic, BIAL redesigned the initial phase midway through the implementation of the project, increasing the capacity of the airport to 11.4 million passengers per annum and the project cost to Rs. 1930.29 crore. This was undertaken so that the airport, at the Airport Opening Date (AoD), had the requisite capacity to handle the aviation traffic at the required/ prescribed service levels. The additional cost was met by increase in debt from lenders. Subsequently, certain project extension works were taken up with a supplemental expenditure budget of Rs. 540 crores (which was funded partly by raising additional equity from the shareholders and partly by further additional debt from lenders) taking the total project cost to Rs. 2470.29 crores.

1.1.5 The airport commenced its operations on 24 May 2008. The shareholding pattern of BIAL as of 31st March 2021 is given below:

Table 1: Shareholding pattern of BIAL

Shareholder	Shareholding (in %)
Fairfax Holdings	54%
Siemens Project Ventures GmbH	20%
Airports Authority of India – (GoI)	13%
Karnataka State Industrial Infrastructure Development Corporation Limited (GoK)	13%
Total	**100%**

1.2 Tariff setting principles for BIAL

1.2.1 The legislature has provided policy guidance to the Authority regarding determination of tariff for aeronautical services under the provisions of the AERA Act. The Authority is required to adhere to this legislative policy guidance in discharge of its functions in respect of major airports. These functions are indicated in Section 13 (1) of the AERA Act, which reads as under:

a) "to determine the tariff for aeronautical services taking into consideration -

i. the capital expenditure incurred and timely investment in improvement of airport facilities;

ii. the service provided, its quality and other relevant factors;

iii. the cost for improving efficiency;

iv. economic and viable operation of major airports;

v. revenue received from services other than the aeronautical services;

vi. concession offered by the Central Government in any agreement or memorandum of understanding or otherwise;

vii. any other factor which may be relevant for the purposes of this Act.

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

b) to determine the amount of development fees in respect of major airports;

c) to determine the amount of passenger service fee levied under rule 88 of the Aircraft Rules, 1937 made under Aircraft Act, 1934 (22 of 1934);

d) to monitor the set performance standards relating to quality, continuity and reliability of service as may be specified by the Central Government or any authority authorized by it in this behalf;

e) to call for such information as may be necessary to determine the tariff under clause 13(1)(a).

f) to perform such other functions relating to tariff, as may be entrusted to it by the Central Government or as may be necessary to carry out the provisions of this Act."

1.2.2 Further, the Authority had issued Order No.13/2010-11 dated 12th January 2011 – "In the matter of Regulatory Philosophy and Approach in Economic Regulation of Airport Operators" (Airport Order) and "The Airports Economic Regulatory Authority of India (Terms and Conditions for determination of tariffs for Airport Operators) Guidelines, 2011" dated 28th February 2011 (Airport Guidelines). These form the guiding principles of the Authority's tariff determination methodology for Airport Operators including BIAL.

Authority's orders applied in tariff decisions in this Tariff Order

1.2.3 The Authority had issued Order No. 14/ 2016-17 on Till applicable for determination of Aeronautical Tariffs. Extract of the Order is as stated below:

"... The Authority will in future determine the tariffs of major airports under "Hybrid Till" wherein 30% of non-aeronautical revenues will be used to cross-subsidize aeronautical charges. Accordingly, to that extent the airport operator guidelines of the Authority shall be amended. The provisions of the Guidelines issued by the Authority, other than regulatory till, shall remain the same... ". Accordingly, the above order No. 14/ 2016-17 was applied by the Authority in determination of aeronautical tariffs for Second Control Period and the same order is being applied for the tariff determination for the Third Control Period.

1.2.4 The Authority had also issued Order No. 35/2017-18 dated 12th January 2018 together with Amendment No. 01 to Order No. 35/2017-18 dated 9th April 2018 detailing the useful lives of Airport Assets. The Authority has considered this Order on depreciation for BIAL effective from 1 April 2018 in the Second Control Period. The same approach is being followed in the Third Control Period.

1.2.5 The Authority issued Order No. 07/2016-17 dated 06th June 2016, in the matter of Normative Approach to Building Blocks in Economic Regulation of Major Airports – Capital Costs Reg. Normative Approach Order is applicable to BIAL as it is a major airport and will be appropriately applied by the Authority in tariff determination process.

1.3 Past Tariff determination history

1.3.1 A brief on the timeline of events for the First Control Period is as follows:

a) BIAL vide their letter no. BIAL/AERA/MYTP/2011 dated 14th September 2011, in compliance of Order of Hon'ble High Court of Delhi, submitted its MYTP proposal for the First Control Period starting from FY 2011-12 to FY2015-16 for tariff determination for the Authority's consideration on 14th September 2011.

b) Pursuant to their submission, a series of discussions / meetings / presentations were held on the proposal including discussions in respect of the financial model developed by BIAL for this purpose.

c) The Authority considered and analysed the views of various stakeholders on the proposals of the Authority on various building blocks in respect of determination of aeronautical tariff for BIAL and determined the aeronautical tariff vide its Order No. 08 /2014-15 dated 10th June 2014 in the matter of Determination of Aeronautical Tariff in respect of BIAL for the First Control Period (1st April 2011 – 31st March 2016).

1.3.2 A brief on the timeline of events for the Second Control Period is as follows:

a) BIAL made its initial MYTP submissions in March 2016 under Single Till and 30% Hybrid Till. BIAL had subsequently responded to certain queries by the Authority during the period November 2016 to January 2017. During January 2017, BIAL had submitted that BIAL was in the process of updating its Business Plan consequent to changes in design space of the proposed Terminal 2 building.

b) BIAL had submitted the updated Business plan in April 2017. Subsequently, BIAL was requested to submit complete details relating to the proposed Capital Expenditure project, which was submitted by BIAL in June 2017 – July 2017.

c) Clarifications were received from BIAL on the Business plan in January 2018 – February 2018. BIAL had submitted additional updates and submissions relating to proposed capital expenditure on 27th February 2018, 13th March 2018 and 21st March 2018. BIAL has also submitted details of accelerated / additional depreciation in April 2018.

d) The time period of MYTP submission and evaluation between 2016 and 2018 is due to changes in Management at BIAL in March 2017, changes made in Business Plan due to changes in Terminal sizing and other assets, further updates provided by BIAL on Capital Expenditure, time taken for review of the Capital Expenditure proposals by Consultant and related items.

e) Pursuant to their submission, a series of discussions/ meetings/presentations were held on the proposal including discussions in respect of the financial model developed by BIAL for this purpose;

f) Based on the Stakeholder Consultation and submissions of all stakeholders, BIAL submissions to Consultation Paper and response to stakeholder comments, the Authority passed the Tariff Order vide

Order No. 18/2018-19 dated 31st August 2018 for Second Control Period. AERA vide corrigendum dated 4th September 2018, issued a revised tariff card.

g) BIAL filed an appeal against Order No. 18/2018 – 19 in Hon'ble TDSAT vide appeal No. 8 of 2018 dated 14th March 2019. BIAL had also filed an interlocutory application, M.A. No. 449/2018 requesting for interim relief by way of staying operation of certain portion of the Order No. 18/2018 – 19 and for permitting BIAL to collect charges as per the rate card of the First Control Period.

h) Hon'ble TDSAT passed an interim order on 14th March 2019 ("Hon'ble TDSAT Interim Order"), permitting BIAL to collect UDF of First Control Period for a limited period of four months – from 16th April 2019 to 15th August 2019.

1.4 Hon'ble TDSAT directions with regards to decisions taken by AERA

1.4.1 Pursuant to BIAL's appeal against Order No. 18/2018 – 19, Hon'ble TDSAT has issued its order on 16th December 2020 for BIAL. The matters for the first and the Second Control Period raised by BIAL under its appeal and the judgement passed by Hon'ble TDSAT with regards to the same is given below.

1.4.2 AERA has looked at Hon'ble TDSAT directions and have applied the directions as applicable under the various regulatory building blocks towards tariff determination for the Third Control Period.

1.4.3 The major decisions of Hon'ble TDSAT are described below:

a) The dual/hybrid Till model for Bangalore Airport is as per request made by BIAL and accepted by AERA on the basis of directives of MoCA. Demand of FIA for single Till cannot be accepted because the directives are under Section 42 of the Act.

b) The claim of BIAL that there is additional land beyond the airport precincts and therefore, beyond the tariff determination power of the Authority cannot be accepted. Income from such land has been correctly treated as non-aeronautical revenue.

c) The claim for pre-Control Period losses as determined in various parts of Para 5 of the first tariff order and virtually reiterated in the next tariff order are set aside and the claim is remitted back to AERA for fresh consideration on its own merits and in accordance with law.

d) The claim of BIAL for 21.66% equity IRR is not found acceptable as it is not promised or guaranteed in terms of any agreement between the concerned parties.

e) The decision to impose 1% penalty by way of reduction of the value of the Terminal II Building from ARR is just, proper and within the jurisdiction of the Authority because the word 'penalty' has been used differently in a peculiar context.

f) The order that BIAL should offer explanation if the cost incurred exceeds 10% of the cost approved by the Consultant suffers from no error and is within the powers of the Regulator.

g) Grant of 10% as tax cost by way of estimate made subject to truing up does not require interference but the Authority has to be cautious that the availability of adequate cash flow also has to be kept in mind in a holistic manner.

h) Decision of the Authority in excluding Rs. 69.45 crores from the opening RAB of the First Control Period suffers from no error.

i) Challenge by BIAL to the decision of AERA to grant uniform exemption to all transit/transfer passengers transiting within 24 hours, from the payment of UDF does not merit acceptance.

j) The decisions of AERA in respect of allocation of assets as well as of expenses as aeronautical and non-aeronautical needs no interference.

k) The decision of the Authority to consider interest income as non-aeronautical revenue is correct and BIAL's claim to exclude such income altogether is not found acceptable.

l) The direction of the Authority in both the tariff orders requiring BIAL to ensure service quality at the Airport is in conformity with the performance standards as indicated in the Concession Agreement is within the jurisdiction of the Authority and requires no interference.

m) 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.

n) The treatment by the Authority in respect of Lease Rentals and Infrastructure Recovery is proper and requires no interference.

o) Issues raised by BIAL in respect of cost of debt do not require any interference with the impugned tariff orders.

p) The plea for light touch regulation has rightly not been accepted by AERA. A preliminary issue raised by BIAL as to maintainability of appeal by FIA is found to be without merits.

q) As held earlier, the plea of FIA for single Till approach cannot be accepted.

r) Due to delay in the first tariff order the recovery period got shrunk to 21 months causing unnecessary burden on the users. This needs to be avoided by AERA but for this reason the tariff order does not require any interference.

s) The grievances raised by FIA against the decisions in respect of initial RAB have no merits.

t) The decision of AERA to allow in the peculiar facts depreciation up to 100% of the value of the assets suffers from no error.

u) Allowing bad debts to be recovered as operating expenses is a bad precedent and should not be followed in future because users should not be put to penalty for no fault of theirs. However, for pragmatic reasons such decision for the First Control Period is not set aside.

v) The practice approved by AERA permitting different treatment to Airlines in respect of landing and taking-off charges and parking charges is discriminatory and impermissible. However, since it has not been carried on during the Second Control Period, hence again for practical reasons alone, the decision is not being reversed. But AERA is requested to be more cautious in such matters in the future.

1.5 Tariff submission by BIAL for 3rd Control period

1.5.1 BIAL submitted its MYTP proposal dated 24th July 2020 to AERA for the 3rd control period (FY 2022 – FY 2026).

1.5.2 The Authority has examined the MYTP submitted by BIAL and verified the data with reference to Balance Sheet and P&L account from audited financial statements of BIAL, examined the projections for the Third Control Period and raised queries / sought clarifications on the information provided by BIAL for finalizing this consultation paper.

1.5.3 BIAL has submitted the MYTP for the Third Control Period from FY 2022 to FY 2026, the document is available on the AERA website along with the Consultation Paper.

1.6 Studies commissioned by Authority

1.6.1 The Authority conducted the following studies for the purpose for its current assessment:

a) Study on allocation of Assets between Aeronautical and Non-Aeronautical Assets (refer Annexure 3 for summary of the report)

b) Study on efficient Operation and Maintenance Costs (refer Annexure 4 for summary of the report)

c) Study on determination of Cost of Equity (refer Annexure 5 for summary of the report)

1.7 Issuance of Consultation Paper and Receipt of Stakeholder Comments

1.7.1 BIAL had filed the Multi Year Tariff Proposal (MYTP) for the Third Control Period seeking revision in aeronautical tariffs. AERA had examined the points raised by BIAL in their MYTP and had published the Consultation Paper for KIA, Bengaluru for the Third Control Period on June 22, 2021 for stakeholder comments and discussion. The Consultation Paper has proposed yield per passenger (YPP) of INR 447.53 at the beginning of the Third Control Period as against BIAL's requested yield per passenger of INR 1,546.55.

1.7.2 The Authority had appointed an Independent Consultant M/s KPMG to assess the MYTP submitted by the airport operator of Kempegowda International Airport, Bengaluru. Accordingly, M/s KPMG has assisted the Authority in examining the MYTP of the airport operator and including verifying the data from various supporting documents submitted by the Airport Operator, examining the building blocks in tariff determination and ensuring that the treatment is as per Authority's methodology, approach, etc.

1.7.3 The Authority issued the Consultation Paper no. 10/ 2020-21 dated 22 June 2021 inviting suggestions/ comments from the stakeholders on various building blocks and the proposals of the Authority with the following timelines:

- Date of Issue of the Consultation Paper: 22 June 2021
- Date of Stakeholder Consultation Meeting: 9 July 2021
- Date for submission of written comments by Stakeholders: 20 July 2021
- Date for submission of counter comments: 30 July 2021

The stakeholders meeting was held on July 9, 2021 the minutes of which are published on the AERA website. Stakeholders gave their written comments post the stakeholder meeting till 20 July 2021. The consultation process concluded with the receipt of counter comments on stakeholder views from the airport operator on 30 July 2021.

1.7.4 The following stakeholders have provided their comments on the Consultation Paper whose comments are available on the AERA website:

- Bangalore International Airport Limited (BIAL)
- Chief Secretary, Government of Karnataka (GoK)
- Additional Chief Secretary, Infrastructure Development Department, Government of Karnataka (GoK)
- FIH Mauritius Investments Ltd.
- Siemens
- Mumbai International Airport Limited (MIAL)
- Association of Private Airport Operators (APAO)
- IATA

- Federation of Indian Airlines (FIA)
- Air India
- Blue Dart
- Federation of Freight Forwarders' Association in India (FFFAI)

1.7.5 The stakeholders, apart from BIAL, who have provided their comments pertaining to the mentioned regulatory building blocks are given below:

Table 2: Chapter-wise stakeholder comments on the proposals of AERA

S no.	Components impacting tariff determination for third control period	Stakeholders who have commented (apart from BIAL)
1.	True-up of pre-control period	Siemens, MIAL, APAO, IATA, FIA
2.	True-up of first control period	IATA
3.	True-up of second control period	RAB - Govt. of Karnataka, FIH Mauritius, Siemens, MIAL, APAO, FIA, IATA WACC – IATA Depreciation – FIH, Siemens, MIAL, APAO, IATA Operating Expenditure – IATA Taxation – No comments Non-aeronautical revenue – IATA Aeronautical revenue – IATA True-up of second control period – FIA
4.	Traffic projections for the Third Control Period	Govt. of Karnataka, Infrastructure Development Department (GoK), FIH Mauritius, Siemens, MIAL, APAO, IATA, FIA and DIAL
5.	Regulatory Asset Base (RAB) & Depreciation for the Third Control Period	Govt. of Karnataka, Infrastructure Development Department (GoK), FIH Mauritius, Siemens, MIAL, APAO, FIA, IATA and AOC
6.	Weighted Average Cost of Capital (WACC) for the Third Control Period	FIH Mauritius, Siemens, MIAL, APAO, IATA, FIA and Blue Dart
7.	Operating expenses for the Third Control Period	FIH Mauritius, Siemens, APAO, IATA, FIA, AOC and Blue Dart
8.	Non-aeronautical revenue for the Third Control Period	FIH Mauritius, Siemens, MIAL, APAO, IATA and FIA
9.	Taxation for the Third Control Period	IATA
10.	Working Capital Interest for the Third Control Period	IATA and FIA
11.	Inflation for the Third Control Period	-
12.	Quality of Service for the Third Control Period	IATA
13.	Aggregate Revenue Requirement for the Third Control Period	Government of Karnataka, IATA, FIA, AOC, Air India, Blue Dart, SpiceJet, Air Vistara, Air Asia, DACAAI, FFFAI

1.7.6 No inputs were received from Ministry of Civil Aviation (MoCA) as part of the Consultation process. The counter comments from BIAL and other stakeholders were received on July 30, 2021.

1.7.7 All the comments received from the stakeholders including BIAL in response to Consultation Paper no. 10/ 2021-22 are uploaded on the AERA website.

1.7.8 Based on the various observations received from the stakeholders along with revised submissions of the airport operator, Authority has examined and finalized various decisions pertaining to the regulatory building blocks based on which this tariff order is being issued.

1.8 Construct of the Tariff Order

1.8.1 The Tariff Order is structured under various chapters with this chapter listing out the background of the Authority's tariff determination. Chapter 2 lists out BIAL's submissions regarding pre-control period as part its submission for the Third Control Period. The Authority has summarized its earlier analysis and decision as per the Order of Second Control Period against each point submitted by BIAL regarding true up of the First Control Period. This is followed by the Authority's current examination and proposals regarding the true up for First Control Period as part of current tariff determination process. The same is followed by comments from various stakeholders and counter comments from the airport operator and followed by Authority's examination and Final decision on the subject matter.

1.8.2 Chapter 3 lists out BIAL's submissions regarding true up for the Second Control Period with respect to specific issues followed by a summary of the Authority's analysis and decisions regarding the various building blocks for the Second Control Period as per the Second Control Period Tariff Order pertaining to those specific issues. This is followed by Authority's current examination and proposals on the specific issues regarding the true up for the Second Control Period. This chapter also discusses the assessment and the outcome of the studies conducted by the Authority regarding asset allocation ratios between aeronautical and non-aeronautical assets and efficient cost segregation between aeronautical and non-aeronautical operating expenses. The summary of these reports is given under appendices to this tariff order. The same is followed by comments from various stakeholders and counter comments from the airport operator and followed by Authority's examination and Final decision on the subject matter.

1.8.3 Chapter 4 - 13 discuss BIAL's submissions and the Authority's examination of BIAL's submissions along with its decisions with respect to various building blocks pertaining to the Third Control Period. The same is followed by comments from various stakeholders and counter comments from the airport operator and followed by Authority's examination and Final decision on the subject matter.

1.8.4 Post the analysis and discussion on various building blocks including true up for the earlier control periods, Chapter 13 presents the revised Aggregate Revenue Requirement as determined by the Authority based on the various decisions of the Authority is presented along with the final decision in tariff for the Third Control Period in this chapter.

1.8.5 Chapter 14 summarized the key issues arising from unprecedented impact of COVID-19.

1.8.6 Chapter 15 summarizes the Authority's decisions regarding each of the building blocks.

2 REVIEW OF PRE-CONTROL PERIOD

2.1 True-up of Pre–control period

2.1.1 Pre–control period refers to the period from Airport Opening Date (AoD) to the start of First Control Period, that is, 1 April 2011.

2.1.2 The Authority in its analysis for the pre-control period has referred to the following documents:

a) Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till (1 April 2011 to 31 March 2016)

b) Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till

c) Order no. 08/ 2014-15 dated 10th June 2014 for BIAL in determination of aeronautical tariffs for First Control Period

d) Consultation Paper no. 05/ 2018-19 dated 17th May 2018 for determination of aeronautical tariffs of BIAL for the Second Control Period (1 April 2016 to 31 March 2021)

e) Order no. 18/ 2018-19 dated 31st August 2018 for BIAL in determination of aeronautical tariffs for Second Control Period

f) BIAL's letter to MoCA dated 12th November 2007 for sanction of UDF

g) MoCA's letter to BIAL dated 3rd April 2008 for ad-hoc International UDF

h) MoCA's letter to BIAL dated 9th January 2009 for ad-hoc Domestic UDF

i) BIAL's letter to MoCA dated 23rd January 2009

j) BIAL's letter to MoCA dated 18th February 2009

k) MoCA's letter to AERA dated 6th October 2009

l) BIAL's letter to AERA dated 22nd January 2010

Background on Pre-control Period as per previous Consultation Paper/ Orders for BIAL

First control period

2.1.3 The Authority noted the sequence of events related to pre-control period from Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till and Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till of First Control Period as given below:

a) BIAL requested MoCA for sanction of UDF on domestic and international passengers at Rs. 675 per departing domestic passenger and Rs. 955 per departing international passenger respectively. Refer to Appendix I.A.

b) MoCA in response granted ad-hoc UDF of INR 1070 on international passengers and ad-hoc UDF of INR 260 on domestic passengers. The Authority noted that certain information was awaited from BIAL at the time of issue of these charges. Refer to Appendix I.B.

c) BIAL in response requested MoCA for revision in domestic UDF stating "*... we consider an interim adhoc UDF amount of INR 375/- as reasonable and justifiable, pending final approval by the Ministry / Regulator...* ". Refer to Appendix I.C.

d) BIAL later reiterated its request by stating *"for a revision in the domestic adhoc UDF to at least INR 375/- per departing passenger (on par with that of Hyderabad International Airport Limited) ...".* Refer to Appendix I.D.

e) In response to BIAL's letter dated 18th February 2009 seeking revision in the approved UDF, MoCA forwarded the request for increase in UDF to AERA. Refer to Appendix I.E.

f) The Authority requested BIAL to submit requisite information and later followed up on the same. BIAL vide its letter dated 22nd January 2010 informed AERA that "*...as you may be aware, GVK has taken over the management of BIAL w.e.f. 19th January 2010. Whereas there is definitely a need for increase of UDF, BIAL would like to understand in detail the parameters for sanction of UDF in the process of being finalized by AERA. Once the parameters are understood, BIAL will submit the appropriate information at the earliest possible...*". Refer to Appendix I.F.

g) The Authority followed up on the matter and sent a reminder to BIAL on 21st September 2010 to BIAL, requesting for the submission, to which BIAL responded that:

"Kindly note that as mentioned in BIAL letter dated 22nd January 2010, BIAL would like to understand in detail the parameters of sanction of UDF. Further BIAL is in advanced stages of finalizing the Master Plan for expansion of Terminal One and construction of Terminal 2. Also, AERA is yet to come up with the guidelines for Economic Regulation in the airport. In view of the above, you would appreciate that it would be appropriate for BIAL to submit the revised computation of UDF once AERA comes up with the regulatory philosophy and guidelines for regulated charges as well as BIAL completes the Master Plan."

h) The Authority noted that when BIAL made a submission of UDF of INR 375 per pax to MoCA, BIAL would have undertaken certain methodology to compute the proposed UDF. The Authority expected BIAL to submit the information on computation of UDF for its evaluation even if the regulatory philosophy of the Authority was not finalized.

i) The Authority in its analysis of Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till and Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till also noted the following:

- Schedule 6 of the Concession agreement provided BIAL the right to charge Landing and Parking charges which could be the higher of AAI tariff effective 2001 duly increased with inflation index up to the Airport Opening Date or the then prevailing tariff at other AAI airports, BIAL had adopted the then prevailing tariff at other AAI airports, without any increase.
- Authority also noted from the contents of BIAL's letter to MoCA dated 12th November 2007 wherein BIAL had agreed to keep landing, parking charges and PSF charged unaltered in the first year of operations, as well as use non – aviation revenues to compensate (short term) deficits of the aviation segment. Refer to Appendix I.A for details.

j) The Authority also noted that under the Concession Agreement dated 5th July 2004 entered between the Government of India (GoI) and BIAL wherein the definition of UDF stated that "*...BIAL will be allowed to levy UDF, w.e.f Airport Opening Date...*". Refer Appendix I.G for the relevant details.

k) Accordingly, the Authority in Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till had considered pre-control period for the period commencing from the date of commercial operation of the airport by BIAL (24th May 2008) till the commencement of the First Control Period (31st March 2011).

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सत्यमेव जयते

l) The Authority had not considered any pre–Airport Opening Date (AoD) demand submitted by BIAL and had given the appropriate reasons in Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till

m) The Authority had made the necessary changes to BIAL's submission as given in Table 8 of Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till and calculated the Pre – control period shortfall claim as INR 33.17 cr. in Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till (Refer Appendix I.H).

n) The Authority had also analysed the Balanced sheet of BIAL for the pre – control period and noted that BIAL had made profits in the years 2009-10 and 2010-11 and the Authority had noted that these profits are sufficient to wipe out the losses of its first year of operation namely 2008-09.

o) BIAL in Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till submitted its revised computation of pre-control period losses under single till and 30% shared till amounting to INR 178.7 and INR 496.64 respectively.

p) The Authority in Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till noted the report of EIL and accordingly reduced INR 69.45 cr. from the value of the asset capitalized by BIAL in FY2009.

q) Making the necessary adjustments, the Authority had calculated the pre – control period shortfall as INR 1.88 cr. in Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till (Refer Appendix I.I for the computation).

r) The Authority had noted the response from stakeholders on pre-control period as well as the clauses in the AERA Act (Some responses and relevant extracts from AERA Act are produced in Appendix I.J).

s) Accordingly, the Authority considered only the period from 1st September 2009 till 31st March 2011 i.e. the period during which the Authority had been given the powers of determining tariffs for Aeronautical Services including UDF. Since, BIAL did not post any loss in FY2010 and FY2011, the Authority had proposed that no pre-control period shortfall claims be reckoned in case of BIAL in Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till (addendum to Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till).

2.1.4 Based on the above discussion, the Authority came out with its decision in the First Control Period order as given below:
"The Authority decides not to consider any Pre-control period losses to be reckoned in computation of Aeronautical Tariffs for the current control period."

Second Control Period

2.1.5 The relevant discussion / submissions in the Second Control Period are summarized below for the easy reference of stakeholders:

a) BIAL in its MYTP submission for the Second Control Period submitted a pre – control period shortfall of INR 1,611 cr. under recovery till the beginning of FY 2017 and computed the ARR of pre – control period under 30% shared till amounting to INR 1415.25 cr. BIAL also considered the pre – Airport opening Date losses as part of operating expenditure for the first year of pre – control period.

b) The Authority reviewed the approach followed in the First Control Period and decided to take ARR approach instead of losses into account on a 40% hybrid till considering expansion needs of BIAL and ensuring similar treatment with HIAL and giving effect to other adjustments and computed the over – recovery as INR 141.55 cr. as given in Appendix I.K.

c) The Authority also noted the stakeholder's comments based on the Authority's approach and gave relevant reasons for the same. Stakeholders comments as well Authority's responses are produced in Appendix I.L.

d) Accordingly, the Authority had decided the following in para 5.6.9 and 5.6.10 of the Second Control Period order:

- "Normally the Authority should confine its tariff determination process to the Control Period
- In case an airport operator claims that there were losses in the pre-control period, the Authority may take into consideration any shortfall in revenues from the ARR from the time of its formation i.e. 1st September 2009.
- The Authority shall consider the shortfall in revenues and not the losses as in the books of accounts.
- In case there is no shortfall, the Authority shall limit its tariff determination process only to the control period.
- This approach will imply that the over recovery as assessed for the period from September 2009 for the Second Control Period will not be clawed back and that the decision taken by the Authority in the First Control Period will be allowed to stand.
- The Authority notes that this matter is sub-judice and the Authority would take a suitable view in accordance with the orders of the Appellate Tribunal in this matter"

Analysis of Third Control Period

BIAL's Third Control Period MYTP submission w.r.t. pre-control period

2.1.6 BIAL in its submission for the Third Control Period has requested the Authority to consider the pre-control period shortfall and accordingly has submitted the following computation together with the carrying cost as at the beginning of Third Control Period as follows:

Table 3: Pre – control period shortfall with carrying cost as submitted by BIAL in its MYTP submission for Third Control Period under 30% shared till

Particulars	FY 2009*	FY 2010	FY 2011	Total
Average RAB	1,667.44	1,615.27	1,504.85	
Fair Rate of Return	9.46%	10.19%	11.20%	
Return on RAB	134.87	164.61	168.59	
WC interest	0.51	0.79	0.68	1.98
Depreciation	104.59	123.58	123.80	351.97
Opex	176.87	136.83	141.17	454.87
Tax	0.81	0.00	0.12	0.93
Less: 30% of non–aero revenues	(40.01)	(52.12)	(62.04)	-154.17
Add: Concession fee	6.82	11.73	13.37	31.92
ARR	**384.46**	**385.42**	**385.69**	**1,155.57**
Actual collections	**170.58**	**293.15**	**334.24**	**797.97**
(Under) / Over recovery	(213.88)	(92.27)	(51.44)	-357.59
(Under) / Over recovery with indexation	**(257.98)**	**(101.67)**	**(51.44)**	**-411.09**

Particulars	FY 2009*	FY 2010	FY 2011	Total
(Under) / Over recovery till beginning of CP1				-411.09
(Under) / Over recovery till beginning of CP3				-1,573.22

*FY2009 – 24th May 2008 to 31st March 2009

Authority's analysis of pre-control period

2.1.7 The Authority has carefully analysed the submissions of BIAL relating to pre-control period and the judgment given by Hon'ble TDSAT dated 16th December 2020.

2.1.8 The Authority has reviewed the pre-control period submission of BIAL and verified the data in reference to the audited financial statements of BIAL.

2.1.9 The Authority has reproduced below paras 46 and 47 of the Hon'ble TDSAT judgement dated 16 December 2020:

"Para 46 - The contention advanced on behalf of BIAL appears to have merit, especially in view of decision of this Tribunal in the case of DIAL wherein facts and figures of earlier period were considered by the AERA for tariff determination and the same was approved by taking a pragmatic view that even if the matter was to be remitted back to MoCA, the exercise of tariff determination by an expert body like AERA would be more reliable and useful. On a careful perusal of discussions made in various sub-paragraphs of Para 5 of the tariff order for the First Control Period, it is evident that the Authority was aware that MoCA had granted only ad hoc UDF charges but has further noted that since it was fixing tariff for the period from 01.04.2011, it would consider the loss, if any, only from 01.09.2009 to March 2011 when factually there was no loss. In Paras 5.29 and 5.30 it decided against the claim for a review of financial results of BIAL for the period since commencement of operations to 31.03.2011. It has declined to consider the claim for the pre-control period mainly for the two reasons which have been highlighted and challenged on behalf of BIAL.

"Para 47 - In the considered opinion of this Tribunal, it will not be proper to hold that in the exercise of its statutory powers to provide for a purposeful and good tariff order, the AERA should depend upon a direction from MoCA to look into facts relating to ad hoc rates and resultant loss, if any. Similarly, for the lapses of MoCA, if any, it will not be proper now to refer the task of looking into deficiencies in tariff formulation for the period prior to First Control Period to MoCA. The relevant facts, figures and accounts for the earlier period should have been gone into by AERA to find out whether there was any merit in the claim of BIAL. Since that has not been done, the claim for pre-control period losses as determined in various parts of Para 5 of the tariff order for the First Control Period and virtually reiterated in the next tariff order are set aside for the purpose of remitting the claim back to AERA for fresh consideration on its own merits and in accordance with law and this order."

2.1.10 The Authority understands that Hon'ble TDSAT has directed AERA to take a fresh view on pre–control period claims. The Authority has further noted that the role of the regulator which was performed by MoCA before the formation of AERA has been taken over by the Authority upon its formation. As MoCA had only approved the ad hoc UDF tariff for BIAL from 24th May 2008 onwards (Airport Opening Date) without undertaking the detailed tariff determination process for BIAL, hence, in compliance with the Hon'ble TDSAT judgement, the Authority proposes to consider the shortfall/ over-recovery of the pre-control period starting from the airport opening date, i.e., 24th May 2008 till the start of the First Control Period, i.e., 31st March 2011.

2.1.11 The Authority noted that BIAL has included an amount of INR 53.3 cr. for the period prior to the Airport Opening Date (AoD). The Authority proposes to not consider the pre-Airport Opening Date claims (i.e. INR 53.3 cr.) of BIAL based on the following:

a) BIAL being a greenfield airport, the airport was under construction/ trial run prior to 24 May 2008. Thus, the investment/ expenditure in regulatory building blocks by BIAL were not available for utilization to users/ passengers. Therefore, the users/ passengers cannot be asked to pay before availing the services offered by the airport. Further, the operational losses prior to the airport becoming operational has no logic.

b) Schedule 6 of the Concession Agreement is given below:

"BIAL will be allowed to levy UDF, w.e.f Airport Opening Date, duly increased in the subsequent years with inflation index as set out hereunder, from embarking domestic and international passengers, for the provision of passenger amenities, services and facilities and the UDF will be used for the development, management, maintenance, operation and expansion of the facilities at the Airport."

The Authority has reviewed the Schedule 6 of the concession agreement which states that BIAL's UDF shall be applicable only from the airport opening date. Further, the Authority noted that the investment in the aeronautical RAB will get capitalized from the airport opening date and consequently, the users should start paying from that date onwards. Therefore, the Authority proposes that the determination of airport charges for the pre-control period shall be determined from the airport opening date.

c) The Authority proposes to compute WACC considering the shareholders' fund and the reserves and surplus, if positive, that is, without reducing the negative reserves and surplus on account of the accumulated losses for FY 2009. Hence, the Authority proposes not to allow opening claims as of airport opening date in the shortfall computations.

2.1.12 The Authority noted that it had computed the pre-control period shortfall in the Consultation Paper no. 05/ 2018-19 dated 17th May 2018 of BIAL for the Second Control Period on 40% shared till and the Authority had not revised the computation in the Second Control Period order of BIAL. The Authority has noted that MoCA has issued a directive to the Authority to adopt 30% shared till in case of HIAL. Accordingly, the Authority had adopted 30% shared till for pre-control period and First Control Period of HIAL. The Authority, hence, considering similarity of BIAL and HIAL in terms of concession agreements proposes to adopt 30% shared till for the computation of pre-control period ARR of BIAL.

2.1.13 In line with the treatment followed by the Authority for the regulatory building blocks in the Second Control Period order, the Authority proposes to make changes to the computation of ARR submitted by BIAL for the pre-control period. These changes have been summarized in the table below:

Table 4: Changes proposed by the Authority to BIAL's computation of ARR for pre-control period

Particulars	Claim by BIAL	Proposed changes by Authority
Duration of pre-control period	Consider shortfall incurred from inception of BIAL to the start of First Control Period.	Consider the pre-control period from airport opening date (24th May 2008) to 31st March 2011 (start of First Control Period) as per the provisions of the concession agreement
Cost of Equity	23.61%	Cost of Equity is proposed as 16% which is same as the cost of equity approved for the first and Second Control Period.
Opening P&L Shortfall	Opening claims of BIAL as of 1st April 2008 – Rs. 53.3 cr. has been claimed as shortfall in FY09	The Authority proposes to compute WACC considering the shareholders' funds and the reserves and surplus, if positive.

Particulars	Claim by BIAL	Proposed changes by Authority
CGF	Consider CGF as non-aeronautical	CGF revenues considered as aeronautical as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020.
Waivers and bad debts	Included as part of opex	Waiver and bad debts excluded from the operating expenditure for computation of ARR. Hon'ble TDSAT judgement dated 16th December 2020 has also agreed to the stand of the Authority.
Adjustment to RAB as per EIL report		To adjust the opening RAB of FY 2009 as per EIL report. Hon'ble TDSAT judgement dated 16th December 2020 has also agreed to the stand of the Authority.
Bifurcation of assets		To bifurcate the asset block into aeronautical and non-aeronautical with the approach similar to the First Control Period
Utility recoveries from non – aero concessionaires		Consider utility recovery from non-aero concessionaires as non-aeronautical revenues. Hon'ble TDSAT judgement dated 16th December 2020 has also agreed to the stand of the Authority.
Real estate revenue	Not considered as part of non-aeronautical revenues	To consider real estate revenue as part of non-aeronautical revenue based on the AERA Act, 2008, AERA guidelines, concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020.
Rental income on land		Rental income considered for land given on lease to airport hotel
Interest income	Not considered as part of non-aeronautical revenues	Interest income considered fully, without excluding interest from cash received from Hotel as Deposit. Hon'ble TDSAT judgement dated 16th December 2020 has also agreed to the stand of the Authority.
Rent and land lease		Rent and land lease from aeronautical concessionaires to be considered as aeronautical revenue. Hon'ble TDSAT judgement dated 16th December 2020 has also agreed to the stand of the Authority.
Taxation	30% non-aeronautical revenues added to revenues while computing aero tax	Not considered the addition of 30% non-aeronautical revenues to the aeronautical revenues while computing aero tax (refer para 3.8.6, 3.8.7, 3.8.8 and 3.8.9)
Till		To compute ARR for the pre-control period on 30% shared till

2.1.14 Based on the above changes, the Authority proposes to evaluate the shortfall/ over-recovery in pre-control period as per the table below:

Table 5: Pre-control ARR and (Under) / Over recovery basis 30% shared till proposed by the Authority

Particulars	FY 2009*	FY 2010	FY 2011	Total
Average RAB for calculating ARR	1,563.78	1,515.38	1,412.49	
Fair Rate of Return	8.73%	9.52%	9.91%	
Return on Assets	116.63	144.20	139.93	
WC interest	0.51	0.79	0.68	1.98
Depreciation	97.81	116.05	116.27	330.13

Particulars	FY 2009*	FY 2010	FY 2011	Total
Opex	123.36	132.43	141.59	397.38
Estimated IT reimbursement	0.00	2.24	9.15	11.39
Total gross ARR	**338.31**	**395.72**	**407.61**	**1,141.64**
Less: 30% of non–aero revenues	-29.07	-32.63	-42.74	-104.44
Add: Concession fee on regulated charges	9.21	15.16	17.26	41.63
Net ARR	**318.45**	**378.25**	**382.13**	**1,078.83**
Actual revenues	**230.19**	**378.96**	**431.57**	**1,040.72**
Over/ (Under) Recovery	-88.26	0.71	49.44	-38.11
Factor till beginning of CP1	1.19	1.10	1.00	
Over/ (Under) Recovery from 24 May 2008 till 31 March 2011 as on 31 March 2011	-105.09	0.78	49.44	**-54.87**
Factor till 31 March 2016 (5 years) considering FRoR of 10.97%				**1.68**
Over/ (Under) Recovery from 24 May 2008 till 31 March 2011 as on 31 March 2016 considering FRoR of 10.97%				**-92.33**
Factor as on 31 March 2022 (6 years) considering FRoR of 11.74%				**1.95**
Over/ (Under) Recovery from 24 May 2008 till 31 March 2011 as on 31 March 2022 considering FRoR of 11.74%				**-179.73**

*FY2009 – 24th May 2008 to 31st March 2009

2.1.15 The Authority proposes to include the shortfall/ over-recovery during the pre-control period while computing the ARR for the Third Control Period.

2.1.16 The Authority understands that some stakeholders may seek legal remedy against the proposal of the Authority related to pre-control period shortfall claims for BIAL. This proposal of AERA is thus subject to the outcome of any such litigation.

2.2 Stakeholder comments regarding pre-control period

2.2.1 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. 10/ 2021-22 with respect to the pre-control period. The comments given by the stakeholders are presented below:

BIAL's comments on pre-control period

2.2.2 The comments from BIAL with regards to the pre-control period are given below:

TSDAT Judgement

- *TDSAT, in its judgement dated 16 December 2020, had directed AERA to look into the entire pre-control period for consideration on merits and in accordance with law.*

Background of BIAL's Financial results Pre – AOD

- *BIAL is a special purpose vehicle established for the purpose of developing an international airport at Bengaluru. MoCA and KSIIDC are shareholders holding 13% each and with directors on the board of BIAL.*
- *All expenses have been incurred by BIAL for the sole purpose of creating airport infrastructure. As a matter of principle, all costs and expenses incurred for creating airport infrastructure have to be recouped and this inevitably, in any business concern, would have been recouped through costs of product/services. It is requested that the underlying principle that all costs and expenses incurred for creating airport infrastructure be applied irrespective of nomenclature.*
    - *BIAL started operations on 24th May 2008, much before AERA came into existence. BIAL had suffered financial losses in the first year of operations, on account of inadequate tariff.*
    - *Additionally, BIAL has also incurred losses of Rs. 53.3 crores upto the Financial year ending 31st March 2008. This was on account of non-capitalization of certain expenses due to the then prevailing accounting standards. Hence, these expenses had to be charged to the P&L statement and this resulted in loss on the opening date of the Airport.*
    - *While the Authority has considered the losses incurred by BIAL in the 1st year of operations, it has not considered the losses (Rs. 53.3 crores mentioned above), which are prior to the Airport Opening Date.*

Accounting Principles governing the Financial Reporting

- *Expenses incurred upto FY 08 and debited in the P&L account up to the commencement of commercial operations of the Airport (AOD) include costs relating to Salaries, Legal / Professional Fees, Travel, Overheads etc. These expenses are reflected in the Audited Financial Statements of the respective years and the same was also submitted to the Authority for consideration.*
- *As per the then existing extant accounting requirements, all the expenditures incurred prior to the commencement of commercial operations of the Airport, which are directly related to the Projects are capitalized by specifically allocating the cost to the respective projects. Other incidental expenditures, which cannot be directly related to construction activity and mainly in the nature of administrative costs such as Payroll of administrative staffs, Legal & professional charges, Advertisement/Corporate expenses, Travelling etc. are recognized as expense as and when incurred and shown under Net Losses during the pre-AOD period.*
- *Relevant paragraphs from Accounting Standard 10 pronouncements relating to cost items that can be capitalized and those that cannot be capitalized are as given below:*

<u>Elements of cost</u>

- *The cost of an item of property, plant and equipment comprises:*

  (a) its purchase price, including import duties and non –refundable purchase taxes, after deducting trade discounts and rebates.

  (b) ***any costs directly attributable to bringing the asset to the location and condition*** *necessary for it to be capable of operating in the manner intended by management.*

- *Examples of directly attributable costs are:*

(a) costs of employee benefits (as defined in AS 15, Employee Benefits) arising directly from the construction or acquisition of the item of property, plant and equipment;

(b) costs of site preparation;

(c) initial delivery and handling costs;

(d) installation and assembly costs;

(e) costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment); and

(f) professional fees.

- *Examples of costs that are not costs of an item of property, plant and equipment are:*

  (a) costs of opening a new facility or business, such as, inauguration costs;

  (b) costs of introducing a new product or service (including costs of advertising and promotional activities);

  (c) costs of conducting business in a new location or with a new class of customer (including costs of staff training); and

  (d) administration and other general overhead costs.

- *The principle followed, in line with the above standards, is explained and disclosed under the Notes to accounts in the Financial Statement of FY 09. Financial statements have been submitted to the Authority as part of responses to queries raised. The relevant extracts from the submitted Financial statements are reproduced below.*

(viii) Incidental Expenditure during Construction Period

Incidental expenditure during construction period (net of related income arising during that period) directly related to the project, incurred prior to commencement of commercial operations is carried forward and allocated to the extent identifiable with any particular fixed asset else it has been allocated to various fixed assets in proportion to their cost on commencement of commercial operations. Incidental expenditure not related to construction, and corporate expenses are recognised as expense when incurred.

SCHEDULE TO ACCOUNTS

17. NOTES ON ACCOUNTS

Rs.000

2. The expenses charged to the Profit and Loss Account up to the AOD, in accordance with the relevant accounting standards/ pronouncements relate to the following categories:

   (a) Expenses that do not meet the criteria for recognition of an intangible asset;
   (b) Incidental Expenditure not related to construction of the project; and
   (c) Expenditure incurred owing to the corporate status of the Company (i.e., Corporate expenses).

- *BIAL notes that AERA has commented that Operational Expenses before Airport became operational has no logic. BIAL submits that these were actual costs incurred by BIAL at the time of setting up of the Airport facilities for the beneficial use of the Airport users in future, which could not be capitalized as per the extant accounting principles. Such costs are normally incurred at the time of setting of large Infrastructure facilities. Accounting treatment given to these costs were exactly in compliance to the applicable accounting standards as mandated under the Companies Act and hence the same cannot be construed as not being logical.*

Recovery under regulatory principles

- *Being a regulated entity, any loss / costs incurred can only be recouped through the tariff mechanism of the subsequent periods. Denial of this recouping mechanism is against principles of natural justice to BIAL, as the loss is on account of compliance to prevalent accounting standards and not otherwise. Also, AERA's principles of True up mechanism adequately provide for recovery of costs/ shortfalls of the past periods in the future tariff years.*
- *If these costs were not expensed off but added to the Asset Base, as per Authority's extant guidelines, the cost would have been recouped in the form of depreciation and also provided a Fair Rate of Return. On the contrary, BIAL has only requested for recoupment of the expenses incurred without any additional return on it, and hence BIAL requests the Authority to include this as a part of Pre-Control period losses.*
- *BIAL notes that the Authority has specified about the costs not benefitting the users/ passengers and that as per the Concession Agreement, the users have to pay only from the day the Airport is put to use. BIAL was incorporated only for the purpose of building and running the Kempegowda International Airport and hence the costs incurred are related to the said activity only. Due to prevalent accounting standards, substantial portion of costs were capitalized whereas a small portion of cost was charged off to the P&L. All these costs have been incurred towards construction of the airport facilities and such costs incurred by every Corporate Entity. This has also been explained in Direction 5 – Authority's guidelines, as given below.*
- *Direction 5 – Authority's guidelines itself provide the framework and recognizes that certain costs may be capitalized to Projects and certain other costs could be considered as part of the P&L (not capitalized). BIAL has exactly followed the same to comply with the extant accounting standards and guidelines applicable. The list below in Direction – 5 also includes different categories of costs viz Legal Fee, Consultancy charges etc., Personnel costs not capitalized to Projects etc., similar costs are considered by BIAL as a charge to its P&L statement.*

(d) Payroll costs related to capital projects shall be submitted separately.

A5.5.5.3. **Administration and general expenses** - Airport Operator(s) shall submit, in specified **Form F11(c)**, as under:

(a) all general **administration and** corporate costs, including break-up of all expenses related thereto:

(b) Provided that the said costs shall be further segregated as :

(i) Administration charges, including director's sitting fees, communication expenses, travelling and conveyance, advertisement, office maintenance, printing and stationery, **other allocated overhead expenses.**

(ii) Legal and Auditor's Fees

(iii) **Consultancy and advisory expenses**

(iv) Other charges including land lease rent, insurance costs, miscellaneous expenses

(c) Copy of Board approvals, consultancy, legal, and other contracts, insurance documents, rent agreements and other relevant documents shall be submitted as proof thereof.

(d) Costs related to capital projects proposed to be capitalized shall be submitted **separately.**

MOCA's ad hoc tariff determination

- *BIAL is a Special Purpose Vehicle Company which was incorporated on 5th January 2001 for implementation of Greenfield airport at Devanahalli on a Build Own Operate and Transfer (BOOT) model under Public Private Participation (PPP) basis.*
- *All expenses incurred before the Airport Opening Date are only for the purpose mentioned above. The expenses in question are in the nature of pre-operative expenses. Substantial portion of this was capitalised into Project cost, while the remaining portion, on account of prevailing accounting Standards, was taken to the P&L account. As these expenses were charged to the P&L statement, this reflected as loss as on the opening date of the Airport. The nature of expenses has not changed and only treatment in the books has changed.*
- *Further, BIAL had also incorporated these Expenses charged to the P&L, while submitting the tariff proposals to MOCA. Based on these submissions, MOCA had granted ad-hoc tariff (domestic and International) to BIAL.*
- *The Authority has been directed by TDSAT to consider true up for the entire pre-control period. The Authority's interpretation of not considering pre-AOD period is incorrect and is against TDSAT Judgement.*

Summary

- *The Accounting standards form the bedrock of Financial statement reporting and is to be strictly followed by all companies established in India. These standards are mandated by the pronouncements of Ministry of Corporate Affairs.*
- *BIAL has followed the accounting treatment as per the applicable accounting standards.*
- *BIAL cannot be penalized for following the standards and the law of the land.*

- *These are real expenses incurred by BIAL for setting up the airport facilities and hence has to be reimbursed to BIAL.*
- *BIAL has no other means of recovery of these costs other than through true up of the ARR.*
- *BIAL believes that the tariff period can be classified into the following blocks:*
- *Airport Opening Date – 24.05.2008 to 01.01.2009 (i.e. Notification of AERA Act)*
- *01.01.2009 to12.05.2009 (i.e., establishment of AERA)*
- *12.05.2009 to 01.09.2009 (i.e., notification of powers of AERA) (including Section 13)*
- *01.09.2009 to 01.04.2011 (i.e., first tariff period commencement)*
- *Accordingly, the Authority can consider, for the period prior to establishment and notification of powers under AERA Act (period prior to 01.09.2009), the reference basis for the Authority to be at the least, the provisions of the Concession Agreement. The concession agreement is a self-contained and detailed document, giving necessary and appropriate provisions for tariff determination.*
- *BIAL had also submitted in the past, the basis of all expenditure (capital and operating) from the time its incorporation and considering that BIAL is a SPV incorporated only for the purposes of development of KIAB and BIAL did not undertake any other activity other than development related activities of KIAB. Hence, BIAL once again requests and pleads that this expenditure needs to be taken into consideration for the purposes of pre-control period shortfall.*

Legal remedy available to stakeholders

- *BIAL has noted AERA's comments that certain stakeholders may seek legal remedy on Authority's proposals on Pre-control period losses. BIAL believes that this remark of Authority is avertable and renders no meaning for the purposes of Consultation paper.*
- *AERA is an independent regulator who determines tariff as per the applicable regulatory principles and its own analysis. The Authority has clearly included a section in the Consultation Paper regarding TDSAT order and the consequential action being proposed by the Authority.*
- *It is well within the knowledge of every stakeholder regarding legal remedies available under applicable law and BIAL believes that there is no reason to include such statements in the Consultation Paper.*
- *BIAL believes that the above referred AERA's statement may be construed as tacit encouragement to certain stakeholders to avail legal recourse against the stated Authority's proposal made in the Consultation Paper.*
- *We request the Authority to withdraw this paragraph from the Consultation Paper as this may be mis interpreted to colour the Authority's' intentions.*

Adjustments made in computation of Pre-control period shortfall

- *Table 3 of the Consultation Paper lists down the various aspects of the Building Block wherein the Authority has made adjustments based on its Principles. BIAL once again requests AERA to consider the principles based on submissions and explanations provided by BIAL on these based on the MYTP documents / submissions made in previous control periods.*
- *BIAL also submits that Authority has considered Notional lease rentals on Hotel from the Airport Opening date. BIAL wishes to inform that the hotel became operational only in September 2016*

and we fail to understand how a notional lease rental can be prescribed for an asset which was not even in operation in the said period of time. BIAL's submissions on the same is detailed in the appropriate section on notional lease rentals.

- *BIAL's submission on Treatment of 30% subsidization from Non-Aeronautical Revenues to be considered as Taxation is elaborated in other section.*

Other stakeholder comments on pre-control period

2.2.3 Siemens commented as follows on Pre-AoD losses and notional lease rent from BAHL as follows:

- *"BIAL started operations on 24th May 2008, much before AERA came into existence. BIAL has also incurred losses of Rs. 53 crores, prior to the date of airport opening, on account of non-capitalization of preliminary expenses due to the then prevailing accounting standards.*

  Being a regulated entity, this loss can only be recouped through the tariff mechanism for the subsequent period.

  Denial of this recouping mechanism is against principles of natural justice to BIAL, as the loss is on account of accounting standards and not because of BIAL.

  AERA is requested to consider pre-AOD losses as per the direction of TDSAT and not resort to partial consideration of pre-control period losses"

- *"AERA has proposed considering notional lease rentals for the land leased to BAHL and treat the same as non-aeronautical revenue, from the date of Airport opening (24th May 2008). The hotel at the Airport started commercial operations only on 30th Sep 2016 and it is not logical to apply any lease rentals before this date. AERA is requested not to apply any notional lease rentals from BAHL for the period prior to hotel operations start date."*

2.2.4 MIAL commented as follows on the notional lease rent from BAHL:

- *"The Authority has proposed to consider a notional lease rental from Bangalore Airport Hotels Limited (BAHL) from the Airport opening date i.e. 24.05.2008, while the hotel was under construction in initial years and started operations only in 2016-17 and no rental was received by BIAL. The Authority is requested to not consider notional lease rentals for the tariff determination."*

2.2.5 APAO commented on the Pre-AoD losses and consideration of notional lease rent as follows:

- *"BIAL started operations on 24th May 2008, much before AERA came into existence. BIAL had suffered losses in the first year of operations, on account of inadequate tariffs. Additionally, BIAL has also incurred losses of Rs. 53 crs, prior to the date of airport opening (FY 2006-2008). This was on account of non-capitalization of preliminary expenses due to the then prevailing accounting standards. Hence, these expenses had to be charged to the P&L statement and this resulted in loss on the opening date of the Airport. The same is reflected in the annual reports of BIAL also in the respective years.*

  TDSAT, in its judgement dated 16 December 2020, had directed AERA to look into the entire pre-control period for consideration on merits. While the Authority has considered the losses incurred by BIAL in the 1st year of operations, it has not considered the losses (Rs 53 crs mentioned above), which are prior to the Airport Opening Date.

  Being a regulated entity, this loss can only be recouped through the tariff mechanism for the subsequent period. Denial of this recouping mechanism is against principles of natural justice to BIAL, as the loss is on account of accounting standards and not because of BIAL.

The Authority is requested to consider pre-AOD losses as per the direction of TDSAT and not resort to partial consideration of pre-control period losses."

- *"We have observed that the Authority has proposed to consider a notional lease rental from BAHL (100% subsidiary of BIAL) from the Airport opening date. It is a matter of fact that the Hotel started operations only in 2016-17 and we are unable to understand as to how AERA can ascribe lease rentals to an asset for the period when it was not even operational and was actually in various stages of construction.*

  In light of the above, we would request AERA to re-examine the issue of charging notional rentals for the period when the said asset itself was not operational and not consider them for tariff determination."

2.2.6 IATA agrees with Authority's approach on pre-control period and commented as follows:

- *"IATA noted the proposal by AERA on the treatment of shortfall/over-recovery of the pre-control period and fully support the decision to reject pre-airport opening date accumulated losses for the reasons mentioned in the consultation paper. This will also better reflect the cost-relatedness principle outlined by ICAO.*

  It is extremely unfortunate that AERA is calculating the under-recovery based on 30% hybrid till approach"

2.2.7 FIA commented as follows:

- *FIA submits that AERA was established by the Central Government through its Notification dated 12.05.2009. Further, Chapter 3 of the Airports Economic Regulatory Authority of India Act, 2008, as amended (AERA Act) which stipulates the powers and functions vested in the AERA inter alia including determination of Aeronautical Tariff, was notified on 01.09.2009.*

  Accordingly, AERA cannot retrospectively determine the BIAL's Aeronautical Tariff when the aeronautical tariff for the period prior to its formation was being determined by the Ministry of Civil Aviation (MoCA) on an ad hoc basis.

  Without prejudice to the above, it is submitted that passengers/airlines travelling cannot be burdened unnecessarily on account of the losses suffered by the BIAL prior to the First Control Period. It is a settled position of law that (a) future consumers cannot be burdened with additional costs as there is no reason why they should bear the brunt; and (b) the regulatory authority is required to take into consideration the efficient working of a utility as also the interests of the consumers while deciding the claims of the utilities. AERA being a creation of the statute is duty bound to balance the interest of all the stakeholders and consumers in terms of the AERA Act.

  In view of the above, FIA requested AERA to kindly disregard/exclude claims of pre-control period losses claimed by BIAL.

  Without prejudice to the above, it may be noted that true up of pre-control, if considered by AERA, should be done on Single Till instead of 30% Shared till."

2.3 BIAL's response to stakeholder comments regarding pre-control period

2.3.1 On IATA's comments regarding pre-control period, BIAL has submitted as follows:

- *"BIAL started operations on 24th May 2008, much before AERA came into existence. BIAL has also incurred losses of Rs. 53.3 crores upto the Financial year ending 31st March 2008.*

This was on account of non-capitalization of certain expenses due to the then prevailing accounting standards. Hence, these expenses had to be charged to the P&L statement and this resulted in loss on the opening date of the Airport.

Expenses incurred upto FY 08 and debited in the P&L account, up to the commencement of commercial operations of the Airport (AOD), include costs relating to Salaries, Legal / Professional Fees, Travel, Overheads etc. These expenses are reflected in the Audited Financial Statements of the respective years and the same was also submitted to the Authority for consideration.

BIAL submits that these were actual costs incurred by BIAL at the time of setting up of the Airport facilities for the beneficial use of the Airport users in future, which could not be capitalized as per the extant accounting principles. Such costs are normally incurred at the time of setting of large Infrastructure facilities. Accounting treatment given to these costs were exactly in compliance to the applicable accounting standards as mandated under the Companies Act.

Being a regulated entity, any loss / costs incurred can only be recouped through the tariff mechanism of the subsequent periods. Denial of this recouping mechanism is against principles of natural justice to BIAL, as the loss is on account of compliance to prevalent accounting standards and not otherwise. Also, AERA's principles of True up mechanism adequately provide for recovery of costs/ shortfalls of the past periods in the future tariff years.

If these costs were not expensed off but added to the Asset Base, as per Authority's extant guidelines, the cost would have been recouped in the form of depreciation and also provided a Fair Rate of Return. On the contrary, BIAL has only sought for recoupment of these expenses, and hence BIAL requests the Authority to include this as a part of Pre-Control period losses.

All these costs have been incurred towards construction of the airport facilities and such costs are incurred by every Corporate Entity. This has also been explained in Direction 5 – Authority's guidelines. Direction 5 – Authority's guidelines itself provide the framework and recognizes that certain costs may be capitalized to Projects and certain other costs could be considered as part of the P&L (not capitalized). BIAL has exactly followed the same to comply with the extant accounting standards and guidelines applicable.

BIAL cannot be penalized for following the standards and the law of the land. BIAL has no other means of recovery of these costs other than through true up of the ARR.

Hybrid Till has been adopted by AERA, pursuant to NCAP 2016 and BIAL is in agreement with the same."

2.3.2 On FIA's comments regarding pre-control period, BIAL has submitted as follows:

- *"AERA has considered the same based on TDSAT order. Also, it has only partially implemented the TDSAT order as detailed by BIAL in response to the Consultation Paper. We request the Authority to consider our responses to Consultation Paper and factor the pre-AOD losses also in the computation of Pre-control period losses."*

2.4 Authority's examination after reviewing stakeholder comments on pre-control period

2.4.1 The Authority has carefully reviewed the comments received from BIAL and other stakeholders on the pre-control period.

2.4.2 To summarize, BIAL has submitted the following in response to the pre-control period proposal by AERA:

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- BIAL was established for developing the airport at Bengaluru. BIAL had incurred expenses prior to the airport opening date (opening claims) which consist of expenses such as salaries, legal/professional fees, travel, overheads etc. These expenses have been incurred for the purpose of creating airport infrastructure and have been charged to the P&L due to the then prevailing accounting standards.
- BIAL is a regulated entity and any loss/cost incurred can be recouped through the tariff determination mechanism only.
- Direction 5 of the Authority's guidelines provide a framework for recognizing costs that may be capitalized and other costs that can be considered part of the P&L and hence not capitalized. The categories included in this direction include payroll costs, admin and general expenses etc.
- BIAL has requested for reimbursement of the expenses incurred without any additional return on it.
- MoCA had fixed only the ad-hoc tariff and as per TDSAT order, the Authority has been directed to consider the pre-control period based on merits.
- To consider the principles for determining the pre-control period shortfall claims as per BIAL's MYTP submission.
- The Authority should not consider notional lease rent from hotel from the Airport opening date as the hotel became operational only in September 2016.

2.4.3 The Authority noted from BIAL's submission as well as the comments from Siemens and APAO that BIAL was unable to capitalize Pre – Airport opening expenses due to the then prevailing accounting standards, and hence, had expensed these costs to the P&L. The Authority also noted BIAL's reference to the Direction 5 of the Authority's guidelines regarding capitalization and non-capitalization of various costs. The Authority accordingly reviewed and analyzed Accounting Standard 10 and Direction 5 of its guidelines. The Authority is of the view that though the accounting standards and Direction 5 allow the airport operator to expense the costs not related to construction activity as part of the P&L, however, if the investment in the building block is not available for utilization to the users/passengers, they cannot be asked to pay for the same. Since, BIAL started its operations on 24th May 2008, any claims prior to the airport opening has no logic. The Authority had also elaborated the same as part of its decisions in the first and second control period order as well as in the proposal presented in Consultation Paper no. 10/2021-22 for the Third Control Period for BIAL. The same are reproduced below:

Consultation Paper for the First Control Period
"The Authority proposes to compute WACC considering the full value of Equity invested (without reducing the Accumulated losses). Hence, the Authority proposes not to allow accumulated losses as of Airport opening date (i.e Rs. 53.3 Crores) to be added to the shortfall computations."

Second Control Period Order
"5.6.9.3 The Authority shall consider the shortfall in revenues and not the losses as in the books of accounts"

Consultation Paper for the Third Control Period
a) BIAL being a greenfield airport, the airport was under construction/ trial run prior to 24 May 2008. Thus, the investment/ expenditure in regulatory building blocks by BIAL were not available for

utilization to users/ passengers. Therefore, the users/ passengers cannot be asked to pay before availing the services offered by the airport. Further, the operational losses prior to the airport becoming operational has no logic.

b) Schedule 6 of the Concession Agreement is given below:

"BIAL will be allowed to levy UDF, w.e.f Airport Opening Date, duly increased in the subsequent years with inflation index as set out hereunder, from embarking domestic and international passengers, for the provision of passenger amenities, services and facilities and the UDF will be used for the development, management, maintenance, operation and expansion of the facilities at the Airport."

The Authority has reviewed the Schedule 6 of the concession agreement which states that BIAL's UDF shall be applicable only from the airport opening date. Further, the Authority noted that the investment in the aeronautical RAB will get capitalized from the airport opening date and consequently, the users should start paying from that date onwards. Therefore, the Authority proposes that the determination of airport charges for the pre-control period shall be determined from the airport opening date.

c) The Authority proposes to compute WACC considering the shareholders' fund and the reserves and surplus, if positive, that is, without reducing the negative reserves and surplus on account of the accumulated losses for FY 2009. Hence, the Authority proposes not to allow accumulated losses as of airport opening date in the shortfall computations.

2.4.4 Accordingly, the Authority sees no reason in changing its proposal taken as part of the Consultation Paper no. 10/ 2021-22 for the Third Control Period for BIAL.

2.4.5 The Authority also noted the comments from various stakeholders on the treatment of notional lease rental from BAHL where the stakeholders have requested the Authority to have a relook at the notional lease rentals from hotel as it started operations only in FY 2016-17. The Authority had elaborated reasons for considering rental income from the airport hotel in Consultation Paper no. 05/2018-19 for the second control period and as there is no change in situation, the Authority decides to consider the notional lease rentals from airport hotel from airport opening date.

2.4.6 The Authority also noted comments from IATA on the Authority's approach on the pre-control period as the same is in line with the cost-relatedness principles of ICAO. The Authority is of the view that if the investment/expenditure in regulatory building block is not available for the utilization to users/passengers, they should not be asked to pay before availing those services at the airport.

2.4.7 The Authority also noted comments from FIA requesting the Authority to balance the interest of all the stakeholders and exclude claims of pre-control period losses claimed by BIAL. The Authority's proposal to consider the pre-control period is based on the Hon'ble TDSAT order dated 16th December 2020 where FIA was also a party in the decision-making process. The Authority also notes that the stakeholders can still seek legal remedy against the proposal of the Authority related to pre-control period for BIAL.

2.4.8 The Authority has taken note of the comments given by IATA and FIA on the "till" to be adopted for the calculation of the pre-control period. The Authority had stated the reasons for computing pre-control period ARR on 30% shared till in Para 2.1.12 of the Consultation Paper no. 10/2021-22 and accordingly sees no reason to change its decision.

2.4.9 Having regards to all the above factors and the comments from various stakeholders, the Authority has re-examined its approach to the claim of BIAL for the pre-control period shortfall claims and decides on the following:

- To consider the pre-control period from airport opening date (24 May 2008) till the start of the First Control Period (31 March 2011)

- To undertake the changes proposed in Table 4 while computing the under/ over-recovery of the pre-control period.
- To carry forward the under/ over-recovery amount computed in Table 5 for the pre-control period to the 3rd control period.

2.5 Authority's decisions regarding pre-control period

Based on the material before and its analysis, the Authority has decided the following with regards to the pre-control period:

2.5.1 To consider the pre-control period from airport opening date (24 May 2008) till the start of the First Control Period (31 March 2011)

2.5.2 To undertake the changes proposed in Table 4 while computing the under/ over-recovery of the pre-control period.

2.5.3 To carry forward the under/ over-recovery amount computed in Table 5 for the pre-control period to the 3rd control period.

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3 TRUE UP FOR THE SECOND CONTROL PERIOD

3.1 Issues raised by BIAL pertaining to true up for the Second Control Period

3.1.1 BIAL has raised the following issues relating to the Second Control Period for true up as part of their MYTP submission:

a) Regulatory Asset Base

b) Weighted Average Cost of Capital

c) Aeronautical Depreciation

d) Operational expenses

e) Treatment of various items under non–aeronautical revenues

f) Aeronautical taxes

3.1.2 For each of the issues raised by BIAL, the Authority has looked at the decisions taken at the time of tariff determination for the Second Control Period and has then proceeded to examine the same as part of the tariff determination for the current Control Period.

3.1.3 The Authority proposes to examine the true up for Second Control Period, issue wise, in the following manner:

a) Recording and understanding of the true-up as put forth by BIAL in its submission

b) Recap of decision taken by the Authority for each item of true-up at the time of tariff determination for the Second Control Period

c) Authority's examination and proposal regarding each item of true-up as part of tariff determination for the current control period.

3.2 Authority's analysis of true up for Second Control Period

3.3 True up of Regulatory Asset Base (RAB)

BIAL's submission for true up of regulatory asset base

3.3.1 The Authority had approved a capital expenditure of INR 9,307 cr. as part of tariff determination order of BIAL for 2nd control period (Order no. 18/2018-19 dated 31 August 2018). BIAL has submitted that, the expansion projects cost estimates submitted in the Second Control Period MYTP by BIAL & reviewed by RITES includes the capitalization of certain projects in FY22, that is, beyond Second Control Period and the same was not covered in Table 27 of Order 18/2018-19 dated 31 August 2018, however these details are covered in Table 25 of Order 18/2018-19 dated 31 August 2018 by the Authority.

3.3.2 BIAL has submitted the breakup of total infrastructure cost amounting to INR 9,307 cr. as approved by the Authority in the Second Control Period order. The break-up of this capex cost is detailed below:

Table 6: Reconciliation of Table 25 with Table 27 of Second Control Period Order No. 18/2018-19 dated 31 August 2018 as per BIAL

S no	Particulars	Amount (in INR cr.)
1	Expansion projects approved on the basis of RITES report and savings submitted by BIAL	8167
2	GST @ 4% included to the Project cost	327
3	**Total Expansion project cost including GST**	**8,493**
4	Sustaining capex – I & II, Terminal refurbishment & Forecourts	310
5	Special repairs & refresh capex	1,219
6	**Total cost**	**10,023**
7	Expansion projects excluded in Table 27 of Order 18/2018-19 as the same is getting capitalized after Second Control Period	715
8	**Total capex cost approved by AERA to be capitalized in Second Control Period**	**9,307**

3.3.3 BIAL has submitted the estimated cost at completion for expansion projects which includes projects getting capitalized after the Second Control Period.

3.3.4 The approved costs submitted by BIAL includes 4% GST amounting to INR 327 cr. and approved expansion projects amounting to INR 8,167 cr. totaling INR 8,493 cr.

3.3.5 Some projects which were approved in the SCP order have been deferred by BIAL. BIAL has not proposed these projects in TCP. These are accordingly been reduced from the approved cost by BIAL. The details of these projects are given below:

Table 7: Details of projects which were approved in SCP order by Authority but deferred by BIAL

S no	Particular	Description	Amount (in INR cr.)
1	South parallel taxi extension to eastern boundary and Aircraft Maintenance	*As a long-term strategy, BIAL had identified land for MRO on the East parcel of the airport along with associated infrastructure i.e. taxiway connecting to the land parcel. However, based on the demand from airlines and MRO service providers, it was decided that this MRO/Hanger facility will be located in the Western side of the airport, adjacent to existing cargo buildings. Hence, the decision was taken to not execute this project in the current control period.*	56
2	Taxibots Infrastructure & Additional GSE Parking	*Timely availability of Taxibot was an issue considering the fact that it is being manufactured by very few vendors internationally and there is no production line in India yet. Hence, this Project could not be implemented in Second Control Period.* *Originally, GSE parking (approx. 4 acres) was identified during 2017 along with Taxibots requirement. It was felt that GSE parking area was not adequately covered in the original scope and hence an additional approx. 8000 sqm was added. However, upon reassessment now, the requirement is being deferred.*	63
3	Airport maintenance	*The expansion of Airport maintenance facilities is required to support NSPR and it is segregated into three functional areas - airside facility, landside facility and the E&M yards (i.e.*	98

S no	Particular	Description	Amount (in INR cr.)
		central warehouse/ storage).The Airside and Landside facilities are located adjacent to the South ARFF and existing CISF barrack and E&M yards (i.e. central warehouse / storage) are located on the north-west portion of KIA. However, due to weak demand arising out of COVID-19 outbreak, BIAL has decided to accommodate landside maintenance facility temporarily inside T2 basement. Hence, this has been decided not to be executed in this current control period.	
4	Airport & Airline Administration Building	*AAI (Air Navigation Service provider) had requested for additional staffing space for second runway related operations. As per the earlier Master Plan, an annexure building was proposed adjacent to the existing Admin building (Alpha 1). However, it was decided that BIAL would hand over the Admin building (Alpha 2) to accommodate AAI staffing requirement and BIAL would temporarily shift into another facility until the construction of the "New Airline and Admin building" (Alpha 4).*	61
	Total		**278**

3.3.6 The adjusted AERA approved cost as per BIAL after excluding deferred projects is given in the table below:

Table 8: Adjusted AERA approved capital expenditure as submitted by BIAL for the SCP after excluding deferred projects

Project	Approved amount by AERA after apportioning contingency (3%), tax and site preliminaries (1%) for all projects in SCP	Projects deferred by BIAL as per Table 7	Net amount approved for SCP
	A	B	C = C-B
New south airfield development works	2,066	-56	2,011
T2 Apron 1	448	-63	385
Terminal 2 - Phase 1	3,607	-	3,607
Forecourts, roadways and landside development	1,216	-	1,216
Aircraft maintenance and Airport maintenance	141	-98	42
Rescue and Fire Fighting	7	-	7
Fuel storage & Distribution - Phase 1	-	-	-
Airport and Administration offices	62	-61	0
Utilities Phase 1	106	-	106
Existing Runway, Taxiway improvements	298	-	298
Site Preliminaries	-	-	-
Sub-Total	**7,951**	**-278**	**7,673**
Design/ PMC 5%	386	-	386
Contingency 3%	-	-	-
Add: Pre-Operating Expenses	156	-	156

Project	Approved amount by AERA after apportioning contingency (3%), tax and site preliminaries (1%) for all projects in SCP	Projects deferred by BIAL as per Table 7	Net amount approved for SCP
ORAT	-	-	-
Total	**8,493**	**-278**	**8,215**

3.3.7 Based on the above, the EAC for the projects approved by AERA as per BIAL in the Second Control Period is as follows:

Table 9: Comparison of adjusted AERA approved capital expenditure with estimated capital expenditure for SCP projects as submitted by BIAL

Project	Net Amount approved for SCP	Estimated capex as per BIAL	Difference Over-run / (Under-run)	Variance %	Reason for variation
	A	B	C = B-A	D = C/A	
New south airfield development works	2,011	1,980	-30	-2%	
T2 Apron 1	385	428	43	11%	*The major reason for the increase in costs is on account of having additional rainwater harvesting ponds. In order to meet the water requirement through sustainable additional 3 rainwater harvesting ponds are added on the landside. The total capacity of the ponds added is 227 ML. Construction of these ponds involve earthworks, pond lining, pump rooms and piping works. The cost towards this is Rs. 22.50 crores.* *The apron construction works were planned to be carried out using the Ground Support Equipment (GSE) tunnel or the Eastern Connectivity Tunnel (ECT). However, due to security reasons, approval from BCAS/CISF is awaited for using the tunnels for movement of men, materials and equipment for construction activities on 24x7 basis. This non-availability of the tunnels has resulted in a significantly longer lead of approx. 20 kms for movement of men, material and equipment. This has*

Project	Net Amount approved for SCP	Estimated capex as per BIAL	Difference Over-run / (Under-run)	Variance %	Reason for variation
					contributed to the balance overrun to be incurred.
Terminal 2 - Phase 1	3,607	3,566	-41	-1%	
Forecourts, roadways and landside development	1,216	1,875	659	54%	*Deviation in cost is on account of the major facilities which have got added to the project cost as follows:* *a) Development of Multi modal transport hub (MMTH) contributing INR 481.12 cr.* *b) Additional Landside Facilities contributing INR 177.44 cr.*
Aircraft maintenance and Airport maintenance	42	41	-1	-3%	
Rescue and Fire Fighting	7	7	-0	-1%	
Fuel storage & Distribution - Phase 1	-	-	-	0%	
Airport and Administration offices	0	-	-0	0%	
Utilities Phase 1	106	104	-2	0%	
Existing Runway, Taxiway improvements	298	217	-81	-27%	*Based on the revised masterplan finalized in 2019, it is noted that the planned traffic capacity as submitted for CP-2 can still be achieved even without executing the south parallel taxiway and the two connecting taxis (connecting existing taxiway and runway).* *Savings are on account of cancellation of these works which will not affect the planned airside design capacity.*
Site Preliminaries	-	-	-	0%	
Sub-Total	**7,673**	**8,218**	**545**	**7%**	
Design	386	354	176	46%	
PMC		208			
Contingency 3%	-		-	0%	
Add: Pre-Operating Expenses	156	356	200	158%	
ORAT	-	46	46		
Total	**8,215**	**9,183**	**968**	**12%**	

3.3.8 With regards to the sustaining capex, BIAL has submitted that INR 354 cr. was considered as part of the sustaining capex for the construction of 220 KVA substation which has been deferred to the 4th control period, only INR 25 cr. was incurred in minor modifications in the Second Control Period.

3.3.9 Due to deferment of projects to the Third Control Period, the total asset addition for the Second Control Period is much lower than the capital expenditure approved by AERA in the Second Control Period order. Total asset additions proposed by BIAL for the Second Control Period is given in the table below:

Table 10: Total asset additions and aeronautical asset additions as per BIAL for the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Total additions during the year as per BIAL	225.70	170.30	160.99	2,122.41	1,920.20	4,599.61
Aero additions during the year	213.38	135.99	132.06	2,087.23	1,779.85	4,348.51

3.3.10 Considering the above, RAB submitted by BIAL for the Second Control Period is given below:

Table 11: RAB submitted by BIAL for true-up of the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Opening RAB	2,271.65	2,286.45	2,220.60	2,009.18	3,856.12	
Aero additions during the year	213.38	135.99	132.06	2,087.23	1,779.85	4,348.51
Aero depreciation during the year	198.58	201.84	343.48	240.28	317.94	1,302.12
Closing RAB	**2,286.45**	**2,220.60**	**2,009.18**	**3,856.12**	**5,318.03**	
Average RAB	**2,279.05**	**2,253.52**	**2,114.89**	**2,932.65**	**4,587.08**	

Recap of decision taken by the Authority for projects approved for the Second Control Period at the time of tariff determination for the Second Control Period

3.3.11 The Authority had appointed RITES Limited to undertake the study on determination of efficient capex of BIAL for 2nd control period. RITES had submitted the report to AERA with project-wise efficient capex for 2nd control period.

3.3.12 RITES had allowed a fee of 5% as design and PMC cost which was approved by AERA in the Second Control Period order. The Authority had also decided to review and true-up the project management cost after the project is commissioned based on the study of the actual cost incurred and its reasonableness.

3.3.13 The Authority had decided in para 9.2.11 of the Second Control Period, that the pre-operative amount of Rs. 150 crores will be considered for the purpose of estimating the costs and capitalization for Second Control Period order. The Authority had also decided that it would review and true-up the same after the projects are commissioned based on a study of the actual cost incurred and its reasonableness.

3.3.14 Based on the RITES report, the Authority decided to consider the capital expenditure as per Table 27 Para 9.6.12 of the Second Control Period order for BIAL.

3.3.15 The Authority had decided that BIAL shall submit detailed explanation and justifications, should the cost incurred exceeds 10% over the cost approved by the consultant (RITES).

3.3.16 The Authority had also decided to impose a penalty/ adjustment of 1% of the cost of Terminal-2 Phase 1, if BIAL fails to commission and capitalize Terminal 2 Phase 1 by March 2021. Further, The Authority decided to not consider any additional interest during construction (IDC)/ financing allowance if the project is delayed beyond 31 March 2021.

3.3.17 After the order was issued, AERA vide letter no. F. No. AERA/20010/MYTP/BIAL/CP-II/2016-17/Vol-V dated 13th September 2018 clarified that if the delay in completing the project is beyond the control of BIAL and is properly justified, the same would be considered while truing up IDC and PMC however, under no circumstances adjustment of 1% will be waived. Extract from the letter is given below: *"3. It is clarified that in case there is delay in completion of project beyond March 2021, due to any reason beyond the control of BIAL or its contracting agency and is properly justified, the same would be considered by the Authority while truing up the actual cost at the time of determination of tariff for the 3rd control period in respect of IDC and PMC. However, there will be no waiver of penalty in case Phase I of Terminal 2 project is delayed beyond 31 March 2021 under any circumstances."*

3.3.18 The Hon'ble TDSAT judgement dated 16 Dec 2020 for BIAL has not altered the decision of AERA on levy of adjustment for delay in commissioning of Terminal 2 Phase 1. Relevant extract from Hon'ble TDSAT judgement has been given below:

"53. On the basis of claim that the Terminal II Building would be completed by March 2021 as estimated by BIAL, the Authority agreed to treat the capitalization year for Terminal II-Phase I as 2020-21. This advantage to BIAL would be totally undeserved if the claim of BIAL that it will complete Terminal II-Phase I by end of March 2021 is not found correct. Hence, as a balancing exercise for allowing capitalization on the assurance of BIAL such a penalty which is nothing but reduction of ARR has been provided to ensure that such promise does not cause loss to the users and undue advantage to BIAL if the claim as to the time of completion is ultimately found incorrect.

54. Learned counsel for AERA has further submitted that in spite of the clarification that this penalty will not be relaxed in any situation, if a convincing case is made out for any reasonable delay, the Authority agrees to examine the same on its own merits and may vary or waive the penalty proposed but only for good reasons. This stand of the Authority appears just and proper and does not require further scrutiny except to point out that the stand of BIAL as to the jurisdiction of the Authority is not justified in view of provisions in Section 13(1)(f) read in conjunction with the obligation to determine the tariff under Section 13(1)(a) by taking into consideration the capital expenditure incurred and timely investment in improvement of airport facilities; the service provided, its quality and other relevant factors and the cost for improving efficiency. Section 14(4) of the Act vests the Authority with the power to issue such directions to monitor the performance of the service providers as it may consider necessary for proper functioning. Section 15 also grants power to issue certain directions. Clause 9.2.9 of the Concession Agreement also vests the independent regulator with the power to frame regulations for monitoring of performance standards which could earlier be done by the Government of India as per various sub-clauses of Article 9.2 of the Concession Agreement. Hence, the agreement also respects the power of the regulator to review, monitor and set standards and penalties and regulate such related activities at the Airport with corresponding duties upon the BIAL to comply with all such regulations of the Authority. In any case, the facts justify the limitation set by the Authority through penalty upon the gains of BIAL due to acceptance of its assurance and plea for capitalization of Terminal II-Phase I during Second Control Period itself. The Preamble of the Act discloses that besides regulating tariff and other charges, the Authority is "to monitor performance standards of airports and for matters connected therewith or incidental thereto". Monitoring of timely completion of vital projects like a terminal building has intrinsic relationship with performance of airports".

3.3.19 The Authority had decided to exclude the capital expenditure for the enabling works for the Eastern Connectivity Tunnel.

3.3.20 The Authority had decided to consider the allocation between Aeronautical Area and Non-Aeronautical Area of Opening RAB as per Authority's analysis detailed in FCP order, considering 88.52% of Opening RAB and 87.70% of Terminal Area Expansion works as aeronautical.

3.3.21 Further, the Authority had decided to consider the allocation of 88% towards aeronautical area for Terminal 2. The Authority had decided to consider aeronautical to non-aeronautical gross block ratio of 91% to 9% for allocation of common assets into aeronautical and non-aeronautical proposed for capital additions in the Second Control Period.

3.3.22 The Authority had decided to carry out a study on the allocation of assets between aeronautical and non – aeronautical and use the results of the study to true-up RAB during the next control period (Third Control Period).

3.3.23 The Authority noted the RAB approved in the Second Control Period order is as follows:

Table 12: RAB approved by the Authority as per the Second Control Period Order No. 18/2018-19 dated 31 August 2018

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Opening RAB	2,224.29	2,249.05	2,376.22	3,197.94	5,318.60	
Additions during the year	213.20	326.58	1,215.78	2,425.90	5,229.58	9,411.04
Depreciation during the year	188.44	199.40	394.07	305.24	451.05	1,538.20
Closing RAB	**2249.05**	**2376.22**	**3197.94**	**5318.60**	**10,097.14**	
Average RAB	**2,236.67**	**2,312.63**	**2,787.08**	**4,258.27**	**7,707.87**	

3.3.24 The Authority had decided to true-up the RAB at the end of the control period based on actuals at the time of determination of tariffs for the next control period.

Authority's examination and proposal for regulatory asset base (RAB) as part of tariff determination for the current control period

3.3.25 The Authority has carefully examined the submissions of BIAL relating to Regulatory Asset Base (RAB).

Approved projects of Second Control Period deferred to the next control period

3.3.26 The Authority notes that BIAL in its submission has included FY 2022 capital expenditure for comparison with the approved RAB for the Second Control Period since some of the projects have been deferred from FY 2021 to FY 2022. The Authority proposes to consider capital additions proposed till FY 2021 as part of RAB for the Second Control Period.

3.3.27 The capital addition projects deferred to the next control period are as follows:

- Terminal 2 – Phase I
- Terminal 2 - Apron
- South runway – Phase II
- Forecourts, roadways & landside development – Phase Ib
- Aircraft maintenance & airport maintenance facilities
- Utilities Phase I

3.3.28 Since, many of the projects are deferred to the next control period including the Terminal 2, the discussion and the Authority's proposal regarding the cost overrun with respect to RITES recommended cost, penalty/ adjustment, asset allocation, etc. on these deferred capital expenditure projects have been provided in the Regulated Asset Base and Depreciation for the Third Control Period chapter.

Comparison of the AERA approved capital cost with the estimated actual cost for the projects proposed to be capitalized in the Second Control Period

3.3.29 The Authority noted that RITES had recommended the revised project cost for the projects forming part of the Second Control Period. The Authority had decided in the Second Control Period order to ask BIAL to submit detailed explanation and justifications should the cost incurred exceeds 10% over the cost approved by the consultant (RITES).

3.3.30 The Authority asked BIAL to submit an auditor certificate for the proposed project-wise capital expenditure capitalized from FY17 to FY20 with its break-up into project cost, design, PMC, pre-operative expenses and IDC. BIAL in its response dated 4 June 2021 submitted the auditor certificate for the project-wise capitalization from FY17 to FY20. The Authority has considered the project-wise capitalization as per the auditor certificate for its analysis.

3.3.31 Since the Authority had approved the cost of the entire project while BIAL has only capitalized some part of the project, for comparison purposes, entire block cost including the FY22 capex is compared with the Authority approved cost in the Second Control Period. Below table provides the comparison of the estimated actual cost submitted by BIAL and approved capex by the Authority for the Second Control Period:

Table 13: Comparison of the asset addition approved by the Authority in the Second Control Period and the estimated actual addition to RAB as per BIAL

S no.	Project	Net amount approved by Authority in SCP order	Proposed capitalization as per BIAL^ in SCP	Approved amount carried forward to the TCP
		A	B	C = B-A
1	New south airfield development works	2,011	1613	398*
2	Forecourts, roadways and landside development	1,216	89	1,127
3	Rescue and Fire Fighting	7	7	0
4	Existing Runway, Taxiway improvements	298	217	81
5	Other projects proposed to be capitalized in the next control period – T2 Phase 1, T2 Apron, South Runway Phase II, etc.	4,143	0	4,143
	Sub-Total	**7,673**	**1,926**	**5,747**
6	Design and PMC#	386	56	330
7	Pre-Operating Expenses#	156	77	79
	Sub-Total	**8,215**	**2,059**	**6,156**
8	**IDC# and FA as per BIAL**		**148**	
A	**Projects Sub-Total**		**2,208**	
B	**Sustaining capex (BIAL has included express cargo and Eastern Tunnel Connectivity**	**1,548**	**1,162**	

S no.	Project	Net amount approved by Authority in SCP order	Proposed capitalization as per BIAL^ in SCP	Approved amount carried forward to the TCP
	(ECT) project under sustaining capex)			
	Total (C = A+B)		3,370	

^ proposed capitalization is based on the auditor certificate submitted by BIAL on 4 June 2021; # refer Annexure 6 for project wise break-up of the design, PMC, pre-operative expenses and IDC; * refer 5.2.6 for details of works carried forward to the Third Control Period

3.3.32 The Authority noted from the above table that the capital expenditure for the projects proposed by BIAL to be commissioned in the SCP does not exceed the approved capital expenditure for these projects as per SCP order of the Authority.

3.3.33 With regards to the sustaining capex, the Authority noted that BIAL had deferred the INR 354 cr. construction of 220 KVA substation to the 4th control period and it has incurred INR 25 cr. in minor modifications in the Second Control Period.

3.3.34 The Authority noted that the sustaining capex incurred by BIAL is less than the sustaining capex approved in the SCP order.

Design, PMC and pre-operating expenses of the capitalized assets in the Second Control Period

3.3.35 The Authority noted that while the Design and PMC cost of all projects approved in 2nd Control Period is estimated to be higher than 5% by BIAL, only a portion of this cost has been capitalised in 2nd control period. The Design and PMC cost as a percent of cost for the proposed capitalization in the Second Control Period (FY17 to FY21) is 3% which is less than the 5% approved by the Authority in the Second Control Period. The Authority proposes to consider the design and PMC cost proposed to be capitalized in the Second Control Period for true-up of the Second Control Period. The treatment of Design and PMC cost for other assets yet to be capitalised is provided in subsequent chapters.

3.3.36 The Authority further noted that the pre-operative expenses proposed to be capitalized in the Second Control Period is INR 77 cr. The Authority noted that the pre-operative expenses includes the cost of employees involved in undertaking the capital expenditure in Second Control Period and other miscellaneous administrative expenses. The Authority has already accounted the design and PMC cost for the capital expenditure in the Second Control Period and is of the view that the pre-operative expenses are redundant cost. The Authority proposes to exclude the pre-operative expenses from the asset additions of the Second Control Period.

Allocation of assets into aeronautical and non-aeronautical assets

3.3.37 The Authority in its Second Control Period order had decided to undertake a study on the allocation of assets between aeronautical and non-aeronautical and use the results of the study to true-up the RAB. The Authority has considered the opening RAB of FY17, capital addition and corresponding depreciation based on the results of the study on asset allocation (refer Annexure 3 for summary of the report)

3.3.38 The asset allocation study reviewed the various asset categories and developed a basis for segregation of various assets into aeronautical, non-aeronautical and common. Based on the same, the Authority has reclassified some portion of assets.

Table 14: Summary of asset re-segregation in Second Control Period as per the asset allocation study

S. No	Details of asset	Observation	Adjustment in aero asset additions of 2nd control period (INR cr.)
1	Electrical and power house equipment	**Allocation as per BIAL:** Aeronautical **Issue:** Power supply infrastructure at an airport provides power to air side, roads, terminal building and forecourts. These equipment include the DG sets, UPS, substations, power distribution board, low tension switchboards, high tension cables, etc. Since, these assets serve both the aeronautical assets as well as the common assets, bifurcation based on the usage is required. **Revised asset allocation:** Accordingly, the asset allocation study has recommended that the electrical and power house equipment assets serving the terminal building, forecourts, entire airport and those not identifiable are classified as common assets.	-4.69
2	BIAL – App (Thoughtworks project)	**Allocation as per BIAL:** Aeronautical **Issue:** Asset allocation study noted that the mobile application (BIAL App) provides the flight information and also the details of the retail, F&B outlets, car parking, etc. Thus, the application provides information of both aeronautical and non-aeronautical services at the airport. Further, BIAL has classified its BIAL Public Portal – www.bengaluruairport.com as a common asset. BIAL App is also assumed to be a similar asset to BIAL public portal. **Revised asset allocation:** Accordingly, the costs associated with Thoughtworks project for development of mobile app are proposed to be classified from aeronautical to common assets as per the asset allocation study.	-0.59
3	Landscape in real estate area	**Allocation as per BIAL:** Aeronautical **Issue:** Landscaping is undertaken by the airport to provide enhanced passenger experience while also meeting the environment sustainability goals of the airport. However, BIAL has considered the landscaping undertaken around the airport hotel as aeronautical. **Revised asset allocation:** Since, the assets forming part of the commercial real estate development are considered as non-aeronautical assets, the capital expenditure for landscaping in and around the commercial real estate development is also considered as non-aeronautical as per the asset allocation study.	-0.14
4	Car park related assets	**Allocation as per BIAL:** Aeronautical **Issue:** Car park related assets are non-aeronautical assets as per past orders of AERA. However, these assets have been considered as aeronautical by BIAL. **Revised asset allocation:** Accordingly, the costs associated with car park and advertising related assets are classified as non-aeronautical assets as per the asset allocation study.	-0.17
5	Water harvesting assets	**Allocation as per BIAL:** Aeronautical **Observation:** BIAL has developed water harvesting ponds/ rain sumps to store rain water for use at the airport. It is noted that these rain water sumps serve both aeronautical and non-aeronautical assets. **Revised asset allocation:** Accordingly, the costs associated with water harvesting ponds/ rain sumps are classified as common assets.	-13.29

S. No	Details of asset	Observation	Adjustment in aero asset additions of 2nd control period (INR cr.)
	Total		-18.88

3.3.39 BIAL has submitted the terminal area ratio of 86.31% in FY17 and FY18 while for FY19 and FY20 the terminal area ratio submitted by BIAL is 85.34%. Due to the change of terminal area ratio from FY18 to FY19, there is an impact of aeronautical asset addition of FY19. The study has applied a consistent terminal area ratio throughout the Second Control Period on the common assets to determine the aeronautical asset addition. The revised terminal area ratio of 85.73% is computed based on the average terminal area ratio of the Second Control Period (assuming FY21 terminal area ratio equal to FY20 terminal area ratio, that is, 85.34%). There is an impact on the aeronautical asset addition on account of change in terminal area ratio. Such adjustment has been shown in Table 15.

Financing allowance

3.3.40 The Authority has noted that BIAL has funded the asset through debt and equity. However, the financing allowance has been computed by BIAL considering a return equivalent to cost of debt during the period in which the assets were still in CWIP irrespective of whether it was funded by equity or debt. This has led to addition of the financing allowance over and above the capitalized assets in the books of account of BIAL. The Authority noted that financing allowance is a notional allowance and different from the actual investment incurred by BIAL which includes only the interest during construction (IDC) among other things. Therefore, the Authority proposes that only the IDC that gets capitalized would be considered as part of RAB.

3.3.41 As per the Second Control Period order for BIAL, the Authority proposes to adjust the opening RAB on account of EIL report. Depreciation on excluded assets given in the EIL's report is subtracted from the total depreciation. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

3.3.42 The Authority has proposed the following changes to the FY21 asset additions submitted by BIAL:

a) The Authority had asked BIAL to submit the current status of the projects proposed in FY21. BIAL, in its response, has submitted that the completion for T2 Apron Phase II (INR 465 cr. as per BIAL) and South Runway – Phase II (INR 478 cr. as per BIAL) has been delayed and expected completion is revised from Mar 2021 to Aug 2021. Accordingly, the Authority has excluded both these projects from the FY21 capital expenditure.

b) Enabling works capex of Eastern connectivity tunnel (INR 80 cr.) – Excluded as per 2nd control period order for BIAL.

c) T2 ORAT related expenses (~INR 23 cr.) in special repairs in FY21 – Excluded since ORAT expenses included separately in the capital expenditure proposed to be capitalized in FY22 by BIAL (BIAL has confirmed exclusion through its response to queries)

d) In line with AERA's decisions of treating revenues from CGF as aeronautical as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020, the Authority has considered express cargo capex (INR 80 cr.) as 100% aeronautical instead of BIAL's treatment of express cargo capex as non-aeronautical.

e) Gross block ratio is a composite ratio and a weighted average of aero, common and non-aero assets. Hence, the Authority notes that the gross block ratio should be applied on entire capex addition irrespective of it being aero, common or non-aero instead of BIAL's approach of applying it selectively on common assets. Common assets have been segregated by BIAL in its asset register based on terminal area ratio and therefore, the Authority proposes to apply the same ratio (85.73%) for common assets. Based on the above, the Authority proposes to revise bifurcation ratio for FY21 capex of airport offices, ITI project and sustaining capex from 91% to terminal area ratio of 85.73%.

f) Revised actual WPI in FY20 (3.64% to 1.7%) to apply on the special repairs cost of FY21 given in FY19 prices

3.3.43 Below table provides the summary of the adjustment to the asset additions of the Second Control Period:

Table 15: Aeronautical asset addition proposed by the Authority from FY17 to FY21 based on the asset allocation study

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Total investments in fixed assets during Second Control Period as per BIAL (A)	**225.7**	**170.3**	**160.99**	**2,122.41**	**690.90**	**3370.30**
Aeronautical asset addition to RAB as per BIAL' (B)	**213.92**	**135.99**	**132.02**	**2,087.23**	**576.21**	**3145.37**
Adjustments to aeronautical asset addition to RAB by the Authority						
Adj - Exclusion of written off amount in FY20 as per IGAAP audited accounts (disposal of assets not accounted by BIAL) (C)				-38.93		-38.93
Adj – Exclusion of Financing Allowance over capitalized amount by the Authority as per para 3.3.40 (D)				-41.07		-41.07
Proposed adjustment to RAB due to change in segregation logic as per asset allocation study, for reasons below (E):	-3.85	-0.92	-0.71	-13.4		-18.88
Electrical and Power House Equipment (E.1)	-3.19	-0.60	-0.70	-0.20		-4.69
BIAL App (E.2)	-0.27	-0.32	0	0		-0.59
Landscape in real estate area (E.3)	-0.14	0	0	0		-0.14
Car park related asset (E.4)	-0.17	0	0	0		-0.17
Water harvesting assets (E.5)	-0.08	0	-0.01	-13.2		-13.29
Adj – Impact due to terminal area ratio change as per asset allocation study (F)	-9.23	-0.14	15.71	0.15		6.49
Adj. - Exclusion of pre-operative expenses (G)	0.00	-1.78	0.00	-70.34	-4.90	-77.03
Adj. – FY21 aero adjustment					-13.50	-13.50

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Total adjustments (H=C+D+E+F+G)	-13.08	-2.84	15.00	-136.04	-18.40	-182.92
Aeronautical asset additions to RAB as per the Authority (I=B+H)	**200.86**	**133.16**	**147.02**	**1923.64**	**557.82**	**2962.49**

* refer Table 15 in the Study on allocation of assets between aeronautical and non-aeronautical assets given in Appendix II of this Consultation Paper

3.3.44 Based on the changes suggested above, the RAB proposed by the Authority for true-up of the Second Control Period is given in the table below:

Table 16: RAB considered by the Authority for true-up of Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021#	Total
Opening RAB*	2,224.29	2,237.97	2,181.31	2,052.18	3,782.97	
Additions during the year (refer *Table 15*)	200.86	133.16	147.01	1,923.64	557.82	2,962.49
Depreciation during the year (refer *Table 30*)	187.19	189.82	276.14	192.86	249.71	1,095.72
Closing RAB	**2,237.97**	**2,181.31**	**2,052.18**	**3,782.97**	**4,091.07**	
Average RAB	**2,231.13**	**2,209.64**	**2,116.74**	**2,917.57**	**3,937.02**	

*Opening RAB of FY17 is taken equal to closing RAB of FY16, # forecasted

Stakeholder comments regarding true-up of the regulated asset base for the Second Control Period

3.3.45 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. 10/ 2021-22 with respect to true-up of the regulated asset base for the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on regulated asset base and depreciation for the Second Control Period

3.3.46 BIAL commented as follows on the reduction of INR 38.93 crores for assets disposed:

- *"During the process of review of MYTP, BIAL has submitted reconciliation between the Gross Block as per the Fixed Asset Register and the value of Assets as per the IGAAP Financial statements. In this reconciliation an asset line of Rs. 38.93 crores have been shown as an item of reconciliation where the item was removed from the Gross Block of assets as the item was disposed of.*

- *Summary of response provided during review of MYTP is as below:*

Asset addition as per Business Plan	*2046.16*
Asset addition as per Asset Register	*2007.23*
Difference (Note 1)	*38.93*

Note 1 - There will be a difference of Rs 38 crores in the gross block between this version of FAR and that additions as per model. This is because, the current FAR is based on audited IGAAP financials. In the audited IGAAP accounts, two assets relating to canopy with WDV of Re 1 but with gross block and accumulated depreciation of Rs. 38 crores were removed from the gross block itself. Hence, the difference in the gross block between the numbers as per business model and this FAR.

- *It may be noted that in case of the above 2 assets, the Net Block (i.e., Asset Base) is Rs. 1 and the asset was fully depreciated. Hence, there is no adjustment required to be made to the Regulatory Asset Base, which essentially is the Net block of assets.*

- *AERA has incorrectly considered the Gross block value for reduction to RAB whereas the adjustment if any should be on the net block / written down value (Re. I)*
- *Hence, BIAL requests the Authority to remove the incorrect reduction of Rs. 38.93 crores from the RAB estimate."*

3.3.47 BIAL commented as follows regarding the pre-operative expenses:
"AERA's position on Pre-Operative Expenses in the Second Control Period Order

- *BIAL had submitted an estimated cost of approx. Rs. 281 crores towards Pre-Operative expenses as part of PAL-1 Project Capital Expenditure estimate in the Second Control period for Authority's consideration.*
- *Below Paragraphs from the Second Control Period Order detail the Authority's evaluation of Pre-Operative Expenses.*

9.2.9 The Authority had noted that RITES had commented about the Pre-Operating Expenses submitted by BIAL, as follows:

"...An amount of Rs. 461 Crores has been included in the revised submissions towards preoperative costs which includes Rs. 180 Crores towards PMC. The cost towards PMC is already taken into consideration at Sl.no.14 above and hence to be excluded. AERA may therefore like to take a view on the balance amount of Rs.281 Crores claimed towards Pre-Operative expenses..."

9.2.10 Authority had obtained certificate from Chartered Accountant on the details of Pre-Operative expenses carried in books and sought confirmation that these costs were not considered as part of the expenditure debited to P&L account. Extract from the certificate of the Chartered Accountant is as below.

This is to certify that Bangalore International Airport Limited (BIAL) has incurred the below mentioned preoperative expenditures for various projects, during the FY 2016-17 and FY 2017-18 (Till Dec 2017).

Amount in INR

Particulars	FY 2016-17	FY 17-18 (Till Dec 17)
Opening Balance of Preoperative Expenses	**45,84,96,394**	**65,50,28,603**
Add: Expenses incurred during the year :		
Payroll Costs	30,20,48,698	21,80,13,508
Professional & Technical Consultancy	3,96,77,225	17,15,417
Travelling and Conveyance	1,76,46,197	70,77,721
Other Project Costs	23,71,514	1,83,72,626
Less: Preoperative Expenses capitalized	**(16,52,11,424)**	**(5,03,79,160)**
Closing Balance of Preoperative Expenses	**65,50,28,603**	**81,13,63,283**
No. of Employees whose cost included above	**105**	**92**

Also confirm that these costs are part of Capital work-in-progress and not included in Operating Expenditure debited to P&L account.

9.2.11 The Authority had reviewed the certificate provided. The Authority also noted that certain costs relating to Pre-Operative Expenses were carried over from the year 2015-16 (and may be before too). The Authority also noted that BIAL had submitted details of the personnel deployed, cost of which would be debited to Pre-Operative Expenses. ***The Authority noted that there was a need to have an own Project Management Team when large scale Capital Expenditure Projects are being executed. The Authority urged BIAL to ensure that the costs relating to Pre-Operative***

Expenses be optimally managed based on the requirements of the stated projects only. As these costs were proposed to be incurred over the second control period, the Authority proposed to consider an amount of Rs. 150 crores towards the same, as against BIAL submission, for the purpose of estimating the costs and capitalization for MYTP. *The Authority would review and true up the same after the Projects are commissioned based on a study of the actual cost incurred and its reasonableness* ***(emphasis supplied).***

- *From the above, it is evident that AERA has not only acknowledged the need for having an own Project Management team but has also provided for the estimated addition to RAB at Rs. 156 crores (incl. GST addition Rs. 6 crore), against BIAL's estimate of Rs. 281 crores. AERA had also noted clearly that this would be reviewed and trued up based on a study and the reasonableness of the costs.*
- *Having rightly noted the need for own Project Management team and its associated costs in Second Control period Order, AERA cannot now adopt an inconsistent approach which is in reversal of the approvals given for incurring such costs and subsequently branding the same as "redundant", considering the fact that BIAL has relied on AERA's MYTO of the second control period and factored such costs at the time of Financial closure.*
- *This proposal does not have basis because of the principles of Promissory Estoppel. It was on the basis of the second tariff order that BIAL incurred such expenses.*
- *It is the legitimate expectation of BIAL that treatment that has been accorded to other airports should also be accorded to BIAL. BIAL also has the right of "Equivalent Treatment" under the Concession Agreement.*
- *The Hon'ble Supreme Court has in multiple instances applied the principles of promissory estoppel, legitimate expectations and the concept of level playing field.*
- *Even otherwise, the statement of objects and reasons of AERA Act specifically sets out that one of the objectives of AERA is to "create a level playing field and foster healthy competition amongst all major airports". Not allowing for pre-operative expenses (for BIAL) not only fails to create a level playing field but also creates a distinct disadvantage to BIAL as compared to other airports where pre-operative expenses have been considered*
- *Therefore, BIAL requests AERA to consider pre-operative expenses as incurred by BIAL.*
- *No detailed explanation/ justification has been provided by the Authority for the change of mind/ thought and no rational reasoning has been provided for the exclusion of the entire cost head – Pre-Operating expenditure (incurred and to be incurred).*
- *Authority's revised stand is in contravention to their own MYTO of the second control period, will result in incorrect determination of the RAB addition on capitalization of the expansion projects and this disallowance will severely impact the cash flows of BIAL.*

AERA's position and consideration of Pre-Operative Expenses as part of Capital Expenditure in other Airports

- *AERA has also considered the same as part of the Project at the time of review of additions to RAB – For example in DIAL/ MIAL and even in case of T1 Expansion Project of BIAL. Certain references are included below*

MIAL - Table 34: List on New Projects considered by the Authority for the 2nd Control period.

In Rs. Crores	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	Total
Taxiway 'M' (Only Slum Rehab cost)	-	34.93	37.69	40.66	43.88	157.15
Air India Code 'C' Hangar	-	53.10	-	-	-	53.10
South-East Pier (between Grid RE29 – PE 12)	90.00	318.50	-	-	-	408.50
Meteorological Farm	-	12.67	-	-	-	12.67
Sub Total	90.00	419.20	37.69	40.66	43.88	631.43
Soft Cost (IDC & Preoperative)	-	80.05	10.00	13.98	18.25	122.29
Total cost of new Projects as above	90.00	499.25	47.69	54.65	62.12	753.72

- *MIAL First Control Period Order*

Description	Revised Cost II (Oct 2011) in Rs Crore	Cost disallowed in Rs Crore	Cost not presently included in Rs Crore	Project cost being considered in Rs Crore
T1 Projects	453	54.00		399.00
T2 Projects	5,083	0.60		5,082.40
Runway, Taxiway & Apron	1,545		32.34	1,512.66
Landside Projects	41	1.00		40.00
Miscellaneous projects	562	52	25	485.00
Technical services & consultancies	834	48.00		786.00
Capital expenditure for operations	118			118.00
Pre operative expenses	684			684.00
Capitalized interest	1,410			1,410.00
Upfront fee paid to AAI	154	153.85		-
ATC Equipment cost & Technical block in NAD colony	310		200.00	110.00
Contribution to MMRDA for Sahar elevated road	166			166.00
WHSS-Shivaji Smarak/Memorial	25		25.00	-
Mithi river realignment	150			150.00
RET N5 & E2	51	0.75		50.25
Enabling cost for taking over of carved out assets (NAD colony)	110		110.00	-
Cost of settlement of land	30		30.00	-
Project cost	11,750			11,017.46
Escalation & Claims	450			450.00
Contingency	180			180.00
Total Project cost	12,380	310.20	422.34	11,647.46

- *Extracts from Consultation Paper (02/2011-12) of DIAL on DF*

- *5.3 The Summary of Project Cost (Rs. In crores) recommended by EIL is as below:*

Description	Initial cost as per DIAL	Final cost as per DIAL	Allowable cost as per EIL
T1, T2 & Initial CWIP	762	754	754
Runway/Taxiway/Apron/Lighting	1,765	2,634	2,610.18
Terminal-3 and Associated buildings	4,669	6,836	6,373.50
Airport services building & Airport connection building	-	160	160
Preliminary, Preoperative & IDC	1,279	1,320	1,320
Metro	350	350	350
Upfront fee paid to AAI	150	150	-
Rehabilitation of Runway 10-28	-	110	90
Delhi Jal Board Infrastructure Funding	-	54	54
New ATC Tower with Equipment	-	350	-
Security Capex	-	139	139
Total Project Cost	**8,975**	**12,857**	**11,850.68**

- *This concept has been accepted and approved by AERA and with this background only, AERA has approved Pre-Operative Expenses in the second control period Order of BIAL.*
- *Expansion projects undertaken by BIAL is no different from those undertaken by DIAL/ MIAL/ HIAL etc. Hence, AERA cannot treat BIAL in a discriminatory manner as proposed in the Consultation Paper.*
- *Authority has not conducted any study on reasonableness of the Pre-Operative expenses submitted by BIAL. Considering that the Project construction is still ongoing, AERA has proposed to not consider the cost in entirety. This is contradicting AERA's position in second control period Order wherein it proposed to review and true up once the projects are commissioned.*
- *To summarily reject a major cost head (that was already approved by the Authority, and which is directly connected with Project implementation) is unjust and discriminatory.*
- *We further wish to submit that in the Consultation Paper No. 11/ 2021-22 issued by the Authority in case of HIAL, within a week after BIAL Consultation Paper was issued, AERA has proposed consideration of Pre-Operative expenses to be added to the RAB. Such discriminatory treatment is neither explained nor is fair to BIAL.*
- *References to consideration of Pre-Operative Expenses to RAB, from Hyderabad Consultation Paper is reproduced below:*

  6.2.3 Soft Cost

  (e) Preliminaries, Insurance & Permits

  As per HIAL's submission, an amount of Rs. 120.10 Crores is also provisioned towards preliminaries, insurance & permits in the capital cost proposal at approx. 2.39% of the proposed capital hard cost of works (i.e., Rs. 5030.19 Crores). The breakup of Rs. 26.50 Crores includes the building permission fee (Rs. 7.968 Crores). The various insurances and preoperative expenses are expected to be incurred and Rs. 93.60 Crores is estimated as the lump sum basis for future expenses.

- *After the review of preliminaries by RITES, insurance & permits cost was restricted to Rs. 98.35 crores as against Rs. 120.10 Crores submitted by HIAL.*

  RITES Report

  5.2.8.1. PRELIMINARIES, INSURANCES AND PERMITS

  An amount of Rs. 348.99 Crores is provisioned in the capital cost proposal towards preliminaries @ 16.308% of the Basic cost of works excluding Cess & GST etc. This amount of preliminaries refers to Expansion works awarded to L & T for PTB (266.906 Crores), Apron & Taxiway (72.338 Crores) and GSE Tunnel (9.747), whereas the cost of awarded work for these three is 3063.99 Crores. The amount is said to be catered Mainly for Site overheads and running cost(65.156Cr.) ,Head office overheads(62.25Cr.) ,provision of contractor's insurance Professional indemnity in respect of Contractor's design obligations(6.508Cr.), temporary Barricading(11.634Cr), Establishment, Operation, Maintenance and removal of Contractor's labor camp, Contractors equipment, Fabrication yard ,store stock yard ,test labs and other facilities as required for execution of Expansion work(32.071Cr) ,Deployment of consultant (Design services 63.50 Cr.), plant and tools like Tower cranes (8.258 Cr.) and other preliminaries and general requirement (6.030Cr). For Phase 2 part 82.96 Cr. is catered Lump sum basis.

Similarly, Preliminaries are included in Airport System work awarded to Megawide (80.301 Crores excluding GST).

However, an amount of Rs. 120.10 Crores is also provisioned towards preliminaries, insurance & permits in the capital cost proposal @ approx. 2.39% of the Proposed Capital hard cost of works (i.e.,5030.19 Crores). The breakup of 26.50 Crores are Building permission fee (7.968 cr.) and various insurances and preoperative expenses are incurred and 93.60 Crores is estimated lump sum basis for future expenses.

- *From the above, it is very evident that the Authority had accepted and approved Pre-Operative Expenses as a legitimate item of Capital Expenditure, in other major airports. Authority should apply the same basis for BIAL also. In other words, equals cannot be treated unequally.*

Details and Justification of the Project team deployed their work scope and responsibilities

- *Notwithstanding anything said above, BIAL would like to explain the need, roles, responsibilities of its Project Team in the implementation of the expansion projects.*
- *In response to a query during MYTP evaluation, BIAL has submitted details of the activities performed by BIAL Projects team, comparison and contrast with the functions performed by the PMC etc.*
- *BIAL is again submitting herewith the details of functions performed by the Projects Team, how this is not in overlap with the Operational functions of running and managing an Airport, together with the details of work division between PMC and Projects team as Annexure I*
- *Authority has noted that "The Authority is of the view that the tasks of BIAL's project team are generally a part of the airport's scope of work and these costs should not be capitalized".*
- *As per clause 2.1 of the Concession Agreement (CA), the scope of work of BIAL is split into 3 distinct areas, as given below:*

  The scope of the Project (the Scope of the Project.) shall mean:

  2.1.1 the development and construction of the Airport on the Site in accordance with the provisions of this Agreement

  2.1.2 the operation and maintenance of the Airport and performance of the Airport Activities and Non-Airport Activities in accordance with the provisions of this Agreement; and

  2.1.3 the performance and fulfilment of all other obligations of BIAL in accordance with the provisions of this Agreement

- *The definition of the term "Airport" as explained in the Definition section of the CA is "Airport means the greenfield international airport comprising of the Initial Phase, to be constructed and operated by BIAL at Devanahalli, near Bangalore in the State of Karnataka and includes all its buildings, equipment, facilities and systems and including, where the circumstances so require, any Expansion thereof, as per the master plan".*
- *Further. The term "Expansion" is also defined in the CA and it means the expansion of the facilities at the Airport from time to time as per the master plan. Further, clause 7.2 talks specifically about Expansion of the Airport.*
- *As can be seen from the above background, there is a clear distinction between normal operations and maintenance of the Airport (as per 2.1.2) and Expansion of Airport facilities (as per definition section and as per 7.2). Hence, the parties to the CA have clearly bought out the 2 aspects – normal*

operations and future expansion, as distinct activities, as 2 different activities to be performed by BIAL.

- *The Authority cannot now say that any expansion of the airport is a part of a routine activity of the airport's scope of work. If that were so, there was no need for the parties to specifically carve out these 2 activities separately as scope of work for BIAL to perform under the CA.*
- *Authority has also commented that the magnitude of Pre-Operative Expenses is not justified given the additional cost for Design and PMC. BIAL submits that when AERA approved the Capital Expenditure in the Second Control Period order, the approved cost had all the 3 elements viz. Design, PMC and Pre-Operative expenses. Design/ PMC costs were benchmarked against AAI Projects while an adhoc amount of Pre-Operative Expenses was approved by the Authority. Each element of cost is unique and increase in one cost element cannot be the reason for denial in another cost element. All these 3 costs are needed for completing the project.*
- *Also, the Authority had, during the Second control period order also noted that AERA would do an evaluation of the costs and reasonableness of all the above 3 elements of cost independently. BIAL has submitted detailed reasons for cost increase and also provided break-up details and justification of the Pre-Operative expenses incurred. Authority cannot create linkages between these 3 cost elements and interpret that increase in one element would be compensated by another.*

Salary and Overhead costs being capitalized recognized in Direction 5

- *Pre-Operative Expenses estimated submitted by BIAL includes costs relating to Salary of Personnel deployed from Projects Team, Project Office Running expenditure, Travel, Insurance and other Overheads.*
- *Direction 5 – The Guidelines issued by the Authority itself takes cognizance of certain costs relating to Personnel and Other expense being capitalized to projects. Relevant extracts are given herein.*

(d) Payroll costs related to capital projects shall be submitted separately.

A5.5.5.3. Administration and general expenses - Airport Operator(s) shall submit, in specified Form F11(c), as under:

(a) all general administration and corporate costs, including break-up of all expenses related thereto:

(b) Provided that the said costs shall be further segregated as :

(i) Administration charges, including director's sitting fees, communication expenses, travelling and conveyance, advertisement, office maintenance, printing and stationery, other allocated overhead expenses.

(ii) Legal and Auditor's Fees

(iii) Consultancy and advisory expenses

(iv) Other charges including land lease rent, insurance costs, miscellaneous expenses

(c) Copy of Board approvals, consultancy, legal, and other contracts, insurance documents, rent agreements and other relevant documents shall be submitted as proof thereof.

(d) Costs related to capital projects proposed to be capitalized shall be submitted separately.

- *Hence, Authority observation that these costs should be a part of Operating Expenses and not capitalized, is not in line with its own regulations and also not in accordance with the accounting principles and standards.*

Accounting Treatment for Pre-Operative Expenses

- *It is established accounting principle that any costs that are directly attributable to the commissioning of an asset should be capitalized as part of the asset cost. Accordingly, it is justified that such Pre-Operative expenses are accounted as part of Capital Expenditure. Authority's noting that such costs should be part of Operating Expenses is not in line with extant accounting principles.*

Certification from Auditors

- *Expert opinion on the subject issued by the auditor is enclosed herewith as Annexure 2*

Contradictory noting on Pre-Operative Expenses by the Authority

- *AERA has, in different paragraphs of the Consultation Paper, accorded different views on the Pre-Operating Expenses as follows:*

- *Rs. 150 crores of costs estimated for capitalization in Second Control Period Order being considered as "Redundant" in the current Control period as Design and PMC costs are already accounted for.*
- *Magnitude of Pre-Operative expenses is not justified given additional costs proposed by BIAL for design and PMC.*
- *Costs needing to be considered as part of Operating Expenditure and should not be capitalized.*

- *From the reading of the above, if AERA feels that the magnitude of Pre-Operative expenses submitted by BIAL are not justified, it can commission an Independent study to review the reasonableness of the cost and BIAL should be given an opportunity to present its views on the findings of such study.*
- *BIAL has also obtained an auditors' certificate listing the value of Pre-Operative Expenses capitalized and lying in CWIP. This is enclosed as Annexure - 3*
- *Until the conclusion of such a study, BIAL's estimate of Pre-operative expenses may be considered in the RAB by the Authority and true up be done in the fourth control period.*

Summary

We request the Authority to:

- *Honor Authority's own guidelines and principles*
- *Give effect to decisions and process detailed in the past tariff orders*
- *Avoid discrimination between airports*
- *Respect extant accounting principles and Expert certification in this manner*

Accordingly, BIAL requests that Pre-Operative expenses not be summarily rejected but the expected cost at completion as submitted by BIAL needs to be considered as part of addition to Regulatory Asset Base.

BIAL is agreeable to subject itself to any independent evaluation/ review of reasonableness of such costs.

3.3.48 BIAL commented as follows on the allocation of opening RAB:

Following is the extract of Authority's Order of the First Control Period

"8.26 With respect to Terminal 1 Expansion area (T1A), the Authority noted that according to BIAL, the additional Aeronautical Area constructed for Terminal 1 Expansion was 54810 sq. m whereas the additional Non-Aero area constructed was 7684 sq. m and additional common area was 22436 sq. m totaling to additional constructed area of 84,930 sq. m. This resulted in a ratio of 87.70%:12.30% for Terminal 1A Area between Aeronautical and Non-Aeronautical areas. The Authority proposed to consider this ratio in allocation of T1A cost between Aeronautical Assets and Non-Aeronautical Assets, for the present, for consideration under additions to RAB. The Authority noted that BIAL shall provide year-wise audited space allocation with the details of allotment for concessionaires and accordingly the asset allocation for Aeronautical RAB is likely to vary. The Authority proposed that this will be trued up at the time of determination of Aeronautical Tariffs for the next control period."

Decision 4 of the MYTO of First control period contained the following on asset allocation:

- *"Decision No. 4. Allocation of assets and Operation and Maintenance Expenditure between Aeronautical and Non-aeronautical services*

  a. The Authority decides:

  i. ***To consider the allocation of Opening RAB as of 1st April 2011 between Aeronautical and Non-Aeronautical Assets as determined by the Authority and detailed in Table 15.***

  ii. To consider the allocation of assets relating to Terminal 1 expansion between Aeronautical Assets and Non-Aeronautical Assets as detailed in Para 8.26 above.

  iii. To consider the allocation of Operation and Maintenance Expenditure between Aeronautical and Non-Aeronautical services as submitted by BIAL as per Table 13 for computation of ARR for the current control period.

  iv. ***To commission an independent study to assess the reasonableness of the asset allocation considered in Para i and Para ii above (Refer Para 8.70.1 above).***"

- *The Authority had noted the following in the Second control period Order*

  "8.6.4 The Authority had also included a proposal to carry out study of allocation of area between Aeronautical and Non-Aeronautical area and consider the same appropriately at the time of true up of ARR for the second control period."

- *The Authority, vide decision 5 in the Second Period Order had noted the following:*

  "5 (a) (ii) 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 stabilized and result of the study will be used to true up during next control period."

- *Hence, from the above it is clear that the Opening RAB allocation and further allocation considered by the Authority in the First Control period was subject to an independent study to be conducted. This was also noted in the MYTO of the Second Control Period.*

- *Also, Para 70 of the TDSAT Order noted that AERA has commissioned a study for allocation of assets as given below:*

  "At this stage, it would not be proper to interfere with the allocation made by the Authority when admittedly a study has already commenced. AERA has taken the stand that allocation as per the outcome of study will hopefully be implemented in the Third Control Period. Hence, AERA is directed to take suitable and required steps to ensure that the study is completed at the earliest and put to use as indicated."

- *The Authority, in the Consultation Paper for the Third Control Period has proposed to adopt the closing RAB of the First Control Period as such, as the Opening RAB of 1st April 2016 without carrying out an Independent evaluation of the assets of the Airport from Airport Opening date.*

- *We request the Authority to true up the Opening RAB as of First Control period be trued up based on a full-fledged allocation study being carried out and appropriately the same may be trued up from the Pre-control period onwards.*

- *Also, we request the Authority to provide adequate guidelines on the manner of classification of various assets and areas into Aeronautical/ Non-Aeronautical and Common and the manner of division of the common assets, so that there is clarity on the same for future periods for all Airports.*

3.3.49 BIAL commented as follows on the ratio for allocation of assets capitalized during second control period between aeronautical and non-aeronautical:

- BIAL requests the Authority to consider the following submissions and change the asset allocation accordingly.

Asset Details	Allocation by BIAL	Allocation by AERA in Consultation Paper 10	Adjustment (Rs. Cr.)	Explanations / Reasoning for BIAL allocation
Electrical and Powerhouse Equipment (S # 1)	Aeronautical	Common	(4.69)	Power is a necessary utility that is required to be provided by the Airport Operator. All Electrical and Powerhouse Equipment are for core Airport usage. Also, AERA adjusts the Utility cost recovery charges received from Concessionaires from Operating expenses and considers the entire cost as Aeronautical. Accordingly, all Electrical and Powerhouse Equipment costs are to be considered Aeronautical.
Car Park related Assets (S # 4)	Aeronautical	Non-Aeronautical	(0.17)	Assets listed in the study report are signages adjacent to Main access road and Parking display. These are not car parking area related assets but signages and displays needed for passenger convenience and guidance According the same may be treated as Aeronautical
Water Harvesting Assets (S # 5)	Aeronautical	Common	(13.29)	Assets relating to water harvesting – Mainly the ponds and other pipelines are considered as Common by AERA. These assets are part of the Utility infrastructure being created by BIAL as part of its Environment and Sustainability initiatives. As submitted earlier, the Utility assets which are for core Airport Operations should be treated as Aeronautical Also, any cost recoveries from these assets are adjusted from Operating Expenditure and the entire cost is treated as Aeronautical

Asset Details	Allocation by BIAL	Allocation by AERA in Consultation Paper 10	Adjustment (Rs. Cr.)	Explanations / Reasoning for BIAL allocation
				Accordingly, we request the Authority to treat these Assets as Aeronautical

3.3.50 BIAL commented as follows on the allocation ratio considered for certain projects/common assets for FY 21 and for the Third Control period:

- *BIAL notes that the Authority has considered 85.73% to be considered as the Ratio for allocating certain projects viz Airport Offices, ITI Project and Sustaining Capital Expenditure proposed to be capitalized in 2021 noting that, in the Fixed Asset Register the common assets are segregated based on Terminal Ratio. Similar principle has been proposed to be used for the Capital Expenditure estimated for the Third Control Period also.*
- *For estimation purposes a Project is considered at its consolidated value. Similarly, a consolidated estimate / total value is considered for Sustaining Capital Expenditure. This is necessary, as during the overall estimation process (in this case from FY 21 to FY 26), it is not possible to break-down the total project value into individual asset line items.*
- *In any Project, there are:*
  - *Assets directly identifiable as Aeronautical (For example Baggage system related or Security related, in a Terminal Building or any Airside related capital expenditure)*
  - *Assets not directly identifiable as Aeronautical – indicated as Common (For example Computers which may have a mixed use)*
  - *Certain assets directly identifiable as Non-Aeronautical assets*
- *As the Project level Capital Expenditure estimate is likely to have all the 3 components, BIAL has taken the overall cost ratio (which is a representative value, as it is derived from the Overall existing asset register) and applied the same at 91% for these Projects/ Consolidated Capex line items such as Sustaining Capex, which would have a cross section of all categories.*
- *Also, based on BIAL's past estimate, the proportional of purely Aeronautical assets in certain of these Projects (For example ITI or Sustaining Capex) is expected to be more than 91%, but has been taken at 91% based on a representative number, for the purpose of estimation which can be trued up at Actuals.*
- *Hence, we request the Authority to consider the ratio for Projects/ combined capex costs which may have all elements, at 91% which would be trued up on review of individual line items on inclusion of the said line items in the Fixed Asset Register.*

3.3.51 BIAL commented as follows on the design and PMC cost for the Second Control Period:

- *The Authority has considered the capitalized cost of Design and PMC and allowed the same for the addition to RAB in the 2nd control period.*
- *The PAL 1 projects are integrated, complex, mega-scale development projects involving 25 mmpa Terminal, NSPR and associated Airside works, MMTH and landside design, landscape design and PMC for managing and overseeing the entire project.*

- *BIAL has submitted the detailed break up of Design and PMC cost undertaken to complete this project. The projects capitalized in 2nd Control Period is largely the NSPR project and the Design and PMC cost relating to that project has been capitalized as per the accounting policies.*
- *The Design and PMC costs should be considered for the entire project cost at the time of completion of Capitalisation of the entire project in the Third Control Period.*

3.3.52 BIAL commented as follows on the disallowance of financing allowance:

Provisions as per Direction 5

- *The Authority was established under the AERA Act 2008 for discharge of its functions of determination of tariff for aeronautical services, and to call for such information as may be necessary to determine tariff under the AERA Act. To ensure this AERA issued an Order No.13/2010-11 dated 12th January 2011 ("Airport Order") finalizing the Regulatory Philosophy and approach for economic regulation of Airport Operators. Further, the AERA issued the Direction No.5/2012-11 dt. 28th February 2011 providing the Terms and Conditions for determination of tariffs for Airport Operators) Guidelines, ("Airport Guidelines") 2011 under Section 15 of the AERA Act directing all Airport Operators to act in accordance with the Guidelines.*
- *Direction 5 allowed Airport operators to be eligible for Financing Allowance (which is basically a return on the value invested in construction phase of an asset including Equity invested), before the Asset is put into use. This is a legitimate expectation of investors.*
- *The concept of Financing Allowance and how the Work in Progress Asset includes the Financing Allowance is detailed out in Paragraph 5.2.7 of the Direction No.05-2010-11 as below:*

  "5.2.7. Work In Progress assets (a) Work in Progress Assets (WIPA) are such assets as have not been commissioned during a Tariff Year or Control period, as the case may be. Work in Progress assets shall be accounted for as:

  WIPAt = WIPAt-1 + Capital expenditure + Financing allowance – Capital receipts of the nature of contributions from stakeholders (SC) - Commissioned Assets (CA)

  Where:

  WIPAt = Work in progress Assets at the end of Tariff Year t

  WIPAt-1 = Work in progress Assets at the end of the Tariff Year t-1

  Capital Expenditure= Expenditure on capital projects and capital items made during Tariff Year t.

- *The Financing allowance shall be calculated as follows:*

$$\text{Financing Allowance} = R_d \times \left(\text{WIPA}_{t-1} + \frac{\text{Capex} - \text{SC} - \text{CA}}{2}\right)$$

- *The Authority has further provided an Illustration on Page 28 of the working. The extract of the illustration is as under:*

Illustration 7: The following example illustrates this approach for calculation of Work in progress assets, financing allowance and commissioned assets The numbers in the illustration have been rounded to the nearest integers.

Forecast Work in Progress Assets

		2010-11	Tariff Year 1	Tariff Year 2	Tariff Year 3	Tariff Year 4	Tariff Year 5
Opening WIP: $WIPA_{t-1}$	OW	-	-	-	558	638	-
Capital Expenditure	CE	-	[illegible]	521	-	-	-
Financing Allowance	FA=R_d x (OW+(CE-CA-SC)/2)	-	-	37	80	43	
Capital Receipts	SC	-	200	-	-	-	-
Commissioned Assets	CA	-	633	-	-	681	-
Closing WIP: $WIPA_t$	CW = OW + CE + FA - SC - CA	-	-	558	638	-	-

- *The cost of debt, R_d, used for calculation of financing allowance, is the cost of debt determined by the Authority under Clause 5.1.4.*
- *The example illustrates that those assets, which have been acquired or commissioned within the same Tariff Year (i.e. Tariff Year 1), have been included both in Capital Expenditure and Commissioned Assets.*
- *The value of **commissioned assets, as calculated, shall be used for forecasting RAB for the Control Period.***

- *Further, Para 5.2.5 of the same Direction No. 05 details the forecasting of RAB wherein the commissioned assets (including the Financing Allowance on the assets, when it was in Work in Progress stage) has been added to RAB and forms part of the closing and average RAB workings. The Illustration 4 in Page 23 is given below:*

Forecast RAB

		2010-11	Tariff Year 1	Tariff Year 2	Tariff Year 3	Tariff Year 4	Tariff Year 5
Opening RAB_{t-1}	OR	22,750	20,500	18,826	16,462	13,998	12,277
Commissioned Assets	CA	-	633	-	-	681	-
Depreciation	DR	2,250	2,307	2,364	2,364	2,402	731
Disposals	Di	-	-	-	100	-	-
Incentive Adjustments	IA	-	-	-	-	-	-
Closing RAB_t	CR=OR+CA-DR-Di+IA	20,500	18,826	16,462	13,998	12,277	11,547
RAB for calculating ARR	RA=(OR+CR)/2		19,663	17,644	15,230	13,138	11,912

- *The Clause (d) of Para 5.2.6 defines Commissioned Assets as below:*

  "Commissioned Assets: Represents investments brought into use during Tariff Year t, consistent with Clause 5.2.7 herein below."

- *Thus, form the above clauses it is clear that the Financing Allowance is computed on the Work in Progress balance based on Capital Expenditure incurred irrespective of it being funded by debt/Equity/Internal accruals and is capitalized as part of Commissioned assets for RAB Computation.*

<u>Clarification and affirmation of Direction 5 provided to BIAL by AERA.</u>

- *BIAL had vide its letter dated 27th August 2012 sought clarification from AERA on Financing Allowance, (the letter is being produced in Annexure 4) requesting AERA to confirm its understanding on the above clauses of Financing Allowance and its application in the Business Plan.*
- *The Authority vide its email dated 22nd October 2012 has clarified the following.*

"i) BIAL's understanding that the Financing Allowance is computed on the total Work in Progress balance (whether funded through debt/ equity/ internal accruals) and is capitalized as a part of commissioned assets for RAB computation is correct vis-à-vis Authority's Guidelines.

ii) As regards the clarifications on the computation of the financing allowance assuming there is no contribution on account of Capital receipts, the formula for Financing Allowance would be: Rd x (Opening WIP + (Capital Expenditure – Commissioned Assets)/2), where Rd is the Cost of Debt."

The letter is provided as Annexure 5

- *Thus, Direction 5 provides an explicit, detailed elaboration of Financing allowance. Manner and formulae of computation and addition of the "commissioned assets" into RAB including the Financing allowance are elucidated in detail with examples. Also, this has been positively re-affirmed by AERA in the clarificatory letters provided.*

Past Tariff Orders of BIAL

- *The regulatory principles laid down by the Authority and based on which the tariff orders are determined provide a fundamental foundation of the regulatory clarity to the stakeholders on the manner in which different components of costs and revenues are treated.*
- *Based on the regulatory philosophy and the confirmation/clarification given by the Authority, BIAL filed its MYTP submission for 1st and 2nd Control period providing for Financing Allowance and the same was approved by the Authority for both the Control periods.*
- *In the MYTO of both the control periods, the Authority has taken cognizance that the Financing allowance (on total capital expenditure) which will be added to RAB will be different from the Interest during Construction (which is on the Loan borrowed) which will be capitalized in the financial statements.*
- *Following is the extract of Table 27 of the MYTO issued for BIAL for the second control period. The table clearly denotes that the estimated addition to RAB is the Cost incurred plus Financing allowance whereas the same table shows estimate of addition to the Financial statements as being Cost incurred plus IDC.*

Extract from Table 27 - Additions to RAB for 2nd Control period as per MYTO

Project	*Capitalisn*	*Infra cost*	*Financing allowance*	*IDC*	*Total Addition to RAB*	*Total addition to Fixed Assets - books*
		A	*B*	*C*	*A+B*	*A+C*
Site preparation & Earthworks to Runway 2, Taxiway & Apron	*2018*	*696.47*	*105.98*	*65.32*	*802.45*	*761.79*
Runway 2, Taxiway & Apron - Phase Ia	*2020*	*1286.92*	*194.33*	*164.29*	*1481.25*	*1451.21*
Others						
-						
-						
Expansion projects capitalized		***9306.63***	***896.08***	***1035.77***	***10202.71***	***10342.40***

- *In the example highlighted above, Total addition to RAB is Rs. 1286.92 crores of cost plus Financing allowance Rs. 194.33 crores which is Rs. 1481.25 crores whereas the total capitalization in books is Rs. 1286.92 crores cost plus IDC Rs. 164.29 crores which is Rs. 1451.21 crores. This clearly shows that Financing allowance is not the same as IDC.*
- *Workings of Financing allowance and IDC for the highlighted Project is detailed below:*

Financing Allowance estimation computations (From MYTO Model of SCP)

Runway 2, Taxiway & Apron - Phase Ia							
Particulars		***FY 16***	***FY 17***	***FY 18***	***FY 19***	***FY 20***	***Total***
Opening Work in progress		*0.00*	*6.75*	*197.94*	*470.35*	*1288.35*	
Spend projected		*6.75*	*181.22*	*239.83*	*732.26*	*126.87*	*1286.92*
Applicable rate of Interest		*10.25%*	*10.25%*	*10.25%*	*10.25%*	*10.25%*	
Computed Financing allowance		*0.00*	*9.98*	*32.58*	*85.74*	*66.03*	*194.33*
Capitalization		*0.00*	*0.00*	*0.00*	*0.00*	*1481.25*	
Closing Work in progress		*6.75*	*197.94*	*470.35*	*1288.35*	*0.00*	
For the same asset Loan draw down and IDC computations are as below (From MYTO Model of SCP)							
Runway 2, Taxiway & Apron - Phase Ia							
Particulars		***FY 16***	***FY 17***	***FY 18***	***FY 19***	***FY 20***	***Total***
Opening Loan balance		*0.00*	*0.00*	*112.28*	*123.79*	*701.60*	
Additional Loan taken		*0.00*	*101.84*	*0.00*	*512.58*	*101.50*	
Interest during Construction		*0*	*10.44*	*11.51*	*65.23*	*77.12*	*164.29*
Capitalized		*0.00*	*0.00*	*0.00*	*0.00*	*880.21*	

- *Following is the extract of Para 10.14 and Table 23 of MYTO issued for BIAL for the first control period. The Table clearly notes the term Financing allowance as being added to the costs and charges.*

  10.14 The Authority's approach of treating capital work in progress is to give financing allowance at the cost of debt for the capital work in progress assets.

  Table : Assets decided to be considered as part of addition to RAB for the First control period - Rs. Crores

Project	***Date of Capitalization***	***Basic Cost and charges***	***Financing allowance - Projects***	***Total Cost to be added to RAB***
Apron Expansion	*February-14*	*121.15*	*23.12*	*144.27*
Terminal 1 Expansion	*February-14*	*1342.30*	*168.63*	*1510.94*
Other Projects i.e., Miscellaneous	*February-14*	*16.39*		*16.39*
Terminal 1 Expansion - Additional	*March-15*	*80.22*		*80.22*
Other Projects	*March-15*	*98.32*		*98.32*
Expansion Projects Capitalized (A)				***1850.13***
Maintenance Capex Projects	*31st March 2012*	*15.43*		*15.43*
	31st March 2013	*22.52*		*22.52*
	31st March 2014	*0.00*		*0.00*
	31st March 2015	*264.50*		*264.50*
	31st March 2016	*61.66*		*61.66*

Project	*Date of Capitalization*	*Basic Cost and charges*	*Financing allowance - Projects*	*Total Cost to be added to RAB*
Maintenance Capital Expenditure (B)				*364.11*
Total Capitalization				*2214.24*
Maintenance capital expenditure for 2011-12 and 2012-13 given net of disposals				

- *Workings of Financing allowance and IDC (though not included as part of the MYTO) for the highlighted Project is detailed below:*

Apron Expansion							
Particulars	***FY 11***	***FY 12***	***FY 13***	***FY 14***	***FY 15***	***FY 16***	***Total***
Opening Work in progress	*0.00*	*36.02*	*68.06*	*117.79*	*0.00*	*0.00*	
Spend projected	*34.20*	*26.15*	*40.46*	*20.34*	*0.00*	*0.00*	*121.15*
Applicable rate of Interest	*12.00%*	*12.00%*	*10.50%*	*11.00%*	*12.50%*	*12.50%*	
Financing allowance	*1.82*	*5.89*	*9.27*	*6.14*	*0.00*	*0.00*	*23.12*
Capitalization	*0.00*	*0.00*	*0.00*	*144.27*	*0.00*	*0.00*	
Closing Work in progress	*34.20*	*68.06*	*117.79*	*0.00*	*0.00*	*0.00*	

For the same asset Loan draw down and IDC computations are as below (From MYTO Model of FCP)

Apron Expansion							
Particulars	**FY 11**	**FY 12**	**FY 13**	**FY 14**	**FY 15**	**FY 16**	**Total**
Opening Loan balance	0.00	0.00	42.36	0.00	0.00	0.00	
Additional Loan taken	0.00	40.25	11.25	0.00	0.00	0.00	
Interest during Construction	0.00	2.11	5.28	0.00	0.00	0.00	7.39
Loan for Capitalised asset	0.00	0.00	58.89	0.00	0.00	0.00	
Closing loan balance	0.00	42.36	0.00	0.00	0.00	0.00	

Summary:

- *IDC cost is not taken for RAB Addition, but financing allowance is considered for RAB addition.*
- *Computation of Financing allowance is on total capital expenditure and not on debt drawals.*
- *Formula of Financing Allowance considers cost of debt rate for entire expenditure in work in progress.*
- *As per Authority's principles both equity and debt get return during the construction phase.*

Current Position

- *Financial closure for Expansion project was based on the applicability of Financing Allowance and both shareholders and lenders have invested their share based on the tariff orders approved by AERA in the 2nd Control Period.*
- *Accordingly, BIAL has provided a CA certificate as required during MYTP evaluation process explaining the detailed project wise computations of Financing allowance in line with Direction 5 and the amount to be additionally added to RAB. The certificate is enclosed as Annexure 6. In BIAL's estimate, due to upfront investment of huge value of Equity, approx. Rs. 200 crores are the additional inclusion to be made in RAB.*
- *In the Consultation Paper for the 3rd Control period, the Authority has stated that BIAL has computed financing allowance irrespective of whether it was funded by equity or debt and that this has led to additional capitalization in the books of account of BIAL and that it is notional and*

hence will not be considered both for true up of Second control period and the estimation for third control period. In effect, the Authority is treating the funds deployed by the airport operator during construction phase at zero cost. This is incorrect and not in line with its own Tariff Philosophy and the conceptual framework.

- *BIAL wishes to submit that it has deployed 93% of its internal accruals for expansion in the airport since AOD in creation of assets like Terminal T1A expansion, NSPR, Terminal T2, Aprons etc., all managed with a prudent mix of internal accruals and debt funding. Any investment made in creation of an asset has to be accorded a return.*
- *This has also been deliberated by TDSAT in the DIAL Order for the 1st Control Period in the context of Authority's decision of considering RSD at zero cost debt wherein the TDSAT states "Conceptually, the cost of investment can never be zero since that would imply an infinite return {by general definition, return on investment = (gains from investment – cost of investment)/cost of investment)}. Thus, it is obvious that if this fund has been used as an investment, there is a cost attached to it which cannot be obviated by saying that it is a zero cost debt." Hence, the concept that any investment towards construction of an asset has to be accorded a return has been recognized in the above TDSAT order.*
- *Further, BIAL wishes to submit the Tariff Philosophy for Airport operators provides for a Fair Rate of Return on the Regulatory Asset Base only after the asset is commissioned and put to use. The assets used in the airport are capital intensive and have long gestation period for commissioning, during which phase the Financing allowance rightly provides for a return on the long-term assets (including Equity invested therein) which take time to commission. Moreover, the Direction No.05 allows for only a return at the cost of debt and thus no unjust enrichment is accorded to the airport operator on the equity funds invested at the time of creating the assets for the airport.*
- *Abrupt changes to Regulatory principles, in contravention to Authority's own Guidelines and one which had been followed in the past tariff orders, creates doubts regarding consistency of the Regulator's approach while adding to the doubts in the minds of Investors. Such an approach by the Authority will harm the interest of the Investors who have already invested in the airport.*
- *Changes to a set regulatory approach which has been laid down by the Authority itself and consistently followed in the past orders and one which has been extended to the applicable other airport operators also, as a hindsight, creates confusions and doubts on the Regulatory Approach as well as doubts in the minds of the Stakeholders and investors of the airport project. Such an approach by the Authority will harm the interest of the investors who have invested in the airport. On one hand the Airport operator is required to continuously invest in the airport to enhance capacity and provide world class amenities to passengers while on the other hand it has to forego any form of return on its investment during the construction phase which vitiates the environment for further investment in the sector due to regulatory uncertainty.*
- *Non consideration of Financing allowance is unjust, violating AERA's own guidelines and inconsistent with the approach followed in the previous Orders.*

Summary

- *The AERA Act requires the Authority to consider "timely investment in improvement of airport facilities"; and "economic and viable operation of major airports". The statement of objects and reasons of the AERA Act requires Authority to encourage investment in airport facilities, create a level playing field and foster healthy competition. The Airports Infrastructure Policy of 1997 and*

NCAP 2016 also emphasise the need to provide a commercial orientation and encourage private sector participation in the airport sector.

- *The principles of promissory estoppel and legitimate expectation demand that if investment is approved in a given regulatory matrix, after the investment has been made, the regulatory matrix cannot be changed.*
- *BIAL has tied up the financial closure and funded from Internal accruals upfront for PAL-1 projects based on the applicable Regulatory Principles and the precedence set in the past control periods.*
- *Financing allowance computation is fully in compliance with Direction 5, affirmed by Authority to BIAL in its communications and has also been considered by AERA in the past orders.*
- *What was accorded to BIAL in MYTO of SCP was a Promissory estoppel. A principle enshrined in AERA Regulations of 2011 and followed consistently in the previous 2 control orders cannot be withdrawn or amended.*
- *Based on extant AERA regulations and the principles applied in the Previous control period orders, BIAL has submitted CA certificates on the calculations of Financing allowance. We request the Authority to consider the same and update the Regulatory Asset Base accordingly.*

3.3.53 BIAL commented as follows regarding the eastern connectivity tunnel:
"Background:

- *KIA currently has external access through the Trumpet on NH 44 (earlier NH 7) and the South Access Road. As this was of a serious security concern, the BIAL Management explored alternate access points to the airport and evaluated options which were discussed with Government of Karnataka (GoK) / Infrastructure Development Department (IDD). Also, the construction works on the South-Western connectivity has commenced and is planned for operationalization by March 2018. An Eastern Connectivity Road providing connection to the Eastern development pocket (not connected to the airport west areas and the terminals) is under construction by the PWD department.*
- *Request for the access to Eastern side of the airport was made by Additional Commissioner Traffic and by ACS Home, in 2016 which has necessitated the project. Relevant letters are enclosed as Annexure 7.*
- *The access to the Airport through the Trumpet on NH 44 through SW Connectivity road is the only external access available between airport terminal and Bangalore city. The expansion on NH 44 is not possible due to congestion at Hebbal flyover and due to land acquisition constraints. As per Bengaluru Metropolitan Region Development Authority (BMRDA) Structure Plan 2031, intense development is planned around east of Bangalore urban clusters / nodes. Significant other developments in the area ex. commercial developments at Doddaballapura and Chikballapura, business parks, IT and hardware parks, KIADB aerospace parks etc. is expected to lead to additional traffic.*
- *BIAL has conducted a feasibility study to evaluate options for an alternate access and based on the study it was proposed that the Eastern Tunnel Access road would be feasible and make the airport more easily accessible for the eastern part of Bengaluru city.*
- *BIAL undertook construction of the Eastern Tunnel works involving Phase 1- Early Works which includes construction of Tunnel below cross field taxiway (approximately 300m, only civil works) and the same has been capitalized in FY 21.*

- *The criticality of the Eastern Connectivity Tunnel is that it had to be built below the cross taxiway and thus it had to be taken up at the time of construction of NSPR. If it was not done now, it would be prohibitively expensive to undertake it once the NSPR is operational and it will also result in shut down of NSPR for the construction period of around 9 months.*
- *The ECT was done after getting requisite permissions/ approvals from BCAS, CISF etc. BIAL has also got the approval to open the ECT (ready for use) below the cross taxiway and currently this is being used to transport the construction materials and labour, in view of the operationalization of the NSPR vide Minutes of Meeting dt. 14th January 2020 and the tunnel has been put to use.*
- *BIAL would thus request AERA to consider the capitalization of the ECT and not exclude it from the RAB of Second Control Period.*
- *The Eastern Connectivity Tunnel (ECT) comes below the cross-field taxiway which is under the boundary of the NSPR. This cross-field taxiway is the only connecting taxiway between North and South Runway and to the Terminal buildings. The ECT has been constructed along with NSPR to avoid any future disruptions to the air traffic operations, once the cross-field taxiway becomes operational. The tunnel has 5.5m clear height with 4 traffic lanes divided by a central section for walkway and tunnel utilities and drains and additional utility trench on either of the traffic lanes etc.*

1. Operational difficulties BIAL will face if it were to construct this ECT under an operating environment i.e., under a "live taxiway".

- *The Cross-field taxiway has to be closed, if the ECT were to be constructed in an operating environment. Closure of this important taxiway to enable construction of Eastern Connectivity Tunnel will have the following impact:*
- *The Eastern Crossfield Taxiway will have to be closed in the future, if the ECT were to be constructed in an operating environment. Closure of this important taxiway to enable construction of Eastern Connectivity Tunnel will have the following impacts:*
    - *Reduction in overall air traffic movements (capacity) at BLR Airport, as one runway needs to be closed in the absence of the Eastern Crossfield Taxiway connection (the only North-South connection on the Airfield). Closure of the South Runway will adversely impact (i) hourly airfield capacity, causing significant imbalance between airside, terminal and landside capacity leading to changes to airline schedules; (ii) reduced low visibility operations, resulting in aircraft diversion and delays since this is the only CAT III equipped runway at BIAL.; and (iii) Elimination of Code F aircraft operations at BLR Airport during this*
    - *As per compliance, such construction will be categorised under the "taxiway over a bridge" category, which will result in additional cost and thus was avoided. Taxiway over the bridge has stringent regulatory requirements to ensure sufficient strength to hold the weight of the heaviest aircraft as well as requisite security requirements for such operations (per Section 2 below).*
    - *Design stability is better when constructed with integration rather than stand alone. Considering the requirement of deep excavation to construct tunnel under the taxiway, it is also expected to have rock blasting / piling etc. These activities will adversely affect the strength of adjoining paved surfaces of runway & taxiway.*
    - *While the existing surface is required to be removed and re-laid to construct the ECT, the joining of new and old surfaces will have difference in evenness, which may lead to compliance*

issues with regard to slope corrections and water ponding. In addition, all the new surfaces are expected to settle down during its stabilization period and any such settling of surface between the tunnel and taxiway will result in surface deterioration and cracking.

- *The natural topography of the airport is in a north-western direction, and the drainages are laid out accordingly. Any disruption in the drainage path may lead to flooding of South Runway and associated areas. Also, while executing any excavation work in operational areas, all the AGL circuits & other cables need to be protected, which will be impracticable in this case.*
- *The existing AGL circuits originates from both the CCRs located at either end of the runway and panning out towards the North Side. Any disruption to these cables will affect the existing AGL in areas which are to be used for operating North Runway. To relocate these circuits and integrating with the CCRs of North Runway requires huge expansion of facilities at CCRs of North Runway.*
- *During the construction of such magnitude, it is expected to have several heavy pieces of machinery to excavate and move earth and building materials along with a significant manpower. These vehicles and manpower are expected to move through the aircraft operational areas (i.e., airside areas), which will add to the hazards affecting aircraft operations and need appropriate regulatory and security compliance and clearance (see Section 2 below).*
- *Re-approval from appropriate regulatory Authority would be required, which requires demonstration of strength.*

2. Challenges that BIAL would face, from a BCAS perspective, if it were to construct this ECT in an operating environment.

- *Airside & Landside mix during construction endangering airport security.*
- *Access for manpower and equipment to airside for construction activities.*
- *Re-approval from appropriate regulatory Authority.*
- *Safeguarding the area with increased manpower.*

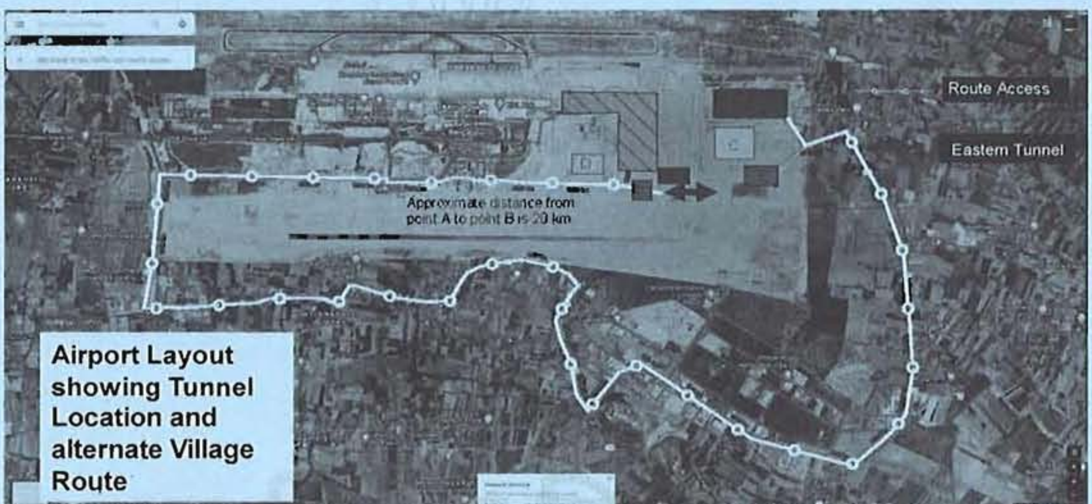
3. Other aspects of Airport Operations

The construction of South runway and Crossfield taxiway connection to north runway has essentially split the airport property into two parts – east and west. All the airport management offices are in the west, with very little development in the east. The tunnel is the sole access from west to east within the airport property. Alternate route around the south runway and village roads is 20km long.

- *The tunnel is being used by the BIAL landside security team for regular patrolling of the airside perimeter wall and undertaking regular safety checks on both sides of the Crossfield taxiway.*
- *BIAL security team undertakes patrolling along the perimeter road during day as well as night and also has posts on the eastern side of the tunnel and attends to all the exigencies. With sizeable number of guard posts on the eastern side and the area to be covered is extensively large, any occurrence of untoward incident requiring intervention of law and order / security agencies will necessitate the use of the tunnel as there is no alternate access other than taking the village road which increases the distance by 20 kms and reaction time by almost an hour. Another point to be noted is that these village roads are not accessible 24x7.*

- *Due to undulating terrain and soil pile up on account of construction activities (happening outside the operational area), during rainy season, slush pile up happens near the perimeter wall of the operational area. This slush has to be cleared using heavy machinery to avoid wall collapse. These heavy machinery like bull dozers, dumpers, excavators have to necessarily move via the Eastern Tunnel to do perform these activities as they cannot move thru the village roads.*

- *BASHM team has to carry out regular habitat monitoring for effective WHMP (Wildlife Hazard Management Program). This is in accordance with the requirements stated in ICAO 9981 Part 3, Para 6.3.1 and ICAO 9137 5th Edition Chapter 9. As part to this, the critical habitat around the airports is assessed and recorded for regular monitoring. The prominent habitat areas, near the airport vicinity, are located on the southeast side of runway 27 L9 (Forest belt) and North of 27 R (Bettakotte lake). These are the two prominent locations for bird/wildlife hazard which could pose concurrent threat to the airport operations. BASHM team has to monitor this area for bird habituation to identify the species so that we can alter their habitat and also for keeping the birds less attracted to airside. Apart from this, the team also has to move into these areas for bird scaring to keep away the flocking birds from the lakebed. Since the water birds and bigger in size having huge plumage their maneuverability from aircraft movement path in minimal and often leads to bird strike incidents. Hence it is imperative to keep these attended whenever they are available on lakebed. All these activities are currently carried out taking the circuitous route of 20 kms which often leads to increased lead time in reaching to these locations. A quick access to the east area through this Eastern Tunnel is critical in BASHM activities.*



- *To address all the above-mentioned issues and obtain maximum operational efficiency, the Eastern Connectivity Tunnel is undeniably necessary. This will practically eliminate all the operationally related constraints making the tunnel a valued infrastructure to secure airport operations with better efficiency in handling any contingencies as well as better time utilization.*

4. Financial Impact of implementing ECT in FY2026 under an Operating environment

- *BIAL had carried out an evaluation to ascertain the cost benefit analysis of carrying out this activity currently instead of being done in FY 26. Considering the Design, PMC and Contingency costs at 5% and 3% as applied by AERA the estimated cost of the project in FY 26 is Rs. 176.37 crores, excluding IDC. Additionally, operational difficulties and challenges have to be considered.*

Estimate of Eastern Connectivity Tunnel in Year 2026

Sl. Nr.	Item	Amount	Amount
1	Award Cost of Construction in Year 2019	78,00,00,000	
2	Inflation adj @ 4.9% for 7 years	1.398	
3	**Estimated base Construction Cost in Year 2026**	**1,09,02,42,280**	
4	Airside Allowance due to lesser Productivity	21,80,48,456	Assumed 20% as the access need to be through Airside
5	Dismantling of Taxiway for 300 m	2,25,00,000	Provisional Sum
6	Re-doing of Taxiway in Year 2026	30,00,00,000	Assumed 20,000 / m2 including any rectifications needed
7	**Estimated Construction Cost in Year 2026**	**1,63,07,90,736**	
8	Design & PMC Fee@5%	8,15,39,537	
9	Contingency@3%	5,13,69,908	
10	**Estimated Project Cost in Year 2026**	**1,76,37,00,181**	

- *As can be seen from the above, it is beneficial to implement ECT works along with NSPR implementation and not during FY2026 under an operating environment.*
- *BIAL submits that considering the cost savings as detailed above and prudence employed in developing the Eastern Connectivity Tunnel and the fact that the Eastern Connectivity Tunnel is already in use for various airport activities, this expenditure needs to be considered under Section 13 of the Act., in particular, Section 13(1)(a)(iii) and 13(1)(a)(iv).*
- *BIAL strongly believes that this capital expenditure is necessary at this stage of the project so as to avoid a higher capital expenditure at a later stage and also avoid operational disruptions to Airlines and Air Traffic movement at KIAB. BIAL is being penalized (rather than being rewarded) for its capital efficiency and advance planning.*
- *As elaborated above, the Eastern Connectivity Tunnel has already been put to use and capitalized. Eastern Connectivity Tunnel is currently used by for performing various Airport activities such as vehicular movements and Security and safety related patrolling, BASHM etc. and it establishes vital connectivity with the other side of the Airport. As the tunnel was created due to a specific need and request, and has been successfully, constructed, commissioned and put to use for various Airport activities as stated above, BIAL requests the Authority to consider the Eastern Connectivity Tunnel as part of RAB."*

Other stakeholder comments on true-up of regulated asset base for the Second Control Period

3.3.54 Government of Karnataka commented as follows on the eastern connectivity tunnel:

- *"Reconsideration of key projects directed by Government of Karnataka: The Metro Rail Scheme and Appurtenant works and the tunnel works under the active run way for connecting the terminal to the eastern access road have been mandated by Government of Karnataka to provide better connectivity to passengers travelling to their home. The capital cost for these projects should be considered in this control period."*

3.3.55 Regarding the eastern tunnel works, Infrastructure Development Department (GoK) submitted that these works are required for the alternate access points to the airport from the security standpoint and initiated by Government of Karnataka. IDD stated that BIAL has saved future costs, as doing this project later under a 'live taxiway' would have created more operational problems and also would have costed more. IDD requested the Authority to consider the capitalization of the enabling works of eastern connectivity tunnel as per BIAL's submission.

3.3.56 FIH Mauritius Investments Ltd. submitted as follows regarding the disallowance of project pre-operative expenses:

- *"These are expenses incurred for having a dedicated Project team that is responsible for implementation of Expansion Project by working along with team of international consultants.*

- *Contrary to the decision taken in the 2nd control period tariff order, AERA has now disallowed the entire cost of Rs.355 crores and this disallowance will severely impact the cash flows of BIAL.*
- *In the 2nd control period order, Authority had acknowledged that there is a need to have a dedicated Project Management team when large scale capital expenditure Projects are being executed.*
- *Authority had approved pre-operative expenses in the case of Delhi and Mumbai airport expansion projects in the recent past and has also proposed pre-operative expenses in the consultation paper issued for GHIAL recently.*

We request the Authority to reinstate the pre-operative expenses as approved in the 2nd tariff order and true up the same at the time of completion of the projects based on actual costs incurred and its reasonableness."

3.3.57 FIH submitted the following regarding the withdrawal of financing allowance:

- *"Financing Allowance as per Direction No. 05 was followed by AERA in the last 2 tariff orders. This was the basis for lenders and shareholders to commit their share of investment in the Expansion Project.*
- *AERA has inconsistently revised the concept of Financing allowance in the 3rd Control Period and this will seriously affect the cash flows and ability to service debt service obligations of the company, especially since BIAL has invested100% of the equity (amounting to Rs 2,425 crs) prior to debt disbursement.*
- *Such changes to Regulatory principles, in contravention to Authority's own Guidelines and one which had been followed in the past tariff orders, creates doubts regarding consistency of the Regulator's approach while adding to the doubts in the minds of Investors & Lenders.*

We request the Authority to honour its own guidelines and airport regulations and allow Financing Allowance in line with the principles applied in the tariff orders of the prior control periods."

3.3.58 Regarding the issues of concern in the consultation paper, Siemens stated the below issues.

Similar to the comments of FIH, Siemens has also stated that the Authority should uphold its guidelines and airport regulations and allow financing allowance as claimed by BIAL.

Similar to the comments of FIH, Siemens has also stated that the Authority should reinstate the pre-operative expenses as approved in the 2nd control period order and true-up the same at the time of the completion of the projects based on actual costs incurred and its reasonableness.

3.3.59 MIAL stated that the Authority needs to consistently follow its own guidelines and is requested to allow the financing allowance as per its own guidelines and the past practice for tariff determination of BIAL.

3.3.60 APAO stated that the Authority should honour its own guidelines and airport regulations and allow the financing allowance claimed by BIAL.

APAO stated that the Authority had approved INR 150 cr. in the 2nd control period after acknowledging that there is a need to have dedicated project management team when large scale capital expenditure projects are being executed. APAO stated that the disallowance of pre-operative expenses will severely affect the cash flows of BIAL and the Authority has not conducted the study when the project is still under construction. APAO requested AERA to allow pre-operative expenses as approved in the 2nd control period order and true-up the same at the time of completion of the projects based on the actual costs incurred and its reasonableness.

3.3.61 FIA commented that while it appreciates that independent studies have been conducted by AERA on efficient capital expansion, asset allocation, Operating Expenditure/O&M expenses, and Cost of Equity, FIA submitted that the same may be undertaken prior to commencement of each 'Control Period' in order to minimise any large variations in projections and also ensuring suitable benchmarking of costs. Further, FIA requested AERA to apply the cost rationalisation measures, as indicated in such studies, to be applied retrospectively from the First Control Period.

3.3.62 IATA submitted as follows on the capital expenditure for the second control period:

- *"There were several capital expenditures incurred in the SCP period which are of concerns especially in relation to the cost escalations compared to what have been previously approved by AERA in the SCP:*
    - *The cost overrun of T2 Apron 1 of 11% is beyond the acceptable variance of 10%. Any such exceedance should have triggered the need to review the project prior to proceeding ahead with the changes.*
    - *The forecourts, roadways and landside development cost has escalated by 54%. IATA would like to reiterate our view expressed at the consultation meeting that at present the development of MMTH is not supported by users pending further clarification from BIAL as outlined in our letter dated 14 September 2020, attached to this submission for your reference (see Appendix A). For this reason, any changes to the scope/design of infrastructure to support the development of the MMTH such as roads etc. should be funded/apportioned accordingly to BIAL and metro/rail authorities, and not to airport users. The statement below further exemplify the lack of consultation with airport users who are now being asked to fund the development of the MMTH and associated cost escalations to support its development.*
    - *There is a need for BIAL to more timely engage airport users for its capital projects where any potential cost overrun, changes to scope or specification can be highlighted much earlier on and users feedback taken into consideration. The project cost overruns should not be accepted if there is no prior agreement/validation from airport users through the required (ongoing) consultation process.*
- *IATA fully supports the decision by AERA to exclude pre-operative expenses from the asset additions of the SCP. As highlighted, these expenses are redundant and is double-counting the design and PMC allowance if they were to be included."*

BIAL's response to stakeholder comments regarding true-up of regulated asset base for the Second Control Period

3.3.63 BIAL concurred with the comments of GoK, IDD, FIH, Siemens, MIAL and APAO.

3.3.64 With regards to the IATA's comments on the cost-overrun in the T2 Apron and MMTH project, BIAL submitted the justification given as part of the Consultation Paper.

3.3.65 Regarding the comment by IATA on the lack of consultation process, BIAL further submitted that IATA has submitted a letter regarding Third control period projects (PAL-2, Group B Projects as per CP) for which, BIAL had conducted Stage I and Stage II consultations and the increase in Landside and Forecourt projects which are part of the Projects approved in the Second control period, being capitalised in the third control period on account of delay due to Covid-19, does not have any linkage to IATA's letter of 14th September 2020.

3.3.66 Regarding IATA's comment on the interim consultations and changes in scope/ design of infrastructure, BIAL submitted that it has undertaken the consultations as per Direction 5. BIAL submitted that any interim consultation regarding proposed change in design/ scope/ specification done mid-way into the project implementation, will only delay the completion of the project, resulting in increased costs and further, manner of dealing with situations where all users do not have a uniform opinion to the changes to design, scope is not laid down in AERA's guidelines. In BIAL's case currently, the major changes in design and scale of the Forecourts and landside projects happened on account of GoK's decision to enable metro connectivity to the Airport. This metro connectivity was a long pending request from the Airport users, considering the fact that the Airport is located 30-40 kms away from the city and the long commute time. Further, BIAL submitted that the master plan update meeting was conducted by BIAL on 24th April 2019 with all those who were within the Airport's system including Airlines (Domestic and International) and AoC and this discussion and update included MMTH concept and future metro connectivity and the minutes have also been shared. BIAL has carried out a proactive briefing for the Master plan update.

3.3.67 Regarding IATA's comment on the pre-operative expenses, BIAL submitted similar responses as given in its stakeholder comments.

3.3.68 BIAL responded to FIA's comment on the capital expenditure for the Second Control Period that the scope of work given by AERA to the independent consultant was to review and examine the O&M costs incurred by the airport (BIAL) for the previous control period (2nd control period – FY 2017 to FY 2021) and hence, it is not correct to extend any such cost rationalisation measures to the first control period.

Authority's examination after reviewing stakeholder comments on the true-up of the regulatory asset base of Second Control Period

3.3.69 The Authority has examined the comments of BIAL on the reduction of INR 38.93 cr. from asset addition of FY20. The Authority has noted from BIAL's comments that the written down value of the asset is INR 1 and therefore, the reduction of INR 38.93 cr. is not required from the RAB. Accordingly, the Authority has revised the asset addition of FY20 for computation of RAB for the true-up of the Second Control Period.

Pre-operative expenses

3.3.70 The Authority has examined the comments of BIAL, FIH, Siemens, APAO and IATA on the pre-operative expenses. In the Second Control Period order of BIAL, the Authority has noted that it had approved pre-operative expenses of INR 156 cr. (incl. GST) and decided that it will review and true-up the same after the projects are commissioned based on a study of the actual cost incurred and its reasonableness. The Authority examined its decisions with regards to the pre-operative expenses for other airports. The Authority notes that it is a general practice at airports to employ a project management team whose expenses are capitalized with the commissioning of the project. The Authority has also taken a note of the segregation of roles and responsibility of the project team and the PMC consultants for the PAL 1 projects.

3.3.71 The Authority has noted its guidelines which specify the requirement to submit separately the payroll costs of capitalized projects and the costs related to administrative and general expenses incurred for capital projects. The Authority has also examined the statutory auditor's opinion submitted by BIAL on the capitalization of the pre-operative expenses. The auditor's certificate has given detailed reasoning of capitalization for each expense. Based on the above evaluation, the Authority decides to allow pre-operative expenses upto INR 156 cr. for the projects proposed to be capitalized in the Second Control Period order of BIAL to provide consistent treatment of the pre-operative expenses across airports.

3.3.72 The Authority further noted that the pre-operative expenses proposed to be capitalized in the second control period is INR 93.61 cr. which is less than the approved amount of INR 156 cr. (incl. GST) since the remaining cost is proposed to be capitalized in the Third Control Period. The Authority decides to consider the pre-operative expenses capitalized in the second control period for true-up of the second control period. The treatment of pre-operative cost beyond INR 93.61 cr has been provided in Chapter 5 on regulatory asset base and depreciation for the Third Control Period.

Opening RAB of the Second Control Period

3.3.73 The Authority examined the comments of BIAL to conduct an asset allocation study to determine the opening RAB of the Second Control Period. BIAL needs to appreciate that issues relating to true-up of first control period have reached finality with issue of the second control period tariff order and the demands of BIAL cannot be kept open in perpetuity in subsequent control period. AERA only considers such true-up arising out of exigencies like court orders. Further, based on the Hon'ble TDSAT judgement dated 16 December 2020, the Authority has conducted a study on asset allocation for the asset additions of the Second Control Period and the same is considered for true-up of the RAB for the Second Control Period.

Allocation of assets for the Second Control Period

3.3.74 The Authority noted the comments of BIAL on the allocation of the assets capitalized in the Second Control Period. With regards to the electrical and powerhouse equipment and water harvesting ponds, the Authority is of the view that these assets provide services to the common areas at the airport and therefore, these assets are considered as common and bifurcated into aeronautical and non-aeronautical assets.

3.3.75 Regarding BIAL's comment on the car park related asset, the Authority has considered these as non-aeronautical assets as these are related to car park and advertising signages.

3.3.76 The Authority has examined BIAL's comment on the allocation ratio for common assets of FY21 and assets capitalized in the Third Control Period. Since the Authority has considered the actual asset addition of FY21 for true-up of the Second Control Period in this tariff order, BIAL's comment is not relevant for the SCP. The Authority has discussed this comment of BIAL in para 5.5.48 while reviewing the regulatory asset base and depreciation for the Third Control Period.

Design and PMC Cost

3.3.77 The Authority has examined BIAL's comment to consider the design and PMC costs of the entire PAL 1 project. While the Authority has bifurcated the design and PMC costs into SCP and TCP, the Authority would clarify that the evaluation of the design and PMC cost is undertaken for the entire project cost approved in the SCP order and based on the recommendation of the RITES study on efficient capital expenditure.

Financing Allowance

3.3.78 The Authority has carefully examined the submission of BIAL, FIH, Siemens, MIAL and APAO on the treatment of financing allowance. The Authority also notes that it had approved the Financing Allowance in the Second Control Period order for BIAL and hence, to ensure consistency in regulatory framework, the Authority decides to consider Financing allowance instead of the Interest During Construction (IDC) for the true-up of Second Control Period. The Authority also noted that BIAL in its MYTP submission had submitted INR 41 cr. as the Financing Allowance for the Second Control Period which has been revised to INR 230 cr. based on the reassessment undertaken by BIAL. BIAL has also submitted an auditor certificate in this regard. Based on the auditor certificate, the Authority has considered the revised total Financing Allowance of INR 230 cr. and aeronautical Financing Allowance of INR 219 cr. for true-up of the Second Control Period. The views of the Authority on Financing Allowance for the Third Control Period have been discussed in detail in Chapter 5 of the Third Control Period.

Eastern Connectivity Tunnel

3.3.79 The Authority has examined the comments of BIAL, Government of Karnataka and IDD (GoK) on the inclusion of eastern connectivity tunnel (ECT) in the RAB. The Authority noted from GoK and IDD comments that the ECT construction was finalized based on the Government of Karnataka's directions. The Authority has noted that BIAL has capitalized the ECT and using it for vehicular movements, security and safety related patrolling, BASHM etc. However, the Authority is of the view that the ECT was envisaged to provide access to the airport for the passengers from the eastern side. Since, it is not being fully utilized for the purpose for which it was built, the Authority cannot consider it as part of RAB and hence decides to exclude it from the RAB of BIAL.

Comments on other issues regarding true up of RAB

3.3.80 Regarding FIA's comment to undertake the asset allocation study prior to each control period, the Authority will take the decision to conduct the asset allocation study at the time of determination of tariffs for the next control period.

3.3.81 The Authority noted FIA's comment to apply cost rationalization from the First Control Period. The Authority clarifies that it has already trued-up the First Control Period in the SCP order of BIAL and certain changes to the true-up of the First Control Period are undertaken as per decisions of the Hon'ble TDSAT judgement dated 16 December 2020. Therefore, the Authority does not agree with FIA's comment to apply cost rationalization from First Control Period.

3.3.82 Regarding IATA's comment on the cost-overrun in T2 Apron, the Authority has already reviewed the increase in cost in T2 Apron in the Consultation Paper no. 10/ 2021-22 for BIAL and feels that no further review is required in this regard.

3.3.83 The Authority noted IATA's comment on the cost-overrun in MMTH and its letter to the BIAL for clarification. The Authority noted that BIAL has responded to IATA's comments appropriately.

3.3.84 The Authority has taken note of IATA's comment of continuous consultation process for the capital projects to check for potential cost-overrun, changes in scope or specification. In this regard, the Authority is of the view that its guidelines clearly state the various steps which are required to be undertaken by the airport operator for the consultation process and accordingly, expects the airport operator to follow the same.

3.3.85 The Authority has updated the asset allocation for FY21 based on the actual fixed asset register submitted by BIAL. The Authority has decided the following changes to the asset allocation submitted by BIAL based on actuals of FY21:

a) Enabling works capex of Eastern connectivity tunnel (INR 101.26 cr.) – Excluded as per 2nd control period order for BIAL

b) In line with AERA's decisions of treating revenues from CGF as aeronautical as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020, the Authority has considered express cargo capex (INR 82.81 cr.) as 100% aeronautical instead of BIAL's treatment of express cargo capex as non-aeronautical

c) Similar to the Authority's treatment to consider the electrical and power house equipment serving common areas as common assets for assets capitalized in FY17 to FY20, the Authority has considered the electrical and power house equipment (comprising of substation and other assets) of FY21 serving common areas as common assets.

d) BIAL has considered open terrace café as common asset. As it is related to non-aeronautical service, the Authority has considered it as non-aeronautical asset.

e) BIAL has considered chiller plant in T1A as aeronautical asset. The Authority noted that BIAL has considered similar asset capitalized in previous years as common asset. Further, since the asset serves the terminal building, which is a common asset, the Authority has considered chiller plant in T1A as common asset.

3.3.86 Based on the above, the aeronautical asset addition decided by the Authority for the Second Control Period is given below:

Table 17: Aeronautical asset addition decided by the Authority for true-up of Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Total investments in fixed assets during Second Control Period as per BIAL excluding FA (A)	**225.7**	**170.3**	**160.99**	**2,081.34**	**728.25**	**3366.58**
Aeronautical asset addition to RAB as per BIAL excluding FA (B)	**213.92**	**135.99**	**132.02**	**2,046.16**	**620.06**	**3148.15**
Adjustments to aeronautical asset addition to RAB by the Authority						
Proposed adjustment to RAB due to change in segregation logic as per asset allocation study, for reasons below (C):	-3.85	-0.92	-0.71	-13.4	76.00	**57.12**
Electrical and Power House Equipment (C.1)	-3.19	-0.6	-0.7	-0.2	-6.40	**-11.09**
BIAL App (C.2)	-0.27	-0.32	0	0		**-0.59**
Landscape in real estate area (C.3)	-0.14	0	0	0		**-0.14**
Car park related asset (C.4)	-0.17	0	0	0		**-0.17**
Water harvesting assets (C.5)	-0.08	0	-0.01	-13.2		**-13.29**
Express cargo related assets (C.6)					82.81	**82.81**
Open terrace café (C.7)					-0.10	**-0.10**
Chiller plant in T1A (C.8)					-0.30	**-0.30**
Adj – Impact due to terminal area ratio change as per asset allocation study (D)	-9.23	-0.14	15.71	0.15	0.12	**6.61**
Adj. – FY21 Eastern Connectivity Tunnel related assets (E)					-101.26	**-101.26**
Adj. – Aero financing allowance (F)	0.00	1.03	10.65	192.17	16.00	**219.85**
Total adjustments (G=C+D+E+F)	-13.08	-0.03	25.65	178.92	-9.14	**182.32**
Aeronautical asset additions to RAB as per the Authority (H=B+G)	**200.86**	**135.97**	**157.66**	**2225.12**	**610.92**	**3330.53**

3.3.87 Based on the changes suggested above, the RAB decided by the Authority for true-up of the Second Control Period is given in the table below:

Table 18: RAB decided by the Authority for true-up of the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021#	Total
Opening RAB	2,224.29	2,236.49	2,181.13	2,060.91	4,086.69	
Additions during the year	200.86	135.97	157.66	2,225.12	610.92	3,330.53
Depreciation during the year	188.67	191.33	277.88	199.34	270.23	1,127.44

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021#	Total
Closing RAB	**2,236.49**	**2,181.13**	**2,060.91**	**4,086.69**	**4,427.38**	
Average RAB	**2,230.39**	**2,208.81**	**2,121.02**	**3,073.80**	**4,257.04**	

3.4 <u>True up of Traffic</u>

BIAL's submission for true up of traffic

3.4.1 BIAL has submitted the Passenger traffic, ATMs and cargo traffic in the Second Control Period as follows:

Table 19: BIAL's submission for true up of traffic for Second Control Period

Traffic as per BIAL	UoM	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Domestic Pax	Mn	19.28	23.10	28.83	27.78	7.41	106.40
International Pax	Mn	3.60	3.81	4.48	4.58	0.59	17.06
Total Pax	**Mn**	**22.88**	**26.91**	**33.31**	**32.36**	**8.00**	**123.46**
Domestic ATM	Nos	154,095	172,665	211,795	202,055	68,926	809,536
International ATM	Nos	24,022	24,665	28,456	28,996	9,472	115,611
Total ATM	**Nos**	**178,117**	**197,330**	**240,251**	**231,051**	**78,398**	**925,147**
Domestic Cargo	MT	119,878	128,504	144,130	150,088	81,927	624,527
International Cargo	MT	199,466	219,899	242,650	224,093	171,400	1,057,508
Total Cargo	**MT**	**319,344**	**348,403**	**386,780**	**374,181**	**253,327**	**1,682,035**

Recap of decision taken by the Authority for traffic at the time of tariff determination for the Second Control Period

3.4.2 The Authority had decided to true-up the passenger, ATM and cargo traffic at the time of tariff determination for the Third Control Period, based on the actual numbers during the Second Control Period.

3.4.3 The traffic projections considered by the authority at the time of tariff determination for the Second Control Period is shown in the table below:

Table 20: Traffic considered by the Authority as per tariff order for the Second Control Period

Traffic approved by AERA	UoM	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Domestic Pax (mppa)	Mn	19.28	23.10	26.57	30.55	35.13	134.63
International Pax (mppa)	Mn	3.60	3.81	4.27	4.78	5.35	21.81
Total Pax (mppa)	**Mn**	**22.88**	**26.91**	**30.84**	**35.33**	**40.48**	**156.44**
Domestic ATM	Nos	154,095	172,665	194,521	217,780	243,842	982,903
International ATM	Nos	24,022	24,665	28,567	31,050	33,846	142,150
Total ATM	**Nos**	**178,117**	**197,330**	**223,088**	**248,830**	**277,688**	**1,125,053**

Traffic approved by AERA	UoM	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Domestic Cargo (MT)	MT	119,878	128,504	139,990	151,579	164,296	704,247
International Cargo (MT)	MT	199,466	219,899	238,953	258,215	278,934	1,195,467
Total Cargo	**MT**	**319,344**	**348,403**	**378,943**	**409,794**	**443,230**	**1,899,714**

Authority's examination and proposal for traffic as part of tariff determination for the current control period

3.4.4 The Authority compared the traffic as submitted by BIAL for the period FY 2017 – FY 2021 with the actual traffic as given by AAI on its website. The comparative analysis is provided below:

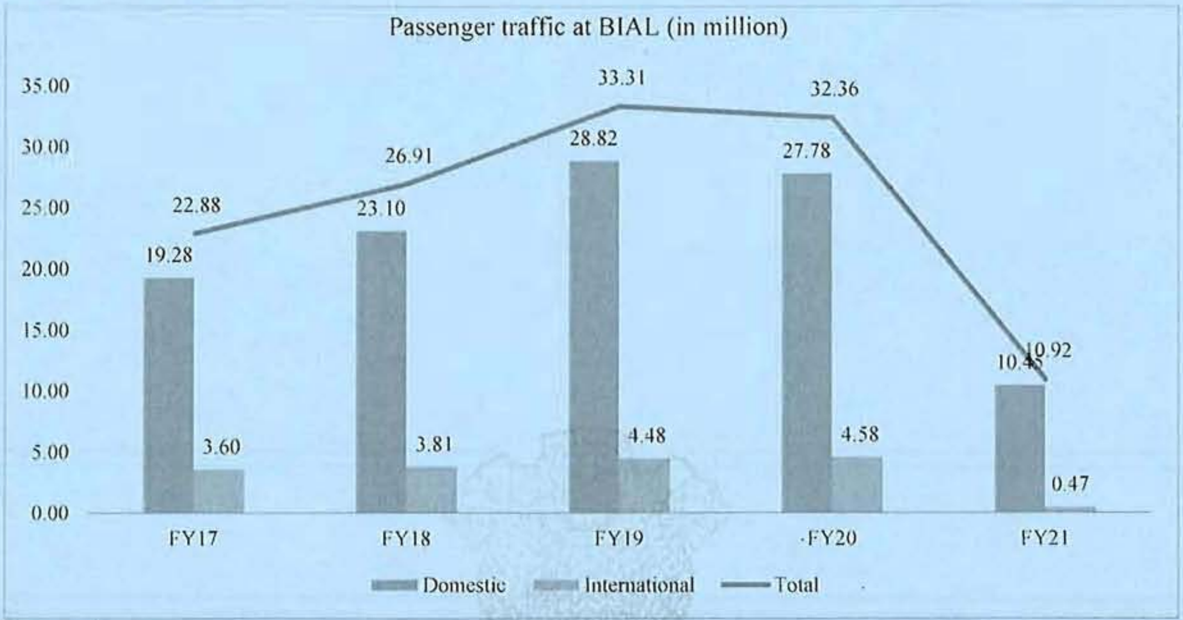
Table 21: Comparison of traffic as per actuals and as per data on the AAI website

Traffic	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Domestic Pax- BIAL (mppa)	19.28	23.10	28.83	27.78	10.45	109.44
AAI traffic news (mppa)	19.28	23.10	28.82	27.78	10.45	109.43
Difference – Domestic (mppa)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0**
International Pax – BIAL (mppa)	3.60	3.81	4.48	4.58	0.47	16.94
AAI traffic news (mppa)	3.60	3.81	4.48	4.58	0.47	16.94
Difference – International (mppa)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0**
Domestic ATM - BIAL	154095	172665	211795	202055	102801	843411
AAI traffic news	153249	170539	209584	200048	102459	835879
Difference - Domestic	**-846**	**-2126**	**-2211**	**-2007**	**-342**	**-7532**
International ATM - BIAL	24022	24665	28456	28996	11192	117331
AAI traffic news	24022	26021	29811	30311	11192	121357
Difference - International	**0**	**1356**	**1355**	**1315**	**0**	**4026**
Domestic Cargo – BIAL	119878	128504	144130	150088	119125	661725
AAI traffic news	119878	128504	144223	150009	119104	661718
Difference – Domestic	**0**	**0**	**93**	**-79**	**-21**	**-7**
International Cargo – BIAL	199466	219899	242650	224093	207518	1093626
AAI traffic news	199466	219899	242626	224053	207568	1093612
Difference	**0**	**0**	**-24**	**-40**	**50**	**-14**

3.4.5 It is observed that the traffic submitted by BIAL for the period FY 2017 – FY 2021 is approximately equal to AAI traffic report. The Authority proposes to consider the traffic data uploaded by AAI till FY21 on its website for true-up of the Second Control Period.

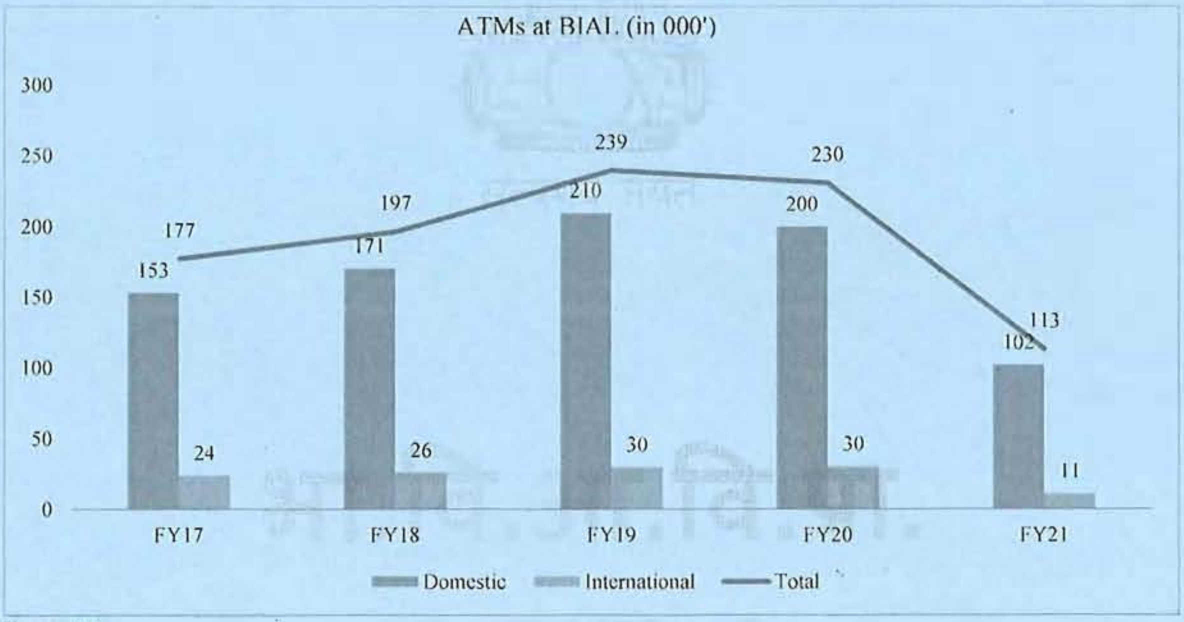
3.4.6 The trends for passenger traffic, ATMs and cargo at BIAL can be seen in the graphs below:

Figure 1: Passenger Traffic at BIAL (FY 2017 – FY 2021)



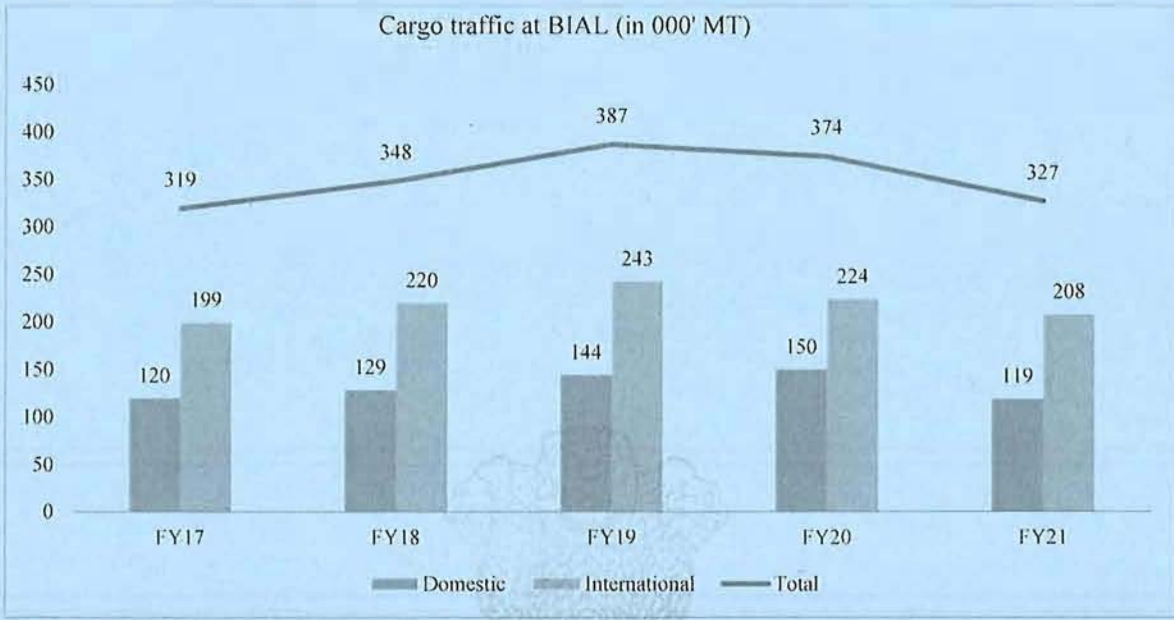
Source: AAI

Figure 2: ATMs at BIAL (FY 2017 – FY 2021)



Source: AAI

Figure 3: Cargo traffic at BIAL (FY 2017 – FY 2021)



Source: AAI

3.4.7 Based on the analysis in Para 3.4.4 and 3.4.5, the traffic decided by the Authority for true-up of the Second Control Period is given below:

Table 22: Traffic decided by the Authority for true-up of the Second Control Period

Revised traffic for BIAL	UoM	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Domestic Pax	Mn	19.28	23.1	28.82	27.78	10.45	109.43
International Pax	Mn	3.6	3.81	4.48	4.58	0.47	16.94
Total Pax	**Mn**	**22.88**	**26.91**	**33.31**	**32.36**	**10.91**	**126.36**
Domestic ATM	Nos	153,249	170,539	209,584	200,048	102,459	835,879
International ATM	Nos	24,022	26,021	29,811	30,311	11,192	121,357
Total ATM	**Nos**	**177,271**	**196,560**	**239,395**	**230,359**	**113,651**	**957,236**
Domestic Cargo	MT	119,878	128,504	144,223	150,009	119,104	661,718
International Cargo	MT	199,466	219,899	242,626	224,053	207,568	1,093,612
Total Cargo	**MT**	**319,344**	**348,403**	**386,849**	**374,062**	**326,672**	**1,755,330**

3.5 True up of WACC

BIAL's submission for true up of WACC

3.5.1 BIAL has considered the cost of equity as 23.61% for the computation of WACC of the Second Control Period basis the report prepared by CRISIL Risk and Infrastructure Solutions Limited.

3.5.2 BIAL has considered the actual cost of debt for the computation of WACC for the Second Control Period.

3.5.3 Considering the above, BIAL has submitted the WACC as 15.53% for the Second Control Period. The details are as follows:

Table 23: WACC submitted by BIAL as part of current MYTP submission

Particulars (In %)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Cost of Equity	23.61%	23.61%	23.61%	23.61%	23.61%
Cost of SS	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of Debt	9.22%	9.22%	9.22%	9.22%	9.22%
Weighted average gearing of Equity	47.67%	47.67%	47.67%	47.67%	47.67%
Weighted average gearing of SS	5.92%	5.92%	5.92%	5.92%	5.92%
Weighted average gearing of debt	46.40%	46.40%	46.40%	46.40%	46.40%
Fair rate of return (FRoR) / WACC	15.53%	15.53%	15.53%	15.53%	15.53%

Recap of decision taken by the Authority for WACC at the time of tariff determination for the Second Control Period

3.5.4 The Authority had considered cost of equity as 16% in the Second Control Period order of BIAL. AERA had decided to commission a study on cost of equity and consider the results of the same at the time of true up of Second Control Period.

3.5.5 The Authority had decided to exclude "net investment" made by BIAL on Projects other than airport as a reduction from equity deployed for airport project, for computing gearing (used to calculate the Fair Rate of Return). This includes the net invested value in BAHL after adjusting the deposits received from Hotel and the investments proposed in other non-aeronautical subsidiaries.

3.5.6 The Authority had also decided to true up cost of debt based on any changes to interest rates and to true up WACC 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.

3.5.7 The WACC estimated by the Authority was 11.93% for the Second Control Period.

Authority's examination of WACC as part of tariff determination for the current control period

3.5.8 The Authority has looked at BIAL's submission with regards to the Weighted Average Cost of Capital. The Authority had at the time of the determination of WACC for the Second Control Period had indicated that WACC shall be trued-up based on changes in gearing between equity and debt, cost of debt shall be trued-up based on changes to interest rates and commission study on cost of equity.

3.5.9 The Authority has carefully examined the funding options used by BIAL in the Second Control Period. An analysis of the funding options and the approach taken by the authority is described in the tables below:

Table 24: Equity considered by the Authority for true-up of the Second Control Period

Average equity (INR cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
As per BIAL	1,565	2,249	2,921	3,339	3,310
Change to equity amount by AERA	To exclude "net investment" made by BIAL on projects other than airport as a reduction from equity deployed for airport project				
Considered for true up	1,419	2,034	2,689	3,102	3,165
Difference	**-145**	**-216**	**-232**	**-237**	**-145**

3.5.10 The Authority had asked for the statutory auditors' certificate for the cost of debt from FY17 to FY20 and accordingly, BIAL had submitted the required certificate. The Authority noted that the cost of debt has been revised by BIAL in the statutory auditor's certificate and the Authority proposes to consider the cost of debt as per the statutory auditor certificate. Further, the Authority had asked BIAL to submit details of the cost of debt prevalent for the FY 2021. BIAL submitted that in August 2020, the interest rate has been reset to 7.85% from 8.75%. Accordingly, the Authority proposes to consider the weighted average cost of debt of 8.40% for the FY 2021 which will be trued-up based on actuals.

3.5.11 The Authority also noticed that the actual cost of debt for the Second Control Period as 9.11% is considerably lesser than the 10.39% which is the weighted average cost of debt as considered by the Authority for the Second Control Period. The Authority understands that the reduction in the cost of debt is on account of the reduction of rates by RBI. The Authority has hence considered the cost of debt at actuals at 9.11% p.a. for true up of WACC for the Second Control Period.

3.5.12 As per the decision in the Second Control Period order, the Authority had decided to consider 16.00% as the cost of equity. Accordingly, the Authority has proposed to consider the cost of equity as 16.00% for the purpose of true up of WACC for the Second Control Period.

3.5.13 Based on the above, the revised WACC considered for true-up of the Second Control Period is given in the table below:

Table 25: Recomputed WACC considered by Authority for true-up of the Second Control Period

Particulars (In %)	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Cost of Equity	16.00%	16.00%	16.00%	16.00%	16.00%
Cost of State Support	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of Debt	9.11%	9.11%	9.11%	9.11%	9.11%
Average equity	1,419	2,034	2,689	3,102	3,165
Average State Support	333	333	333	333	333
Average debt	1,461	1,554	1,604	2,720	5,332
Weighted average gearing of Equity	46.40%				
Weighted average gearing of SS	6.22%				
Weighted average gearing of debt	47.38%				
Fair rate of return (FRoR) / WACC	**11.74%**				

Stakeholder comments regarding true-up of the WACC for the Second Control Period

3.5.14 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. 10/ 2021-22 with respect to true-up of the WACC for the Second Control Period. The comments given by stakeholders are presented below:

BIAL's comments on true-up of WACC for the Second Control Period

3.5.15 BIAL commented as follows on the exclusion of investments on projects other than airports from equity:

- *"The Authority has treated hotel as a non-aeronautical activity but ring-fenced / excluded equity investments into the hotel while computing Equity for FRoR. Further, the Authority has considered a notional lease rental from hotel and treated the same as non-aeronautical revenues.*
- *Having considered the revenues as non-aeronautical, it must be followed up that the investments also should be considered as non-aeronautical and not excluded while computing equity for FROR.*
- *BIAL request the Authority to reconsider its proposal and not have an inconsistent approach and not make any reduction in Equity for FRoR purposes.*
- *Additionally, BIAL is not aware of the computations made for excluding the Investment. From a reading of the Consultation Paper, BIAL notes that the values considered are not the average*

values of advances outstanding from BAHL, which we request the Authority to take cognizance of."

Other stakeholder comments on true-up of WACC for the Second Control Period

3.5.16 IATA commented as follows on the true-up of the WACC:

- *"While we see that AERA has reduced BIAL's proposed cost of equity from 23.61% to 16.00%, we still believe that the allowance is generous, as it is not commensurate with the risks BIAL is facing. In particular, AERA is proposing to fully true up the traffic generated by a one-in-one-hundred-year event and on top of this reward the company with a 16% on equity, a rate that is almost 10 percentage points higher than that paid by the Indian Government. It is evident that traffic is one of the major risks an airport face and truing it up involves transferring this business risk towards users. AERA must be cognizant of this fact and adjust the cost of equity downwards accordingly.*
- *Independently from the above we note that in its order for the Second Control period, decision 11 (iii) states "to commission a study on Cost of Equity and consider the results of the same at the time of truing up Second control period revenues". Since the latest study, as per appendix IV of the consultation document, concludes that the Cost of Equity should be 15.05%, and considering what was mentioned in Decision 11 (iii), shouldn't AERA consider adopting the 15.05% for the true up calculations of the second control period?*
- *Separately, we note the truing up on the cost of debt to an average of 9.11%. We also note from paragraph 3.5.10 that interest rates had been reset to 7.85% in August 2020. It would be important for AERA to compare this rate against the cost of debt that is being paid by other airports it regulates. If BIAL or the any of the other airports pay a lower interest rate, then AERA should consider adopting the lowest available cost of debt at all airports instead of solely truing up actuals. Such an approach would encourage airports to seek the lowest possible rates (and avoid potential complacency)."*

BIAL's response to stakeholder comments regarding true-up of the WACC for the Second Control Period

3.5.17 In response to IATA's comment on the true-up of WACC for SCP, BIAL submitted as follows:

- *"The study conducted by AERA is to determine an appropriate CAPM rate for the Cost of Equity (CoE) for the third control period (FY2021-22 to FY2025-26). This is evidenced by the scope of work referred to in Para 1.3 of the independent consultant's report. Hence, the Authority has applied the same for the 3rd control period. This is the approach adopted by AERA uniformly across all other major airports too. We do not find any inconsistency in this approach of the Authority.*
- *Every airport has a different credit rating and risk profile as determined by the lenders (who are different for various airports). Hence the reason for different interest rates among the various airports. As being an association of Airlines, IATA, surely is cognizant of the credit rating scenario in airlines sector.*
- *BIAL has obtained one of the lowest debt rates in a conscious effort to minimise the charges to the users. Also, every bank will have its own benchmark lending rate as the cost of funds for each bank is different. So, to even say that the lowest interest rate obtained by one airport operator should be the benchmark for other airports is incorrect."*

Authority's examination after reviewing stakeholder comments on the true-up of the WACC of Second Control Period

3.5.18 The Authority has noted BIAL's comment that since the hotel income is considered as non-aeronautical revenues, the investment in such operations should also be included in the equity while computing gearing for the airport project. The Authority has given its position on this comment by BIAL in para 14.6.4 of the Second Control Period order.

3.5.19 However, the Authority noted that BIAL has highlighted that average values of advances outstanding from BAHL is not considered while computing the equity. The Authority has taken note of it and considered only the average advance outstanding from BAHL for exclusion from equity in the final order.

3.5.20 The Authority has noted IATA's comments on the cost of equity of 16% stating that it is higher due to true-up of traffic undertaken by the Authority. The Authority has given its detailed examination for considering the cost of equity as 16% in its previous orders of BIAL and therefore, it does not consider the proposal of IATA on the cost of equity.

3.5.21 The Authority has examined IATA's comment to apply the 15.05% cost of equity to the true-up of the Second Control Period and BIAL's response to it. However, the Authority would clarify that the study of cost of equity was undertaken by the Authority for the Third Control Period and therefore, the conclusion of the said study cannot be applied to the Second Control Period.

3.5.22 The Authority has noted IATA's comment on benchmarking the cost of debt of Second Control Period with other airports and BIAL's response to it. The Authority noted that the cost of debt of each airport is different and dependent on the various airport-specific factors including the credit rating, future cash flow projections, traffic projections, competition, etc. Therefore, benchmarking the cost of debt with other airport operators may not find out the efficient cost of debt for an airport.

3.5.23 The Authority has considered the actual equity, debt and state support based on the audited financial statements for FY21 for true-up of SCP in the final order.

3.5.24 Based on the above, the revised WACC decided for true-up of the Second Control Period is given in the table below:

Table 26: Recomputed WACC decided by the Authority for true-up of the Second Control Period

Particulars (In %)	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**
Cost of Equity	16.00%	16.00%	16.00%	16.00%	16.00%
Cost of State Support	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of Debt	9.06%	9.06%	9.06%	9.06%	9.06%
Average equity	1,384	2,025	2,686	3,137	3,047
Average State Support	333	333	333	333	333
Average debt	1,461	1,554	1,604	2,720	4,712
Weighted average gearing of Equity	47.24%				
Weighted average gearing of SS	6.40%				
Weighted average gearing of debt	46.36%				
Fair rate of return (FRoR) / WACC	**11.76%**				

3.6 <u>True up of Depreciation</u>

BIAL's submission for true up of depreciation

3.6.1 With reference to AERA order No. 35 / 2017 – 18 in matter of determination of useful life of airport assets dated 12th January 2018 and amendment No. 01 to the order dated 9th April 2018, BIAL has considered a one-time impact of INR 148.7 cr. for the purpose of tariff determination.

3.6.2 BIAL has submitted the following depreciation for true-up of the Second Control Period:

Table 27: Depreciation for Second Control Period as submitted by BIAL

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Depreciation	198.58	201.84	343.48	240.28	317.94	**1,302.13**

Recap of decision taken by the authority for depreciation at the time of tariff determination for the Second Control Period

3.6.3 The Authority had proposed to consider land development works that had been considered by BIAL to have a useful life of 20 years to 50 years based on the lease period available to BIAL.

3.6.4 BIAL had considered the design life for the existing runways and taxiways as 20 years. Since the design of the runway and taxiway was similar to that of other airports, the Authority decided to revise the useful life of the asset to 30 years starting 1st April 2018 as per Companies Act.

3.6.5 The Authority vide its decision number 7a (ii) of SCP order had decided to true up depreciation at the time of determining aeronautical tariffs in the Third Control Period based on actual date of capitalization of assets as well as based on Order No. 35/ 2017-18 on useful lives.

Authority's examination and proposal for depreciation as part of tariff determination for the current control period

3.6.6 The Authority proposes to revise the useful life of the assets based on the Order no. 35/ 2017-18 applicable from 1 April 2018 onwards. The Authority's observation in this regard are given below:

a) Asset Class – Plant and Machinery (Aerobridges, Airport Communication, Baggage Handling, Escalators/ Elevators, HVAC Equipment, Other Airport Equipment and Security/ Safety Equipment) - The Authority has examined the below submission of BIAL in its letter to AERA dated 25 April 2018 on considering a lower useful life of 7.5 years for certain airport specific assets falling within Plant and Machinery due to extra shift operations:

"KIA is a fast growing airport and has witnessed rapid passenger growth and high air traffic movement. Airport specific equipment such as aero bridges, baggage handling system, escalators, elevators, travellite, HVAC equipment, cargo ASRS, ETV Equipment, X Ray machine, RT Set, DFMD, HHMD, security equipment are continuously used and need higher maintenance. Being used in triple shift, these equipments undergo wear and tear and this reduces their useful life. BIAL wishes to submit they it would adopt lower useful life for certain assets used 24/7 on triple shift basis based on technical justification."

The Authority noted that the useful life of assets related to Plant and Machinery is 15 years as given in the AERA's order No. 35 / 2017 – 18 in matter of determination of useful life of airport assets dated 12th January 2018 and amendment No. 01 to the order dated 9th April 2018. The useful life prescribed in AERA's order has considered the typical usage of these assets for an airport and there appears to be no reason for the usage of these assets to vary from the typical usage for BIAL. Further, the Authority notes that it provides BIAL with adequate maintenance expenditure to enable the airport to maintain the assets in good working conditions during the life of the assets. Therefore, the Authority proposes to not consider the lower useful life submitted by BIAL for the Plant and Machinery assets.

b) Asset Class – Buildings – The Authority has noted that BIAL has considered a lower useful life for assets under Canopy, New Project Office building, and Nursery Unit under Building category. The Authority notes that all these assets are part of the building. AERA's Order no. 35/ 2017-18 does not provide for reducing the life of assets under Asset Class Buildings. The Authority has noted that BIAL has not given the rationale for lower useful life in its technical justification for these assets. The Authority has issued Order no. 35/ 2017-18 as part of its normative approach to various Building Blocks in the Economic regulation of Major Airports where it has stated that *"The Authority has been of the considered view, that it would be preferable to have as far as practicable, a broad year to year consistency in what Depreciation is charged by the companies as certified by the relevant statutory auditors and what the Authority would take into account in its process of tariff determination. Issue of a notification will ensure this objective."* Therefore, the Authority proposes that the useful life for these assets should be same as building assets class.

c) Asset Class – Runway and Taxiway– The Authority has noted that BIAL has considered a lower useful life of 20 years for assets under Runway and Taxiway and a useful life of 5 years for runway top layer of the New South Parallel Runway (NSPR). The Authority has noted that BIAL has not given the rationale for lower useful life in its technical justification for these assets. Since the Authority has allowed the upgradation of runway to be amortized over the balance period of the useful life of the original runway, which addresses the requirement of upgrades required for the runway, the Authority proposes to not consider the shorter useful life for runway, taxiway and runway top layer.

d) Other asset classes – The Authority proposes to revise the useful life of the other asset classes (IT equipment, furniture and fixtures, other roads, etc.) based on the useful life given in the Order no. 35/ 2017-18.

3.6.7 Additionally, the Authority proposes to undertake the following changes to the submission of BIAL relating to depreciation:

- The Authority had considered a useful life of 50 years for land development capital expenditure in its 2nd control period order based on the available lease period. BIAL has commissioned the land development capex in FY20 and therefore has considered the useful life as 48.5 years based on the available lease period. However, while projecting the depreciation for FY21, BIAL has considered the useful life of land development capex as 30 years. Based on the useful life in FY20, the Authority proposes to consider the same useful life of 48.5 years for land development capex in FY21.
- Adjustment of depreciation of the assets excluded as per EIL study
- Adjustment of depreciation on the pre-operative expenses excluded from the RAB

3.6.8 The Authority proposes to consider the below useful life from 1 April 2018 onwards for the true-up of the Second Control Period.

Table 28: Useful life considered by the Authority from 1 April 2018 onwards for true-up of depreciation for the Second Control Period

Asset type	Useful life (years)
Earthwork	48.5
Terminal, utility, office and other buildings	30
Runway, taxiway and apron	30

Asset type	Useful life (years)
Water management system	30
Roads	5
Roads (Trumpet)	20
Baggage handling, aerobridges, HVAC equipment, other airport equipment	15
Electrical fittings	10
Security/ safety equipments	15
IT Equipment	6
Software	5
Furniture and fixtures	7
Vehicles	8
Office equipment	5
Intangibles (agreements)	30

3.6.9 The Authority noted the one-time depreciation charge submitted by BIAL for FY19 is on account of the note no. 2 of the Order no. 35/ 2017-18 wherein it is stated that the book value of the asset as on 1 April 2018, after retaining the residual value, shall be recognized in the opening balance of the retained earnings where the remaining useful life of an asset is nil. For the assets with nil remaining life as on 1 April 2018 as per the Order no. 35/ 2017-18, BIAL has computed the one-time depreciation amount of INR 148.7 cr. Based on the changes to the useful life for canopy, airport communication and other airport equipment proposed by the Authority in para 3.6.6, the revised one-time depreciation amount proposed by the Authority is given in the table below.

Table 29: One-time adjustment for depreciation as proposed by the Authority

Asset Sub-category	Existing useful life before 1 April 2018	Revised useful life as per BIAL's technical evaluation	Revised life as per Authority	One-time impact (INR cr.)*
Total one-time depreciation as per BIAL				**148.7**
Adj. - Canopy	30	9	30	-21.9
Adj. - Airport Communication	10	7.5	15	-0.3
Adj. - Other airport equipment	10	7.5	15	-0.5
Total one-time depreciation as per Authority				**125.9**

*difference is due to rounding off

3.6.10 The Authority had conducted an independent study on the asset allocation of the Second Control Period for BIAL (refer Annexure 3 for summary of the report). The Authority proposes to apply the proportion of the aeronautical assets as per the study on total depreciation, recomputed based on the revised useful life of assets, to determine the depreciation on aeronautical assets. The Authority noted that the proportion of the aeronautical assets is varying from year-on-year basis since BIAL has undertaken expansion of the airport facilities. Therefore, the Authority proposes to apply the proportion of the aeronautical assets of a particular year to the depreciation amount of the respective year.

3.6.11 Based on the changes suggested above, the depreciation proposed by the Authority for true-up of the Second Control Period is given in the table below:

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

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Total depreciation	**213.83**	**217.54**	**238.51**	**262.70**	**339.26**	**1,271.83**
Adj. - Change in useful life, revision in asset addition			-42.62	-50.37	-60.71	**-153.70**
Add - One time depreciation impact			125.92			**125.92**
Adj. - EIL assets	-4.19	-3.92	-11.34*	-0.90	-0.90	**-21.24**
Adj. - Depreciation on excluded pre-operative expenses	0.00	-0.03	-0.06	-1.27	-2.48	**-3.84**
Total adjusted depreciation	**209.64**	**213.59**	**310.40**	**210.16**	**275.16**	**1,218.96**
Aeronautical proportion as per asset allocation study	**89.29%**	**88.87%**	**88.96%**	**91.77%**	**90.75%**	
Aeronautical depreciation as per the Authority	**187.19**	**189.82**	**276.14**	**192.86**	**249.71**	**1,095.72**

*amount adjusted on account of one-time depreciation charge on the furniture related assets

Stakeholder comments regarding true-up of the depreciation for the Second Control Period

3.6.12 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. 10/ 2021-22 with respect to true-up of the depreciation for the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the depreciation for the Second Control Period

3.6.13 BIAL commented as follows on the useful life of 15 years proposed by the Authority for items of Plant & Machinery instead of 7.5 years proposed by BIAL based on triple shift operation:

- *"The Authority had issued Consultation Paper No. 9/ 2017-18 dated 19th June 2017 on Determination of Useful life of Airport Assets. Further to the receipt of comments from various stakeholders and consideration of the same, the Authority had issued its Order No. 35/ 2017-18 on 12th January 2018 on the same.*
- *Para 3.5.2 and 3.5.5 of the said Order with respect to a Stakeholders' comments on changes to certain classifications under Plant & Machinery and on Extra Shift depreciation and Authority's observations on the same are as detailed below:*

  3.5.2 MIAL has commented as follows:

  "Authority has mentioned in the remark column "As per Companies Act", but it has not taken into account the following provisions of the Schedule II of the Companies Act, 2013:

  (i) Schedule II has two distinct categories as Plant & Machinery (Item No. IV) and Electrical Installations and Equipment (Item No. XIV) - Schedule-II provides a useful life of 15 years for general category of Plant and Machinery with a provision for Extra shift depreciation while for Electrical Installation and Equipment it provides for a useful life of 10 years. Authority has clubbed items like Generators and Power Equipments etc. (such as transformers, sub-stations, AT and LT

Panels, switch gears and distribution system etc.) which are part of Electrical Installations and Equipments with other items of Plant & Machinery. Since there is a specific category for Electrical Installations and Equipment these items should not be clubbed with general category of Plant and Machinery. We therefore request the Authority to move items such as Generators and Power Equipment etc. (such as transformers, sub-stations, TIT and LT panels, switch gears and distribution system etc.) from general category of Plant & Machinery to Electrical Fittings (Item No. 17) and change the nomenclature of Item No. 17 to Electrical Installations and Equipments in line with the Schedule IT of the Companies Act, 2013.

*(ii) Note 6 to the Schedule IT provides for extra shift depreciation for all items of Plant & Machinery, other than continuous process plant, covered under (IV)(i)(a) of the Schedule depending upon whether asset is used for double or triple shift. We request Authority to provide for extra shift depreciation, as prescribed under the Companies Act, for the airports which are required to be operated on 24*7 basis for 365 days in a year.*

It may be pertinent to note that MIAL has already provided depreciation in its books of accounts as detailed above under point (i) and (ii) and on the same basis tariff for 2nd control period were determined by the Authority."

3.5.5 Authority has reviewed MIAL's comments. The Authority notes that the assets would need to be classified as provided under the Companies Act under Plant & Machinery under Item IV or Electrical Installation under Item XIV. Nomenclature and classification will be made in line with Companies Act 2013. ***There will be no extra shift depreciation as the rates considered by the Authority are based on the operation of the assets at the Airport.***

- *Post issue of the said Order, the Authority has issued Amendment No. 01/ 2018-19 to the said Order on ... April 2018. Certain Paragraphs on the matter on Extra shift depreciation on which the Authority has formed a different opinion than the earlier Order are reproduced below:*

  2. Consideration of Extra Shift Depreciation on certain items of Plant & Machinery

  2.1 Authority notes that Note 6 of Schedule II to Companies Act provides as follows:

  "6. The useful lives of assets working on shift basis have been specified in the Schedule based on their single shift working. Except for assets in respect of which no extra shift depreciation is permitted (indicated by NESD in Part C above), if an asset is used for any time during the year for double shift, the depreciation will increase by 50% for that period and in case of the triple shift the depreciation shall be calculated on the basis of 100% for that period."

  2.2 The Authority also notes relevant sections of Accounting Standard AS 10 dealing with Property Plant & Equipment which also details about the depreciation.

  2.3 The Authority has also noted the relevant sections of the Guidance Note on Accounting for depreciation in Companies Act in context of Schedule II to the Companies Act (Guidance Note) issued by the Institute of Chartered Accountants of India. These are reproduced in Annexure II:

  2.4 From a combined reading of the Companies Act and accounting pronouncements, the Authority notes that:

  2.4.1 Accounting Standard makes it imperative for an entity to determine useful life of assets considering various factors specified.

  2.4.2 There are clear guidances on whether the Asset is to be classified as a Continuous Processing Plant and manner of considering extra shift depreciation to assets.

2.4.3 Should the useful life determined by the entity considering the above factors, be different from the prescribed rates as per Companies Act, appropriate disclosures should be made.

2.4.4 Technical justifications are needed to back the decisions of the Management.

2.5 The Authority notes that certain Plant & Machinery in certain very large Airports / Airports with higher volume of operations would need to be running continuously or run extra shifts. Accordingly, appropriate considerations as detailed in aforementioned pronouncements should be factored and given effect to.

2.6 The Authority's intent, in case of plant and machinery detailed in the Annexure to the order was to align with the pronouncements of the Companies Act. Accordingly, the Authority notes that other allied provisions and conditions should also be considered and complied with.

2.7 Hence, the Authority accordingly clarifies its decision on manner of considering useful lives for Plant & Machinery items as follows:

2.7.1 Useful lives of Plant & Machinery are determined as 15 years. In case the airport operator wants the useful life to be lower due to extra shift operations, it will be considered based on the technical justification to the satisfaction of the Authority.

2.7.2 Considerations of extra shift depreciation and other applicable requirements of law, if allowed by the Authority as above shall be computed as per the prescriptions of the Companies Act and the Guidance Note of ICAI.

- *From a combined reading of the aforementioned paragraphs:*
  - *Authority has, taking cognizance of the Stakeholder comments acknowledged that large airports would have equipment that need to be running continuously or run extra shifts.*
  - *Authority has noted the intent to align with the pronouncements of Companies Act wherein the Extra shift depreciation is mentioned.*
  - *Authority would need to be provided with a technical justification in the airport operator wants the useful life to be lower due to extra shift operations.*
  - *Provision for Extra shift deprecation was one of the key reasons for issuance of Amendment to Order 35 on Useful life of Airport Assets.*
- *Accordingly, BIAL had submitted Technical Justification from Mr. Shashikant Muddapur, a Chartered Engineer in the Second Control period and Authority had taken cognizance of the same in the Second Control Period Order and allowed Extra shift depreciation at the time of issue of MYTO for Second control period.*
- *The Technical justification which was provided to the Authority in the Second Control Period and taken full cognizance in the MYTO of the second control period has not been found adequate by the Authority in the Third Control Period. Such action taken by AERA, without according any detailed reasoning and justification leads to regulatory uncertainty.*
- *In the current consultation paper, the Authority had noted that "The useful life prescribed in AERA's order has considered the typical usage of these assets for an airport and there appears to be no reason for the usage of these assets to vary from the typical usage for BIAL". This is contrary to the Authority's own evaluation and note in Amendment No. 1 of Order 35/ 2017-18 that certain assets would need to be used on triple shift and that may need depreciation at higher rate and the pronouncements of Companies Act need to be respected.*

- *BIAL has also, in addition to the earlier Technical evaluation submitted, obtained another Technical Evaluation on the useful lives of these assets which is enclosed as Annexure 8.*
- *Hence, BIAL requests that the useful life based on Technical evaluation submitted by BIAL, in full compliance of Order 35 and Amendment No. 1 to Order 35 be considered by the Authority and the depreciation be computed based on such useful lives adopted.*
- *AERA in its Orders on Depreciation has stated that an asset would need to be classified as provided under the Companies Act, 2013 in the category of Plants and Machineries under Item IV or electrical installations under Item XIV and on the other hand, has chosen to disregard the Note 6 to Schedule II of the Companies Act, 2013. Note 6 to the Schedule II to the Companies Act, 2013 provides 'for extra shift depreciation for all items of Plant & Machinery, other than continuous process plant, covered under (IV)(i)(a) of the Schedule depending upon whether asset is used for double or triple shift.*
- *AERA has now proposed that there would be no extra shift depreciation as the rates considered are based on operation of the assets at the airport. Such selective application of the provisions of the Act is arbitrary, unreasonable and against settled principles of law.*
- *ICAI in para 5.2 of its Report dated 10.04.2017, while analysing the assets classified as Airport assets has mentioned that specific review for the category of plant and machinery, X-Ray machines, baggage scanning/handling systems and security equipment may be required on the basis of usage pattern at the airport, which is nothing but reference to usage from a single shift to double/triple shift. However, AERA in the consultation paper, while determining the useful life of the assets for the above category, has failed to consider the extra shift depreciation for the assets at BIAL that are functional round the clock.*
- *Extra Shift Depreciation is intended to compensate for the extra wear and tear on account of usage of an asset in more than one shift. It is pertinent to point out that in the present case, the operations at the airport are conducted round the clock, thereby leading to a greater wear and tear of equipment as compared to an airport handling single shift or limited operations.*
- *AERA has adopted a pick and choose approach, which is inconsistent and unreasonable and has been implemented to the detriment of BIAL."*

3.6.14 BIAL's commented as follows on useful life for Canopy, New Project Office and Nursery considered by the Authority similar to buildings than that estimated by BIAL based on technical evaluation:

- *"Authority has noted in the Preamble to the Consultation Paper No. 9/2017-18 and Order No. 35/2017-18 that it would be preferable to have as far as practicable, a broad year to year consistency in what Depreciation is charged by the companies as certified by the relevant statutory auditors and what the Authority would take into account in its process of tariff determination. Issue of a notification will ensure this objective"*
- *In Order 35, Authority had laid down the prescribed useful lives for various Airport assets after receipt of comments from the Stakeholders on the Consultation Paper issued for the same.*
- *In the said Order 35, the Authority had also noted at follows for Airport Assets for which useful lives were not prescribed.*

  Note 7: Specific assets, other than those listed above, could be created in different airports, based on the specific requirements. Such specific assets would have to be individually evaluated technically for its useful life and depreciated for which technical justification should be submitted to the Authority.

- *Based on the above Regulatory Principle and guideline issued, BIAL had carried out a Technical evaluation of certain assets which are not part of the Airport asset list for which useful lives were prescribed by the Authority. Technical justification obtained for the said assets were also submitted to the Authority for consideration during Second Control Period Order and also in response to query during evaluation of the MYTP for the Third Control Period.*
- *The Authority has noted that these assets are part of the building and AERA's Order no. 35/ 2017-18 does not provide for reducing the life of assets under Asset Class Buildings. The Authority has noted that BIAL has not given the rationale for lower useful life in its technical justification for these assets. Useful life adopted by BIAL on these assets are based on the Technical evaluation carried out by a Chartered Engineer as submitted to the Authority wherein the specifications of these assets have been detailed with the assessment of the useful lives. These assets cannot just be categorized under the main category Buildings.*
- *Companies Act requires componentization of assets where any significant component of an asset has a different useful life.*
- *This has been taken note of by the Authority in Order 35, as noted in Para 3.11.6 as follows:*

  3.11.6 The Authority notes MIAL's submission on the Companies Act requirement for key components of the asset to be evaluated differently for the significant value components of the asset. Authority notes that this is to be complied with by the Airport Operators.
- *Hence, BIAL requests that the useful life based on Technical evaluation submitted by BIAL, in full compliance of Order 35 and Amendment No. 1 to Order 35 be considered by the Authority and the depreciation be computed based on such useful lives adopted."*

3.6.15 BIAL's commented as follows on useful life for runway considered by the Authority as 30 years instead of 20 years submitted by BIAL based on technical evaluation:

- *"The Authority had issued Consultation Paper No. 9/ 2017-18 dated 19th June 2017 on Determination of Useful life of Airport Assets. This was based on a study conducted by ICAI. In the said Consultation Paper, the useful lives of Runway, Taxiway was estimated to be 30 years. Extract of the Annexure to the Consultation Paper is detailed below:*

Asset Category (Airport Specific)	Useful Life (In Yrs)	Depreciation Rate (%)
Runway Taxiway Apron	30 Yrs (most of the operators have estimated life as 30 yrs)	3.33
Hanger	30/60	3.33/1.67

- *Further to the receipt of comments from various stakeholders and consideration of the same, the Authority had issued its Order No. 35/ 2017-18 on 12th January 2018 on the same. Comments on*

Runway/ Taxiway as submitted by MIAL and BIAL noted that the useful lives of such assets are 20 years. Extract of the comments is reproduced below:

3.2.3 BIAL has commented as follows:

"We would like to draw attention to ICAI's presentation in Annexure 2 with regard to "Analysis of Individual assets - Runway, Taxiway and Apron" wherein ICAI has rightfully noted that BIAL concession agreement has design and life specified as 20 years for Runway and Taxiway. We believe that design and cost of Runway and Taxiway has been done to cater to the life in line with the Concession Agreement and accordingly BIAL has been following the same life till now. The proposal now considers the life of Runway and Taxiway as 30 years. We believe that when the Concession Agreement specify the life as 20 years, changing the life of the asset to 30 years for the purpose of streamlining across all airports will be unjust. We request the Authorities to consider the life of Runway and Taxiway as 20 years specifically for BIAL in line with the Concession Agreement."

3.2.4 MIAL has submitted as follows:

Runway, Taxiway and Aprons - Authority in Part II of Annexure 5 has suggested useful life of 30 years for Runway, Taxiway and Aprons. MIAL has considered useful life of 20 years for Runways due to the following reasons:

MIAL assumed operations and development of CSIA from 3rd May 2006 and took control of AAI's existing assets including Runways. Since Runways were originally constructed by AAI and MIAL has only done the strengthening and substantial restoration works of these runways, it has considered useful life of 20 years.

Besides above, various reports and data relied upon by ICAI as mentioned below, also justify useful life of Runways (even new Runways) as 20 years only instead of 30 years proposed by the Authority since Runways are considered as Flexible Pavements against Apron which are considered as Rigid Pavements (concrete)

I. ICAO Airports Economic Manual (2013 edition) has suggested useful life of Runways and Taxiways in the range of 15-30 years. ii.UK government - CAA in "A guide to Airfield Pavement design and evaluation - Design and Maintenance Guide (February 2011)" recommends that structural design life be 20-30 years. The upper end of this range being for concrete pavements and the lower end for flexible pavements. iii. US Department of Federal Aviation Administration in its Advisory circular AC No. 150/53206E has stated that Pavement and other facilities built to FAA standards are designed to last at least 20 years. iv FAA Airport Compliance Manual - Order 5190 B - 2009 also states that Pavement and other facilities built to FAA standard are designed to last at least 20 years. Aerodrome Design Manual Part 3 (2003 edition) states that pavement designed in accordance to these standards are intended to provide a structural life of 20 years. VI. Concession Agreement of BIAL also states that design life of flexible pavement is 20 years. vii. ICAI itself in para 6.2.18 of its Report mentioned that useful life of 20 years can be considered for Flexible Pavements (Runway and Taxiway) and 30 years for Rigid Pavements (Apron)

viii. Authority has also mentioned in para 2.2.5 (B) (i) that in view of the international prescriptions on standards of design life, the practice followed by certain airports in Asia and other parts of the world, useful life of 10-15 years for Runways and Taxiways surfaces and 30 years for Runways and Taxiways bases can be prescribed which means Authority should provide useful life for Runways and Taxiways either as average of 10 to 30 years or provide different useful lives *for bases and surfaces but providing useful life of 30 years for both i.e., bases and surfaces would be incorrect and inappropriate.*

- *Based on the comments received from Stakeholders, the Authority had noted as follows:*

  3.2.6 Authority notes that the useful life of the Airfield pavements viz Runway, Taxiway and Apron are dependent on various factors including design intent etc. The rate provided by the Authority was a normative rate considering the various factors.

  3.2.7 On reviewing the comments from certain stakeholders, the Authority decides that while the rate prescribed will remain as given in the Consultation Paper, if there is a different rate adopted by the Airport Operator, between 20 to 30 years, the same should be justified and backed up by suitable technical certification which will be critically examined by the Authority and a view taken on the same.

- *In order to give effect to the above note, the Authority had included a note in the Order as follows:*

  6. Runway/ Taxiway - If there is a different rate adopted by the Airport Operator, between 20 to 30 years, the same should be justified and backed up by suitable technical certification which will be critically examined by the Authority and a view taken on the same.

- *As submitted by BIAL as part of its comments to the Consultation Paper on the useful lives of assets, BIAL's concession agreement had specified the design intent as 20 years for the original Runway and Taxiway constructed. Relevant extracts from the Concession Agreement (which were referred in the ICAI study report) are given below:*

1.1.10 RUNWAY

The runway is designed to accept B 747 aircraft and the ICAO aerodrome reference code is 4E.

The characteristics of the runway specification are:

Runway length - 4000m
Runway width - 45m
width of runway plus light paved shoulders - 60m
pavement type - flexible
Pavement classification number - 80
Runway strip width - 300m
Stop-ways at each threshold - 60m x60m
Runway orientation - 09/27
Usability factor - >95%
Turning circle at 09end.

The longitudinal and transverse profile, slope changes, sight distance, distance between slope changes, pavement markings, signage and surface accuracy are designed in accordance with the Standards and Recommended practices stipulated in ICAO Annex 14. ***The design life for the flexible pavement is 20 years.***

1.1.11 TAXIWAYS

The characteristics of the taxiway specification are:

width - 25m (code F)

- *Width of taxiway plus shoulder - 45m*
- *Separation distance between the centre line of runway and taxiway - 190m*
- *taxiway centre line to taxiway centre line - 97.50m*
- *pavement type - flexible*
- *PCN - 80*

The longitudinal and transverse profile, slope changes, sight distance, distance between slope changes, pavement markings, signage and surface accuracy shall be in accordance with the Standards and Recommended Practices stipulated in ICAO Annex 14. ***The design life for the flexible pavement is 20 years.***

- *Hence, the basis and design intent (which was in line with the Concession Agreement) based on which the Original Runway and Taxiway were constructed cannot be changed by AERA and that too after the useful life for these assets being considered at 20 years for the past periods from the year 2008.*
- *Authority had commented that the useful life for Runway was changed from April 2018 to 30 years in the second control period order. Basis of this change is as explained below:*
    - *In the Second Consultation Paper model, depreciation rates were estimated block wise*
    - *Land development cost, Existing Runway and New South Parallel Runway (NSPR) were all together in one block as "Runways"*
    - *Useful life for this block was considered at 3.34% from April 2018 in order to compute an average depreciation rate including Land development cost which was to be depreciated at 50 years, the existing Runway / Taxiway to be depreciated at 20 years and NSPR at 30 years.*
- *Accordingly, BIAL requests that the prescriptions in the Concession Agreement be respected and the depreciation on the original Runway and Taxiway be allowed considering a useful life of 20 years. It may be noted that the design life of the new runway is 30 years and accordingly based on the design intent, BIAL has adopted a useful life of 30 years for the new runway asset capitalized. This was also discussed and deliberated during the Second control period, which has also been considered by the Authority at the time of issue of MYTO for second control period.*
- *BIAL's design intent for new Runway has been adequately detailed in the Stage III Stakeholder consultation held by BIAL, extract of which is provided below:*

Pavement Design GVK

Runway and Taxiway Pavement

- Airfield Pavement is designed based on ICAO and FAA standards for the Aircraft Traffic from Master Plan.
- Runways and taxiways are designed for flexible (asphalt) pavement, Runway Holding Positions are designed for rigid(concrete) pavement.
- Shoulders and blast pads designed for flexible (asphalt)
- Design Life
    - Asphalt Pavement (flexible): 30 Years

3.6.16 BIAL commented as follows on the useful life of runway top layer considered at 30 years by the Authority instead of 5 years submitted by BIAL:

- *In S # 14 of Annexure 1 to Order 35, the Authority had noted that*

"Resurfacing & Runway: The cost of resurfacing & runway leading to restoration of original PCN value would be amortized over 05 years for the purpose of Tariff computations"

- *Companies Act requires componentization of assets where any significant component of an asset has a different useful life.*

  Schedule II – Note 4

  "Useful life specified in Part C of the Schedule is for whole of the asset. Where cost of a part of the asset is significant to total cost of the asset and useful life of that part is different from the useful life of the remaining asset, useful life of that significant part shall be determined separately."

- *Detailed guidance on the same is also prescribed in the Guidance Note on Accounting for Companies in the Context of Schedule II to the Companies Act, 2013.*

- *This has been taken note of by the Authority in Order 35, as noted in Para 3.11.6 as follows:*

  3.11.6 The Authority notes MIAL's submission on the Companies Act requirement for key components of the asset to be evaluated differently for the significant value components of the asset. Authority notes that this is to be complied with by the Airport Operators.

- *Hence, when the New South Parallel Runway was being capitalized, in compliance with the applicable Companies Act requirement of componentization and as per Authority's principles, it was necessary to identify different components of Runway which could have a different useful life and accordingly note the useful life for the same.*

- *As the useful life of resurfacing the runway was considered by the Authority itself at 5 years, which is aligned with the actual need for resurfacing the Runway also, the top layer of the Runway has been identified to have a useful life of 5 years.*

- *BIAL has acted in full compliance to the extant accounting and legal requirements and in line with Authority's directions. Hence, BIAL submits that the useful life of Top layer, which will wither away faster, and which needs to be re-surfaced be considered as 5 years.*

3.6.17 BIAL commented as follows on the useful life for earthworks considered as 48.5 years by the Authority:

- *BIAL, in its Fixed Asset Register had considered a useful life of 48.5 years for the Earthworks.*

- *Estimated depreciation for future years (Third Control Period) is done on a block estimate and the Earthworks together with Runways, Taxiways were all considered as part of 1 block "Buildings 2-RW/TW" category. This block has assets with useful life of 48.5 years (Earthwork), 20 years (First Runway and Taxiway) and 30 years (New South Parallel Runway).*

- *For ease of computation, a common useful life of 30 years was used.*

- *BIAL agrees that the Earthworks be considered with a useful life of 48.5 years whereas the useful lives of existing Runways and Taxiways have to be considered at 20 years as per the submissions made above.*

3.6.18 BIAL commented as follows on the adjustments to depreciation due to reduction to RAB as per EIL study report:

- *BIAL has made its arguments and submissions on why the reduction made to RAB based on EIL study is not correct and unjust. Hence, BIAL requests that the depreciation adjustment due to the reduction to RAB made based on EIL Report be reversed.*

3.6.19 BIAL commented as follows on the adjustment to depreciation due to pre-operative expenses not considered as part of RAB additions

- *BIAL has submitted in detail in the relevant section on why Pre-Operative expenses have to be considered as part of Capital Expenditure and hence as part of additions to RAB.*
- *BIAL accordingly requests the Authority to reverse the deduction made on account of reduction in depreciation due to Pre-Operative Expenses not being considered.*

3.6.20 BIAL commented as follows on the revision to one time depreciation based on its comments above:

- *The Authority has adjusted the 'One-time' depreciation due to change made by the Authority on useful lives of Canopy and Plant & Machinery.*
- *BIAL requests the Authority to reverse the adjustment made based on the submissions made by BIAL for S # 1 and S # 2 as above.*

3.6.21 BIAL commented as follows on the aeronautical proportion of RAB of a respective year used for computation of depreciation for reimbursement:

- *The Authority has proposed that total depreciation for the year will be segregated between Aeronautical and Non-Aeronautical in the ratio of the assets – Aero: Total Assets and has accordingly computed the Aeronautical Depreciation to be considered for ARR computation.*
- *BIAL had computed the allocation ratio between Aeronautical and Non-aeronautical assets based on the segregation of depreciation at an individual asset level between Aeronautical and Non-Aeronautical asset. This is evident from the following table which shows the ratio of Aeronautical assets for each year from 2016-17 to 2019-20 together with the ratio of Aeronautical deprecation for each of these years.*

Particulars	*FY 17*	*FY 18*	*FY 19*	*FY 20*
Aero Gross Block of assets	*90.80%*	*90.35%*	*90.04%*	*92.78%*
Aero Depreciation for the year	*92.44%*	*92.38%*	*88.75%*	*90.56%*

- *This is because different assets will have different useful lives and hence, the depreciation cannot be uniformly assigned based on the overall asset Gross block ratio.*
- *Only for estimation purposes for future years, a ratio of the total depreciation, which is made at a block estimate has been taken, which will be trued up in the next control period based on actual asset capitalization into different categories and based on depreciation computed by the accounting system.*
- *Hence, BIAL requests that the identification of depreciation to each asset done by BIAL to compute the total Aeronautical depreciation be considered by the Authority."*

Other stakeholder comments on true-up of depreciation for the Second Control Period

3.6.22 FIH has stated in its comments that the Authority has proposed changes to the useful life for computation of depreciation, which has been approved in the previous tariff orders.

3.6.23 Similar to the comments of FIH, Siemens has also stated that the Authority should uphold its guidelines and airport regulations and allow depreciation as claimed by BIAL.

3.6.24 MIAL stated that the extra shift depreciation had been specifically allowed by the Authority vide Amendment dated 9 April 2018 to the Order no. 35/ 2017-18 dated 12 January 2018. MIAL submitted that the Authority should allow the extra shift depreciation based on the technical justification provided by BIAL and also allow the useful life of assets based on the technical justification provided by BIAL.

3.6.25 APAO stated that the Order no. 35/ 2017-18 allows for the useful life of runways/ taxiways to be between 20-30 years and Further, extra shift depreciation for Plant and Machinery in the case of large airports, running continuously for extra shift, was also allowed, based on technical justification. APAO further stated that the Authority had accepted the justification given by BIAL in the 2nd control period in the 2nd control period order while the Authority has reversed its position and had gone against its own orders. APAO requests Authority to honour its own decisions taken in previous tariff and consider useful lives as claimed by BIAL.

3.6.26 IATA submitted it supports the adjustments made by AERA on the life of certain assets as well as other adjustments and also notes AERA's comment that the asset lives have been determined on the basis a "typical usage" of the asset. IATA submitted that since 2020-21 was not a typical year, AERA may wish to consider extending the life of the assets.

BIAL's response to stakeholder comments regarding true-up of depreciation for the Second Control Period

3.6.27 BIAL concurred with the comments of FIH, Siemens, MIAL and APAO.

3.6.28 In response to IATA's comment on depreciation, BIAL submitted that depreciation charge to P&L is guided by the accounting Standards and Accounting principles followed by BIAL and these cannot be changed instantly. Further, BIAL submitted that all the assets were put to use and in operation even during FY 21 and it has submitted detailed explanations and clarifications done on the useful lives of assets which BIAL requests the Authority to consider and allow accordingly in the ARR computations.

Authority's examination after reviewing stakeholder comments on the true-up of the depreciation of Second Control Period

3.6.29 The Authority has carefully examined comments from BIAL, FIH, Siemens, MIAL and APAO on the true-up of the depreciation of SCP and have given its analysis and decision below:

a) Asset Class – Plant and Machinery (Aerobridges, Airport Communication, Baggage Handling, Escalators/ Elevators, HVAC Equipment, Other Airport Equipment and Security/ Safety Equipment): The Authority has given its detailed reasoning for considering the useful life of 7.5 years for these assets in para 3.6.6 of the Consultation Paper no. 10/ 2021-22 for BIAL. The Authority would clarify to BIAL that the amendment no. 1 to the Order no. 35/ 2017-18 dated 9th April 2018 provided the clarity that the airport operators can adopt extra shift depreciation subject to consideration of the technical justification to the satisfaction of the Authority. The Authority has evaluated the submission of the addendum to the technical evaluation for considering the lower useful life for these assets. Below are extracts from the technical evaluation report:

"Item-wise explanation for having reckoned Useful Life of Equipments as 7.5 years is given below:

1. Baggage Handling System, Passenger Boarding Bridges, Escalators, Elevators, Travellators, HVAC etc.

Unlike other industries, these systems/equipments in a busy airport which works 24/7 get loaded/unloaded continuously for 365 days. Also, these systems/equipments undergo very frequent ON-OFF cycles resulting in the reduction of useful life.

2. Baggage Handling System (BHS) are more than a simple mechanical system and are built along with a complex SCADA (Supervisory Control and Data Acquisition) system to move the passenger baggage/bags from check-in to aircraft baggage trolleys and during this process, pass through Screening System, Diverters, Position Sensors at multiple levels. A complex baggage system comprises of more than 100 smaller segments and many of the sections operate in different speed controlled through the SCADA system. As such, the life gets reduced compare to a conventional and more predictable manufacturing/process systems. Due to faster technology improvements/changes the SCADA operating system gets redundant sooner and needs to *be upgraded/replaced due to global/local regulation changes. Reckoning the above factors, the baggage handling system can be qualified for lesser Useful Life and also supported by AERA amendment No. 1 to order number 35 clause 2.7.1*

3. Equipments such as Passenger Boarding Bridges, during operation are extended, retracted, raised, lowered, swivelled to connect the bridge to various types of aircrafts and are also exposed to various open weather conditions.

4. Equipments such as Escalators, Elevators and Travellators are used continuously for 24 hours in busy airports. Hence serviceability and safety compliance requirements are very high since these are exclusively used by airport personnel/passengers.

5. VDGS (Visual Docking Guidance System) which helps safe docking of aircraft to stands are installed in "open to sky" environment. These systems are operating with Laser technology and in severe weather conditions, they deteriorate faster and as such with Electronic circuits playing a major role have a useful life of not greater than 7.5 years.

6. Automatic sliding doors: There are multiple automatic sliding doors installed at the Departure Entrance, Boarding gates and Arrival entry/exit. These doors operate continuously based on people movement and is subject to heavy number of ON-OFF cycles.

7. Unlike typical process/manufacturing industry, where shift operation is steady, the Electromechanical equipment that are used in the airports are subjected to multiple/numerous ON-OFF cycles, which deteriorates the normal design life of the equipment.

Managements strategically assess the investment in capital expenditures for acquisitions, along with ancillary costs and the costs associated with the repair and maintenance requirements of those assets while they are in service. For this reason, determining accurate costs using an LCC (Life Cycle Costing) approach is critical. In the Airport's case, this is necessary to safely and cost-effectively accommodate the growing number of passengers with the efficiency that passengers expect. The airports must manage risk since the failure of older assets car, pose a danger to travelers, airport Personnel and visitors.

It may also be noted that sometimes new technology is likely to render these running equipments obsolete much before the scheduled useful life as reckoned. Hence to avoid risks of spares availability and drop in efficiency, these equipments will need to replaced much earlier.

In view of all the above and considering that the process of determining the useful life of the equipment is permitted to be reduced for 2/3 shift operation, it is recommended that, the useful life of Electromechanical equipment working in the airports to be determined at 7.5 years instead of 15 years."

Order 35 provides for specific determination of life through technical evaluation for specific assets other than those listed in the Order based on specific requirement of the Airport. The Authority notes from the above technical evaluation that the shorter life is proposed by the airport operator for the assets under Plant and Equipment which are already included in the order and therefore, these are not new equipment for specific requirement of the airport. The Authority has also noted that BIAL has requested for a useful life of 7.5 years for some of the items, yet many of them still continue to be in operation even after 7.5 years. Therefore, the Authority does not find any merit in reducing the useful life of such assets.

b) Asset class – Buildings: The Authority has noted the technical justification submitted by BIAL in relation to useful life of Canopy, New Project office and Nursery. Below are extracts from the technical evaluation report:

"As regards to buildings/items like canopy, New Project Office, Nursery etc are not general buildings/ items. Apart from their design and sustenance to the required cause of operatable on temporary nature and constructed in areas meant for future development as per Master plan, the material used for construction also temporary in nature to reduce the cost of construction of these temporary structures."

The Authority is of the view that the canopy is part of the building and therefore, it cannot have a separate useful life than the building's useful life of 30 years. Further, New Project Office and Nursery forms part of the building asset class and therefore, their useful life is also considered as 30 years.

c) Asset class - Runway and Taxiway - The Authority has noted BIAL's submission to consider the useful life of existing runway as 20 years instead of 30 years. The Authority has given the justification for change in the useful life of runway to 30 years in para 3.6.6 (c) of the Consultation paper no. 10/ 2021-22 for BIAL and para 10.6.4 of the SCP order for BIAL. The Authority finds no additional information from BIAL in its stakeholder comments to change its proposal in the Consultation Paper.

d) Asset class - Runway top layer – The Authority has noted BIAL's submission to consider the useful life of the runway top layer as 5 years instead of 30 years as considered by the Authority. Similar to the canopy assets, the runway top layer is also part of the runway asset and therefore, the Authority cannot have two different useful life for runway top layer and the runway. Accordingly, the Authority decides to consider the useful life of 30 years for runway top layer similar to the runway. Further, it may be noted that the resurfacing of top layer of the runway is allowed as R&M cost and amortized over 5 year period.

e) The Authority has noted that BIAL has agreed with Authority's proposal to consider the useful life of earthworks as 48.5 years for the Third Control Period.

f) The Authority has noted BIAL's comment on allowing the one-time depreciation and the depreciation on the excluded assets as per EIL study. Since the Authority has not revised its decision on these matters, no change is proposed to the aeronautical depreciation on this account.

g) The Authority has decided to allow the pre-operative expenses in the true-up of the regulatory asset base of the SCP and accordingly, the Authority decides to allow the depreciation on the pre-operative expenses.

h) The Authority has noted BIAL's comment related to the application of the aeronautical proportion of RAB of a respective year to compute the aeronautical depreciation. The Authority is of the view that the aeronautical asset ratio captures the aeronautical to non-aeronautical bifurcation of assets and the same can be adopted for computation of the aeronautical and non-aeronautical depreciation for the Second Control Period. Further, the approach adopted by the Authority brings consistency to the aeronautical depreciation computation across airports.

3.6.30 The Authority noted IATA's comment to extend the useful life of the assets based on its usage in FY21 and BIAL's response to it. The Authority does not agree with IATA's comment as the useful life for airport assets are governed as per the Authority's Order no. 35/ 2017-18.

3.6.31 Based on the Authority's decision to allow financing allowance upto Second Control Period, the Authority has also considered the depreciation on the financing allowance for true-up of the SCP.

3.6.32 The Authority has decided to disallow the eastern connectivity tunnel cost from the RAB and accordingly, the Authority has excluded the depreciation on the eastern connectivity tunnel.

3.6.33 The Authority has considered the actual depreciation based on the audited financial statements for FY21 for true-up of SCP in the final order.

3.6.34 Based on the changes mentioned above, the depreciation decided by the Authority for true-up of the Second Control Period is given in the table below:

Table 31: Depreciation decided by the Authority for true-up of Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Total depreciation	**213.83**	**217.54**	**238.51**	**262.70**	**345.1**	**1,277.67**
Adj. – Less: Change in useful life, revision in asset addition			-42.62	-50.37	-57.62	**-150.62**
Adj – Add: One time depreciation impact			125.92			**125.92**
Adj. – Less: EIL assets	-4.19	-3.92	-11.34	-0.90	-0.90	**-21.24**
Adj. – Less: Depreciation on excluded ECT cost					-1.41	**-1.41**
Adj. – Add: Depreciation on FA assets	1.66	1.67	1.90	5.79	10.33	**21.34**
Total adjusted depreciation	**211.30**	**215.30**	**312.36**	**217.21**	**295.51**	**1,251.67**
Aeronautical proportion as per asset allocation study	**89.29%**	**88.87%**	**88.96%**	**91.77%**	**91.45%**	
Aeronautical depreciation as per the Authority	**188.67**	**191.33**	**277.88**	**199.34**	**270.23**	**1,127.44**

3.7 True up of Operating Expenditure

BIAL's submission for true up of operating expenses

3.7.1 BIAL has submitted the following aeronautical operating expenses for true up of the Second Control Period:

Table 32: Operating expenses (Aero) submitted by BIAL for the Second Control Period

Operating expenses	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Personnel expenses	116.01	118.27	146.58	186.17	203.47	770.50
O&M	83.92	98.84	99.15	117.12	120.27	519.29
Lease Rent	13.01	13.42	13.83	14.24	14.67	69.17
Utilities	37.72	42.64	34.68	36.45	33.08	184.58
Insurance	1.60	2.26	1.97	3.19	7.70	16.72
Rates & taxes (other than IT)	8.72	6.53	9.36	8.90	9.16	42.68
Marketing & Advertising	8.09	9.25	15.31	19.88	15.61	68.14
CSR	3.72	4.81	16.00	19.51	16.42	60.46
General admin costs	26.59	33.65	28.69	32.74	36.01	157.68
Total operating expenses - Aero	**299.37**	**329.67**	**365.58**	**438.20**	**456.40**	**1,889.23**
Less: Disallowance - Interest/hotel cost						-

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Operating expenses	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Concession fee	32.67	37.06	29.29	22.95	7.80	129.76
Waiver and bad debts	-	0.60	11.15	2.74	-	14.49
Total Operating Expenditure – Aero	**332.05**	**367.33**	**406.02**	**463.89**	**464.20**	**2,033.48**

3.7.2 The submissions of BIAL relating to opex for the Second Control Period are as follows:

- Waiver and bad debts - BIAL has considered waiver and bad debts as part of operational expenditure.
- CSR expenditure – BIAL has considered CSR as part of operational expenditure.

3.7.3 BIAL has submitted a certificate from Sreedar Mohan and Associates on the allocation of operating expenses into aeronautical and non-aeronautical for the Second Control Period. The ratio of allocation of operating expenditure into aeronautical and non – aeronautical as per the certificate is given below:

Table 33: Aeronautical ratio for operating expenses as per BIAL

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Personnel Expenses	94%	94%	93%	92%	92%
Operations & Maintenance	89%	89%	88%	89%	89%
Concession Fee	Revenue ratio	Revenue ratio	Revenue ratio	Revenue ratio	Revenue ratio
Lease Rent	100%	100%	100%	100%	100%
Utilities	100%	100%	100%	100%	100%
Insurance	91%	90%	90%	90%	90%
Rates & Taxes (other than IT)	100%	100%	100%	100%	100%
Collection Cost	100%	100%	100%	100%	100%
Other Marketing costs	95%	90%	88%	86%	86%
Waivers & Bad Debts	100%	100%	100%	100%	100%
CSR	100%	100%	100%	100%	100%
Total General Administration Costs	99%	98%	95%	91%	91%

Recap of decision taken by the Authority for Operating expenses at the time of tariff determination for the Second Control Period

3.7.4 The Authority notes the following operating expenses considered at the time of tariff determination for the Second Control Period vide decision number 9a (i):

Table 34: Operating expenses as considered by the Authority at the time of tariff determination for the Second Control Period

Operating expenses	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Personnel expenses	107.77	128.73	146.7	164.6	193.92	741.72
O&M	82.73	95.14	109.41	125.82	144.69	557.79
Lease Rent	13.03	13.42	13.83	14.24	14.67	69.19
Utilities	40.64	42.77	48.88	51.4	60.32	244.01
Insurance	3.54	4.54	4.81	6.08	8.86	27.83
Rates & taxes (other than IT)	8.72	8.8	8.87	8.96	9.4	44.75
Marketing & Advertising	7.58	8.69	9.83	11.12	12.58	49.80
CSR	0	0	0	0	0	-
General admin costs	19.66	10.56	23.79	26.17	28.78	108.96

Operating expenses	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Total Operating expenses - Aero	**283.67**	**312.65**	**366.12**	**408.39**	**473.22**	**1,844.05**
Less: Disallowance - Interest / Hotel cost	-0.2	-0.28				
Concession fees	39.89	44.89	29.48	35.2	42.03	191.49
Total Operating expenditure - Aero	**323.36**	**357.26**	**395.6**	**443.59**	**515.25**	**2035.54**

3.7.5 The key decisions of the authority relating to operating expenditure in the Second Control Period order is summarized in the table below:

Table 35: Key decisions of the authority relating to operating expenditure for BIAL

Particular	Reference in Order	AERA's Decisions	Reference in Hon'ble TDSAT Order	Hon'ble TDSAT 's Order
Bad debts	18.36.2 (FCP Order) and 12.3.31 (SCP Order)	Consider INR 47.51 cr. of actual bad debts (Kingfisher airlines) written off during FY 2013 as part of operational expenditure. Authority proposed to not consider write off of any bad debt other than Kingfisher, as the airport operator is expected to recover the same in normal course of business.	Para 112	*"Allowing bad debts to be recovered as operating expenses is a bad precedent and should not be followed in future because users should not be put to penalty for no fault of theirs. However, for pragmatic reasons such decision for the First Control Period is not set aside."*
Utility charges	12.7.5	Similar to considering lease rentals from aeronautical concessionaires as aeronautical revenue, the Authority has considered infrastructure recoveries for utilities from aeronautical service providers as aeronautical and has considered this as deduction from utility cost.	Para 83	*"...The claim of BIAL to treat infrastructure recoveries from net cost of utilities realized from concessionaries providing aeronautical services as non-aeronautical revenue cannot be accepted..."*
CSR expenses	12.3.33	Being not related to airport activity, the Authority proposed to not allow CSR expenditure for First Control Period and Second Control Period.	Para 81	*"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."*
Lease Rentals	12.3.19	The Authority understood that usage towards non – aero / non – airport would be a small percentage of the total land lease and hence decided to not allocate any cost to non – aeronautical services		

3.7.6 Additionally, the Authority had decided to true-up operating expenses for the Second Control Period at the time of determination of tariff for the Third Control Period considering the results of the study on allocation of expenses between aeronautical and non-aeronautical services.

Authority's examination and proposal for operating expenses as part of tariff determination for the current control period

3.7.7 The Authority has commissioned a study to determine efficient aeronautical operation and maintenance costs for true-up of the Second Control Period for BIAL (refer Annexure 4 for summary of the report).

3.7.8 The Authority noted that the study has bifurcated operations and maintenance costs into aeronautical, non-aeronautical and common costs based on the provisions of the AERA Act, 2008 and the guidelines issued from time to time.

3.7.9 The Authority noted the below bifurcation methodology of the personnel cost, operation and maintenance cost, general administration cost, marketing and advertising cost (except collection charges which are considered as aeronautical expense) is undertaken as per below:

a) These major expenses are sub-divided into sub-cost centres

b) Each sub-cost centre is categorized into aeronautical, non-aeronautical and common and the expenses within that sub-cost centre are also categorized accordingly

c) These common costs except for marketing and advertisement expenses have been further bifurcated into aeronautical and non-aeronautical costs based on the expense allocation ratio (based on directly attributable expenses within the major cost head). Marketing and advertisement expenses are bifurcated based on 85:15 ratio which is the average for previous years

d) Sub-cost centres whose allocation is changed from aeronautical to common include quality management, corporate affairs, terminal operations, ops, planning and project co-ordination, innovation lab, landside maintenance – special equipment, utilities – water supply, utilities – power supply, corporate communication, chief operations officer, customer engagement and service quality and president – airport operations.

3.7.10 In the study, the Authority noted that the forecast for FY 2021 is revised based on the data available till December 2020. Therefore, the impact in the FY 2021 is a combination of this revision and the revised segregation logic.

3.7.11 The details of the various adjustments proposed, and its corresponding impact are shown in the table below:

Table 36: Efficient O&M cost adjustment as per the study for the Second Control Period

S. No	Details of Expense	Observation
1	Personnel costs	**Segregation by BIAL:** BIAL has segregated the personnel expenses into various departments / cost centres and categorized under aeronautical, non – aeronautical and common. **Observation:** The personnel costs have been bifurcated into aeronautical, non-aeronautical and common costs based on the allocation of sub-cost centre wise expenses. These common costs have then been further bifurcated into aeronautical and non-aeronautical costs based on the expense allocation ratio (based on directly attributable expenses). Additionally, the numbers for FY 2021 have been revised based on revised estimates submitted by BIAL.
2	Operation & maintenance expenses	**Segregation by BIAL:** BIAL has segregated the O&M expenses into various departments / cost centres and categorized under aeronautical, non – aeronautical and common. **Observation:** The O&M costs have been bifurcated using the same methodology used for personnel costs. Some expenses related to F&B, lounges (except VIP) under the head terminal operations are classified as non–aeronautical expenses. Additionally, the numbers for FY 2021 have been

S. No	Details of Expense	Observation
		revised based on the actuals submitted by BIAL till Q3 FY 2021 and Q4 is estimated by taking the average for first three quarters.
3	Utilities	**Segregation by BIAL:** BIAL had submitted estimates of utilities costs. **Observation:** The utilities cost has been adjusted for the utility's recoveries from aeronautical concessionaires as per AERA's Second Control Period order for BIAL. The net amount has been considered 100% aeronautical expenses. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld this stand. The utilities cost for FY 2021 has been revised based on the actuals submitted by BIAL till Q3 FY 2021 and Q4 is estimated by taking the average for first three quarters.
4	Insurance	**Segregation by BIAL:** BIAL has considered the asset ratio to bifurcate the insurance expenses into aeronautical and non – aeronautical. **Observation:** Insurance expenses have been bifurcated based on the adjusted gross fixed asset ratio derived from the asset allocation study. Additionally, the numbers for FY 2021 have been revised based on revised estimates submitted by BIAL.
5	Marketing & Advertising	**Segregation by BIAL:** BIAL has bifurcated the expenses department wise into 100% aeronautical, 100% non-aeronautical and common expenses. The common expenses are allocated into aeronautical and non-aeronautical on the ratio of 85:15, which is the average ratio of the previous years. **Observation:** The marketing and advertisement expenses (other than collection charges) are bifurcated department wise into aeronautical, non-aeronautical and common. The common costs are then apportioned in the ratio of 85:15 which is the average of the previous years. Collection charges are considered as aeronautical expense. Additionally, the numbers for FY 2021 have been revised based on the actuals submitted by BIAL till Q3 FY 2021 and Q4 is estimated by taking the average for first three quarters.
6	CSR	**Segregation by BIAL:** BIAL has considered CSR expenses as 100% aeronautical. **Observation:** CSR expense has been considered as operational expenditure as per the directions of the Hon'ble TDSAT judgement dated 16 Dec 2020. These are categorized as common and computed based on the aeronautical profit before tax for BIAL. Additionally, the numbers for FY 2021 have been revised based on revised estimates submitted by BIAL.
7	General admin expenses	**Segregation by BIAL:** BIAL has segregated the general admin expenses into various departments / cost centres and categorized under aeronautical, non – aeronautical and common. **Observation:** The general administrative costs have been bifurcated into aeronautical, non-aeronautical and common costs based on the allocation of sub-cost centre. These common costs have then been further bifurcated into aeronautical and non-aeronautical costs based on the expense allocation ratio (based on directly attributable expenses). Donations have been considered as non – aeronautical while provision for doubtful debts have been excluded from General administrative costs. Additionally, the numbers for FY 2021 have been revised based on revised estimates submitted by BIAL.
8	Waivers and bad debts	Waivers and bad debts have been excluded from the operational expenses. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld this view.

3.7.12 Based on the result of the study, the allocation ratio for operating expenses considered by the authority for true-up is given below:

Table 37: Revised segregation logic for O&M costs proposed to be considered by the Authority for Second Control Period

Operating expenses	Cost allocation % as considered by authority in Second Control Period	Cost allocation % proposed to be considered by the Authority in Second Control Period as per the independent study				
		2017	2018	2019	2020	2021
Personnel Expenses	90%	90.44%	91.05%	89.71%	88.94%	88.94%
Operations & Maintenance	Based on asset ratio	83.62%	84.78%	82.66%	84.49%	89.65%
Lease Rent	100%	100%	100%	100%	100%	100%
Utilities (Net)	100%	100%	100%	100%	100%	100%
Insurance	91%	89.29%	88.87%	88.96%	91.98%	90.93%
Rates & Taxes (other than IT)	100%	100%	100%	100%	100%	100%
Collection cost	100%	100%	100%	100%	100%	100%
Marketing and Advertising	85%	89.82%	83.60%	85.17%	84.80%	84.80%
Total General Administration Costs	90%	95.10%	91.27%	63.34%	59.03%	90.00%

3.7.13 The aeronautical concession fee for BIAL is computed as 4% of the aeronautical revenues. The Authority proposes to consider CGF revenues as part of aeronautical revenues as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16[th] December 2020, for computing the aeronautical concession fees.

3.7.14 Based on the above changes, the revised aeronautical operational expenditure considered for the true-up of the Second Control Period as per the study is given below:

Table 38: Proposed aeronautical operating expenditure by the Authority for the Second Control Period

Operating expenses adjustments	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Personnel expenses	107.37	110.43	137.41	174.29	187.78	717.27
O&M	83.03	98.97	96.93	117.09	120.09	516.11
Lease Rent	13.01	13.42	13.83	14.24	14.67	69.17
Utilities	36.45	41.92	34.86	34.22	23.41	170.86
Insurance	1.57	2.22	1.94	3.25	5.64	14.62
Rates & taxes (other than IT)	8.72	6.55	9.36	8.90	8.29	41.82
Marketing & Advertising	7.90	9.02	12.93	10.77	6.07	46.69
CSR	2.14	4.22	6.98	6.85	5.21	25.41

Operating expenses adjustments	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
General admin costs	23.40	27.34	17.28	19.90	24.09	112.02
Total operating expenses - Aero	**283.59**	**314.08**	**331.52**	**389.51**	**395.26**	**1713.97**
Concession fee	39.63	44.62	38.11	32.85	13.21	168.42
Waiver and bad debts	0.00	0.00	0.0	0.0	0.0	0.0
Total operating expenditure - Aero	**323.22**	**358.70**	**369.63**	**422.36**	**408.47**	**1882.38**

3.7.15 The Authority notes that in order to determine the efficient O&M costs, following is presented in the study (refer Annexure 4 for summary of the report):

a) The study has given the details of BIAL's budgeting and review process, cost reduction measures undertaken by BIAL.

b) The study has undertaken trend analysis of the various components of the inflation adjusted operational expenditure cost for the period from FY17 to FY20. The study has noted that due to increase in the passenger traffic and addition of new facilities such as new south parallel runway, the operational expenditure cost has increased over this period. The study has noted that the trend in costs with respect to growth in traffic and capacity augmentation indicate that BIAL has maintained the efficiency in operational costs during the Second Control Period.

c) The Authority has noted that report includes the analysis of BIAL's O&M costs with respect to its performance (Internal benchmarking) and its competitors (external benchmarking). It is observed from internal benchmarking that for the period FY12 – FY21, the inflation adjusted costs per pax at BIAL has decreased for major heads except O&M which has shown a marginal increase due to the increase in capacity at the airport. It is noted that the overall (total) operational expenditure incurred by BIAL for the period FY 2017 – FY 2020 appears reasonable in range of other private airports in India.

3.7.16 The Authority proposes to consider the aeronautical operating expenditure as per Table 38 for the purposes of true-up of the Second Control Period.

Stakeholder comments regarding true-up of the operating expenditure for the Second Control Period

3.7.17 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. 10/ 2021-22 with respect to true-up of the operating expenditure for the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the operating expenditure for the Second Control Period

3.7.18 BIAL commented as follows on the inclusion of the finance cost which were considered as opex in MIS and rounding off items in the operating expenditure:

- *"Following is the tabulation of Opex allocation ratios as proposed by BIAL versus Opex cost allocation as proposed by the Authority in Consultation Paper 10.*

Exp Head	*Proposed by BIAL*					*Proposed by Authority*				
	FY 17	*FY 18*	*FY 19*	*FY 20*	*FY 21*	*FY 17*	*FY 18*	*FY 19*	*FY 20*	*FY 21*
Personnel	*94%*	*94%*	*93%*	*92%*	*92%*	*90.44%*	*91.05%*	*89.71%*	*88.94%*	*88.94%*
O&M	*89%*	*89%*	*88%*	*89%*	*89%*	*83.62%*	*84.78%*	*82.66%*	*84.49%*	*89.65%*
Lease Rent	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Utilities	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

Exp Head	Proposed by BIAL					Proposed by Authority				
Insurance	91%	90%	90%	90%	90%	89.29%	88.87%	88.96%	91.98%	90.93%
R&T	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Collection Cost	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Marketing & Advt.	95%	90%	88%	86%	86%	89.82%	83.60%	85.17%	84.80%	84.80%
Total G&A	99%	98%	95%	91%	91%	95.10%	91.27%	63.34%	59.03%	90.00%
CSR	100%	100%	100%	100%	100%					
Total Opex	89%	89%	88%	88%	91%	87.14%	87.14%	79.83%	79.62%	87.79%

- *Of the total cost of Rs. 2290.57 crores for SCP as submitted by BIAL, Rs. 2033.48 Crores was estimated as Aeronautical Expenditure. As against this, as per the study, Rs. 2241.31 crores has been estimated as the cost, of which Rs. 1882.38 crores has been estimated as Aeronautical cost.*
- *Broad reconciliation of MYTP submission to the costs considered by AERA are given below:*

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21	Total
Expenses as per MIS	**371.84**	**412.54**	**463.99**	**530.40**	**511.31**	**2290.07**
Adjustments						
Less: Collection costs reduced to arrive at IGAAP numbers (Contra)	(5.27)	(6.31)	(6.57)	(7.27)		25.40
Add: Exchange differences considered as Finance cost (Contra)	6.77	0.89	0.01			7.65
Less: Finance cost considered as Opex in MIS	(0.95)	(0.99)	(0.62)	(1.35)		(3.91)
Rounding off	(0.01)	(0.01)	(0.01)	(0.31)		(0.34)
Expenses as per IGAAP	**372.43**	**406.22**	**456.44**	**523.19**	**511.31**	**2269.59**
Add: Collection costs added (Contra)	5.27	6.31	6.57	7.27		25.42
Less: Exchange losses (Contra)	(6.77)	(0.87)	(0.01)			(7.65)
Less: 2020-21 adjustment based on estimate					(46.05)	(46.05)
As per Study	**370.93**	**411.66**	**463.00**	**530.46**	**465.26**	**2241.31**

- *BIAL's submission on the items of costs not considered and reasoning for inclusion is as given below:*
  - *Finance costs that are considered as Operating Expenses in MIS relate to the assets taken on lease for ICT requirements. These are actual Operating costs and are to be reimbursed to BIAL.*
  - *Rounding off differences are various minor adjustments across various codes in Trial Balance and cannot be excluded by the Authority.*
- *BIAL requests these 2 items to be included as part of Operating Expense and provide for reimbursement of the same.*

3.7.19 BIAL commented as follows on the allocation of key costs under personnel, O&M, general admin and marketing costs:

- *For key costs – Personnel, O&M, General Admin and Marketing costs other than collection fee, AERA has segregated the same based on sub-cost centers as done by BIAL. However, certain cost centers considered as Aeronautical by BIAL have been treated as common/ Non-Aero by AERA.*
- *From Table 16 of Appendix III – Allocation study report, areas where there are differences in allocation are summarized below. BIAL's analysis of the same and reasoning for the basis considered by BIAL is as elaborated below:*

No.	***Sub-cost center***	***Personnel***		***O&M***		***GA and M&A***		***Remarks***
		BIAL	***Study***	***BIAL***	***Study***	***BIAL***	***Study***	
2	*Quality Management*	*A*	*C*	-	-	*A*	*C*	*The Quality Management team works towards the overall improvement of the airport operations and hence taken as common. Similar treatment was considered by AERA for other airports.*
3	*Corporate Affairs*	*A*	*C*	*A*	*C*	*A*	*C*	*Corporate Affairs exist to support both Aeronautical and Non-Aeronautical activities and hence, considered as common. Similar treatment was considered by AERA for other airports.*
4	*Terminal Operations*	*A*	*C*	*A*	*A*	*A*	*C*	*Terminal operations cost includes costs related to maintenance, upkeep and running of the terminal. Since both aeronautical and non-aeronautical services are managed and provided within the terminal, hence expenses under this head are considered as common. Similar treatment was considered by AERA for other airports. Terminal operations is considered as aeronautical for O&M expenses with some cost items containing F&B, lounges (except VIP) being reclassified from aeronautical to non-aeronautical.*
12	*Ops Planning & Project Co-ordination*	*A*	*C*	*A*	*C*	*A*	*C*	*Involves planning and coordination of the entire airport which includes aeronautical as well as non-aeronautical services.*
14	*Innovation Lab*	*A*	*C*	*A*	*C*	*A*	*C*	*Aimed at innovation in the airport and its operations which caters to aeronautical as well as non-aeronautical services.*

No.	Sub-cost center	Personnel		O&M		GA and M&A		Remarks
		BIAL	Study	BIAL	Study	BIAL	Study	
22	Real Estate Development	C	C	Non-Airport	N	Non-Airport	N	Considered as non-aero for O&M, GA and M&A. Considered common for personnel cost in accordance with the submission made by BIAL (real estate personnel are involved in filing the property tax managing contracts of cargo, ground handling, etc.,)
27	Landside Maintenance – Special Equipment	A	C	A	C	A	C	Includes central air conditioning unit of terminal and hence considered as common.
28	Utility – Water supply	A	C	A	C	A	C	Utility is provided to both aero and non-aero service users and hence taken as common.
33	Utility – Power Systems	A	C	A	C	A	C	Utility is provided to both aero and non-aero service users and hence taken common.
47	Corporate Communications	A	C	A	C	A	C	Corporate Communication exist to support both aero and non-aero activities and hence, considered as common. Similar treatment was considered by AERA for other airports.
49	Chief Operations Officer	A	C	A	C	A	C	COO is responsible for managing the operations of airport as a whole and hence its costs are taken as common. Similar treatment was considered by AERA for other airports.
50	Cust Engagement and Service Quality	A	C	A	C	A	C	Similar to ops planning and project coordination
62	President – Airport operations	A	C	A	C	A	C	Similar to Chief Operations Officer.

- *AERA has reclassified expenses based on the reasoning provided above. BIAL has given below the details of different teams and the nature and function of the roles performed by them. While certain functions have been considered as Common based on the reason that the service is for Overall Airport, following fundamental principle is brought to the attention of the Authority*

- *Certain departments of BIAL are engaged in managing Non-Aeronautical services. These are Commercial, Landside Traffic etc. Such departments and cost centers have been fully identified as Non-Aeronautical.*

- *While the Non-Aero concessionaires are provided with space within and in front of terminal building, BIAL has no role or involvement in managing any operations, planning, co-ordination activities of the Concessionaires.*

- *Apart from the dedicated teams handling Non-Aeronautical concessionaires, no other team is working on the any matters of the Non-Aeronautical concessionaries.*
- *BIAL is not aware of the Organization structure and Operations of other airports and hence, cannot comment on the manner of allocation at such airports. We request AERA to examine and take decision based on BIAL's cost centre, structure etc. and not decide based on practice adopted in other airports.*
- *Line by line explanation is as provided below:*

Cost Centre	***Reasoning by AERA***	***BIAL response***
Corporate Affairs	*Corporate Affairs exist to support both Aeronautical and Non-Aeronautical activities and hence, considered as common. Similar treatment was considered by AERA for other airports.*	*Corporate Affairs team manages the affairs of BIAL only. They deal with all permissions required at GoI and GoK for the Airport. Corporate Affairs of Non-Aero concessionaires are not managed by BIAL. Hence this is considered fully aeronautical.*
Terminal Operations	*Terminal operations cost includes costs related to maintenance, upkeep and running of the terminal.* *Since both aeronautical and non-aeronautical services are managed and provided within the terminal, hence expenses under this head are considered as common. Similar treatment was considered by AERA for other airports.* *Terminal operations is considered as aeronautical for O&M expenses with some cost items containing F&B, lounges (except VIP) being reclassified from aeronautical to non-aeronautical.*	*Maintenance and upkeep of the Terminal is the responsibility of BIAL's E&M Team and operations of Terminal are supervised and managed by Terminal Operations team.* *For any specific areas leased to concessionaires, the upkeep, maintenance activities are managed by the respective concessionaires. Also, BIAL is not responsible for managing any other operations of the Non-Aero concessionaires.* *This team ensures that passenger and baggage processing & information flows are facilitated in a timely manner and coordinate with regulatory and other service providing agencies to ensure best levels of services at all times. Hence this cost is to be treated as Aeronautical.*
Ops Planning and Project Co-ordination *Customer Engagement and Service Quality* *Quality Management*	*Involves planning and coordination of the entire airport which includes aeronautical as well as non-aeronautical services.*	*AERA has mentioned that this involves planning and coordination of the entire airport.* *BIAL submits that the BIAL team does not carry out any Operations planning and coordination for the Concessionaires.* *Service Quality Team is responsible for evaluating and maintaining the ASQ of the Airport, which is mandated by the Concession Agreement.*

Cost Centre	*Reasoning by AERA*	*BIAL response*
		While AERA notes that the team works for overall quality management, the quality management initiatives taken are for only the Operations carried out by BIAL and not that of the concessionaires. Hence this is fully Aeronautical. These activities are part of the responsibilities of BIAL as per the requirements of the Concession agreement. *Hence to be considered as Aeronautical.*
Landside Maintenance Special Equipment	*Includes central air conditioning unit of terminal and hence considered as common.*	*Central air-conditioning is the necessary facility to be provided by BIAL as per the terms of the concession agreement. This is also an Aeronautical asset. Hence to be treated as 100% Aeronautical* *This team is responsible for asset management in Terminal - Special systems like BHS, PBB, VHT, HVAC Electricals, Civil, Mechanicals, Infra ICT & Services from Trumpet to Terminal and hence considered fully as Aeronautical.*
Utility – Water Supply *Utility – Power Systems*	*Utility are provided to both aero and non-aero service users and hence taken as common.*	*Utilities are basic facilities to be provided to the users of the Airport. Hence, these are 100% Aeronautical. Utility cost recoveries are netted off and 100% considered as Aeronautical by the Authority.* *This team ensures that Utility services are seamlessly provided for Airport functioning and also develops strategic goals for Energy, Environment and waste management. Also, they are the company custodian for all ISO standards, Noise and Air quality management.*
Chief Operations Officer	*COO is responsible for managing the operations of airport as a whole and hence its costs are taken as common. Similar treatment was considered by AERA for other airports.*	*As the name implies, these are designations only working on core airport operations management etc. Hence, to be considered as 100% Aeronautical.*

3.7.20 BIAL commented as follows on the adjustments made to the allocation of G&A, M&A, Utilities and Insurance:

- *AERA has made certain adjustments relating to G&A costs. BIAL understands from Appendix-III that costs relating to Donation and Provision for Doubtful debts have been adjusted. Basis of allocation %s for 2018-19 and 2019-20 being 63.34% and 59.03% is not known to BIAL.*
    - *Donations of Rs. 3.08 Crores in FY 19-20 and Rs. 2.60 crores in FY 18-19 have been made to the Chief Minister Relief Funds for various humanitarian activities included Flood relief etc. These are to be considered as Aeronautical cost and reimbursed to BIAL.*
    - *BIAL has submitted earlier its responses on Waiver/ Bad debts to be allowed as Operating Costs, we request the Authority to consider the same.*
- *AERA has considered adjustments to Marketing & Advertisement costs for 2018-19 and 2019-20. From Appendix- III, Table 46, BIAL understands that the M&A costs have been allowed only based*

on passenger growth rate and Inflation increase. Detailed computations relating to the same are not available with BIAL.

- *AERA has noted that BIAL has not submitted justification for the Marketing & Advertisement costs for 2019-20. BIAL has submitted all details sought by AERA during MYTP evaluation process.*

Items (Rs. Cr)	***FY 17***	***FY 18***	***FY 19***	***FY 20***
Publishing in Soveniers etc.	*0.28*	*0.64*	*0.35*	*0.72*
Enhanced Digital Platform for apps and website	-	-	-	*2.95*
Regular audio, video , photos for main event at airport	*0.10*	*0.07*	*0.17*	*0.39*
T2 video journey	-	-	*0.60*	*2.33*
Cargo shows, Cargo data subscription, etc	*0.10*	*-0.03*	*0.40*	*0.34*
Advertising for New route launch - KLM, etc	-	*0.00*	*0.04*	*0.69*
BIAL - Vision, Mission related spends	-	-	*0.35*	*0.04*
Digital marketing, Social Media spend, Retainer fee	-	-	*0.35*	*1.64*
Various minor initiatives - BIAL Newsletter, Exibition stalls, Signages, Concessionaire Training, ASQ survey, General advertising etc.	*0.48*	*0.60*	*0.40*	*0.30*
One time cost for 10 year celebration	-	-	*3.17*	-
Events like Yoga day, tree Plantation, employee initiatives, 100 Mn pax	*0.01*	*0.23*	*0.76*	*0.48*
Items (Rs. Cr)	***FY 17***	***FY 18***	***FY 19***	***FY 20***
Pinnacle awards	*0.99*	*0.42*	*1.41*	*2.24*
Republic Day celebration, Sports Celebrations, Dasara Celebrations	*0.17*	*0.24*	*0.40*	*0.67*
Season of Smiles	*0.83*	*1.12*	*1.51*	*1.35*
Various sponsorship - IATA, GES Expo, etc	-	-	-	*0.46*
Total Marketing & Advertisement (A)+(B)	***2.97***	***3.29***	***9.91***	***14.59***
Table 46 of Consultation Paper	*2.93*	*3.24*	*9.80*	*14.56*
Diff	*0.04*	*0.05*	*0.11*	*0.03*

BIAL is ready any further details that the Authority seeks on this account.

- *Costs reported are actual costs incurred for various activities undertaken by BIAL.*
- *Certain one-time costs were incurred by BIAL, and details of Events carried out etc. were submitted to the Authority. Break-up details of such costs are given below. One Time costs incurred in 2019-20 similar to the costs incurred in 2018-19 and considered by the Authority should be considered for reimbursement. One off costs such as T2 Video journey cost (not capitalizable) but essential from a perspective of retaining organizational knowledge for future developments should be considered by AERA.*
- *Enhanced digital platform is to redesign, develop and maintain airport website, to assess and enhance airport mobile app, provide ready to use API architecture and build on existing BIAL Enterprise and system APIs as well as provide campaign management solutions.*
- *Terminal T2 video is series of initiatives to cover the journey of T2 right from concepts, construction, updates and final completion. It will have videos to cover various activities in Terminal T2 journey including a detailed video, construction update video, Electronic Press Kit, Social Media video, Coffee table Book design, repository of photographs etc in a comprehensive manner.*

- *AERA has adopted a new methodology of recomputing the actual M&A costs to be allowed based on passenger growth rate and inflation. This basis of benchmarking is incorrect and AERA should review the details of the actual costs incurred and consider such costs for reimbursement.*
- *AERA has made certain adjustments to Utility cost and Insurance, with significant value adjustments in FY 20, details of which are not available with BIAL. BIAL requests the Authority to provide details for reconciliation and submission of comments.*
- *On completion of reconciliation of model, BIAL will submit changes if any to be made in the computations.*

3.7.21 BIAL commented as follows on the true-up of the CSR expenses and its bifurcation into aeronautical and non-aeronautical expenses:

- *Based on the computations detailed in Table 43, Authority has estimated Rs. 1.16 crores to be the Aeronautical CSR Expenses for the first control period (year 2016). Accordingly, the True up has been re-calculated by the Authority. The details of such computation are still awaited from the Authority for reconciliation.*
- *BIAL notes that the basis and methodology of computation of CSR costs that are to be considered as Aeronautical is fair and reasonable.*
- *On completion of reconciliation of model, BIAL will submit changes if any to be made in the computations.*

Other stakeholder comments on true-up of operating expenditure for the Second Control Period

3.7.22 IATA commented as follows on the true-up of the operating expenditure:

- *"We note that AERA has commissioned a study on operating costs efficiency for BLR, similar to those commissioned for the DEL, BOM and HYD determination processes. And while all the studies go into minute detail on cost allocation and make adjustments accordingly, neither of the studies are thorough enough in relation to adjustments on the basis of efficiency. Since no major efficiency are proposed in these studies, by implication all airports are being considered to be at the "efficiency frontier" and we seriously doubt this is the case. In normal regulated environments, there is usually one company situated at an efficiency frontier and the gap between this and the rest (the efficiency gap) is used for setting efficiency targets for the latter airports. We encourage AERA to further improve the benchmarking of costs to allow it to better differentiate the performance of each of the airports and be able to promote more efficiency at those airports that are not delivering it in full.*
- *Secondly we would like to highlight the significant issues we have with the operating costs allowances for FY2021. COVID has decimated traffic and stakeholders in the sector have had the need to adapt to such circumstances to survive. Airlines have cut opex by 40% by the end of Q1 2021. Even a number of airports, which long argued that their costs are fixed, have had to make drastic cost reductions (of up to 40%). Examples of how some airports have done are reported below:*

Operating costs (sample of European airport groups)

2020/19 (%)	Staff costs (excluding aid)	Maintenance	Utilities	Security	Other	Total before aid and one offs	Total after aid & one offs
AMS group	3%	-4%	2%	-22%	-28%	-16%	-21%
ADP group	-14%	-22%	-24%	-40%	-43%	-32%	-34%
AENA	2%	-30%	-41%	-42%	-20%	-20%	-20%
DAA group	-23%	n.a.	n.a.	n.a.	-47%	-38%	-28%
Fraport group	-25%	n.a.	n.a.	n.a.	-40%	-33%	-21%
CPH	-15%	-35%	-22%	n.a.	-43%	-20%	-30%
VIE	-13%	-68%	-30%	n.a.	-48%	-26%	-42%
ZRH group	-1%	-34%	-11%	-23%	-35%	-19%	-25%

- *However, the consultation document proposes an increase in opex for the Financial year ending in 2021. There is a significant mismatch between what is being done elsewhere and what is being presented in the consultation document. We note that at the consultation meeting BLR showed some cost reductions (compared to the increases showed in the consultation document), so there is a mismatch AERA would need to review.*
- *Even with the reductions showed by BLR at the meeting, these are not adequate. For instance, we note BLR's decision to preserve staff levels which is a noble act, but that cannot be done at the expense (due to the true up mechanism) of the rest of the industry which has had the need to adjust their own cost bases to survive. If BLR wants to take positions that are not in line with what a real competitive industry would need to do, then that should be funded through its own equity and not by the airlines and their passengers.*
- *AERA should only allow a proposed cost by BIAL if it is satisfied that the airport has considered (and implemented applicable/feasible) all possible cost reduction initiatives. Appendix B to this submission contains a non-exhaustive list of potential cost optimization initiatives which AERA may wish to test whether BLR has adopted them. While the list is generic and contains suggestions that may not be applicable in an Indian context, it is still a very useful starting point to challenge what an airport has done.*
- *We note that the Efficiency study provides some detail on the plan BIAL 2.0 but clearly, it does not go far enough.*
- *We would also like to add further remarks in relation to the efficiency study:*
    - *The reports states that it analyses BIAL's O&M costs with respect to its "competition" (Page 12). We would like to state that we do not believe BIAL is in a competitive environment, which explains the need for the airport to be subject to economic regulation. We suggest that future reports refrain some such unfounded assertions and only calls DIAL, MIAL and HIAL as "comparator" airports.*
    - *In the trend analysis (which is only until FY20), the study accepts the explanation "Headcount increase was mandated due to increase in passenger traffic, commissioning of New south parallel runway during FY 2019-20 and the increased area of operations:" It would be appropriate to further analyse the details on the individual activities assigned to the c. 150 new personnel (16% of the staff base) been hired rather than just being satisfied through a "one-line" response.*
    - *One of the major flaws of a trend analysis is that it assumes the "starting" point is as efficient as it could be. Based on the high-level external efficiency benchmark analysis that have so far been carried, we cannot be certain that this is the case.*

- *Table 47 of the efficiency study shows the trends of general expenses but only up to 2020. It would be important to see the details of such expenses for FY2021 to see how the measures announced in BIAL 2.0 are reflected in such expenses.*
- *Much of the trend analysis justifies cost increases on the basis that their growth is lower than the rate of growth of traffic. If such is the sole justification to allow increases, then we should be seeing the same argumentation for seeking downwards costs in FY2021 on the significant reduction in traffic, but the reports stay mute on the subject.*
- *We suggest better KPIs are used on the calculation of power consumption. This is also an area that would benefit from external benchmarking (i.e. making comparisons on energy consumption per sq/metre, etc) in order to compare efficient utilization. There could also be further analysis in what elements of utility consumption are variable vs. those that are fixed (and that would further help to determine adequate KPIs).*
- *Marketing and advertisement expenses should be fully funded by non-aeronautical revenue rather than bifurcated, or should be funded from BIAL's return/profit. Any increase in traffic will greatly benefit the airport operator and its non-aeronautical business (i.e. more passengers using non-aeronautical services/products) and will not necessarily benefit paying aeronautical users. Furthermore, the marketing and advertisement activities are largely seen as to enhance the standing/brand of BIAL within the local community which is not necessary for the provision of aeronautical services. Hence it should be funded as such by BIAL from its profit, at its own discretion. In any case, we do not see how marketing costs could be justified in the current context.*
- *We support the exclusion of bad debt from the operating expenses as otherwise it would generate perverse incentives on the regulated company.*
- *We see that the conclusions of the study on the internal benchmarking of personnel cost indicate that such comparisons are not reliable because some personnel is outsourced, but the study does not propose a solution (just to rely on full operating costs comparisons). It would be important for AERA for consider collecting information in different breakdowns (i.e. costs allocated on an activity basis).*
- *We note in Figure 29 shows BIAL's Repair & Maintenance were the highest of the four comparators to up to 2019 then slightly fell in 2020 (presumably due to the large fixed asset addition in the year), though still higher some of the comparators. Still, the authors of the study seemed to be "satisfied" since BIAL was "in range". We request AERA to carry out further scrutiny on the reasonableness of R&M expense as this is the second largest expense at the airport.*
- *More generally, and as highlighted previously, we take issue when conclusions of "efficiency" are made because an airport is "in range". This cannot be the way to determine efficiency nor provide the appropriate incentive for airports to become "the best of the lot", since its fine to be "in range".*
- *To be fair, we note that BLR's overall operating cost per pax and per ATM is relatively lower than the comparable airports, which could probably highlight that the need to adjustments is lower than those needed at other airports. However, and as highlighted above, we still see the need to further scrutinize specific areas within operating costs. Moreover, and as also mentioned above, the study does not really analyze FY21, year of paramount importance since opex should have been expected to decrease substantially due to lower traffic.*

- *We would appreciate for AERA to take into consideration the abovementioned points before publishing the order."*

BIAL's response to stakeholder comments regarding true-up of operating expenditure for the Second Control Period

3.7.23 BIAL submitted the following response to the IATA's comment on the true-up of the operating expenditure:

- *"Covid-19 has affected the airport operators in a big way. Each airport operator has initiated cost reduction measures and are on track to achieve the target measures. Each country is affected in different ways and hence practices followed in European airports cannot be fully expected to be followed in case of Indian Airports.*
- *Each of the European airport mentioned by IATA has obtained some sort of support from the host Government – be it in the form of short working time (as in the case of ZRH and Fraport) or 50% support on airport charges payable by airlines (as in the case of CPH). The same is not the condition in India. Additionally, IATA should be aware that BIAL is a single terminal based airport while most of the airports in the table shown by IATA have multiple terminals, hence the ability to save costs should also factor this aspect.*
- *Another factor to be considered in the European airports is the cost reduction on security costs. In BIAL, security is a "reserved activity", and the state is responsible for the same. The cost saving table given by IATA includes security costs and hence is not directly comparable with the Indian Airport scenario.*
- *BIAL has undertaken various cost reduction measures and has managed to reduce it costs by 16% when compared to FY2020. All these are without any state support unlike the measures offered to the European airports.*

Staff related Cost saving measures

- *In Indian Context Layoff means "failure, refusal or inability of an employer on account of shortage of coal, power or raw materials or the accumulation of stocks or the breakdown of machinery [or natural calamity or for any other connected reason] to give employment to a workman whose name is borne on the muster rolls of his industrial establishment...."*
- *In case of decision to retrench employees, the same can be done only after seeking approval from appropriate government authorities and by giving three months' notice. Further, recent labour court decisions have held that forced resignation of the employees (which is what retrenchment or lay off is all about) obtained under duress, coercion and without their free will and consent and accepted by any employer is unsustainable in the law and acceptance of the such resignations is illegal.*
- *After the break-out of Covid-19 pandemic, Ministry of Labour and Employment, Government of India had issued an advisory Directives dated 20th March 2020, bearing ref No. D.O. No.M-11011/08/2020-media, advising all Private and Public enterprises not to terminate their employees.*
- *GoK and GoI hold 13% stake each in BIAL. Given the public nature of the airport and with Government shareholders, lay-off / retrenchment cannot be considered as easily as what is being suggested by IATA.*
- *BIAL is, in principle not agreeable to IATA's suggestion regarding staff levels reduction through the method of retrenchment/ layoffs.*

- *However, BIAL has taken all austerity measures as possible on personnel costs. No increments were given, no new job hire was made other than the commitments already made and there was a freeze on the recruitments.*
- *Cost reduction measures taken up by BIAL on this front are elaborated in the MYTP submission. There was no clarity on how to Covid-19 pandemic situation would pan out and hence if BIAL were to lay off the employees, there would be a need to hire again in FY 23 when additional facilities were being commissioned, which would be counter-productive and lead to higher costs.*
- *BIAL has noted the suggestions on cost optimisation measures made by IATA. Most of these have already been implemented by BIAL and a comparative analysis is enclosed in Annexure.*
- *Marketing and Advertisement activities are common costs incurred for both Aeronautical and Non-Aeronautical purposes. New airline connectivity, new route development etc. are typical examples of Aviation marketing. Hence, to comment that Marketing & Advertisement is entirely Non-Aeronautical is not correct."*

Authority's examination after reviewing stakeholder comments on the true-up of the operating expenditure of Second Control Period

Response to BIAL's comments on Operating Expenses

Finance costs related to ICT

3.7.24 The Authority has examined BIAL's response to allow the finance cost related to ICT assets taken on lease. The Authority noted from the audited financial statements of BIAL that these costs are part of the other borrowing costs instead of the operating expenditure. Since these are actual costs incurred by BIAL, the Authority decides to allow these costs as part of the working capital interest similar to the treatment in the audited financial statements.

Rounding off in Trial Balance

3.7.25 The Authority noted BIAL's response to allow the rounding off differences across various codes in Trial Balance. The Authority has decided to adopt the audited operating expenditure for the purposes of the tariff determination and therefore, it cannot allow the rounding off differences which do not reflect in the audited operating expenditure.

Allocation of operating expenses for the Second Control Period

3.7.26 The Authority has noted BIAL's comments on the allocation of the cost centre -wise personnel, O&M, general admin and marketing costs. The Authority has examined it cost centre-wise and given its decision below:

- **Corporate affairs**: BIAL has submitted that its corporate affairs team manages the affairs of BIAL only and deals with all permissions required at GoI and GoK for the airport. BIAL also submitted that the corporate affairs of non-aero concessionaires are not managed by BIAL and hence this is considered fully aeronautical. The Authority noted that corporate affairs for an airport is responsible for representing BIAL. BIAL, being a business owner of aeronautical and non-aeronautical businesses operational at the airport, the Authority has noted the conclusion of the study to consider BIAL's corporate affairs cost-centre as common and decides to consider the same.
- **Terminal operations**: BIAL submitted that the maintenance and upkeep of the terminal is the responsibility of BIAL's E&M team and operations of terminal are supervised and managed by Terminal Operations team. BIAL further submitted that for any specific areas leased to concessionaires, the upkeep, maintenance activities are managed by the respective concessionaires and also, BIAL is not responsible for managing any other operations of the non-aero

concessionaires. BIAL also submitted that this team ensures that passenger and baggage processing & information flows are facilitated in a timely manner and coordinate with regulatory and other service providing agencies to ensure best levels of services at all times and hence, this cost is to be treated as aeronautical. The Authority noted that terminal building being a common asset, the team responsible for terminal operations has to be considered as common and decides to not make any change to the conclusion of the study.

- **Ops planning and project co-ordination and Customer engagement and service quality management:** BIAL has submitted that the ops planning and project co-ordination and customer engagement and service quality management works on the quality management initiatives and ops planning and project co-ordination for only the operations carried out by BIAL and not that of the concessionaires. Hence, BIAL submitted that these are fully aeronautical and these activities are part of the responsibilities of BIAL as per the requirements of the Concession agreement. The Authority has noted that the bifurcation of roles and responsibilities of the concerned cost centres cannot be limited to BIAL and other concessionaires. The Authority noted that the study has concluded that these cost-centres are responsible for the entire airport operations of BIAL which includes the aeronautical activities and the non-aeronautical activities of BIAL. Therefore, the Authority decides to consider ops planning and project co-ordination and customer engagement and service quality management costs as common.
- **Landside maintenance special equipment**: BIAL submitted that central air-conditioning is the necessary facility to be provided by BIAL as per the terms of the concession agreement and this is also an aeronautical asset and hence to be treated as 100% aeronautical. BIAL also submitted that this team is responsible for asset management in Terminal - special systems like BHS, PBB, VHT, HVAC Electricals, Civil, mechanicals, infra ICT & services from trumpet to terminal and hence considered fully as aeronautical. The Authority noted that as per the asset allocation study the air-conditioning in the common area is considered as common assets and the building – AC plant is considered as common assets. Therefore, the Authority decides to consider the landside maintenance special equipment as common and make no changes to the conclusion of the study.
- **Utility – Water Supply and Utility – Power Systems:** BIAL has submitted that utilities are basic facilities to be provided to the users of the airport and hence, these are 100% aeronautical. BIAL also submitted that utility cost recoveries are netted off and 100% considered as aeronautical by the Authority. BIAL submitted that this team ensures that utility services are seamlessly provided for airport functioning and also develops strategic goals for energy, environment and waste management and also, they are the company custodian for all ISO standards, noise and air quality management. The Authority notes that the utility team is responsible for providing services to the airport which includes aeronautical and non-aeronautical services and therefore, decides to consider it a common expense and make no change to the conclusion of the study.
- **Chief operations officer**: BIAL submitted that as the name implies, these are designations only working on core airport operations management etc. and hence, to be considered as 100% Aeronautical. The Authority notes that Chief Operations Officer is an integral part of the airport management whose role cannot be limited to only the aeronautical activities at the airport. Therefore, the Authority decides to consider it as a common expense and make no change to the conclusion of the study.

<u>Donations</u>

3.7.27 The Authority has noted BIAL's response to allow the donations made in FY19 and FY20 to the Chief Minister Relief Funds. The Authority is of the view that the donations are a voluntary payment made by BIAL for the humanitarian purposes. In case the Authority allows reimbursement of such payments, then such payment can no longer be termed as donation from BIAL as it will then become a donation from BIAL's users. The Authority believes that if BIAL do want to support humanitarian causes, it should do so from its own profits and not ask for reimbursement of such expenses from its users. In conclusion, since such donations are not related to the airport and not mandated by any statute, the Authority cannot allow the reimbursement of such voluntary donations.

Waiver and Bad Debts

3.7.28 The Authority has noted BIAL's response to allow waiver and bad debts as part of the operating expenditure. The Authority decides to not allow the waiver and bad debts as part of the operating expenditure based on its decision in the earlier orders. Hon'ble TDSAT judgement dated 16 December 2020 has also upheld the decision of the Authority.

Marketing and Advertising expenses

3.7.29 The Authority has examined BIAL's comment to allow the marketing and advertising expenses with the break-up of the marketing and advertising costs. The Authority noted that BIAL has incurred one time expenditure for T2 video journey whose detailed requirement is given by BIAL, digital platforms for apps and website, BIAL – vision, mission related spends, digital marketing social media spend and one-time cost for 10-year celebrations. The Authority noted that BIAL has incurred some one-time expenses which has resulted in higher costs in marketing and advertising for FY19 and FY20. Based on the details furnished by BIAL, the Authority decides to allow the marketing and advertising expenses as per audited financial statements as part of the operational expenditure for the Second Control Period.

Corporate Social Responsibility

3.7.30 The Authority has taken note of BIAL's agreement with the basis and methodology adopted by the Authority for the computation of the aeronautical CSR expenses.

Response to IATA's comments on Operating Expenses

3.7.31 The Authority has noted IATA's comments with respect to the operating expenditure which can be summarized as follows:

- BIAL's cost for FY21 has increased in comparison to cost reduction by European airports
- Additional scrutiny on the personnel addition and O&M expenses
- Outcome of the efficient opex study considers all airports including BIAL as efficient
- Marketing and advertisement expenses need to be considered as non-aeronautical

3.7.32 The Authority has noted IATA's comment regarding the cost reduction at BIAL for FY21 in comparison to the European airports. The Authority has also noted BIAL's response to IATA's comment that the comparison between European airports and Indian airports is not correct as both operate in different business environment. Further, BIAL has clarified to IATA that it has reduced the opex by 16% in FY21. The Authority considers the response of BIAL in this regard as adequate.

3.7.33 Regarding IATA's comment on requirement of additional scrutiny in personnel addition and O&M expenses, the Authority believes that additional scrutiny for the personnel addition or increase in O&M expenses is not required when the reasons of traffic increase and capacity enhancements are able to justify such increase in cost. The Authority also notes that IATA has suggested to further analyse the individual activities assigned to the new personnel. However, the Authority fails to appreciate how such analysis would help in determining the efficient personnel cost. The Authority clarifies that the intention of the study is to determine efficient opex and not to interfere in the day-to-day business decisions of the airport.

3.7.34 The Authority has noted that IATA has suggested to consider the marketing and advertisement as non-aeronautical. The Authority has noted from BIAL's response that these also include the spend on new route development, promotions, etc. and therefore, these are considered as common expenses.

3.7.35 The Authority has taken note of IATA's suggestion related to efficiency benchmarks, KPIs for utility consumption, etc. The Authority would clarify to IATA that the study was undertaken with the publicly available data for other airports. The Authority has noted that to undertake the analysis suggested by IATA it would require a comprehensive data from all the airports and expand the scope of the study. Therefore, understanding the limitations of the study, the Authority decides to accept its conclusion for the true-up of the operating expenditure.

3.7.36 The Authority noted that the rates and taxes have been considered as purely aeronautical expenses by BIAL. However, the Authority noted that these comprise of property taxes paid for the airport and is directly proportional to the terminal area. Since, the terminal building is a common asset, the Authority decides to consider the rates and taxes (property taxes) as common expenses and bifurcate it based on the average terminal area ratio for true-up of the SCP.

3.7.37 The Authority has considered the actual operating expenditure based on the audited financial statements for FY21 for true-up of SCP in the final order.

3.7.38 Based on the result of the opex allocation study, the allocation ratio for operating expenses decided by the Authority for true-up of SCP is given below:

Table 39: Revised segregation logic for operating expenditure decided by the Authority for Second Control Period

Operating expenses	Cost allocation % as considered by authority in Second Control Period	Cost allocation % decided by the Authority in Second Control Period as per the opex allocation study				
		2017	2018	2019	2020	2021
Personnel Expenses	90%	90.44%	91.05%	89.71%	88.94%	87.65%
Operations & Maintenance	Based on asset ratio	83.62%	84.78%	82.66%	84.49%	92.09%
Lease Rent	100%	100.00%	100.00%	100.00%	100.00%	100.00%
Utilities (Net)	100%	100.00%	100.00%	100.00%	100.00%	100.00%
Insurance	91%	89.29%	88.87%	88.96%	91.98%	91.43%
Rates & Taxes (other than IT)	100%	85.73%	85.73%	85.73%	85.73%	85.73%
Collection cost	100%	100.00%	100.00%	100.00%	100.00%	100.00%
Marketing and Advertising	85%	89.82%	83.60%	85.17%	84.80%	84.10%

Operating expenses	Cost allocation % as considered by authority in Second Control Period	Cost allocation % decided by the Authority in Second Control Period as per the opex allocation study				
		2017	2018	2019	2020	2021
Total General Administration Costs	90%	95.10%	91.27%	63.34%	59.03%	52.29%

3.7.39 Based on the above, the aeronautical operating expenditure decided by the Authority for the true-up of Second Control Period is given below:

Table 40: Aeronautical operating expenditure decided by the Authority for true-up of Second Control Period

Operating expenses adjustments	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Personnel expenses	107.37	110.43	137.41	174.29	157.35	686.84
O&M	83.03	98.97	96.93	117.09	123.78	519.80
Lease Rent	13.01	13.42	13.83	14.24	18.72	73.22
Utilities	36.45	41.92	34.86	34.22	25.20	172.66
Insurance	1.57	2.22	1.94	3.25	5.66	14.64
Rates & taxes (other than IT)	7.48	5.62	8.02	7.63	7.17	35.91
Marketing & Advertising	7.90	9.02	14.91	19.62	6.27	57.73
CSR	2.14	4.23	6.99	6.85	5.10	25.30
General admin costs	23.40	27.34	17.28	19.90	13.32	101.24
Total operating expenses - Aero	**282.35**	**313.15**	**332.18**	**397.08**	**362.57**	**1687.33**
Concession fee	39.67	44.65	38.14	32.88	13.99	169.32
Waiver and bad debts	0.00	0.00	0.00	0.00	0.00	0.00
Total operating expenditure - Aero	**322.02**	**357.80**	**370.32**	**429.96**	**376.56**	**1856.66**

3.8 True up of Aeronautical taxation

BIAL's submission on taxation

3.8.1 BIAL is entitled to a tax holiday for 10 years in the period of first 15 years of operations. During this period, BIAL is required to pay the Minimum Alternative Tax (MAT) on the book profits of the company. BIAL has availed this tax holiday from FY 2013 for a period of 10 years.

3.8.2 BIAL has computed the tax for true-up considering 30% non–aeronautical revenues as part of Aeronautical P&L in line with the approach followed in the Consultation Paper for DIAL.

3.8.3 The tax outflow submitted by BIAL for the Second Control Period is as follows:

Table 41: Tax reimbursement proposed by BIAL for the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
IT Reimbursement	55.53	80.38	42.92	0.00	0.00	**178.83**

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Recap of decision taken by the Authority for taxation at the time of tariff determination for the Second Control Period

3.8.4 The Authority vide decision number 12.a had decided to consider tax outflow estimate (MAT) for computation of tax for BIAL for the Second Control Period.

3.8.5 The Authority notes the following tax considered at the time of tariff determination for the Second Control Period vide decision number 12a (i):

Table 42: Tax considered by the Authority at the time of tariff determination for the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
IT Reimbursement	71.34	97.04	0.00	0.00	0.00	168.38

Authority's examination and proposal for taxation as part of tariff determination for the current control period

3.8.6 The Authority noted that BIAL has considered the 30% of non-aeronautical revenues to compute the aeronautical tax. The fact that a part of non-aeronautical revenues is used for cross-subsidization as per the hybrid till mechanism does not change the nature of such revenues to aeronautical. Cross-subsidization as per hybrid till mechanism is done in order to reduce tariff pressure on passengers and to incentivize the airport operator to make effective investments in non-aeronautical revenue generating sources.

3.8.7 The consideration of 30% non-aeronautical revenues 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 revenues as part of revenue from aeronautical services.

3.8.8 Therefore, the Authority is of the view that:

a) 30% non-aeronautical revenues should not be treated as a subsidy for the airport operator as the airport operator has already earned it from non-aeronautical services and is meant as a cross subsidy to the airport user.

b) Consideration of 30% non-aeronautical revenues as part of revenues from aeronautical services would result in undeserved enrichment to the airport operator effectively reducing the cross-subsidy benefit to the airport user from the present 30% of non-aeronautical revenues.

c) Further, this issue has been decided by the Authority and the details may be seen in Chapter 8 of DIAL Tariff Order No. 57/2020-21 dated 30 December 2020 for the Third Control Period.

3.8.9 The Authority, in line with its decision for other airports, proposes to not consider 30% of non-aeronautical revenues while computing aeronautical taxation for the true-up of the Second Control Period.

3.8.10 As per the Second Control Period order, the Authority proposes to allow actual aeronautical MAT as passthrough for true-up of the Second Control Period. The Authority noted that BIAL has paid MAT at effective tax rate of 19.10%, 19.19%, 19.40% and 16.94% from FY17, FY18, FY19 and FY20 respectively by dividing MAT payment by the Profit before Tax (PBT) for the respective years. Tax forecasted for FY21 is nil due to negative PBT.

3.8.11 The Authority has noted that BIAL has not considered the one-time depreciation charge in the P&L while computing aeronautical taxation. BIAL, in its response to queries, has submitted that the one-time depreciation charge would have been charged to P&L account and since there is a regulatory over-ride in Note no. 2 of Order no. 35, the same is adjusted in retained earnings. Since, one-time depreciation is allowed in the computation of the ARR, the Authority proposes to consider the one-time depreciation charge while computing the aeronautical Profit Before Tax (PBT).

3.8.12 Based on the above changes, the Authority proposes to determine the aeronautical tax by considering the effective tax rate on the aeronautical PBT as given below:

Table 43: Proposed taxation for the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
MAT paid by BIAL	**115.94**	**153.92**	**131.04**	**71.75**	**0.00**	
Aero revenues	996.05	1,121.69	959.27	828.51	332.64	**4,238.17**
30% of non-aero revenues	0.00	0.00	0.00	0.00	0.00	**0.00**
Aero operational expense	-323.22	-358.70	-369.63	-422.36	-408.49	**-1,882.40**
EBITDA	672.83	762.99	589.64	406.16	-75.85	**2,355.77**
Aero Depreciation	-187.19	-189.82	-276.14	-192.86	-249.71	**-1,095.72**
Interest expenses	-143.97	-106.48	-93.71	-118.22	-162.14	**-624.48**
PBT	**341.67**	**466.69**	**219.79**	**95.08**	**-487.69**	**635.58**
Effective tax rate	19.13%	19.20%	19.42%	17.04%	0.00%	
Aero tax	**65.35**	**89.62**	**42.69**	**16.20**	**0.00**	**213.83**

Stakeholder comments regarding true-up of the taxation for the Second Control Period

3.8.13 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. 10/ 2021-22 with respect to true-up of the taxation for the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the taxation for the Second Control Period

3.8.14 BIAL commented as follows on the 30% cross subsidization of non-aeronautical revenues not considered for taxation:

- *BIAL has submitted an Expert opinion on the said matter, which appears to have not been evaluated by the Authority. BIAL requests the Authority to review and evaluate the same.*
- *Direction-5 notes the following on Tax Payments*

  5.5.1 Taxation represents payments by the Airport Operator in respect of corporate tax on income from assets/ amenities/ facilities/ services taken into consideration for determination of Aggregate Revenue Requirement.
- *Since Direction 5 states that taxation on income from services taken into consideration for determination of Aggregate Revenue Requirement should be considered for taxation, as 30% of the Non-Aeronautical Revenues have been taken as part of the Aggregate Revenue Requirement, tax estimate on the same should also be considered for reimbursement.*
- *Since the cross subsidy is part of aeronautical revenue, it has to be considered while drawing aeronautical P&L, from Pre-control period.*

3.8.15 BIAL commented as follows on the MAT rate considered for estimation of aeronautical tax:

- *From a reading of Para 3.8.10, the Authority notes that BIAL has estimated MAT rate for FY 20 at 16.94% which is much lower than the actual MAT rates applicable during the year. (Applicable MAT rate for FY 20 is 17.47% including applicable surcharge / CESS)*
- *The tax rates applied by the Authority will be reconciled with the model and we will submit our observations, if any on the same.*

3.8.16 BIAL commented as follows on the adjustment of one-time depreciation from aeronautical profits:

- *As per principles of Direction-5, Taxation represents payments by the Airport Operator. As noted by the Authority, BIAL has paid Minimum Alternate Tax (MAT) during the years in the second control period.*
- *BIAL is required to comply with the relevant prescriptions of the Income Tax Act and the directions for computation of MAT. MAT computation is largely based on book profits. Accordingly, inclusions/ exclusions to Book profits are also guided and mandated based on extant rules and principles prescribed under the Income Tax Act.*
- *As the One-time deprecation was not charged to P&L account (in full compliance to and as mandated by the Authority's prescriptions in Order 35 this was adjusted from Retained earnings). Note from Order 35 mandating the same is as given below*
- *Note 2: From the date this schedule comes into effect, the book value of assets as on that date (a) shall be depreciated over the remaining useful life as per this schedule; (b) after retaining the residual value, shall be recognized in the opening balance of retained earnings where the remaining useful life of an asset is NIL.*
- *This adjustment of One-time depreciation to Retained Earnings was not allowed by the Income Tax Authorities, as a deduction or an expenditure for estimating Book Profit for MAT calculation and payment by BIAL.*
- *Hence, as BIAL has paid MAT based on Book profits without considering the One-Time depreciation as a charge to P&L/ Adjustment to book profits, the same cannot be notionally adjusted to increase the cost and arrive at a lower profit for arriving at profit % estimation.*
- *BIAL has, as part of MYTP evaluation and queries, submitted the Income Tax Returns and all back-up computations.*
- *In taxation matters, the primacy of Income Tax Act will prevail and has to be respected.*
- *Also, BIAL notes that the Authority has carried out this adjustment of One-Time depreciation to arrive at Aeronautical Profits only but not to compute the Total Profits to compute the ratio of tax to profits.*
- *We request the Authority to correct this error in computation of Aeronautical Taxation.*

Authority's examination after reviewing stakeholder comments on the true-up of the taxation of Second Control Period

3.8.17 The Authority noted BIAL's comment to consider the 30% of the non-aeronautical revenue for computation of the taxation. The Authority has given its reasoning for not considering the 30% of the non-aeronautical revenues for computation of the taxation in para 3.8.7 and 3.8.8 of the Consultation Paper no. 10/ 2021-22 for BIAL which addresses the comments of BIAL. Therefore, the Authority finds no reason to make any change to its proposal in the Consultation Paper no. 10/ 2021-22 for BIAL.

3.8.18 The Authority has noted BIAL's comment on the MAT rate for FY20. The Authority has not received further comment from BIAL in support of its claim and therefore, it has not considered BIAL's comment on the MAT rate for true-up of the taxation for SCP.

3.8.19 The Authority has carefully examined BIAL's comment on the adjustment of one-time depreciation in FY19 from aeronautical profits. The Authority noted that BIAL has not considered the one-time depreciation in the P&L as per the Order no. 35/ 2017-18 of the Authority and the Income Tax Act. Therefore, the MAT computation of FY19 did not consider this one-time depreciation.

The Authority notes from BIAL's comment that it does not agree with the Authority's reduction of the one-time depreciation from the aeronautical profit before tax as such deduction is not allowed under Income Tax Act. The Authority noted that BIAL had not included the one-time depreciation charge in the audited P&L of the airport however for tariff filing purposes it has included the one-time depreciation charges in the total depreciation. Since, the Authority is allowing BIAL to claim the aeronautical one-time depreciation charges from the aeronautical tariffs, the Authority considers it reasonable to account the aeronautical one-time depreciation charge for computing the aeronautical profit before tax.

Further, the Authority noted that it has applied the ratio of aeronautical PBT to total PBT on the actual tax paid by BIAL to compute the aeronautical taxation. The Authority noted that it has considered the actual tax paid by the airport operator in computing the aeronautical taxation irrespective of the fact that the actual tax paid could have been lower if Income Tax Act and AERA's Order no. 35/ 2017-18 would have allowed consideration of the one-time depreciation charge as a P&L entry. BIAL submitted that the Authority has not considered the deduction of the one-time depreciation charge from the total profits of the airport, to compute the aeronautical PBT to total PBT ratio. The Authority considers it fair to deduct the one-time depreciation from both aeronautical PBT and the total PBT to compute its ratio for determination of the aeronautical tax. Accordingly, the Authority has revised the true-up of the taxation for the Second Control Period.

3.8.20 Based on the above, the Authority decides to determine the aeronautical tax by considering the effective tax rate on the aeronautical PBT as given below:

Table 44: Taxation decided by the Authority for true-up of Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
MAT paid (refund) by BIAL	**115.94**	**153.92**	**131.04**	**71.75**	**-2.59**	**470.05**
Aero revenues	996.95	1,122.50	960.14	829.23	349.69	**4,258.51**
30% of non-aero revenues	0.00	0.00	0.00	0.00	0.00	**0.00**
Aero operational expense	-322.02	-357.80	-370.32	-429.96	-376.56	**-1,856.66**
EBITDA	674.94	764.69	589.81	399.27	-26.89	**2,401.83**
Aero Depreciation	-188.67	-191.33	-277.88	-199.34	-270.23	**-1,127.44**
Interest expenses	-143.97	-106.54	-93.75	-119.91	-175.50	**-639.67**
PBT	**342.30**	**466.82**	**218.19**	**80.03**	**-472.62**	**634.72**
Effective tax rate	19.13%	19.20%	23.88%	17.01%	0.55%	
Aero tax	**65.47**	**89.64**	**52.10**	**13.61**	**-2.59**	**218.24**

3.9 True up of non-aeronautical revenue

BIAL's submission on non – aeronautical revenue

3.9.1 The non-aeronautical revenue submitted by BIAL for the true-up of the Second Control Period is given below:

Table 45: NAR submitted by BIAL for true up of Second Control Period

Particulars (In INR crore)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Non – Aviation Revenues (A)						
Car park	63.3	75.4	88.7	90.3	18.7	336.4
Terminal Entry/Miscellaneous Income	0.0	0.0	0.0	0.0	0.0	0.0
Retail	105.3	118.5	143.4	160.9	15.5	543.6
Food & Beverage	31.9	41.1	57.0	69.1	11.9	211.0
Advertising & Promotions	71.8	77.9	77.6	75.2	19.9	322.4
Rents and Land Leases	28.2	30.7	34.7	39.3	43.1	175.9
Lounge Revenues	19.9	26.9	33.5	38.8	5.2	124.4
Utility Charges	5.7	5.6	5.8	5.8	5.6	28.6
Flight Catering	9.1	9.9	12.7	11.7	5.6	48.9
Non-Aviation Revenues - Others	5.9	8.0	9.9	14.3	7.8	45.8
Misc. Income (Including entry)	0.2	0.1	0.0	0.0	0.0	0.3
Total non – aviation revenues	**341.3**	**394.0**	**463.2**	**505.3**	**133.3**	**1837.2**
Aviation Concessions (B)						
Cargo	41.8	43.9	47.2	44.3	30.7	207.8
Fuel Farm	74.9	81.9	90.4	74.9	2.5	324.7
Ground Handling	5.0	6.0	8.0	38.8	22.7	80.4
ICT	16.9	18.0	17.4	17.5	16.1	85.9
Common Infrastructure Charge	34.5	38.9	56.7	67.0	18.6	215.8
Total Aviation Concessions	**173.2**	**188.7**	**219.6**	**242.6**	**90.6**	**914.6**
Total non – aeronautical revenue (A+B)	**514.5**	**582.7**	**682.8**	**747.9**	**223.9**	**2751.8**

3.9.2 BIAL has given the following submissions relating to non – aeronautical revenues:

- **Treatment of CGF** - BIAL has considered revenues from CGF as non – aeronautical revenues
- **Income from real estate and Interest** – BIAL has not considered income from real estate and interest for the computation of ARR.
- Reasons for increase in non – aeronautical revenues till FY 2020:
- **Land side traffic** - Increase on account of app taxi providers like Ola & Uber
- **Retail** - Increase on account of opening of "Quad" which is a retail and F&B plaza opposite arrivals and increase in number of F&B outlets and award of new tenders on the kerb side
- **Lounge Revenue** - Increase on account of award of contract to new operator in 2019
- Reasons for reduction in non – aeronautical revenues for FY 2021:
- Reduction in passengers and low customer sentiments affecting sales per pax due to COVID19

- Waiver of MAG by BIAL across all concessionaires for the period March to October 2020.
- Reduction in revenue share by 15 – 20% for all outlets to sustain business operations

Recap of decision taken by the Authority for Non – aeronautical revenue at the time of tariff determination for the Second Control Period

3.9.3 The Authority notes the following non – aeronautical revenues considered at the time of tariff determination for the Second Control Period vide decision number 10a (i):

Table 46: Non – aeronautical revenue as considered by the Authority at the time of tariff determination for the Second Control Period

Particulars (In INR crore)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Car park	63.3	71.3	80.2	90.2	101.5	406.5
Terminal Entry/Miscellaneous Income	0.2	0.2	0.2	0.2	0.2	1
Retail	108.3	121.9	137.1	154.2	173.5	695
Food & Beverage	31.9	35.9	40.4	45.4	51.1	204.7
Advertising & Promotions	71.8	78.0	81.9	86.0	90.3	408
Rents and Land Leases	18.2	23.0	24.4	25.8	27.6	119
Lounge Revenues	19.8	22.2	25.0	28.1	31.7	126.8
Utility Charges	2.2	2.2	2.2	2.2	4.3	13.1
Flight Catering	8.5	9.5	10.7	12.0	13.5	54.2
Non-Aviation Revenues – Others	5.9	17.9	5.9	5.9	5.9	41.5
Real Estate	0	0	0	0	0	0
Total Non-Aero Revenues	**330.0**	**382.0**	**407.9**	**450.1**	**499.5**	**2069.5**
Add: Revenue considered for land lease hotel	9.3	9.3	9.3	9.3	9.3	46.5
Add: Interest income on estimated cash	21.4	42.2	18.0	11.1	5.3	98
Total considered for computing 30% adjustment	**360.7**	**433.5**	**435.1**	**470.5**	**514.0**	**2213.8**

3.9.4 The decisions of the Authority relating to non–aeronautical revenue for BIAL is given in the table below:

Table 47: Key decisions of the authority relating to non – aeronautical revenue for BIAL

Particular	Reference in Order	AERA's Decisions	Reference in Hon'ble TDSAT Order	Hon'ble TDSAT 's Order
Rent & Land lease	4.5.22	Rentals received from aeronautical service providers will be considered as aeronautical revenue.	Para 83	*"The treatment by the Authority in respect of Lease Rentals and Infrastructure Recovery is proper and requires no interference."*
Utility charges	13.6.10	Revenues from aeronautical concessionaires to be considered as recoveries and reduced from utility cost (operating expenditure) and consider net costs of utilities as aeronautical.	Para 83	*"The treatment by the Authority in respect of Lease Rentals and Infrastructure Recovery is proper and requires no interference."*
CGF, ICT, Aerobridge,	4.5.16	Consider revenue from CGF, ICT, Aerobridge, fuel throughput and Common	Para 31	*"...The determination of tariff by the impugned order by taking into*

Particular	Reference in Order	AERA's Decisions	Reference in Hon'ble TDSAT Order	Hon'ble TDSAT 's Order
fuel throughput and Common Infrastructure Charges (CIC)		Infrastructure Charges (CIC) as aeronautical revenue		*consideration CGF revenues as aeronautical revenues is also found to be in order requiring no interference..."*
Interest income	13.6.8	Consider interest income as part of non – aeronautical revenue	Para 73	*"The decision of the Authority to consider interest income as non-aeronautical revenue is correct and BIAL's claim to exclude such income altogether is not found acceptable."*
Hotel subsidiary – BAHL	13.6.11 and 13.6.13	1. Consider notional land lease rent for the area given on lease to the hotel operator in the absence of land lease agreement between BIAL and BAHL. 2. Interest income earned on deposit received from hotel project as non–aeronautical revenue. Other income interest includes income from interest on security deposit from BAHL.	Para 71 and Para 73	*"On consideration of the discussion made by the Authority in the relevant paragraphs noted above, no good reasons are found to interfere with the views of the Authority on this issue."*
Real estate	4.5.36	Consider revenue from real estate as non–aeronautical revenue	Para 40	*"The claim of BIAL that there is additional land beyond the airport precincts and therefore, beyond the tariff determination power of the Authority cannot be accepted. Income from such land has been correctly treated as non-aeronautical revenue."*
Cargo Village	8.19 (FCP Order)	Revenue from cargo village assets to be treated as non–aeronautical revenues.		

3.9.5 Additionally, AERA had decided in the Second Control Period order to review and true-up the non-aeronautical revenues on actuals, at the time of determination of tariff for the next control period.

Authority's examination and proposal for non–aeronautical revenue as part of tariff determination for the current control period

3.9.6 The Authority proposes to undertake the following changes to the submission of BIAL relating to non – aeronautical revenue:

Treatment of CGF, ICT, fuel throughput, Aerobridge and Common Infrastructure Charges

3.9.7 In the Second Control Period order, the Authority had considered revenue from CGF, ICT, aerobridge, fuel throughput and Common Infrastructure Charges (CIC) as aeronautical revenues as per the AERA

Act, 2008, AERA guidelines and the concession agreement of BIAL. Accordingly, the Authority in line with the approach followed in the Second Control Period order proposes to consider the revenue from CGF, ICT, aerobridge, fuel throughput and CIC as aeronautical revenues for true-up of the Second Control Period as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020.

Treatment of lease rentals from aeronautical service providers

3.9.8 In the Second Control Period order, the Authority had decided to consider the rentals received from aeronautical service providers as aeronautical revenue. Accordingly, the Authority in line with the approach followed in the Second Control Period order proposes to consider the revenue from rentals received from aeronautical service providers as aeronautical revenues for true-up of the Second Control Period. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

Treatment of revenues from real estate

3.9.9 In the Second Control Period order, the Authority had considered revenue from real estate as non–aeronautical revenue as per the AERA Act. Accordingly, the Authority in line with the approach followed in the Second Control Period order proposes to consider the revenue from real estate as non-aeronautical revenues based on the AERA Act, 2008, AERA guidelines, concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020.

3.9.10 The Authority had noted in the Second Control Period order that there was no agreement between BIAL and BAHL for the land leased for the hotel project. The Authority had assumed a notional annual lease rental of INR 9.26 cr. for the hotel project and assumed it as non-aeronautical revenue for the Second Control Period. BIAL has entered into an agreement with BAHL from 1 April 2019. As per the agreement between BAHL and BIAL, annual lease rent of INR 2.48 cr. with an escalation of 10% every 3 years is payable by BAHL. Accordingly, it is proposed to consider a notional lease rent of INR 9.26 cr. from FY17 to FY19 due to lack of an agreement during this period followed by the actual lease rent received by BIAL from BAHL in FY20 and FY21 as non-aeronautical revenue.

3.9.11 The Authority had noted that BIAL has formed a subsidiary Bengaluru Airport City Limited (BACL) in January 2020 to carry out real estate activities such as development of commercial ventures such as hotels, restaurants, conference venues, meeting facilities, business centres, trade fairs, real estate, theme parks, amusement arcades, golf courses and other sports and/or entertainment, facilities, banks and exchanges and shopping malls, as provided for in the Concession Agreement. BIAL has submitted that the revenues from BACL to BIAL is nil in FY21 and therefore it would not appear in the true-up of the Second Control Period. Accordingly, the Authority has considered nil revenues from BACL to BIAL in FY21 for true-up of the Second Control Period.

3.9.12 The Authority expects BIAL to work on these assets in compliance with the provisions of Land Lease Agreement, State Support Agreement and other relevant documents.

Treatment of lease rentals from AAI for office space

3.9.13 The Authority asked BIAL to submit the details of the lease rentals earned from the office space leased to Airports Authority of India (AAI). BIAL in its response dated 12th Feb 2021 submitted that AAI has been given 3,091 sq. m. of office in FY17 which was increased to 5,836 sq. m. in FY21 and there is no lease rental arrangement between BIAL and AAI.

3.9.14 The Authority is of the view that BIAL cannot have differential treatment of rental arrangement among various stakeholders at the airport. Further, the Authority notes that due to nil lease rentals from AAI, the non-aeronautical revenues proposed by BIAL for the Second Control Period are lower which leads to reduction in the cross-subsidization of the aeronautical revenues. Therefore, the Authority proposes to consider a notional lease rental for the office space leased to AAI for the Second Control Period.

Treatment of interest income

3.9.15 In the Second Control Period order, the Authority had decided to consider revenue from interest income as non-aeronautical revenue as per the AERA Act. Accordingly, the Authority proposes to consider the interest income as non-aeronautical revenue for true-up of the Second Control Period. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

Treatment of utilities charges recovery

3.9.16 In the Second Control Period order, the Authority had decided to consider revenue from aeronautical concessionaires as recoveries and reduced from utility cost (operating expenditure) and consider net costs of utilities as aeronautical. Accordingly, only the utility charges recoveries from non-aeronautical concessionaires is considered as non-aeronautical revenues. Accordingly, the Authority proposes to consider only the utility charges recoveries from non-aeronautical concessionaires as non-aeronautical revenues for the true-up of the Second Control Period. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

3.9.17 Based on the above changes, the proposed non – aeronautical revenue considered for the true-up of the Second Control Period is given below:

Table 48: Proposed NAR by the Authority for the Second Control Period

Particulars (In INR crore)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
NAR - As per BIAL	**514.49**	**582.66**	**682.83**	**747.90**	**223.88**	**2,751.76**
Adjustment to non-aeronautical revenues						
Less: Rents and Land Leases related to CGF	-6.03	-6.64	-7.50	-12.23	-18.30	**-50.70**
Less: Revenues from CGF, ICT, fuel throughput, Aerobridge and Common Infrastructure Charges	-173.16	-188.66	-219.59	-242.57	-90.58	**-914.56**
Add: Revenues from real estate	0.00	0.03	0.40	2.94	2.97	**6.34**
Add: Notional lease rent from BAHL from FY17 to FY19	9.26	9.26	9.26	0.00	0.00	**27.78**
Add: Notional lease rental for AAI office space	6.02	6.32	6.63	6.97	13.15	**39.09**
Add: Interest income	20.36	41.63	66.51	21.43	18.74	**168.66**
Less: Adjustment for utility charges recovery	-2.56	-2.53	-2.50	-3.50	-3.96	**-15.05**
Revised non-aeronautical revenues	**368.37**	**442.07**	**536.04**	**520.94**	**145.89**	**2,013.31**

Stakeholder comments regarding true-up of the non-aeronautical revenues for the Second Control Period

3.9.18 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. 10/ 2021-22 with respect to true-up of the non-aeronautical revenues for the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the non-aeronautical revenues for the Second Control Period

3.9.19 BIAL commented as follows on the lease rentals from BAHL:

- *"BIAL's approach towards Concessionaires has been to provide land and allow for moratorium period for construction after which only the agreed lease rentals / revenue share would commence.*

- *L&T Bangalore Airport Hotel Limited (L&T BAHL) was incorporated to implement the Hotel Project. Based on the agreement executed, BIAL handed over land admeasuring 4.19 acres for a 30 years sub-lease to L&T BAHL to construct a hotel consisting of 321 rooms with a proposed height of 45 meters.*
- *AAI had approved a height of only 30.36 meters for the hotel building as against the envisaged height of 45 Meters and hence, L&T BAHL had to restrict the number of rooms to 154 within the allotted land. In view of the above restrictions & changes, the construction of hotel with limited rooms became an unviable project to L & T BAHL. As a result, the hotel construction was delayed and went into arbitration.*
- *Thereafter L&T and BAHL initiated arbitration proceedings for terminating the Agreement and claimed compensation for the partial construction of the Airport Hotel. Subsequently, based on the settlement agreement, BIAL agreed to purchase 100% of the shares of L&T BAHL for a consideration of Rs. 2 Crore. Thus, BAHL became 100% subsidiary of BIAL and BIAL undertook completion of the balance portion of the Hotel.*
- *BAHL commenced operations on 30th September 2016 and hence, no notional lease rentals can be applied prior to this date.*
- *For Assets which are under construction, it is not a commercial practice to charge rentals during the construction period.*
- *The decision of the Authority in the Second Control Period Order to go back and apply these Notional Lease Rentals from AOD (even through the 30% subsidisation effect was given from the start of the first control period), which has been further confirmed in the third consultation paper, is unfair and unjust.*
- *BAHL continued to incur operating cash losses due to restriction on the Hotel height to 154 rooms and hence BIAL could not charge any lease rentals for the land provided. As the operations picked up and the rooms were fully occupied, BIAL decided to charge lease rentals for the land provided on sub lease to BAHL based on market assessment and on arm's length basis and accordingly a sub-lease deed was executed with lease rentals of Rs. 2.48 Cr per annum in FY 20.*
- *Even if a notional lease rental is to be made applicable, it can be applied only from 30th September 2016 (Hotel commercial operations start date) and not before that.*
- *Even though Direction 5 / AERA Act do not envisage any "Notional" revenue / cost, Authority has decided to apply the same and BIAL is not in agreement with the same. Without prejudice, as BIAL has already discovered a market price for this land, BIAL requests the Authority to consider the rate of Rs. 2.48 crores per annum and not Rs. 9.26 crores from 30th September 2016.*
- *We request the Authority to objectively assess the issue with rationality."*

3.9.20 BIAL commented as follows on the notional lease rentals from the Airports Authority of India (AAI):

- *"The Airport Authority of India is a statutory body and is governed by the AAI Act 1994 and is responsible for providing services of Communication Navigation & Surveillance (CNS) and Air Traffic Services (ATS) services in all airports in India.*
- *BIAL and AAI entered into CNS/ATM Agreement dt. 6th April 2005 and Clause 7.4, of the Agreement states "AAI shall pay a rental fee to BIAL in consideration for providing the facility and office space and the rental rate shall be calculated on cost recovery basis ...".*

- *Based on the above Agreement, AAI has paid lease rentals and based on the valuation exercise conducted by AAI, as the cost recovery has been completed, there are no further lease rentals payable by them. Relevant correspondences are enclosed as Annexure - 9.*
- *Further, as per the Greenfield Airports Policy issued by the Government of India, Air traffic services (ATS) would be provided on a cost recovery basis and AAI would publish a standard agreement for this purpose. The Airport Company would also provide the required infrastructure to AAI free of cost for provision of ATS. Extract of the Green field Policy, highlighted for this reference is enclosed as Annexure 10.*
- *BIAL wishes to submit that AAI is a statutory body and for carrying out the function of CNS/ATM, BIAL has charged lease rentals to AAI as per the Agreement with AAI. In line with the Greenfield Airports Policy, BIAL is not charging lease rentals for the additional space provided to them.*
- *AERA has stated above that there cannot be differential treatment among various stakeholders at the airport and proposed notional lease rentals from AAI to the extent of Rs. 39.09 cr. in 2nd Control Period and Rs. 80.13 cr. in 3rd Control period.*
- *BIAL submits that the stand of AERA in respect of AAI is contradictory to the Greenfield Policy of Government of India and considering a notional lease rent for AAI office space is not correct.*
- *The Authority has erroneously considered notional rentals and BIAL request the Authority to remove the same at the time of finalization of the tariff Order."*

3.9.21 BIAL commented that BIAL is pursuing its legal remedies available under law on the matters on revenue from interest income, utility revenue, revenue from CGF, ICT and CIC and revenue from real estate and for brevity, BIAL is not reiterating its earlier positions and contentions contained in its submissions to various consultation papers, memoranda of appeal, written submissions and requests that the same be read as a part of this submission. BIAL respectfully states that all its submissions in this response are without prejudice to whatever BIAL has contended earlier.

Other stakeholder comments on true-up of non-aeronautical revenues for the Second Control Period

3.9.22 IATA commented as follows on the true-up of the non-aeronautical revenues:

"We would appreciate for AERA to consider the following comments in relation to the true up for non-aeronautical revenues:

- *Lease to AAI: Firstly, we support the implementation of a "notional" income for the lease to AAI. What we would appreciate AERA to further consider is whether this income should be treated as aeronautical. As AERA rightly mentions in paragraph 3.10.2, income "The Authority vide decision no. 1a (ii) of the SCP order had decided to consider revenues from Cargo, Ground Handling and Fuel farm services and rentals from leasing of space to agencies for providing core aeronautical services as aeronautical revenues...". Since AAI will utilize such building to provide aeronautical services (noting that the building is used to provide air navigation services) to the entire aviation community, it would seem appropriate that such income is treated as Aeronautical.*
- *Treatment of interest income: We see that AERA intends to treat interest income as non-aeronautical revenue. If this is cash generated from the aeronautical business, why should it be treated as non-aero? We would appreciate for AERA to consider treating at least a portion of such income as aeronautical."*

BIAL's response to stakeholder comments regarding true-up of non-aeronautical revenues for the Second Control Period

3.9.23 BIAL submitted the following response to the IATA's comment on the true-up of the non-aeronautical revenues:

- *"In regard to notional income from AAI and treatment of Interest income, our submissions to AERA are self-explanatory. We request AERA to note our submissions in this regard.*
- *As regards AAI, notional income is not applicable as BIAL has charged lease rentals based on contractual basis of cost recovery. Post recovery of costs, the agreement does not allow for charging lease rentals. For the additional space given to AAI, these are guided by the Green field Airport policy of GoI."*

Authority's examination after reviewing stakeholder comments on the true-up of the non-aeronautical revenues of Second Control Period

3.9.24 The Authority noted BIAL's comment on the notional revenues considered by the Authority from the hotel land leased to BAHL. The Authority noted that it has considered the notional lease rentals as per its decision in the Second Control Period order for BIAL till the time BIAL has entered into a formal agreement with BAHL. The Authority noted that in the event of lack of an agreement between BIAL and BAHL, the Authority has considered the most suitable data to determine the notional lease rentals and therefore, decides to consider these lease rentals as per its Second Control Period order for BIAL.

3.9.25 The Authority's noted BIAL's comment related to the notional lease rental from AAI. The Authority noted that BIAL has submitted the following clause on the CNS/ ATM agreement dated 6 April 2005: *"AAI shall pay a rental fee to BIAL in consideration for providing the facility and office space and the rental rate shall be calculated on cost recovery basis ... "* and shared the correspondences between AAI and BIAL in which both parties have mutually agreed that the cost recovery is completed and AAI is no longer required to pay the rental fee. However, the Authority noted that the capital cost of the office space leased to AAI is part of the RAB of the airport operator. Therefore, the Authority decides to consider the notional lease rental for AAI office space.

3.9.26 The Authority has noted IATA's comment to consider the notional lease rental from AAI as aeronautical revenues. The Authority had considered the lease rentals from AAI as non-aeronautical revenue in the First and Second Control Period orders for BIAL and hence, the Authority sees no reason to change its decision based on the comments given by IATA.

3.9.27 With regards to the IATA's comment to consider a portion of interest income as aeronautical revenues, the Authority has undertaken detailed examination of the matter in its previous orders of BIAL and therefore, the Authority decides to not change its treatment of the interest income. Further, TDSAT judgement dated 16 December 2020 for BIAL has also upheld the Authority's decision to consider interest income as non-aeronautical revenues.

3.9.28 The Authority has considered the actual non-aeronautical revenues based on the audited financial statements for FY21 for true-up of SCP in the final order.

3.9.29 The Authority, based on the clarifications received from BIAL on the contract-wise break-up of the non-aeronautical revenues, has made revised the rent and land leases from CGF service providers for the SCP.

3.9.30 Based on the above, the non-aeronautical revenues decided by the Authority for true-up of the Second Control Period is given below:

Table 49: NAR decided by the Authority for true-up of the Second Control Period

Particulars (In INR crore)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
NAR - As per BIAL	**514.49**	**582.66**	**682.83**	**747.90**	**251.54**	**2,779.42**
Adjustment to non-aeronautical revenues						
Less: Rents and Land Leases related to CGF	-6.93	-7.45	-8.36	-12.95	-13.59	**-49.27**
Less: Revenues from CGF, ICT, fuel throughput, Aerobridge and Common Infrastructure Charges	-173.16	-188.66	-219.59	-242.57	-105.29	**-929.27**
Add: Revenues from real estate	0.00	0.03	0.40	2.94	3.87	**7.24**
Add: Notional lease rent from BAHL from FY17 to FY19	9.26	9.26	9.26	0.00	0.00	**27.78**
Add: Notional lease rental for AAI office space	6.02	6.32	6.63	6.97	13.15	**39.09**
Add: Interest income	20.36	41.63	66.51	21.43	21.82	**171.74**
Less: Adjustment for utility charges recovery	-2.56	-2.53	-2.50	-3.50	-2.48	**-13.57**
Revised non-aeronautical revenues	**367.47**	**441.26**	**535.18**	**520.22**	**169.02**	**2,033.15**

3.10 True-up of Aeronautical revenue

BIAL's submission for true up of aeronautical revenue

3.10.1 BIAL has submitted details of aeronautical revenues (after considering cargo, ground handling and fuel services as non – aeronautical) for the Second Control Period as follows:

Table 50: Aeronautical revenue as submitted by BIAL

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
User Development Fee	501.13	577.76	461.84	399.67	82.93	2023.32
Landing Charges	303.44	334.89	259.08	165.22	99.67	1162.30
Parking Charges	2.63	3.24	2.61	1.88	0.81	11.16
Housing Charges	9.67	10.51	8.65	6.95	3.70	39.48
PSF / Spare	-	-	-	-	-	0
Total Aeronautical Revenue	**816.9**	**926.4**	**732.2**	**573.7**	**187.1**	**3236.3**

Recap of decision taken by the Authority for aeronautical revenue at the time of tariff determination for the Second Control Period

3.10.2 The Authority vide decision no. 1a (ii) of the Second Control Period order had decided to consider revenues from Cargo, Ground Handling and Fuel farm services and rentals from leasing of space to agencies for providing core aeronautical services as aeronautical revenues.

3.10.3 BIAL has submitted a revenue of INR 7.58 cr. in FY21 from express cargo in its MYTP submission. BIAL has also submitted to the Authority that the operation start date of the express cargo facility has been deferred and proposed to the Authority to consider INR 2.52 cr. in FY21 instead of the earlier submission of INR 7.58 cr. Accordingly, the Authority has proposed to consider the revised revenue from express cargo at INR 2.52 cr. in FY21 as aeronautical revenue.

Authority's examination and proposal for aeronautical revenues as part of tariff determination for the current control period

3.10.4 In line with the Authority's approach taken in the previous control periods for BIAL, the Authority proposes to consider revenue from CGF services and rentals from leasing of space to agencies for providing core aeronautical services as aeronautical revenues as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020. The Authority noted that the revenues from CUTE/ CUSS/ BRS charges (ICT) and Common Infrastructure Charges (CIC) has been included by BIAL as part of the Aviation Concessions revenues and the same has been taken into consideration for the computation of the aeronautical revenues by the Authority.

3.10.5 The Authority sought the information of the discounts offered by BIAL on the Authority approved tariff card during the Second Control Period. BIAL submitted that it has given the discount of INR 4.29 cr. in FY21 towards waiver of parking and housing fee during lockdown and INR 0.32 cr. in FY21 towards international recovery linked airline support scheme. The Authority proposes to consider these discounts as aeronautical revenues for the purposes of true-up of the Second Control Period.

3.10.6 The aeronautical revenues proposed by the Authority for the true-up of the Second Control Period is as follows:

Table 51: Aeronautical revenues as proposed by the Authority for true up of the Second Control Period

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Aviation revenues	816.86	926.39	732.18	573.71	219.10	3,268.25
Aviation concession (CGF) revenues	173.16	188.66	219.59	242.57	100.30	924.28
Aero land leases	6.03	6.64	7.50	12.23	13.24	45.64
Total Aeronautical Revenue	**996.05**	**1,121.69**	**959.27**	**828.51**	**332.64**	**4,238.17**
Add: Discounts offered by BIAL					4.61	4.61
Adjusted total aeronautical revenues	**996.05**	**1,121.69**	**959.27**	**828.51**	**337.25**	**4,242.78**

Stakeholder comments regarding true-up of the aeronautical revenues for the Second Control Period

3.10.7 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. 10/ 2021-22 with respect to true-up of the aeronautical revenues for the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the aeronautical revenues for the Second Control Period

3.10.8 BIAL commented as follows on the disallowance of the aeronautical tariff discounts given by BIAL in FY21:

- *"The Central Government vide notification dt. 23rd Mar 2020 ceased all domestic/ International flight operations (except cargo) from 24th Mar 2020 to 24th May 2020 in the wake of the threat from the Covid-19 pandemic.*
- *The Federation of Airlines (FIA) wrote to MoCA requesting for waiver of airport charges. The Etihad Airways wrote to the Authority vide it letter 16th July 2020 requesting for 100% waiver for Landing charges at Mumbai, Del, Blr, Chennai, Cochin & Hyd. The request made by Etihad Airways was forwarded by Authority to MoCA, who in turn wrote to the concerned airports including BIAL for reciprocal support to the airlines for recommencement of operations.*
- *In view of the above requests, BIAL had waived the parking and housing charges during the lockdown period of Rs. 4.26 cr. in FY 21 and 0.32 in FY INR 0.32 cr. in FY 21 towards international recovery linked airline support scheme as a support to the Aviation fraternity.*
- *The airport is a regulated entity and has suffered severely in the Covid-19 situation and despite that had accommodated the request of Airlines/ MOCA as being part of the integrated aviation*

ecosystem and offered discount genuinely to help Airlines who were grounded due to lockdown situation.

- *The Authority was aware of the request from the Airlines and the fact that MOCA has made a request to the airports for extending support. Despite that, the Authority has taken a stand of disallowing the discount and adding it to BIAL aeronautical revenue. This stand-by the Authority is detrimental to the aviation sector and BIAL request the Authority to take a more holistic approach and allow the same as a one-time waiver, given the adverse impact of Covid-19 pandemic."*

Other stakeholder comments on true-up of aeronautical revenues for the Second Control Period

3.10.9 IATA submitted that commented as follows on the true-up of the aeronautical revenues:

"While support schemes are appreciated, we would like to note that ICAO's policies on charges clearly state that discounts offered by airports should not be paid by airlines that are not benefiting from them (See section II, 3 v). In this regard, we request AERA to consider aeronautical revenues (gross of discounts) for the purpose of true-ups."

BIAL's response to stakeholder comments regarding true-up of aeronautical revenues for the Second Control Period

3.10.10 BIAL submitted the following response to the IATA's comment on the true-up of the aeronautical revenues:

- *"Central Government vide notification dt. 23rd Mar 2020 ceased all domestic/ International flight operations (except cargo) from 24th Mar 2020 to 24th May 2020 in the wake of the threat from the Covid-19 pandemic.*
- *Etihad Airways, a member of IATA, wrote to the Authority vide it letter 16th July 2020 requesting for 100% waiver for Landing charges at Mumbai, Del, Blr, Chennai, Cochin & Hyd as financial support for recommencement of Operations to and from Abu Dhabi.*
- *The request made by Etihad Airways was forwarded by Authority to MoCA vide letter dt. 21st August 2020 for further actions. MOCA in turn wrote the concerned airports including BIAL vide letter dt. 15th September 2020 requesting on details of the Action taken for providing reciprocal support to the airlines for recommencement of operations.*
- *Further, Federation of Airlines (FIA) had written to MoCA even as late as May 2021, requesting for waiver of airport charges along with a number of other requests relating to Airlines. This was forwarded vis email dt. 17th May 2021 with a request as given below:*

  "………2. Both airports and airlines are the most important stakeholders in the civil aviation ecosystem, and it is acknowledged that both of them have been hit hard due to Covid-19 and passing through a rough phase.

  3. In view of the above, it is requested to suggest in what ways airports can provide assistance to airlines for their sustainable operations and likely impact of such assistance on the airports. "

- *In view of the above requests, BIAL had waived the parking and housing charges during the lockdown period of Rs. 4.26 crores in FY 21 and Rs. 0.32 crores in FY21 towards international recovery linked airline support scheme as a support to the Aviation fraternity.*
- *The airport is a regulated entity and has suffered severely in the Covid-19 situation and despite that had accommodated the request of Airlines/ MOCA as being part of the integrated aviation ecosystem and offered discount genuinely to help Airlines who were grounded due to lockdown situation.*

- *Having allowed the waiver, it was very unfortunate that the Authority has taken a stand of disallowing the discount and adding it to BIAL aeronautical revenue.*
- *IATA has quoted the ICAO policy in its response above, which states that the discounts offered by airports should not be paid by airlines that are not benefiting from them. BIAL wishes to submit that the waiver/discount was given to all airlines without discrimination and the airlines have directly benefitted by it. Hence the Authority should consider the Waiver/ discount provided to the Airlines in the Covid-19 Pandemic."*

Authority's examination after reviewing stakeholder comments on the true-up of the aeronautical revenues of Second Control Period

3.10.11 The Authority noted comments of BIAL and IATA and the response by BIAL to IATA's comment on the aeronautical tariff discounts of INR 4.61 cr. given by the BIAL to the airlines in FY21. The Authority noted BIAL's submission that it has offered these discounts on account of the requests to extend support from airlines and MoCA in the wake of the COVID-19 crisis. The Authority appreciates the efforts taken by BIAL to support the aviation ecosystem by offering tariff discounts to the other stakeholders in the COVID-19 crisis. However, BIAL is asking for reimbursement of such support. If the Authority allows such reimbursement of these discounts, then such reimbursement could no more be termed as discounts but such amount would have to be termed as deferred payment by the users to whom the discounts were given. If the intention of BIAL at the time of giving discounts to the users was to consider it as passthrough then it should have entered into an agreement with the users to repay it at a later date. However, in the absence of such agreement, the Authority cannot permit BIAL to charge its users to repay its 'discounts'. Therefore, the Authority decides to consider the aeronautical tariff discounts given by BIAL in FY21 as aeronautical revenues for the true-up of the aeronautical revenues of the Second Control Period.

3.10.12 The Authority has considered the actual aeronautical revenues based on the audited financial statements for FY21 for true-up of SCP in the final order.

3.10.13 Based on the clarification from BIAL as mentioned in para 3.9.29 relating to land lease rentals from CGF service providers, the Authority has accordingly revised the aeronautical revenues. Based on the above, the aeronautical revenues decided by the Authority for the true-up of Second Control Period are given in the table below:

Table 52: Aeronautical revenues decided by the Authority for true-up of Second Control Period

Particulars (In INR Cr.)	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**Total**
Aviation revenues	816.86	926.39	732.18	573.71	230.81	3,279.96
Aviation concession (CGF) revenues	173.16	188.66	219.59	242.57	105.29	929.27
Aero land leases	6.93	7.45	8.36	12.95	13.59	49.27
Total Aeronautical Revenue	**996.95**	**1,122.50**	**960.14**	**829.23**	**349.69**	**4,258.51**
Add: Discounts offered by BIAL					**4.61**	**4.61**
Adjusted total aeronautical revenues	**996.95**	**1,122.50**	**960.14**	**829.23**	**354.30**	**4,263.12**

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Airports Economic Regulatory Authority of India
सत्यमेव जयते

3.11 Revised true-up for the First Control Period

Authority's examination and proposal regarding ARR of First Control Period as part of tariff determination for the Third Control Period

3.11.1 CSR expense has been considered as operational expenditure as per the directions of the Hon'ble TDSAT judgement dated 16 Dec 2020. These are categorized as common and aero CSR expense is computed based on the minimum of actual CSR expense and CSR expense based on aeronautical PBT.

3.11.2 Accordingly, the Authority proposes the revised true-up for the First Control Period as follows:

Table 53: Adjustment to true-up of First Control Period as per the Authority

Particulars (INR cr.)	**2012**	**2013**	**2014**	**2015**	**2016**	**Total**
Aero CSR expense (A)					-1.16	**-1.16**
Total CSR impact (B)	**0.00**	**0.00**	**0.00**	**0.00**	**-1.16**	**-1.16**
WACC (C)	**10.97%**	**10.97%**	**10.97%**	**10.97%**	**10.97%**	
PV Factor (D)	1.52	1.37	1.23	1.11	1.00	
Total impact - PV as on 31 March 2016 (E = B*D)	**0.00**	**0.00**	**0.00**	**0.00**	**-1.16**	**-1.16**
Over/ (under) recovery of First Control Period as on 31 March 2016 – (as per Table 8 of the SCP order) (F)					**313.62**	**313.62**
Adjusted Over/ (under) recovery as on 31 March 2016 (G = E+F)					**312.46**	**312.46**

Stakeholder comments regarding true-up of the First Control Period

3.11.3 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. 10/ 2021-22 with respect to true-up of the First Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the First Control Period

3.11.4 BIAL submitted that it notes that the Authority has not reassessed any of the Building Blocks with respect to First Control Period and it requests the Authority to re-consider the First Control Period true up considering all matters which are disputed by BIAL.

Other stakeholder comments on true-up of the First Control Period

3.11.5 IATA submitted that commented as follows on the true-up of the First Control Period:
"We note that AERA is implementing the TDSAT decision with regards to CSR, so there is not much that can be mentioned regarding this item (despite our disappointment for the decision). We agree how AERA is implementing this decision so that this doesn't come as a simple "pass through" and therefore support the notion of allowing the minimum of actual CSR expenses and CSR expense based on aeronautical PBT."

BIAL's response to stakeholder comments regarding true-up of the First Control Period

3.11.6 BIAL has not submitted response to IATA's comment.

Authority's examination after reviewing stakeholder comments on the true-up of the First Control Period

3.11.7 The Authority has taken note of BIAL's comment on the true-up of the First Control Period. The Authority has already analysed and reviewed the true-up of the First Control Period in its previous orders and made the necessary changes as per the Hon'ble TDSAT judgement dated 16 December 2020. Authority's comments given in Para 3.3.73 related to true-up of the First Control Period may also be referred to in this regard.

3.11.8 The Authority has taken note of the IATA's agreement to the computation of the aeronautical CSR expenses.

3.12 Revised true-up for the Second Control Period

BIAL's submission regarding true-up for the Second Control Period

3.12.1 The true-up submitted by BIAL for the Second Control Period is as shown in the table below:

Table 54: True-up submitted by BIAL for Second Control Period

Aggregate Revenue Requirement	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB	2,279.05	2,253.52	2,114.89	2,932.65	4,587.08	
FRoR	15.53%	15.53%	15.53%	15.53%	15.53%	
Return on RAB	354.03	350.07	328.53	455.56	712.56	
Depreciation	198.58	201.84	343.48	240.28	317.94	1,302.12
Operating Expenditure	299.37	330.27	376.73	440.94	456.40	1,903.71
Working Capital Interest	19.83	0.96	0.74	1.03	6.53	29.09
Tax	55.53	80.38	42.92	0.00	0.00	178.83
Less: Non – Aero Revenue	-154.35	-174.80	-204.85	-224.37	-67.16	-825.53
Add: Concession Fee	32.67	37.06	29.29	22.95	7.80	129.77
ARR	**805.67**	**825.77**	**916.83**	**936.40**	**1,434.07**	**4,918.74**
PV Factor	1.00	1.16	1.33	1.54	1.78	
PV of ARR	805.67	714.77	686.91	607.26	804.99	3,619.60
Actual/Estimated Collections	816.86	926.39	732.18	573.71	187.11	3,236.25
PV of Aero Revenue	816.86	801.86	548.57	372.06	105.03	2,644.38
Under/Over Recovery					-1,682.48	-1,682.48
Under/Over Recovery till beginning of CP3					**-1,737.34**	**-1,737.34**

Authority's estimate of Aggregate Revenue Requirement as per tariff order for the Second Control Period

3.12.2 The authority had estimated the ARR for the Second Control Period in the tariff order of Second Control Period as shown in the table below:

Table 55: ARR determined by the Authority as per tariff order for Second Control Period

Aggregate Revenue Requirement – AERA	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB	2,236.67	2,312.63	2,787.08	4,258.27	7,707.87	
FRoR	11.93%	11.93%	11.93%	11.93%	11.93%	
Return on RAB	266.73	275.79	332.36	507.81	919.18	
Depreciation	188.44	199.40	394.07	305.24	451.05	1,538.20

Aggregate Revenue Requirement – AERA	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Operating Expenditure	323.36	357.26	395.60	443.58	515.26	2,035.06
Working Capital Interest	21.54	2.73	13.48	13.76	13.10	64.61
Tax	71.34	97.04	0.00	0.00	0.00	168.38
Less: Non – Aero Revenue	-108.19	-130.03	-130.54	-141.15	-154.20	-664.11
ARR	**763.21**	**802.18**	**1,004.97**	**1,129.23**	**1,744.39**	**5,443.98**
Add: Over recovery for previous CP	-313.62					-313.62
Total ARR recalculated by Authority	**449.60**	**802.18**	**1,004.97**	**1,129.23**	**1,744.39**	**5,130.37**
Discounted value of ARR	**449.60**	**716.71**	**802.23**	**805.38**	**1,111.56**	**3,885.48**
Actual/proposed collections	997.27	1,122.30	903.93	758.11	978.03	4,759.64
Discounted value of collections	**997.27**	**1,002.72**	**721.57**	**540.69**	**623.22**	**3,885.47**

Authority' examination and proposal regarding ARR as part of tariff determination for the current control period

3.12.3 Authority based on the examination of various building blocks based on actuals, has determined the ARR for the Second Control Period.

3.12.4 The Authority notes that Hon'ble TDSAT had passed an interim order on 14th March 2019 permitting BIAL to collect UDF of First Control Period for a limited period of four months (16th April 2019 to 15th August 2019). Accordingly, the authority had passed the order vide "Amendment to Order 18/2018-19" dated 4th April 2019 as follows:

"4.1.1. The UDF rates for Domestic and International embarking passengers shall be Rs.306 and Rs.1226 respectively instead of Rs. 139 and Rs. 558 for domestic and International embarking passengers respectively, for the ticket procured during limited period from 16th April 2019 to 15th August 2019.

4.1.2. BIAL shall maintain a separate bank account wherein the excess UDF collections, together with any income viz Interest thereon shall be deposited and maintained.

4.1.3. BIAL shall use the funds from the said bank account only for the purpose of Capital Expenditure for the expansion project and after all the other sources of funding are exhausted."

3.12.5 BIAL has collected approximately INR 101.91 cr. from higher UDF during the period from 16 April 2019 to 15 August 2019. BIAL has submitted the auditor certificate in this regard. BIAL has added the excess UDF collection to the aeronautical revenues for true up of the Second Control Period. The Authority proposes to consider the excess UDF collection to the aeronautical revenues for true-up of the Second Control Period.

3.12.6 Considering the various proposals of the Authority for the building blocks concerning Second Control Period, the true-up for the Second Control Period computed by the Authority is as follows:

Table 56: True-up proposed by the Authority for the Second Control Period

Proposed ARR (INR cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB (A) (refer *Table 16*)	2,231.13	2,209.64	2,116.74	2,917.57	3,937.02	
FRoR (B) (refer *Table 25*)	11.74%	11.74%	11.74%	11.74%	11.74%	
Return on RAB (C = A*B)	262.00	259.47	248.56	342.60	462.31	

Proposed ARR (INR cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Depreciation (D) (refer *Table 30*)	187.19	189.82	276.14	192.86	249.71	1,095.72
Operating Expenditure (E) (refer *Table 38*)	283.59	314.08	331.52	389.51	395.28	1,713.98
Working Capital Interest (F)	19.83	0.96	0.74	1.03	6.04	28.59
Tax (G) (refer *Table 43*)	65.35	89.62	42.69	16.18	0.00	213.83
Gross ARR (H = C+D+E+F+G)	**817.95**	**853.95**	**899.65**	**942.18**	**1,113.34**	**4,627.07**
Less: Non – Aero Revenue (I) (refer *Table 48*)	-110.51	-132.62	-160.81	-156.28	-43.77	-603.99
Add: Concession Fee (J)	39.63	44.62	38.11	32.85	13.21	168.41
Over-recovery of FCP (as on 31 March 2017) (K) (refer *Table 53 and note below**)	-349.15					
ARR (L = H+I+J+K)	**397.93**	**765.94**	**776.95**	**818.75**	**1,082.78**	**3,842.35**
Actual/proposed collections (M) (refer *Table 51*)	**996.05**	**1,121.69**	**959.27**	**828.51**	**337.25**	**4,242.78**
(Under)/ Over recovery (N = M-L)	**598.13**	**355.75**	**182.33**	**9.76**	**-745.53**	**400.43**
PV Factor (O)	**1.74**	**1.56**	**1.40**	**1.25**	**1.12**	
(Under)/ Over recovery as on 31 March 2022 (P=N*O)	**1,042.05**	**554.65**	**254.40**	**12.19**	**-833.08**	**1,030.21**

* Over-recovery of FCP given in Table 53 is as on 31 March 2016 which has been carried forward to 31 March 2017 for addition to the ARR of FY17; hence, the over-recovery amount of INR 349.14 has been arrived

3.12.7 The Authority notes that there is an over recovery in the Second Control Period on account of the following:

- Due to delay in capitalization of projects resulting in reduced RAB and depreciation from FY19 till FY21.
- Due to higher aeronautical revenue as compared to the forecast in the Second Control Period order, resulting in over-recovery

3.12.8 The Authority has used estimated figures for FY 2021 for various building blocks for true-up of the Second Control Period as the audited financial statements of FY 2021 were not available at the time of release of this Consultation Paper. This is done to avoid delay in the tariff determination exercise for the Third Control Period and the Authority shall use the audited financial statements of FY 2021 in the final Tariff Order.

Stakeholder comments regarding true-up of the Second Control Period

3.12.9 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. 10/ 2021-22 with respect to true-up of the Second Control Period. The comments by stakeholders are presented below:

BIAL's comments on true-up of the Second Control Period

3.12.10 BIAL has not submitted comments to this section.

Other stakeholder comments on true-up of the Second Control Period

3.12.11 IATA submitted that though the over-recovery as calculated in Table 46 of the Consultation Paper helps in lowering the pressure for increase in charges for the Third Control Period, the over-recovery amount could be reviewed based on the comments provided by IATA.

3.12.12 FIA submitted that as per Table 46 of the Consultation Paper, it appears that in the Second Control Period, BIAL has made an over recovery of INR 1030.21 Cr., excluding pre control period shortfall. As mentioned by AERA, such over recovery is primarily due to delay in capitalisation of projects and higher aeronautical revenue of BIAL as compared to forecast in the Second Control Period. In view of the above, FIA submitted that AERA and airport operators should undertake appropriate measures to ensure that there are no/minimal cases of over recovery, which will assist in lowering the burden of tariff on airlines/passengers.

BIAL's response to stakeholder comments regarding true-up of the Second Control Period

3.12.13 BIAL has not submitted response to the comments of FIA.

Authority's examination after reviewing stakeholder comments on the true-up of the Second Control Period

3.12.14 The Authority has taken note of IATA's and FIA's comment on the true-up of the Second Control Period to minimize the cases of over-recovery for airports. The Authority undertakes a forecast of the building blocks and traffic at the start of the control period which may not hold true during the control period. Therefore, there are chances of over-recovery or under-recovery for the airport based on the actuals at the end of the control period. However, the Authority submits that it undertakes all possible analysis and review to prepare a reasonable forecast of the traffic and building blocks for the control period so that the under-recovery/ over-recovery is kept to the minimum.

3.12.15 Considering the various decisions of the Authority for the building blocks concerning Second Control Period after the examination of the stakeholder comments, the true-up for the Second Control Period decided by the Authority is as follows:

Table 57: True-up decided by the Authority for the Second Control Period

Proposed ARR (INR cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Average RAB (A) (refer *Table 18*)	2,230.39	2,208.81	2,121.02	3,073.80	4,257.04	13,891.05
FRoR (B) (refer *Table 26*)	11.76%	11.76%	11.76%	11.76%	11.76%	
Return on RAB (C = A*B)	262.30	259.76	249.44	361.49	500.64	1,633.64
Depreciation (D) (refer *Table 31*)	188.67	191.33	277.88	199.34	270.23	1,127.44
Operating Expenditure (E) (refer *Table 40*)	282.35	313.15	332.18	397.08	362.57	1,687.33
Working Capital Interest (F)	20.69	1.86	1.30	2.26	3.15	29.26
Tax (G) (refer *Table 44*)	65.47	89.64	52.10	13.61	-2.59	218.24
Gross ARR (H = C+D+E+F+G)	**819.48**	**855.75**	**912.90**	**973.78**	**1,134.00**	**4,695.90**
Less: Non – Aero Revenue (I) (refer *Table 49*)	-110.24	-132.38	-160.55	-156.07	-50.71	-609.95
Add: Concession Fee (J)	39.67	44.65	38.14	32.88	13.99	169.32

Proposed ARR (INR cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Over-recovery of FCP (as on 31 March 2017) (K) (refer *Table 53 and note below**)	-349.20					
ARR (L = H+I+J+K)	399.70	768.02	790.49	850.59	1,097.28	3,906.08
Actual/proposed collections (M) (refer *Table 52*)	996.95	1,122.50	960.14	829.23	354.30	4,263.12
(Under)/ Over recovery (N = M-L)	597.25	354.48	169.65	-21.36	-742.98	357.04
PV Factor (O)	1.74	1.56	1.40	1.25	1.12	
(Under)/ Over recovery as on 31 March 2022 (P=N*O)	1,041.35	553.02	236.81	-26.68	-830.36	974.14

* Over-recovery of FCP given in Table 53 is as on 31 March 2016 which has been carried forward to 31 March 2017 for addition to the ARR of FY17; hence, the over-recovery amount of INR 349.25 has been arrived

3.13 Authority's decisions regarding True-up for the Second Control Period

Based on the material before and its analysis, the Authority has decided the following with regards to the true-up for the Second Control Period:

3.13.1 To consider the aeronautical RAB as per Table 18 for true-up of the Second Control Period

3.13.2 To consider depreciation as per Table 31 for true-up of the Second Control Period.

3.13.3 To consider WACC as per Table 26 for true-up of the Second Control Period

3.13.4 To consider aeronautical operating expenditure as per Table 40 for true-up of the Second Control Period

3.13.5 To consider aeronautical taxation as per Table 44 for true-up of the Second Control Period

3.13.6 To consider non-aeronautical revenues as per Table 49 for true-up of the Second Control Period

3.13.7 To consider aeronautical revenues as per Table 52 for true-up of the Second Control Period

3.13.8 To consider the adjustment to the First Control Period true-up as per Table 53 for true-up of the Second Control Period

3.13.9 To carry forward the over-recovery amount of 2nd control period of INR 974.14 cr. as on 31 March 2022 (excluding pre-control period shortfall) as per Table 57 to the Third Control Period

4 TRAFFIC PROJECTIONS FOR THIRD CONTROL PERIOD

4.1 BIAL's submissions regarding traffic projections for the Third Control Period

4.1.1 BIAL in its submission on traffic for the Third Control Period has given emphasis on the impact covid-19 has had on the aviation sector as well as on the future outlook of the sector.

4.1.2 BIAL has given the following submission with regards to the impact of covid-19 on aviation and tourism:

- The economic slowdown caused due to lockdowns aimed at curbing the pandemic is expected to adversely impact business related travel as well as VFR (visiting family and relatives) and leisure travel.
- Air travel demand continues to be significantly lower as compared to 2019.
- The recovery of the sector depends on the financial conditions of the airlines.
- The combination of economic uncertainty and fear of infection would result in low demand for leisure travelers. Work trips are also going to be impacted on the business side as meetings using video conferencing will be the new norm during the pandemic.

4.1.3 BIAL has also mentioned some challenges that the airports will be facing during the pandemic:

- The additional processes like temperature control on arrival and/or departure; Health certificate check, etc. have led to additional time in these processes.
- There is increased processing time on account of additional checks / questions at check-in passport control etc., limitation of drop-off positions at security control decreasing the throughput, Delayed boarding and deboarding etc.
- The need for adherence to social distancing has resulted in reduction of handling capacity /throughput per checkpoint, Reduction of holding capacity in gate lounges and higher load on seating areas in gate hold room with fewer passenger opting for F&B, retail areas.
- There is changed passenger flow in the airport and the re-organization changes the passenger load on areas, entries, transportation elements etc.

4.1.4 As a result, BIAL submitted that a significant drop in overall traffic is expected for FY21 and a complete/strong recovery during FY22 may not be possible. Accordingly, the basis of projections of traffic submitted by BIAL in its MYTP submission is as follows:

- Traffic in FY22 will increase by over 150% and by another 36% in FY23. These assumptions are on the basis that there will be no lockdown or disruptions to scheduled air travel during these years as well as a covid-19 vaccine or cure would be available which would enable travellers to resume flying like pre-covid times.
- Post FY23, the traffic for the remaining period of the Third Control Period is expected to grow in line with the growth trend witnessed at BIAL during FY15 to FY20 i.e. 17.4% growth for domestic traffic and 9.3% for international traffic.

4.1.5 Accordingly, the traffic forecast submitted by BIAL in its MYTP submission is given in the table below:

Table 58: Traffic forecast submitted by BIAL for the Third Control Period

Traffic	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Passenger Traffic (In Million)						
Domestic Traffic	18.00	23.90	28.06	32.95	38.68	141.59
International Traffic	2.63	4.09	4.47	4.88	5.34	21.41
Total Traffic	**20.62**	**27.99**	**32.53**	**37.83**	**44.02**	**162.99**
Air Traffic Movements (ATMs) (in Thousands)						
Domestic ATMs	148.07	189.97	218.42	252.02	290.88	1,099.36
International ATMs	20.85	26.22	28.56	31.30	34.27	141.20
Total ATMs	**168.92**	**216.19**	**246.98**	**283.32**	**325.14**	**1,240.55**
Cargo Traffic (in MT)						
Domestic Cargo	121,000	151,000	167,610	186,047	206,512	832,169
International Cargo	208,000	243,000	269,730	299,400	332,334	1,352,464
Total Cargo	**329,000**	**394,000**	**437,340**	**485,447**	**538,847**	**2,184,634**

4.2 Authority's examination regarding traffic projections for the Third Control Period

4.2.1 The Authority noted the submissions of BIAL related to traffic. The Authority analyzed the submissions of BIAL and noted the year on year growth rate as well as recovery w.r.t. FY20 levels (pre-covid levels) as follows:

Table 59: Passenger traffic analysis by the Authority on BIAL's submission

Traffic (In Million)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 – FY26)
Domestic	27.78	7.41	18.00	23.90	28.06	32.95	38.68	**141.59**
Growth Rate		-73%	143%	33%	17%	17%	17%	
Domestic Traffic as % of FY20 domestic traffic		**27%**	**65%**	**86%**	**101%**	**119%**	**139%**	
International	4.58	0.59	2.63	4.09	4.47	4.88	5.34	**21.41**
Growth Rate		-87%	347%	56%	9%	9%	9%	
International Traffic as % of FY20 international traffic		**13%**	**57%**	**89%**	**98%**	**107%**	**117%**	
Total	32.36	8.00	20.62	27.99	32.53	37.83	44.02	**162.99**
Growth Rate		-75%	158%	36%	16%	16%	16%	
Total Traffic as % of FY20 total traffic		**25%**	**64%**	**86%**	**101%**	**117%**	**136%**	

Table 60: ATM traffic analysis by the Authority on BIAL's submission

ATMs (In 000')	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 - FY26)
Domestic passenger ATMs	200	65	145	187	216	250	289	**1087**
Growth Rate		-67%	122%	29%	16%	16%	16%	

Domestic ATMs as % of FY20 domestic ATMs		**33%**	**73%**	**94%**	**108%**	**125%**	**145%**	
International passenger ATMs	26	5	16	22	24	26	29	**117**
Growth Rate		-82%	243%	39%	8%	9%	9%	
International ATMs as % of FY20 international ATMs		**18%**	**62%**	**86%**	**93%**	**102%**	**111%**	
Total passenger ATMs	226	70	161	209	240	276	317	**1203**
Growth Rate		-69%	130%	30%	15%	15%	15%	
Total ATMs as % of FY20 total ATMs		**31%**	**71%**	**93%**	**106%**	**122%**	**141%**	
Domestic cargo ATMs	3	4	3	3	3	2	2	**13**
International cargo ATMs	3	5	5	4	4	5	5	**23**
Total ATMs	231	78	169	216	247	283	325	**1240**

Table 61: Cargo traffic analysis by the Authority on BIAL's submission

Cargo Traffic (In MT)	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Total (FY22 - FY26)**
Domestic	150,088	81,927	121,000	151,000	167,610	186,047	206,512	**832,169**
Growth Rate		-45%	48%	25%	11%	11%	11%	
Domestic cargo traffic as proportion of FY20 domestic cargo traffic		**55%**	**81%**	**101%**	**112%**	**124%**	**138%**	
International	224,093	171,400	208,000	243,000	269,730	299,400	332,334	**1,352,464**
Growth Rate		-24%	21%	17%	11%	11%	11%	
International cargo traffic as proportion of FY20 international cargo traffic		**76%**	**93%**	**108%**	**120%**	**134%**	**148%**	
Total cargo	374,181	253,327	329,000	394,000	437,340	485,447	538,847	**2,184,634**
Growth Rate		-32%	30%	20%	11%	11%	11%	
Total cargo traffic as proportion of FY20 total cargo traffic		**68%**	**88%**	**105%**	**117%**	**130%**	**144%**	

4.2.2 The Authority noted the following from the above analysis:

- BIAL has projected the domestic passenger traffic recovery (FY20 levels) sometime in FY24. The growth rate post recovery till FY26 is the 5-year (FY15-FY20) CAGR i.e. 17.4%
- BIAL has projected the international passenger traffic recovery (FY20 levels) sometime in FY25. The growth rate post recovery till FY26 is the 5-year (FY15-FY20) CAGR i.e. 9.3%
- BIAL has projected the domestic ATM traffic recovery (FY20 levels) sometime in FY24. The growth rate post recovery till FY26 is the 15.4%
- BIAL has projected the International ATM traffic recovery (FY20 levels) sometime in FY25. The growth rate post recovery till FY26 is the 9.5%

- BIAL has projected the domestic cargo traffic recovery (FY20 levels) sometime in FY23. The growth rate post recovery till FY26 is the 11%
- BIAL has projected the international cargo traffic recovery (FY20 levels) sometime in FY23. The growth rate post recovery till FY26 is the 11%

4.2.3 The Authority has forecasted the passenger, ATM and cargo traffic for the Third Control Period taking into account the historical growth, future growth prospects and impact of Covid-19 on the aviation sector.

Passenger Traffic forecast

4.2.4 The forecast for passenger traffic for the Third Control Period is based on the following:

- Passenger traffic for FY21 is based on actuals (source: AAI traffic news)
- The Authority projects the domestic passenger traffic to recover to pre-covid levels by FY23. Post recovery, the domestic passenger traffic is expected to grow at 17.4% (FY15-FY20 CAGR)
- The Authority estimates the international passenger traffic to recover to pre-covid levels by FY24 largely due to the restrictions imposed by the various countries and reduced demand considering increased risk of picking up the infection. Post recovery, the international passenger traffic is expected to grow at 9.3% (FY15-FY20 CAGR).

4.2.5 Based on the above analysis, the forecasted passenger traffic proposed by the Authority for the Third Control Period is given in the table below:

Table 62: Passenger traffic considered by the Authority for the Third Control Period

Traffic	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 - FY26)
Domestic Passengers (In Million)								
Pax as per BIAL	27.78	7.41	18.00	23.90	28.06	32.95	38.68	**141.59**
Proposed traffic as per Authority	**27.78**	**10.45**	**18.61**	**30.01**	**35.23**	**41.36**	**48.55**	**173.76**
BIAL submission as % of FY20 traffic		27%	65%	86%	101%	119%	139%	
Proposed traffic as per Authority as % of FY20 traffic		38%	67%	108%	127%	149%	175%	
International Passengers (In Million)								
Pax as per BIAL	4.58	0.59	2.63	4.09	4.47	4.88	5.34	**21.40**
Proposed traffic as per Authority	**4.58**	**0.47**	**2.63**	**4.09**	**4.58**	**5.00**	**5.47**	**21.76**
BIAL submission as % of FY20 traffic		13%	57%	89%	98%	107%	117%	
Proposed traffic as per Authority as % of FY20 traffic		10%	57%	89%	100%	109%	119%	
Total Passengers (In Million)								
Pax as per BIAL	32.36	8.00	20.62	27.99	32.53	37.83	44.02	**162.99**
Proposed traffic as per the Authority	**32.36**	**10.91**	**21.24**	**34.09**	**39.81**	**46.36**	**54.02**	**195.52**

Traffic	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 - FY26)
BIAL submission as % of FY20 traffic		25%	64%	86%	101%	117%	136%	
Proposed traffic as per the Authority as % of FY20 traffic		34%	66%	105%	123%	143%	167%	

Air Traffic Movements (ATM) forecast

4.2.6 The Authority noted that the ATM traffic is expected to recover faster than the passenger traffic as airlines will deploy the additional capacity in anticipation of the passenger traffic demand.

4.2.7 Accordingly, the forecast for ATM traffic for Third Control Period is based on the following:

- ATM traffic for FY21 is based on actuals (Source: AAI traffic news).
- The Authority has projected the ATMs based on the passenger/ ATM for passenger ATMs and cargo / ATM for cargo ATMs.
- The Authority has computed the passenger ATMs based on the Passenger Load Factor (PLF) and weighted average seating capacity as submitted by BIAL. The same is produced in the tables below for reference:

Table 63: PLF and weighted average seating capacity considered by the Authority

Particulars	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Domestic PLF (in %)	92.11%	75.27%	82.20%	84.67%	86.00%	87.32%	88.64%
International PLF (in %)	80.43%	57.39%	74.67%	83.83%	84.47%	84.47%	84.47%
Weighted average domestic seating capacity	151	151	151	151	151	151	151
Weighted average international seating capacity	219	219	219	219	219	219	219

- Accordingly, similar to domestic passenger traffic recovery, the Authority projects the domestic ATMs to recover to pre-covid levels by FY23.
- Similar to international passenger traffic recovery, the Authority projects the international ATMs to recover to pre-covid levels by FY24.

4.2.8 Based on the above, the ATM traffic projected by the Authority for the Third Control Period is as follows:

Table 64: ATM traffic considered by the Authority for the Third Control Period

Traffic	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22–FY26)
Dom ATMs (In '000)								
ATMs as per BIAL	202.06	68.93	148.07	189.97	218.42	252.02	290.88	1,099.35
Proposed ATMs as per the Authority		**102.46**	**153.04**	**237.64**	**273.75**	**315.95**	**364.76**	**1,345.15**
BIAL submission as % of FY20 ATMs		34%	73%	94%	108%	125%	144%	

Proposed ATMs as per the Authority as % of FY20 ATMs		51%	76%	118%	135%	156%	181%	
Int ATMs (In '000)								
ATMs as per BIAL	29.00	9.47	20.85	26.22	28.56	31.30	34.27	141.20
Proposed ATMs as per the Authority		**11.19**	**20.85**	**26.43**	**29.40**	**32.22**	**35.27**	**144.17**
BIAL submission as % of FY20 ATMs		33%	72%	90%	99%	108%	118%	
Proposed ATMs as per the Authority as % of FY20 ATMs		39%	72%	91%	101%	111%	122%	
Total ATMs (In '000)								
ATMs as per BIAL	231.05	78.40	168.92	216.19	246.98	283.32	325.14	1,240.55
Proposed ATMs as per the Authority		**113.65**	**173.89**	**264.07**	**303.15**	**348.17**	**400.04**	**1,489.32**
BIAL submission as % of FY20 ATMs		34%	73%	94%	107%	123%	141%	
Proposed ATMs as per the Authority as % of FY20 ATMs		49%	75%	114%	131%	151%	173%	

Cargo forecast

4.2.9 The Authority noted from the actual cargo traffic for FY21 for BIAL that the cargo traffic at BIAL has not been impacted by COVID-19 pandemic to the same extent as passenger and ATM traffic.

4.2.10 The forecast of cargo traffic for Third Control Period is based on the following:

- Cargo traffic for FY21 is based on actuals (Source: AAI traffic news)
- The Authority estimates the domestic cargo traffic to pre-covid levels by FY23.
- The Authority estimates the international cargo traffic to pre-covid levels by FY22.

4.2.11 Based on the above, the cargo traffic projected by the Authority for the Third Control Period is as follows:

Table 65: Cargo traffic considered by the Authority for the Third Control Period

Traffic	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Domestic Cargo (in MT)								
Cargo traffic as per BIAL	150,088	81,927	121,000	151,000	167,610	186,047	206,512	832,169
Proposed traffic as per Authority		**119,104**	**148,880**	**165,257**	**183,435**	**203,613**	**226,010**	**927,195**
BIAL submission as % of FY20 cargo		55%	81%	101%	112%	124%	138%	
Proposed cargo as per Authority as % of FY20 cargo		79%	99%	110%	122%	136%	151%	
International Cargo (in MT)								

Cargo traffic as per BIAL	224,093	171,400	208,000	243,000	269,730	299,400	332,334	1,352,465
Proposed traffic as per Authority		**207,568**	**230,400**	**255,745**	**283,876**	**315,103**	**349,764**	**1,434,888**
BIAL submission as % of FY20 cargo		76%	93%	108%	120%	134%	148%	
Proposed cargo as per Authority as % of FY20 cargo		93%	103%	114%	127%	141%	156%	
Total Cargo (in MT)								
Cargo traffic as per BIAL	374,181	253,327	329,000	394,000	437,340	485,447	538,847	2,184,634
Proposed traffic as per Authority		**326,672**	**379,280**	**421,001**	**467,311**	**518,716**	**575,774**	**2,362,084**
BIAL submission as % of FY20 cargo		68%	88%	105%	117%	130%	144%	
Proposed cargo as per Authority as % of FY20 cargo		87%	101%	113%	125%	139%	154%	

4.3 Stakeholder comments regarding traffic projections for the Third Control Period

4.3.1 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. 10/ 2021-22 with respect to traffic projections for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on traffic projections for the Third Control Period

4.3.2 BIAL has proposed the total passenger traffic of 174.90 mppa for the third control period based on its evaluation. The comments from BIAL with regards to the traffic forecast are given below:

- *"BIAL acknowledges that, under the prevailing circumstances, neither BIAL nor the Authority or any aviation agency has a proven framework which can be utilized to forecast the aviation sector's recovery with a high degree of certainty, as Covid-19 has had impacts at hitherto unseen levels in the history of global travel / transport and particularly, aviation.*
- *The Authority's proposal that*
    - *BIAL's domestic passenger numbers would grow from 27.78 million annually in FY2020 (pre-covid) to 48.55 million annually in FY2026, implying a 1.75X growth in 5 years and*
    - *International passenger traffic will return to FY2020 (pre-covid 19) levels by FY 24, appears to be highly over-optimistic and will certainly ensure that BIAL would be faced with an under recovery of ARR during the 3rd Control period which needs to be trued up in the subsequent control period.*
- *Any under recovery of ARR would result in BIAL defaulting on its loan covenants that need to be maintained under the Financing Agreements executed with project lenders for the Expansion Project. This may also result in downgrading of BIAL's credit rating and result in the increase in the cost of debt that BIAL has been able to negotiate with the banks.*
- *It appears that the Authority has significantly underestimated the impact of the 2nd wave of Covid-19 while forecasting the Traffic projections for BIAL. In direct contrast to the approach adopted for BIAL, Authority has considered the impact of 2nd wave of Covid-19 while forecasting the traffic*

projections of Hyderabad Airport, whose Consultation Paper was published by AERA on 2nd July 2021 (10 days after BIAL's Consultation Paper was published).

- *Given the above background, BIAL strongly believes that more realistic assumptions need to be used for projecting Traffic for the 3rd Control Period. We believe that the passenger traffic across 3rd Control Period at BIAL may vary between 162.5 to 175 million pax (i.e., projections shared along with MYTP submission as well as part of the Annual tariff submission). Our realistic case still continues to be the traffic submitted in the MYTP document (i.e. 162.5 million pax), while our high case is 175 million pax as submitted in the ATP submissions. Even though recovery is likely to take significantly longer than being estimated by aviation stakeholders, we are sharing our high case passenger traffic projection for AERA's consideration as we understand the potential impact on airlines / passengers of a higher tariff. The projection considers the impact of the 2nd wave as well as views adopted by AERA while forecasting traffic for other PPP airports.*
- *Further, given the resilience of Cargo operations during the pandemic, BIAL's accepts the cargo traffic forecast proposed by AERA.*

Actual Traffic for Q1 FY2022 @ BIAL:

- *BIAL's Q1 FY2022 traffic has been adversely impacted by the rapid rise in Covid-19 cases during the second Covid-19 wave and continuing impact of lockdowns in Karnataka and India. BIAL's daily average domestic pax traffic plummeted from ~51,000 in Feb'21 to ~12,000 pax in May'21. The domestic traffic mildly recovered to ~16,700 daily pax in Jun'21. During Q1 FY2022, BIAL achieved a domestic pax traffic of 1.95 mn. which is only 28% recovery compared to the FY2020 traffic.*
- *International pax traffic remained subdued constituting only a 10% recovery to FY2020 levels due to continued suspension of scheduled international operations in India and various travel restrictions announced by different countries in view of rising Covid-19 cases in India in Q1.*

Details	*Q1 FY2021-22*	*% recovery to FY2020 levels*
Pax in Millions		
Domestic	*1.95*	*28%*
International	*0.12*	*10%*
Total	*2.07*	
Total ATM ('000)		
Domestic	*22.53*	*45%*
International	*3.19*	*49%*
Total	*25.71*	

BIAL's Updated Traffic Projections:

Background:

Domestic passenger traffic:

- *When BIAL had submitted its traffic projections as part of MYTP in July 2020, the drivers that underpinned our submissions (Paragraphs 8.1.9 to 8.1.11 of the MYTP) were:*
  - *Traffic would be impacted for an indeterminate period with most agencies suggesting 3-4 years for recovery of aviation to pre-covid levels*

- *The steep increase in passenger traffic for FY2022 & FY2023, were based on the assumptions that (i) there will be no lockdown or disruptions to scheduled air travel in this period; (ii) there would be rapid Covid-19 vaccinations; or (iii) a cure would be available in the medium-term, which would enable travelers to resume flying at pre-covid levels.*
- *FY2020 traffic levels would be reached in FY2024 and post FY2024, traffic would grow at high historically high growth rates as witnessed by BIAL during FY15-20.*
- *These projections were also based on the assumption that there would be no impact of subsequent waves of Covid-19 infection in the country which would enable steady recovery in traffic.*

- *While domestic traffic recovery did recover briefly during the period Nov'20 – Feb'21, the enormity of the 2nd Covid-19 wave in India saw passenger traffic in May'21 dip to levels last seen in May'20 and Jun'20. The high case load and fatalities in the second Covid-19 wave across India and particularly in Karnataka and Bengaluru, resulted in:*
- *Government of India / DGCA capping aircraft movements to 50% from the previous 80% enacted in January 2021*
- *Government of Karnataka placing stringent curbs on movement of people to curtail the spread of the 2nd wave*
- *Beyond government action, passenger / consumer confidence has taken a sharp hit and continues to be soft, based on repeated warnings from the Government of India and expert task forces about an impending 3rd Covid-19 wave as well as due to reduction in disposable income levels as a result of the economic fallout of the Covid-19 pandemic.*
- *The economic growth forecast for India for FY22 has also been revised downward with SBI lowering its growth forecast for FY2022 from 11% to 7.9%, Reserve Bank of India lowering its forecast to 9.5%, while the World Bank has lowered the forecast to 8.3%. Apart from the worsening macro-economic environment, recovery in business traffic continues to be soft and with corporates adopting a hybrid work culture, business air travel is expected to be a laggard. Historically, BLR Airport's domestic traffic has been driven by corporate / business travel (almost ~78% of traffic between FY 2016-19) and this is the sector that has been most affected by the Covid Pandemic. As a result, we expect to see some permanent erosion of demand in the short to medium-term.*
- *A survey by EY and ICF in September 2020 suggested that business travel going forward would be limited to business development activities only. The latest survey of EY (done in Jun'21) canvassed the attitudes to existing work practices, with employee respondents broadly positive about the impact of remote working. 76% of employees prefer flexibility in where they work and want to be able to work from home for 2-3 days in a week. Based on recent reports by ICRA, CRISIL and CAPA released in Q1 FY2022, the second Covid-19 wave is expected to delay the traffic recovery in India.*
- *With this backdrop and based on traffic seen in Q1 of FY2022 and projected recovery rates (as observed after the first wave, as you are aware was milder in terms of impact), BIAL expects FY2022 domestic passenger traffic would probably be closer to 14.3 million (as against 18 million projected in MYTP submissions), i.e., ~51% of FY 20 levels.*
- *As part of our update of the Traffic projections, BIAL has also reviewed the stance adopted by the Authority for other major PPP airports viz., DIAL and MIAL. We note that AERA felt it appropriate*

on 30th December 2020 and 27th February 2021 to consider that both airports will witness a 100% recovery in domestic traffic in FY 23.

- *Given the crushing impact of Covid-19 2nd wave (which manifested itself post the publication of the tariff orders for DIAL & MIAL), it is only logical to assume that traffic recovery projections for India nationally, would need to be calibrated downward.*
- *We have also perused the latest guidance published by ACI, IATA and leading aviation consultants ICF on recovery of aviation sector. Their views are as under:*
    - *ACI – In their report published December 2020, ACI estimated that domestic traffic may recover by Calendar Year 2023 (which translates to FY 24)*
    - *IATA: In their economic report dated 26th May, IATA suggests that aviation sector may recover to 88% levels of Calendar Year 2019 by Calendar Year 2022. Since Indian aviation sector uses the fiscal year, the periods can be mapped to 88% recovery of FY 20 levels by FY 23.*
    - *ICF: In their latest publication dated June 2021, ICF expects Asia pacific geographies (excluding China) to reach pre-Covid-19 levels in 3 years 5 months (which would translate to mid FY 24).*
- *We would request the Authority to adopt an approach similar to what has been laid down in DIAL and MIAL tariff orders with 100% domestic traffic recovery in FY 23 for BIAL, followed by historical CAGR for the balance tenure of the 3rd control period.*
- *It is to be noted that the choice of historical CAGR by BIAL is built on the assumption that after a 3-year recovery period, the industry and the Indian economy would be primed for rapid aviation growth and should not be used in isolation while ignoring the 'base effect'.*

Domestic ATM traffic:

- *Further, the Authority has stated that airlines shall deploy higher capacities in expectation of demand which has resulted in lower Pax/ ATM assumption in the proposed traffic. However, there is a need to review this assumption based on following:*
- *Indian airlines are expected to register second consecutive year of losses in FY 22 given the impact of 2nd Covid-19 wave. The adverse stress on the cashflows due to lower traffic is expected to severely impact the ability of Indian airlines to add significant new capacity.*
- *Most of the recent aircraft deliveries by Indian airlines are for replacing the fleet of their older aircrafts instead of adding incremental capacity.*
- *Further, most of the new capacity addition by Indian airlines is expected to be deployed to the international sector, post recovery in future.*
- *As such, while supply is expected to lead demand till recovery to pre-covid level (i.e., FY 23 as assumed by AERA), there is no reason to believe that the airlines will continue to add capacity in domestic sector if Pax/ATM levels don't rise to pre-covid levels. We expect that Dom Pax/ATM shall reach the pre-covid levels (Average of 137 during FY 18 to FY 20) faster and the same has been factored in our revised assessment.*

International passenger traffic:

- *The international passenger traffic recovery journey is expected to be more complicated and dependent largely on border control protocols and harmonized and mutually acceptable travel protocols across regions – something that remains elusive as on date.*
- *Prior to the 2nd Covid-19 wave, GoI had managed to establish 'travel-bubble' arrangements with 21 countries. Post the 2nd wave, the number of countries permitting entry of Indian travelers has dropped from the already truncated list. Even though the number of Covid-19 cases in India has dropped significantly from the peak reached in May 2021, the daily case numbers are still amongst the highest in the world and may prove to be a deterrent to expeditious reinstatement of international travel bubbles or scheduled operations.*
- *Our review of guidance published by aviation experts points to a slow recovery:*
  - *Review of ICAO's latest publication dated 22nd June 2021 suggests that International recovery will remain muted across Asia Pacific with traffic expected to be down ~86% - 89% in Calendar Year 2021 vis a vis Calendar Year 2019.*
  - *ICF in their publication dated June 2021 also suggests that international traffic recovery in Asia Pacific region (excluding China) could take close to 4.8 years*
  - *ACI in their December 2020 publication expect international passenger traffic recovery by 24 (FY 25).*
- *On account of the losses incurred, we expect most international carriers (who are network carriers such as BA, EK, LH, AF etc.), to emerge smaller than they were pre-Covid-19. Further network reinstatements are expected to be slow and will be prioritized towards regions and routes which offer enough base load both ways. This is particularly important, as airlines don't depend on point-to-point traffic, except in a very limited number of markets and the reinstation of the whole network is key to get volumes up again, even from a supply side (i.e., bringing aircraft back from storage).*
- *Further, international travel in the current scenario is largely constrained with various obstacles like travel restrictions, quarantine and multiple Covid-19 test requirements. These obstacles are expected to continue in short to medium terms given that different countries and regions have different pace of vaccination Covid-19 caseloads, recovery rates and fatality rates and there is a lack of visibility on the acceptability of digital vaccination certificates between different countries. The scheduled international operations continue to remain suspended in India with no clear visibility or roadmap on resumption of the same in FY 22.*
- *Hence, BIAL expects international passenger traffic in FY 22 to be closer to 0.9 million (as against 2.63 million projected in MYTP submissions which was in itself based on assumption of resumption of scheduled international operations in FY 22), which is about 20% of FY 20 levels. As mentioned earlier, the 0.9 million international pax projection is inherently optimistic and does not factor in the potential downside on account of subsequent Covid-19 waves or continued travel restrictions from other countries. In fact, we believe that international traffic in FY 22 is more likely to be closer to 0.5 million (similar to the levels achieved in FY 21).*
- *We are also hopeful that GoI will achieve its target of 100% vaccination of the adult Indian population by Q4 of FY 22 and this pent-up demand would drive a strong recovery in international aviation traffic beginning FY 23. That said, a full recovery in international traffic may take as long as FY 25. This is broadly in line with latest projections put out by most aviation experts and consultants, which suggests that international traffic recovery in the Asia Pacific region (excluding China) could take close to 4.8 years.*

- *Given all of the above, we project the passenger traffic for 3rd Control period as given below:*

Details	FY 20	FY 22	FY 23	FY 24	FY 25	FY 26	Total
Pax in Millions							
Domestic	27.78	14.30	27.80	32.50	38.00	44.50	157.10
International	4.58	0.90	3.40	4.10	4.50	4.90	17.80
Total	32.36	15.20	31.20	36.60	42.50	49.40	174.90
Pax ATM ('000)							
Domestic		115.50	213.70	246.20	283.80	320.10	1,179.30
International		5.60	18.30	21.90	24.30	26.60	96.80
% Pax recovery to FY2020 levels							
Domestic		51%	100%	117%	137%	160%	
International		20%	74%	90%	98%	107%	
Total		47%	96%	113%	131%	153%	

Comparison across other Airports – AERA's Order/ Consultation Papers

Authority has considered very steep, unreasoned traffic estimates for BIAL. Authority has adopted varied approaches across different airports and has not considered the impact of 2nd wave on BIAL whereas the same seems to have been considered in case of HIAL.

The following table provides the comparison of differing approaches adopted by AERA for traffic estimation across various airports.

Pre-Covid Second wave

in Mio Nos	FY20	FY21	FY22	FY23	FY24
DIAL					
Domestic	49.5	15.1	30.3	49.5	52.8
International	17.8	3.3	11.2	17.8	19.8
Total	67.3	18.4	41.5	67.3	72.6
Growth over FY20					
Domestic		31%	61%	100%	107%
International		18%	63%	100%	111%
Total		27%	62%	100%	108%

in Mio Nos	FY20	FY21	FY22	FY23	FY24
MIAL					
Domestic	33.6	9.3	20.59	33.5	36.3
International	12.3	1.2	7.75	12.4	13.6
Total	45.9	10.50	28.3	45.9	49.9
Growth over FY20					
Domestic		28%	61%	100%	108%
International		10%	63%	101%	111%
Total		23%	62%	100%	109%

In Mio Nos	FY20	FY21	FY22	FY23	FY24	FY25	FY26
BIAL							
Domestic	27.8	10.5	18.6	30.0	35.2	41.4	48.6
International	4.6	0.5	2.6	4.1	4.6	5.0	5.5
Total	32.4	10.9	21.2	34.1	39.8	46.4	54.00
Growth over FY20							
Domestic		38%	67%	108%	127%	149%	175%
International		10%	57%	89%	100%	109%	119%
Total		34%	66%	105%	123%	143%	167%

In Mio Nos	FY20	FY21	FY22	FY23	FY24	FY25	FY26
HIAL							
Domestic	17.73	7.47	12.41	17.73	19.15	20.92	21.99
International	3.85	0.58	1.93	2.89	3.85	4.16	4.47
Total	21.6	8.1	14.3	20.6	23.0	25.1	26.5
Growth over FY20							
Domestic		42%	70%	100%	108%	118%	124%
International		15%	50%	75%	100%	108%	116%
Total		37%	66%	96%	107%	116%	123%

- *BIAL has, historically had a ratio of traffic as compared to HIAL (1.5 times in the recent past). If this ratio is considered on HIAL traffic estimates BIAL's traffic estimate is around 165 Mn.*
- *Also, incorporating the traffic assumptions proposed by the Authority in the HIAL Consultation Paper, the total passenger traffic estimate works out to 165 Mn as given below:*

Growth rate applied for HIAL by AERA vide HIAL Consultation Paper						
Pax. Traffic	*FY 22*	*FY 23*	*FY 24*	*FY 25*	*FY 26*	
Domestic	*70%*	*100%*	*108%*	*118%*	*124%*	
International	*50%*	*75%*	*100%*	*108%*	*116%*	
BIAL traffic - computed basis HIAL growth rates						
Pax. Traffic	*FY 22*	*FY 23*	*FY 24*	*FY 25*	*FY 26*	*Total*
Domestic	*19.4*	*27.8*	*30.0*	*32.8*	*34.5*	*144.5*
International	*2.3*	*3.4*	*4.6*	*4.9*	*5.3*	*20.6*
Total	*21.7*	*31.2*	*34.6*	*37.7*	*39.8*	*165.0*

- *The above estimates are almost identical to the realistic estimate of total passenger numbers of 163 Mn submitted as part of MYTP submissions. However, based on a detailed evaluation done, BIAL has assumed the most optimistic scenario as a target for traffic (at 175 Mn) as submitted as part of ATP.*
- *Hence, we request the Authority to consider BIAL's well-reasoned, updated traffic projections of 175 Mn passengers for the third control period."*

Other stakeholder comments on traffic projections for the Third Control Period

4.3.3 Government of Karnataka commented as follows:

"Traffic estimates: The traffic estimates by the AERA appear aggressive and overestimated. Given the crushing impact of COVID-1 9 and the risk of further waves the traffic recovery projections need to be placed on a reasonable slow growth. Disruptions, lock-downs, restrictions may not lead to traffic growth at the rate AERA has forecast.

Any under recovery of revenue would either result in fall of service standards or in BIAL defaulting on loans."

4.3.4 Infrastructure Development Department, Government of Karnataka commented as follows:

"Given the crushing impact of the 2nd wave of Covid 19 and the residual risk for further Covid-19 waves over the next 6-12 months, traffic recovery projections need to be based on reasonable assumptions of recovery. Lockdowns, disruptions, supply-side challenges etc., mean that the path to recovery to pre-covid levels will be slower than the rate AERA has forecast.

We feel that AERA has assumed a very optimistic traffic forecast for KIAB for the Third Control Period, which differs greatly from the assumptions considered by AERA for Delhi and Mumbai Airports in their recent tariff determination process as well as from the traffic assumptions proposed in the ongoing tariff consultation processes for Hyderabad Airport for the same period

Traffic growth rates assumed, do not factor in the impact of 2nd wave of Covid 19 and considering BIAL's performance in the first quarter of this year and time taken for recovery. International passenger traffic has been severely affected on account of continued restrictions placed on international travel both in Indian and international airports. This will delay the recovery of international traffic.

Government of Karnataka requests the Authority to consider moderating the traffic estimates and adopt principles used in the other airports at the time of finalization of the tariff order."

4.3.5 FIH Mauritius Investments Ltd commented as follows:

"We believe that AERA has assumed an optimistic traffic forecast for KIAB for the Third Control Period, which appears in consistent with the feedback from aviation agencies like ICAO, ACI, IATA and also differs greatly from the assumptions considered by AERA for Delhi and Mumbai Airports in their recent tariff determination process as well as from the traffic assumptions proposed by AERA for the ongoing tariff consultation processes for Hyderabad Airport for the same period, which has been published on 2nd of July 2021.

Traffic growth rates assumed are unrealistic considering performance in the first quarter of this year and time taken for recovery, given the COVID impact on aviation sector.

We would request the Authority to consider moderating the traffic estimates between 160-165 million and accordingly revise its proposal during finalization of the tariff order for BIAL. It is important to specifically tone down the international traffic with the restrictions on travel imposed in the Indian & International airports on account of Covid pandemic."

4.3.6 Siemens commented as follows:

"Traffic Projections for the 3rd Control Period at 195 million passengers is over-optimistic and BIAL will face a serious challenge of ARR under-recovery on account of substantially lower actual traffic.

AERA has assumed an over-optimistic traffic forecast for KIAB for the Third Control Period, which appears inconsistent with the feedback from aviation agencies like ICAO, ACI, IATA and also differs greatly from the assumptions considered by AERA for Delhi and Mumbai Airports in their recent tariff determination process as well as from the traffic assumptions proposed for the ongoing tariff consultation processes for Hyderabad Airports for the same period, which has been published on 2nd of July 2021.

We would request the Authority to consider moderating the traffic estimates between 160-165 million and accordingly revise its proposal during finalization of the tariff determination Order for BIAL."

4.3.7 MIAL commented as follows:

"Authority in this CP has assumed unrealistic traffic forecast which differs from the forecasts of aviation agencies like ICAO, ACI, IATA and other airports.

Traffic recovery from pre-Covid level for FY22 is considered by the Authority at about 76% and 72% for domestic and international flights respectively. Recovery from pre-Covid level assumed for Bengaluru is too high as compared to other airports like Cochin, Chandigarh and Hyderabad. Looking at the present scenario, nearly non-existent international flights and the inevitable third wave of the pandemic, the traffic forecast considered by the Authority needs to be drastically pruned for all the years of the control period."

4.3.8 APAO commented as follows:

"While we hope for a fast recovery in traffic aided by the vaccination programme launched by Government of India (GoI), we believe that AERA has assumed an over-optimistic traffic forecast for KIAB for the Third Control Period, which appears inconsistent with the feedback from aviation agencies like ICAO, ACI, IATA and also differs greatly from the assumptions considered by AERA for Delhi and Mumbai Airports in their recent tariff determination process as well as from the traffic assumptions proposed for the ongoing tariff consultation processes for Hyderabad Airports for the same period, which has been published on 2nd of July 2021 (just 10 days after the consultation paper was issued for KIAB).

Traffic growth rates assumed are wholly unrealistic considering performance in the first quarter of this year and time taken for recovery, supply side challenges and airline network reconstitution.

In light of the facts and points mentioned above, we would request the Authority to consider moderating the traffic estimates between 160-165 million and accordingly revise its proposal during finalization of the tariff determination Order for BIAL. It is important to specifically tone down the international traffic with the restrictions on travel imposed in the Indian & International airports on account of Covid pandemic."

4.3.9 IATA agreed with Authority's traffic projections and commented as follows:

"We agree with AERA proposals on traffic. The airport seems comparatively pessimistic on the profile of recovery in domestic pax. It is reasonable to expect that domestic volumes should recover faster than international (as has been empirically seen), but that is not reflected in the outlook (e.g. BIAL in FY23 say recovery to 89% of intl volumes but only 86% domestic and then a recovery of both more or less at the same time in 2024). Therefore, we find AERA's adjustment to be justified."

4.3.10 FIA has requested AERA to consider industry inputs/reports on traffic from agencies like IATA and ICAO and further conduct an independent study for traffic assessment, in accordance with the AERA Act.

4.3.11 DIAL in the stakeholder consultation meeting had commented that the traffic projections given by BIAL should be considered by AERA as the airport operator is aware of the reality of traffic at the airport.

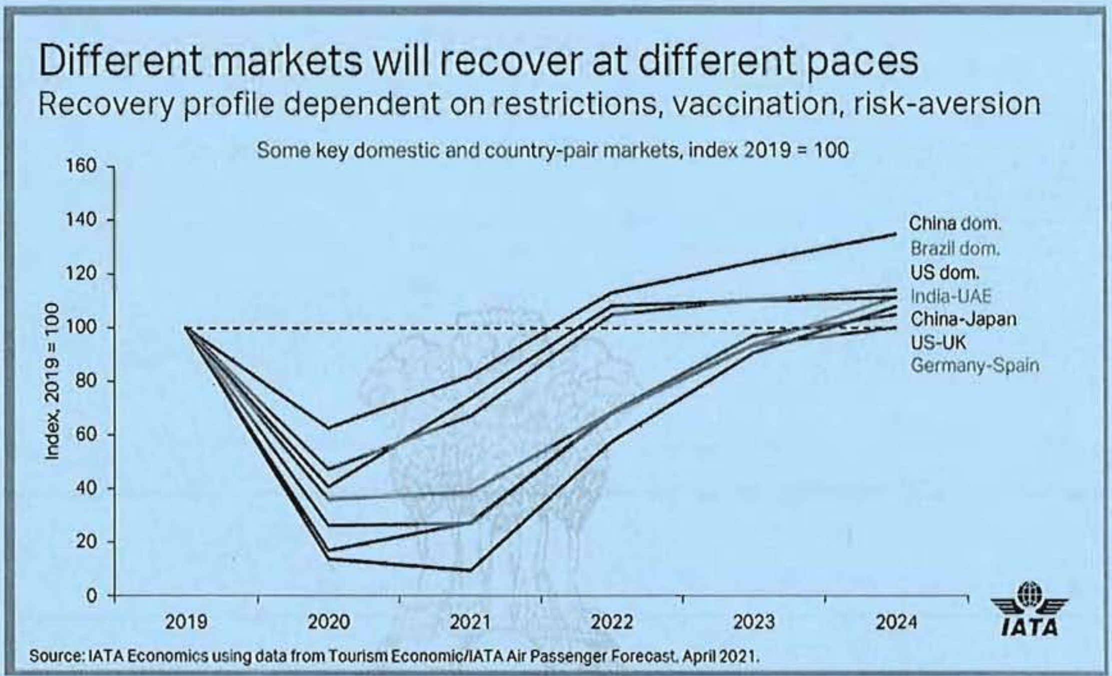
4.4 BIAL's response to stakeholder comments regarding traffic projections for the Third Control Period

4.4.1 BIAL submitted that it concurs with the Chief Secretary, Government of Karnataka (GoK) on the traffic estimates as well on the possibility of a mid-term review. BIAL also agreed to the comments given by Additional Chief Secretary, Infrastructure Development Department, Government of Karnataka (GoK) on the traffic estimates.

4.4.2 On the comments given by BIAL's shareholders, APAO and other airport operators, BIAL has submitted that it has given its detailed explanation and justification as part of its response to the Consultation Paper and the same may be considered.

4.4.3 On IATA's comments, BIAL has submitted as follows:

- *"It appears that IATA has accepted the Authority's Traffic projections, which is in contradiction to IATA's own recent published reports."*
- *IATA's forecast from its study report dated 26th May 2021 is shown below:*



- *The report clearly shows that India domestic market will reach 2019 (i.e., pre-covid) levels towards the end of CY 2023 which is FY 2024 in India.*
- *On the contrary, AERA has projected domestic recovery to reach pre-covid levels by FY2023 (1 year ahead).*
- *It is most unfortunate and wholly incorrect for IATA to take a contradictory position now, having already forecasted Traffic recovery to happen by FY 2024 in its own report to stakeholders and public at large, but now agreeing with Authority's position that recovery will actually happen 1 year ahead."*

4.4.4 On FIA's comments regarding traffic, BIAL has submitted as follows:

- *"BIAL has, in response to the Consultation Paper, provided detailed note on the current status and expected traffic trends and has also submitted the revised traffic estimates as part of the ATP submissions.*
- *BIAL requests the Authority to consider the well-reasoned explanations and justifications submitted on the traffic estimates by BIAL."*

4.5 Authority's examination after reviewing stakeholder comments on traffic projections for the Third Control Period

Traffic forecast for the Third Control Period

4.5.1 The Authority has noted the comments received from BIAL on the revision of the traffic projections.

4.5.2 The Authority realizes that the second wave of COVID-19 has severely impacted the air traffic of first quarter of FY22 which will result in less than projected traffic for the entire FY22 which has not been accounted for in the Consultation Paper. The Authority has also noted Government of Karnataka comment that the likely third wave of COVID-19 will also lead to lower than expected traffic growth rate.

4.5.3 Further, the Authority realizes that the international passenger traffic demand has remained subdued due to travel restrictions imposed by other countries on Indian travelers and the forecast of international passenger traffic in FY22 is likely to be lower than the Authority's projections in the Consultation Paper.

4.5.4 The Authority has noted BIAL's comment that the stress in domestic airline industry will affect the addition of the new capacity which will result in faster recovery of domestic pax/ATM to pre-COVID levels. BIAL has submitted the revised domestic ATMs forecast based on the revised passenger traffic and the domestic pax/ ATM.

4.5.5 The Authority has also noted the comments of Infrastructure Development Department (GoK), FIH, Siemens, MIAL, DIAL and APAO who have suggested that the traffic projections of the Authority may not be realized and therefore, the Authority should consider the traffic projections submitted by BIAL.

4.5.6 The Authority has noted IATA's comment which has agreed with the forecast of the Authority to assume the domestic and international passenger traffic recovery in FY23 and FY24 respectively. However, the Authority realizes that the second wave of COVID-19 has severely impacted the air traffic of first quarter of FY22 which will result in less than projected traffic for the entire FY22 which has not been accounted for in the Consultation Paper. Hence, the Authority has reviewed the traffic forecast for FY22 and its subsequent impact on the rest of the control period.

4.5.7 The Authority has noted FIA's comments on review of the industry reports and undertaking independent study on traffic assessment. The Authority has examined the industry reports while undertaking the traffic forecast for BIAL. On the point of undertaking an independent traffic assessment, the Authority is of the view that the traffic situation is very dynamic at the moment and there is no scientific model available for traffic projections to cater to such pandemic situations. The Authority has undertaken stakeholder consultation with the aviation community to understand their views on the traffic forecast which represents the industry views and therefore, separate study is not required on traffic forecast. Further, the Authority notes that the traffic will anyways be trued-up based on actuals during the tariff determination for the next control period.

4.5.8 Based on the above assessment of stakeholder comments on traffic projections, the Authority decides to revise the passenger and ATM traffic projections for the Third Control Period. Accordingly, the revised traffic projections for the Third Control Period are given below:

Table 66: Traffic projections decided by the Authority for the Third Control Period

Traffic	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 - FY26)
Passenger traffic (in mppa)								
Domestic Passengers	27.78	10.45	14.32	27.78	32.50	38.03	44.49	**157.12**
Dom passenger traffic as % of FY20 traffic		38%	52%	100%	117%	137%	160%	
International Passengers	4.58	0.47	0.92	3.38	4.05	4.50	4.91	**17.76**
Int passenger traffic as % of FY20 traffic		10%	20%	74%	88%	98%	107%	
Total Passengers	**32.36**	**10.92**	**15.24**	**31.16**	**36.55**	**42.53**	**49.40**	**174.88**

Traffic	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 - FY26)
Total passenger traffic as % of FY20 traffic		34%	47%	96%	113%	131%	153%	
ATM traffic (in '000)								
Domestic ATM	202	102	119	217	249	286	323	**1,193.60**
Dom ATM traffic as % of FY20 traffic		51%	59%	107%	123%	142%	160%	
International ATM	29	11	10	23	27	29	32	**121.19**
Int ATM traffic as % of FY20 traffic		39%	36%	78%	92%	102%	111%	
Total ATM	**231**	**114**	**129**	**239**	**276**	**316**	**355**	**1,314.79**
Total ATM traffic as % of FY20 traffic		49%	56%	104%	119%	137%	154%	
Cargo traffic (in '000 MT)								
Domestic Cargo	150	119	149	165	183	204	226	**927.20**
Dom cargo traffic as % of FY20 traffic		79%	99%	110%	122%	136%	151%	
International cargo	224	208	230	256	284	315	350	**1,434.89**
Int cargo traffic as % of FY20 traffic		93%	103%	114%	127%	141%	156%	
Total Cargo	**374**	**327**	**379**	**421**	**467**	**519**	**576**	**2,362.08**
Total cargo traffic as % of FY20 traffic		87%	101%	113%	125%	139%	154%	

Transfer passengers at Bangalore Airport

4.5.9 The Authority noted BIAL's submission related to transit/ transfer passengers at Bengaluru airport. The Authority noted from the Second Control Period order for BIAL that the transit/transfer passengers transiting upto 24 hours are exempted from levy of UDF. The relevant extract is produced below:

"Transit/transfer passengers (this exemption may be granted to all the passengers transiting upto 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 passenger").

4.5.10 The Authority noted that BIAL has revised its projections of the share of the transit/ transfer passenger in the total passenger based on the actual transit/ transfer passenger share of FY21. The same are produced below:

Table 67: Forecast of share of transit/ transfer passenger in total passenger as per BIAL's MYTP for the Third Control Period

% of Exempt passengers	FY2022	FY2023	FY2024	FY2025	FY2026
Domestic Pax	13%	13%	13%	13%	13%
International Pax	5%	5%	5%	5%	5%

Table 68: Forecast of share of transit/ transfer passenger in total passenger as per BIAL's ATP for the Third Control Period

% of Exempt passengers	FY2022	FY2023	FY2024	FY2025	FY2026
Domestic Pax	25.75%	17.45%	17.45%	17.45%	17.45%
International Pax	16.07%	11.11%	11.11%	11.11%	11.11%

4.5.11 The Authority examined the submissions made by BIAL related to the transit passengers in its ATP. The Authority is of the view that the increase in the transit passengers during FY21 is on account of the COVID-19 pandemic and thus, it is a short term trend and not likely to sustain in the future. Further, the Authority will be truing up the aeronautical revenues for the TCP based on actuals which will take into the actual transit passengers at BIAL. Therefore, the Authority decides that the share of transit passengers proposed by BIAL as part of its MYTP seem reasonable for the Third Control Period.

4.6 Authority's decisions regarding traffic projections for the Third Control Period

Based on the material before it and based on its analysis, the Authority has decided the following with regards to traffic projections for the Third Control Period:

4.6.1 To consider the passenger traffic, ATM traffic and cargo traffic as per Table 66 respectively which shall be trued up based on actuals.

4.6.2 To consider the share of transit passengers as per Table 67 for the Third Control Period.

5 REGULATORY ASSET BASE (RAB) AND DEPRECIATION FOR THE THIRD CONTROL PERIOD

5.1 BIAL's submissions regarding RAB and depreciation for the Third Control Period

5.1.1 The capital addition projects submitted by BIAL for the Third Control Period can be divided into following:

a. Capital addition projects deferred from the Second Control Period to the Third Control Period

b. Capital addition projects proposed for the Third Control Period

c. Sustaining capital expenditure for the Third Control Period

5.1.2 These are detailed in the same sequence in the following paras.

a. Capex deferred from Second Control Period as per BIAL's MYTP submission

5.1.3 The capital addition projects deferred from the Second Control Period to the Third Control Period as per BIAL's MYTP submission is as follows:

1. Terminal 2 – Phase I
2. Forecourts, roadways & landside development – Phase 1b
3. Aircraft maintenance & airport maintenance facilities
4. Utilities Phase I

5.1.4 BIAL has proposed to capitalize the above projects in FY22. The capital expenditure for the above projects as submitted by BIAL is as follows:

Table 69: Capital expenditure projects deferred from Second Control Period to Third Control Period as per BIAL's MYTP submission

S. No.	Capital expenditure projects	Project cost	Design, PMC, Pre-operative expenses and contingency cost	Total capex (excl FA)	FA	Total amount (INR cr.)
1	Terminal 2 - Phase I	3,565.67	545.80	4,111.47	638.47	4,749.95
2	Forecourt, roadways & landside development - Phase 1b	1,786.40	157.01	1,943.41	147.81	2,091.22
3	Aircraft Maintenance & Airport Maintenance Facilities	41.16	1.18	42.33	4.41	46.74
4	Utilities	104.22	6.17	110.39	23.69	134.08
	Total	**5,497.44**	**710.16**	**6,207.60**	**814.39**	**7,021.99**

b. New Capex plan for Third Control Period as per BIAL's MYTP submission

5.1.5 Details of the capex plan for the Third Control Period is given below:

Table 70: New Capital expenditure proposed by BIAL in the Third Control Period

S no	Capital expenditure project	Consolidated project name; financial year of commissioning	Project cost	Design, PMC, Pre-operative expenses and contingency cost	Total capex (excl FA)	FA	Total Capex (incl FA)
1	Airside Security wall	Airfield works - Phase I; 2023	3.88	1.03	4.91	0.15	**5.06**

S no	Capital expenditure project	Consolidated project name; financial year of commissioning	Project cost	Design, PMC, Pre-operative expenses and contingency cost	Total capex (excl FA)	FA	Total Capex (incl FA)
2	Airside perimeter Road		18.21	4.83	23.04	0.69	**23.73**
3	T1 Optimization	T1 Optimisation; 2025	249.51	66.12	315.63	30.69	**346.32**
4	Cycle Track along SAR / SWR / NCR plus docking stations	Landside Access and Parking - Phase Ia and Phase Ib; 2026	12.89	3.42	16.31	0.72	17.03
5	MMTH - Phase 2		268.59	71.18	339.77	14.97	354.74
6	Airport Terminal Metro Station		156.82	41.56	198.38	8.74	207.12
7	City Side Metro Station		97.60	25.86	123.46	5.44	128.90
8	North west road expansion		41.13	10.90	52.03	2.29	54.32
9	CISF Barrack Expansion and Access Road	CISF Barrack Expansion; 2026	44.79	11.87	56.66	1.87	**58.53**
10	BIAL Campus Parking and Canteen	BIAL Campus Parking & Canteen; 2026	69.65	18.46	88.11	2.20	**90.30**
11	Animal Quarantine facility	Animal Quarantine facility; 2026	3.65	0.97	4.62	0.23	**4.85**
12	New cargo domestic terminal including Cool Port	Refurbishment of existing cargo terminals & New Cargo terminal; 2023	101.88	27.00	128.88	0.97	129.85
13	Refurbishment of existing cargo terminals		118.76	31.47	150.23	1.12	151.35
14	Refurbishment of catering buildings	Refurbishment of existing catering buildings; 2023	25.81	6.84	32.65	0.81	**33.46**
15	Water Treatment Plant	Water Treatment Plant; 2023	6.80	1.80	8.60	0.21	**8.82**
16	Landscape Works	Landscape Works; 2026	69.39	18.39	87.78	4.42	**92.20**
17	Alpha 4	Alpha 4; 2026	204.37	54.16	258.53	13.01	**271.54**
18	Landside Maintenance Building	Landside Maintenance Building; 2026	12.48	3.31	15.79	0.79	**16.58**
19	CISF Permanent Housing - Phase I	CISF Permanent Housing - Phase I; 2026	369.68	-	369.68	77.16	**446.84**
	Total		**1,875.89**	**399.15**	**2275.04**	**166.49**	**2441.53**

5.1.6 Details of key projects as submitted by BIAL is given below:

a) *"Airside Security Wall and Perimeter Road Relocation at KIA*

- GSE tunnel built below the east Crossfield taxiway is closed for security reasons as it was supposed to connect the Airside of Eastern side Apron. Currently the GSE tunnel is on the landside. If we convert this to Airside by realigning the security wall it reduces close to 14 kms of driving time for maintenance and security vehicles every day. Hence this perimeter wall realignment is included as part of CP3.
- To ease the vehicular movement near GSE tunnel, BIAL also intends to relocate the partial airside security fence along with perimeter road of approximately 700m in length. In addition to this, the other two locations also need relocation as the land reserved for new cargo domestic terminal and new CISF barrack on north east are on airside. Before commencement of these building construction, the parcels shall be converted to landside by relocating the existing airside security wall along with perimeter road of approximately 1.3 km in length.

b) *T1 Optimization*

- The existing Terminal 1 has been in operation from 2008-09. While the planned capacity was 20 Million post Terminal-1 expansion, over 32 Million passengers were handled in this Terminal in 2019-20. The existing terminal T1 is proposed to be rehabilitated to increase its operational efficiency and passenger throughout. This also includes spatial arrangements for converting the integrated terminal into only domestic terminal, once T2 phase 1 is operational.
- Some of the improvements evaluated and captured in this programme are:

Table 71: Details of works proposed by BIAL as part of the T1 optimization project

S. No.	*Major activities – Replacement / Refurbishment*
1	*BHS related upgradation (Redundant line for BHS during Failure of ABC line)*
2	*Replacement of existing system of AHUs and Chillers*
3	*Replacement of PTB fire hydrant MS pipeline and sprinkler MS pipeline network with DI pipeline*
4	*Dual plumbing systems for washrooms inside Terminal 1*
5	*Escalators/elevators which are over 12 years old*
6	*Arrival/departure carousel units over 12 years old*
7	*T1 BHS in BMA area has design limitation resulting in frequent damage to baggage due to steep inclination*
8	*Automatic doors (both landside and airside) over 12 years old*
9	*Wastewater discharge lines*
10	*Alternate / upgraded potable water supply line to address pressure drop and single source failure risk.*
11	*Upgradation of SWM (Solid Waste Management) infrastructure*
12	*Automatic Source transfer switch to be considered for critical IT loads to have a power redundancy*
13	*Integrate the monitoring of concessionaire HVAC equipment with existing HVAC-BMS to check HVAC operations.*
14	*Central monitoring system for T1 elevators and escalators to better monitor VHT systems*
15	*Re configuration of Security Check area*
16	*Addition of E-gates at boarding gates*
17	*Additional terminal exit gates for arrival passengers*
18	*Addition of staircase form level 1 to level 0 to access west bus boarding gates*
19	*Compliance to GOI/PMO office initiative of "Sugamya bharat abhiyan" for PRMs*
20	*Reconfiguration of D to D transfer and link with departure BHS*

S. No.	Major activities – Replacement / Refurbishment
21	Reconfiguration of clinic and pharmacy before and after SHA area
22	Reconfiguration of International area to fit domestic requirement
23	Reconfiguration and Enhancement of VIP Lounge
24	Reconfiguration and Enhancement of toilets / washrooms
25	Enhancement of existing staff cafeteria and Other staff facilities
26	Automated emergency exits with swing display signage for evacuation (intelligent signage system)

c) *MMTH - Phase 2, Terminal Metro Station and Airport City Station*

- The Government of Karnataka (GoK) has proposed to bring metro rail link to KIA to decongest the roads. This would help thousands of air passengers who travel 30 kms by road from the city to reach the airport faster using metro transit. Hence BIAL has decided to integrate this metro rail with other modes of transport, proposed terminals and other proposed infrastructure both airside and cityside by developing a multi modal transportation hub to be located in front of T2.
- As part of this integration, BIAL has proposed two metro stations inside the campus - i) Located in terminal forecourt area to serve mainly passengers, meet/greet service providers and employees working inside the terminal. ii) Located close to first roundabout / trumpet on the west to serve both BIAL and other employees working in airport community and city side development.
- MMTH has two phases. Phase 1 is under construction and would be operational along with T2 phase 1. The phase 2 of MMTH is part of third current period project which has metro stations and other associated facilities including lagoon and arrival plaza landscape features.

d) *North west road expansion*

- To provide access to the suburban railway station and other planned support facilities on the north west, a secondary (north west) four lane access road of approximately 2.5 kms is planned as an expansion project.
- Proposed Domestic Cargo Terminal is likely to be located in the western side of Airport premise and this road expansion project will also facilitate seamless cargo vehicle movements on the Landside and may also probably provide a road rail cargo connectivity effectively.

e) *CISF Barrack Expansion and Access Road*

- A fully functional CISF Barrack is proposed to replace the existing CISF Barrack to accommodate the growing needs to CISF which includes dormitory area, office area and arms area.
- To access the new CISF barrack located on north west of KIA, a partial secondary four lane access road of approximately 1.5 kms is also planned along with the new CISF barrack development.

f) *BIAL Campus Parking and Canteen*

- The current parking facilities for BIAL and Airline employees are located adjacent to the Alpha office buildings, to the west of terminal 1 (T1). However, this land parcel is reserved for future office building (Alpha 4) which is scheduled to be implemented in the Third Control Period. Hence, it is planned to build multi-level car park in Alpha / office zone to serve all employees. This development should be taken up before commencement of Alpha 4 construction.
- Similarly, the existing canteen facility located in Alpha 2 should be relocated when the building is handed over to AAI. So, it is proposed to combine both facilities at the proposed location.

g) *Cargo development related programmes*

- KIA's existing cargo infrastructure has a capacity of about 0.6 million tonnes and has handled about 374,000 metric tonnes during FY20. Since the present concessionaire contracts are valid only till 2023, BIAL has engaged the services of an external consultant to develop a Strategy & roadmap for boosting Air Cargo potential at BIAL. The exercise was carried out in 2018 at a time when passenger traffic was growing at an unprecedented pace of 20%+ per annum. Based on the development plans that were expected to be carried out, the consultant has suggested that the entire cargo infrastructure can be located to the eastern side of the airport.
- In light of the reduced pace of aviation growth over the last year owing to the impact of COVID 19 pandemic on civil aviation, BIAL has reassessed the development projects proposed for Third Control Period including the investment envisaged for cargo handling capacity expansion. As part of this exercise, BIAL relooked at the factors while firming up the plan for the eastern side of airport.
- Accordingly, BIAL has proposed the following developments on the West Side (existing):
- New cargo domestic terminal at MRO 3 location
- Additional cool port building
- Refurbishment of existing cargo terminals
- The decision is to continue on Western side allowing BIAL to effectively use existing cargo terminal and not invest towards new terminals, new landside connectivity and other infrastructure without comprising on handling capacity in the medium term.

h) *Water Treatment Plants (WTP) and Landscape Developments*

- To meet the non-potable demand at KIA, additional water treatment plants (WTP) of 0.9 MLD and 1.6 MLD capacities are planned adjacent to existing booster pump house on the west and within the CUP premises.
- In addition to WTPs, the second phase of landscape development includes
- Landscape at trumpet Interchange
- Main Access Road (MAR)

  Key elements of the Landscaping are:
- The proposals are based around creating a resilient and biodiverse landscape that is underpinned by a network of sustainable drainage. In addition to the environment systems is a network of footpaths and cycle-paths for sustainable transport. The proposals are also promoting the re-use of existing planting along the current MAR in the new design.

i) *CISF Permanent housing - Phase I*

- CISF has been inducted at Bangalore Airport in the year 2008 to provide security for Kempegowda International Airport & its premises. As per directions given in by the Ministry of Civil Aviation, it is the responsibility of Airport Authority of India (the operators of the Airport then) to provide township accommodation to CISF for families & Barracks.
- According to Rule 61 of CISF Rules 2001, "Normally, the undertaking where the Force has been deputed shall provide accommodation in the township itself to all supervisory officers and at the

rate of 45 percent married and 55 percent unmarried or as amended by the Central Govt from time to time, to the enrolled member of force".

- Presently BIAL has provided bachelor accommodation for the eligible personnel at different locations i.e. near to Country Club & Ladies staff and at Raksha Nikunj for Sub-Officers on temporary basis. The construction of temporary barracks is nearing completion, however the same can accommodate only bachelor CISF personnel. Family accommodation has not been provided so far and HRA is being paid as per laid down norms. This has resulted in all the CISF staff residing at scattered locations. These arrangements cause lot of administrative and operational inconvenience besides safety and security issues.
- CISF has completed its 12 years with the BIAL since induction and providing a permanent CISF township for bachelor & married personnel will solve many of the operational and logistic problems. In light of above, it is proposed to setup a permanent Housing township with required amenities for CISF staff deployed at KIA by acquiring land in the nearby vicinity to the airport.

j) Alpha 4

- AAI (Air Navigation Service provider) had requested for additional staffing space for second runway related operations. As per the earlier Master Plan, an annexure building was proposed adjacent to the existing Admin building (Alpha 1). However, it was decided that BIAL would hand over the Admin building (Alpha 2) to accommodate AAI staffing requirement and BIAL would temporarily shift into another facility until the construction of the "New Airline and Admin building" (Alpha 4)
- In the earlier submission, the built-up area of 12,000 sqm was planned for this facility to accommodate BIAL employees in addition to the existing Alpha-2 office space available in the campus. But due to the handover of Alpha 2 to AAI and additional requirement for office space from Airlines and other stakeholders, BIAL has proposed to increase the "New Airport Administration Building" built up area to 45,000 sqm by combining the current planned plot with adjacent plot of 1.0 acre. The total plot area reserved for integrated administration building is 2.5 acres.
- Given the current scenario of COVID-19 that has impacted the traffic significantly, BIAL has accommodated its current staff at different locations across the airport on a short-term basis and decided that this facility will be executed in the latter part of Third Control Period."

c. Sustaining capital expenditure for the Third Control Period as per BIAL's MYTP submission

5.1.7 Apart from the projects planned in Third Control Period, BIAL submitted the following key components of the sustaining capex for Third Control Period as follows:

a) "Replacement of Crash Fire Tender (CFT): BIAL has 4 CFTs and these were purchased in 2007-08. These CFTs would have been in use for more than 15 years during the course of the Third Control Period. Considering the safety performance requirement, it is planned to replace the CFTs in the Third Control Period in phased manner.

b) Escalators, Elevators and Travellators: The refurbishment of escalators, elevators and travellators are planned in 3 phases to optimise the spend across 3 financial years. Components which are in good working condition will be preserved and only the balance equipment will go for upgradation/replacement in the subsequent years to optimize the cost. This ideology is the result of technical due diligence of the need for this asset.

c) *Passenger Boarding Bridges: While the structure will remain as it has balance life expectancy, most of the moving components, software, the cable track and hydraulic system needs to be changed. This work is also planned to be done in phases during this control period.*

d) *Automatic sliding doors: The asset has been run down over the years due to normal wear and tear and hence requires replacement. We are proposing to replace these doors during this control period in phases.*

e) *Baggage handling system: The baggage handling system, which was commissioned in 2008, requires major upgradation related to software, sensors, control logic, drive units. etc. The entire slot system in the arrival area also needs to be refurbished. These works are also proposed to be taken up in phases during the Third Control Period.*

f) *Fire alarm system: Software upgradation, changing of Fire detectors and accessories in line with technological development is proposed during this control period.*

g) *Fire Fighting system: Replacement of corroded pipe sections, replacement of valve and critical motors are proposed to be undertaken during the 3rd CP.*

h) *HVAC system: Average age of high side of the HVAC system pertaining to chillers, cooling towers, valves and pumps is over 13 years. Refurbishing/replacement/upgradation of the HVAC system including Air Handling Units with higher volume of airflow would be required to be done in Third Control Period to meet the change in terminal layout. This will also be a step towards making BIAL energy efficient.*

i) *Cleaning/sweeping equipment: Equipment like Road sweepers, ride on scooters, etc are proposed to be replaced during this Control Period in a phased manner.*

j) *Inspection Vehicle: Most of the inspection vehicles have completed 15 years of life and have run for more than 1.5 Lakhs kms. As most of the inspection vehicles are used in operational area, it is proposed to replace the vehicles in line with fuel efficiency, safety and functionality.*

k) *Civil works in airside other than Runways and taxiways: Apron joint sealing system, Perimeter road strengthening, widening of curves and relay are planned to be carried out in phases. This will be planned in such a way that there is minimal disturbance to operation by coordinating with ATC, operations and safety.*

l) *Power distribution System: Replacement of cables where insulation value is low, upgrading of SCADA system, upgrading DG synchronisation software, adding redundant / standby cables to critical system are planned during the Third Control Period.*

m) *Water distribution system: Replacement of pumps, valves, hydropneumatics system, replacement of existing pipe network, adding redundant lines, filtration system etc are the planned activities during this control period.*

n) *Sewerage treatment system: Existing STP is based on extended aeration system. As there is a need for capacity enhancement and technology upgradation, major refurbishment is planned for the STP in the Third Control Period.*

o) *Asset Management System: In the initial phases of BIAL development, SAP platform was used for maintenance also with plant maintenance system and material management system linked with finance system. With efflux of time, such software has become obsolete. Technological advancements combined with complexity of asset multiplication, effect of SAP based preventive maintenance and work order management is not very effective. This system also does not permit mobility-based work order completion. In 2019, BIAL completed the second runway project along with associated taxiways, CAT*

III lighting system, additional ARFF set up with sophisticated fire fighting vehicle, new perimeter roads, etc. In order to effectively manage the assets during its life, BIAL is focussing on implementing effective asset management system, which will use BIM based systems, using IOTs for analysis, sub-contractor management, attendance control, resource allocation, work force management, scheduling, analytics, inventory management, mobility solutions for asset maintenance, etc. This platform will be pioneered with existing assets and scaled up to manage the increased assets. BIAL will be implementing this project in phased manner to enhance the asset life cycle and also will have reduction in operating utility cost and maintenance cost.

p) *ICT Refresh: BIAL has also estimated ICT Refresh costs at periodic intervals in the Third Control Period.*

q) *Operations Refresh: Sustaining Capex requirements of Operations includes requirements of ARFF, Terminal Operations, Security and Safety departments like PIDS, CCTV Cameras, Trolleys, Queue Managers, VDGS etc."*

5.1.8 The sustaining capital expenditure proposed by BIAL in its MYTP for the Third Control Period is as follows:

Table 72: Sustaining capital expenditure proposed by BIAL as per its MYTP submission for the Third Control Period

Capital expenditure	2022	2023	2024	2025	2026	Total
Sustaining Capital Expenditure	414.34	230.67	282.73	126.54	290.32	**1,344.59**

Allocation of assets into aero and non-aero as per BIAL's MYTP submission

5.1.9 For all common assets, BIAL has submitted that it has applied the aeronautical ratio of 91% as an average of ratios of FY 2018-19 and 2019-20. BIAL has submitted that it has considered the allocation ratio for Terminal – 2 as 88% in line with the earlier control period assessment by the Authority.

Depreciation

5.1.10 BIAL has submitted the following regarding the depreciation for the Third Control Period:

a) *"Fixed assets are considered at their original cost of acquisition less accumulated depreciation. The cost includes cost of subsequent improvements thereto including taxes, duties, freight and other incidental expenses related to acquisition and installation of the assets concerned.*

b) *Depreciation has been provided on "Straight Line Method – (SLM)" over the useful lives of the assets. Useful lives have been aligned with Order 35 of the Authority except in cases where there it is based on technical estimate and justification of the Management of BIAL."*

5.1.11 The depreciation considered by BIAL in its MYTP for the Third Control Period is given below:

Table 73: Depreciation proposed by BIAL as per its MYTP submission for the Third Control Period

Particulars	2022	2023	2024	2025	2026	Total
Depreciation	541.48	726.38	752.18	760.23	797.08	**3,577.35**

Regulated Asset Base

5.1.12 Based on the aeronautical opening RAB, additions for the current control period, applying allocation ratio and after considering depreciation following is the aeronautical RAB for the Third Control Period as submitted by BIAL:

Table 74: RAB proposed by BIAL as per its MYTP submission for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Aero opening RAB (A)	5,318.03	11,443.68	11,008.28	10,581.12	10,330.34	
Add: Aero commissioned assets (B)	6,631.24	224.79	238.04	420.79	1,919.60	**9,434.45**
Less: Aero disposals (C)	0.00	0.00	0.00	0.00	0.00	**0.00**
Less: Aero depreciation (D)	505.59	660.19	665.20	671.56	704.33	**3,206.87**
Aero closing RAB (E = A +B-C-D)	**11,443.68**	**11,008.28**	**10,581.12**	**10,330.34**	**11,545.62**	
Average RAB (F = (A+E)/2)	**8,380.85**	**11,225.98**	**10,794.70**	**10,455.73**	**10,937.98**	

5.2 Authority's examination regarding RAB and depreciation for the Third Control Period

5.2.1 The Authority has analysed BIAL's submission as per MYTP on the capital expenditure proposed for the Third Control Period. The Authority has grouped the proposed capital expenditure for the TCP into the following for evaluation:

A. Capex projects deferred from SCP to TCP

B. Capex projects for TCP and

C. Sustaining capex for TCP

5.2.2 The Authority has noted that BIAL vide its submission dated 2 February 2021, 15 February 2021 and 2 March 2021 had revised the capital expenditure for the Third Control Period.

5.2.3 The Authority noted that ~63% of the total asset additions are brought forward from the previous Control Periods. The Authority noted that BIAL has been estimating capex but not executing the said projects, in the First Control Period and Second Control Period too. The trend of non-execution of proposed spend is as follows:

Table 75: Trend of non-execution of proposed capex

Particulars (INR cr.)	**Proposed capex in order**	**Capex which are dropped later in next control periods/ deferred to TCP**	**% dropped/ deferred**
SCP	10,203	6,917	68%
FCP	2,227	447	20%

5.2.4 The Authority has noted that BIAL had a trend of proposing capex in one control period and postponing the same to future control periods without execution. This leads to services not being available to passengers who have paid up. This trend does not further instill any confidence in the Authority that large projects which were proposed in earlier Control Periods nor the large new projects proposed by BIAL would be completed on time. In order to discourage this trend, the Authority shall reduce 1% of the project cost from ARR/Target Revenue as re-adjustment in case any particular project is not capitalized as per approval in tariff order.

5.2.5 While analyzing the Multi Year Tariff Proposal (MYTP) of BIAL regarding capital expenditure for Third Control Period, the Authority has taken into consideration reduced traffic due to COVID-19 pandemic and has appropriately rationalized the proposed capital expenditure as given in the following paras.

A. Capital expenditure projects deferred from Second Control Period to Third Control Period

5.2.6 Following table gives the details of the capital expenditure in Group A - capex projects deferred from SCP to TCP as submitted by BIAL in its MYTP and the revised submission dated 15 February 2021:

Table 76: Capital expenditure projects deferred from Second Control Period to the Third Control Period as proposed by BIAL

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP	Revised proposed capex as per BIAL for TCP
A	Capex projects deferred from SCP to TCP	A1	Terminal 2 - Phase I	3,565.67	3,565.67
		A2	Forecourt, roadways & landside development - Phase 1b	1,786.40	1,786.40
		A3	Aircraft Maintenance & Airport Maintenance Facilities	41.16	41.16
		A4	Utilities	104.22	104.22
		A5	T2 - Apron Phase 2		427.73
		A6	South Parallel Runway - Phase 2		362.95
		A7	Design, PMC and Pre-ops cost	710.16	830.57
		A	**Capex projects deferred from SCP to TCP (sub-total)**	**6,207.60**	**7,118.69**
	Financing Allowance			814.39	904.80
	Total (including FA)			**7,021.99**	**8,023.50**

5.2.7 BIAL in its submission dated 15 February 2021 had revised the list of projects deferred from the Second Control Period to the Third Control Period. BIAL submitted that the T2 – Apron Phase 2 and the South Parallel Runway – Phase 2 which was proposed to be capitalized in FY21 has been deferred and these projects are proposed to be capitalized in FY22. Based on the revised submission, the Authority noted that the following projects have been deferred by BIAL from the Second Control Period to the Third Control Period:

a) Terminal 2 – Phase 1

b) Forecourts, roadways & landside development – Phase 1b

c) Aircraft maintenance & airport maintenance facilities

d) Utilities Phase 1

e) T2 – Apron – Phase 2

f) South Runway – Phase 2

5.2.8 The Authority has noted that Terminal 2 will have a capacity to handle 25 mppa, taking the total terminal capacity of BIAL to 55 mppa by the end of the Third Control Period. The Authority noted that despite the COVID19 pandemic affecting the passenger traffic in the near-term, the passenger traffic forecast for BIAL by the end of the Third Control Period is 54 mppa which would require the capacity expansion at BIAL. Based on the traffic forecast and the need for capacity expansion, the Authority proposes to consider the capital expenditure deferred from the Second Control Period in the Third Control Period.

5.2.9 Further, the Authority noted that it had taken the decisions on the true-up of the proposed capital expenditure of the Second Control Period in the Second Control Period order. The Authority's analysis for the above projects considering the decisions in the Second Control Period order is given in the section below.

A1 – Terminal 2 – Phase 1 - Delay in commissioning

5.2.10 The Authority has noted that the commissioning of the Terminal 2, which was proposed to be commissioned by 31 March 2021, has been delayed and BIAL has submitted that it will be commissioned by 31 March 2022.

5.2.11 Below are the relevant extracts of the decisions taken by the Authority and the judgement of Hon'ble TDSAT with respect to the Terminal 2 commissioning:

a) The Authority in the Second Control Period order decided to impose a penalty/ adjustment of 1% of the cost of Terminal-2 Phase 1, if BIAL fails to commission and capitalize Terminal 2 Phase 1 by March 2021. Further, The Authority decided to not consider any additional interest during construction (IDC)/ financing allowance if the project is delayed beyond 31 March 2021.

b) After the order was issued, AERA vide letter no. F. No. AERA/20010/MYTP/BIAL/CP-II/2016-17/Vol-V dated 13th September 2018 clarified that if the delay in completing the project is beyond the control of BIAL and is properly justified, the same would be considered while truing up IDC and PMC however, under no circumstances adjustment of 1% will be waived. Extract from the letter is given below: "*3. It is clarified that in case there is delay in completion of project beyond March 2021, due to any reason beyond the control of BIAL or its contracting agency and is properly justified, the same would be considered by the Authority while truing up the actual cost at the time of determination of tariff for the 3rd control period in respect of IDC and PMC. However, there will be no waiver of penalty in case Phase 1 of Terminal 2 project is delayed beyond 31 March 2021 under any circumstances.*"

c) The Hon'ble TDSAT judgement dated 16 Dec 2020 for BIAL has not altered the decision of AERA on levy of adjustment for delay in commissioning of Terminal 2 Phase 1. Relevant extract from Hon'ble TDSAT judgement has been given below:

"*53. On the basis of claim that the Terminal II Building would be completed by March 2021 as estimated by BIAL, the Authority agreed to treat the capitalization year for Terminal II-Phase I as 2020-21. This advantage to BIAL would be totally undeserved if the claim of BIAL that it will complete Terminal II-Phase I by end of March 2021 is not found correct. Hence, as a balancing exercise for allowing capitalization on the assurance of BIAL such a penalty which is nothing but reduction of ARR has been provided to ensure that such promise does not cause loss to the users and undue advantage to BIAL if the claim as to the time of completion is ultimately found incorrect.*

54. If a convincing case is made out for any reasonable delay, the Authority agrees to examine the same on its own merits and may vary or waive the penalty proposed but only for good reasons. This stand of the Authority appears just and proper and does not require further scrutiny."

5.2.12 BIAL has submitted the following justification for the delay in the commissioning of the Terminal 2:

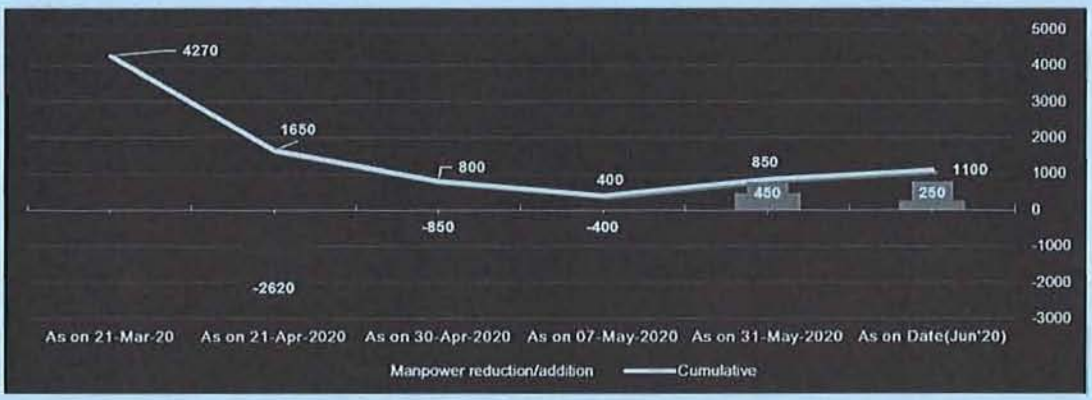
a) "Supply chain issues on imported long lead items. Below are the details of the delay in the procurement of materials from China as per BIAL:

S.no	System	Planned % of material delivered to site by 31st May, 2020	Actual % of material delivered to site by 31st May, 2020	Estimated Impact on project timelines (months)	Remarks
1	Façade Double Glass Units (DGU)	89%	6%	6.5	
2	Bamboo Ceilings and Column Wraps	98%	12%	3.7	
3	Chillers	100%	100%	3.7	Planned delivery on 05 Feb'20, Delivered on 25 May'20
4	PBB's	77%	0%	6.4	
5	Elevators	88%	70%	1.9	
6	Escalators	100%	100%	4.0	First Delivery was planned on 01 Feb'20, whereas delivery commenced Mid May'20
7	Travellators	100%	100%	4.0	

Below are the details of the delay in the procurement of materials from other countries as per BIAL:

Sl	System	Item Description	Planned % of material delivered to site by 31st May, 2020	Actual % of material delivered to site by 31st May, 2020	Estimated Impact on project timelines (months)	Country Of Origin
1	VIIT	Goods Elevator - 3000 kg	88%	70%	1.1	Turkey
2	HVAC	EC Fans for air handling Units	100%	0%	4.0	Germany
3	HVAC	Pressure Independent Balancing Valves	70%	5%	4.0	Israel
4	HVAC	Electrochemical Water Treatment System	70%	50%	2.0	Israel
5	Electrical	Lighting Management System	100%	0%	1.0	USA
6	ICT	Active Component	30%	5%	2.0	Singapore
7	ICT	MTCS Components	30%	0%	2.1	Switzerland
8	AS	HBS - ETD Stations	100%	100%		UK
9	PA	PA Equipment	30%	0%	1.1	USA
10	BMS	BMS	40%	0%	2.1	Switzerland

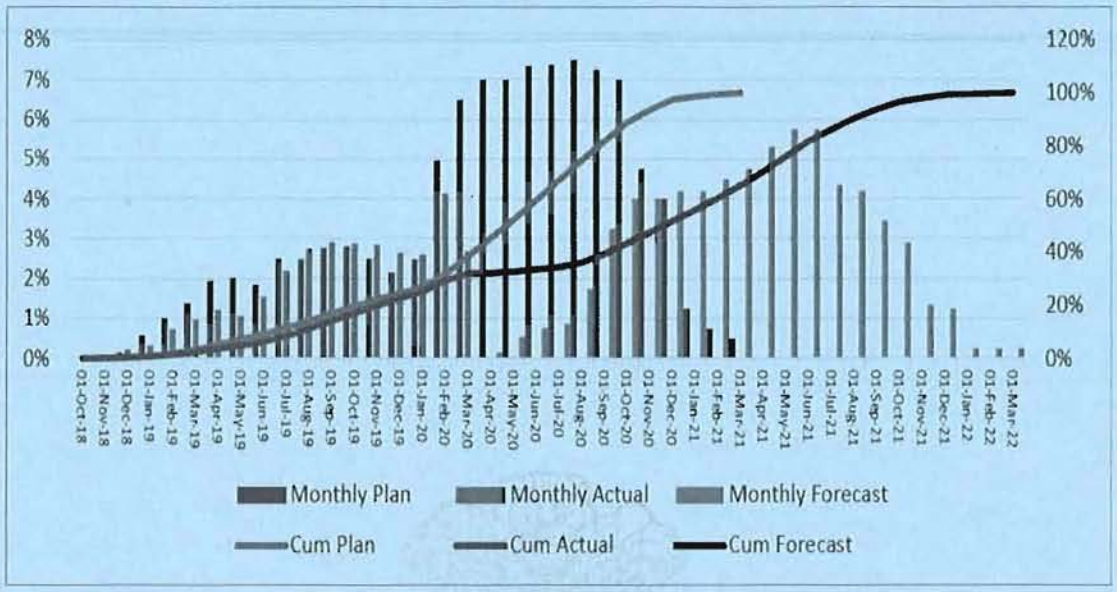
b) *Availability of labour.*



c) *Supply chain issues on local procurement*

d) *Design changes*

BIAL has submitted the following details on the comparison between the actual and the revised timelines for the completion of T2 as follows:



5.2.13 The Authority has examined the submission of BIAL with respect to the delay in the commissioning of the Terminal 2.

5.2.14 The Authority has noted that COVID-19 has affected the Indian infrastructure projects and has led to delay in the projects. The Authority is of the view that the reasons provided by BIAL with the data on labour shortages and supply chain seems reasonable to justify that the project will get delayed beyond 31 March 2021.

5.2.15 Further, the Authority notes that due to disruption in traffic, this delay has not resulted in passenger inconvenience due to lack of timely capacity augmentation.

5.2.16 Based on these extraordinary circumstances, the Authority proposes to consider the interest during construction up to FY22 and also waive the adjustment of 1% on delay in operationalization of Terminal 2 - Phase 1 till 31 March 2022.

5.2.17 BIAL has submitted that the Project Management Costs for the Terminal 2 have been estimated to increase by INR 50 cr. on account of the extended period of construction till FY22. The Authority is of the view that the scope of work of PMC consultant for the Terminal 2 has remained the same despite the increase in the time period for execution of the project. Therefore, the Authority is of the view that the increase in the PMC costs is not justified and it cannot be passed on to the passengers. The Authority proposes to exclude the additional PMC costs estimated by BIAL for Terminal 2 for FY22.

5.2.18 The Authority proposes to levy the reduction (adjustment) of 1% in the project cost of Terminal 2 in case BIAL fails to commission and capitalize Terminal 2 Phase 1 by 31 March 2022. It is clarified that in case there is delay in completion of project beyond March 2022, due to any reason beyond the control of BIAL or its contracting agency and is properly justified, the same would be considered by the Authority while truing up the actual cost at the time of determination of tariff for the 4th control period in respect of IDC and PMC. However, there will be no waiver of penalty in case Phase 1 of Terminal 2 project is delayed beyond 31 March 2022 under any circumstances.

Cost overruns in the capital expenditure deferred from the Second Control Period to Third Control Period

5.2.19 The Authority had appointed RITES Limited to undertake the study on determination of efficient capex of BIAL for 2nd control period. RITES had submitted the report to AERA with project-wise efficient capex for 2nd control period. Below table compares the estimated cost as per BIAL's MYTP submission and the approved cost by the Authority (adjusted for the contingency cost) in its Second Control Period order for BIAL.

Table 77: Comparison of adjusted AERA approved amount with estimated cost (excluding FA/IDC) as per BIAL

Reference	Project	Net approved amount carried forward from SCP to TCP	Proposed capitalization in TCP by BIAL	Cost Over-run / (Under-run)	Variance %
		A	B	C = B-C	D=C/A
A1	Terminal 2 - Phase 1	3,607	3,566	-41	-1%
A2	Forecourts, roadways and landside development	1,127	1,786	659	58%
A3	Aircraft maintenance and Airport maintenance	42	41	-1	-2%
A4	Utilities Phase 1	106	104	-2	-2%
A5	T2 Apron 1	385	428	43	11%
A6	South Parallel Runway – Phase II	398	363	-35	-9%
	Sub-Total	**5,665**	**6,288**	**623**	**11%**
A7	Design and PMC	329	505	176	54%
A7	Pre-Operating Expenses and ORAT	79	325	246	311%
	Total	**6,073**	**7,118**	**1,045**	**17%**

* amount approved by Authority for SCP projects deferred to TCP is excluding the proposed capitalization of projects in Second Control Period

5.2.20 The Authority in the Second Control Period order had decided that BIAL shall submit detailed explanation and justifications, should the cost incurred exceeds 10% over the cost approved by the consultant (RITES). The Authority noted that the following projects have exceeded the approved cost:

a) A2 - Forecourts, roadways & landside development – Phase 1b

b) A5 - T2 Apron – Phase 2

c) A7 - Design, PMC, pre-operative expenses and ORAT cost

5.2.21 BIAL has submitted along with its MYTP submission the justification for the increase in the cost. The Authority has reviewed the justification and proposed the head-wise revisions in the section below.

A2 – Forecourt, roadways & landside development - Phase 1b - Cost overruns

5.2.22 The Authority noted that the approved Forecourts, roadways & landside development cost based on the independent consultant study was INR 1,216 cr. in the Second Control Period order of BIAL while BIAL has estimated the cost as INR 1,875 cr., an increase of INR 659 cr.

5.2.23 The justification submitted by BIAL for increase in cost for Forecourts, roadways & landside development – Phase 1b is as follows:

"These projects are related to the complete landside road network that have been planned to be added or expanded to support the new Terminal 2 – Phase 1 and other new developments. A modern Multi-Modal Transport Hub (MMTH) has been designed to give the best city/airport travel customer experience, connectivity between the terminals and easy transfer between various modes of transport.

a) *Development of a Multi-Modal-Transport Hub (Rs. 181.12 crores)*

- During the PAL 1 Capex submission, a basic Multi Level Car Parking (MLCP) was considered to support the Terminal 2 parking requirement. The Parking proposals made as per DPR submitted in Second Control Period MYTP proposal envisaged a T2 MLCP of approximately 64,000 Sqm with space for parking around 1800 cars for passengers and employees in the basement and at surface level. MLCP was designed to be an RCC framed (Basement + G structure). The Basement with 4m height & superstructure 3.90 m floor height was assumed. In addition to the above, provision of 6m long Boom Barriers at entry points & Parking Management System was also included.
- However, during 2017-18, based on discussions with the Bengaluru Metro Rail Corporation Limited (BMRCL), airport metro connectivity was felt necessary. Hence the forecourt and land side facilities at BIAL had to cater to this new requirement. The terminal station was to be strategically placed so as to provide best access from both the Terminals- T1 and T2. This led to the redesign of the common areas between T1 and T2. The vertical alignment of the metro in the forecourt area of T1 and T2 also underwent a thorough review and evaluation. It was finally decided that a subgrade open to sky terminal metro station would do best justice from a passenger facility and accessibility point of view along with optimum utilization of land. The concept further evolved into a Multi-Modal Transport hub, which could accommodate private vehicles, taxis, city buses and the metro rail.
- The development of the MMTH evolved on account of the following:
- MMTH to be a passenger-oriented and a focused transit node for the city. Connections between the terminals and the transportation hub are a key component of the passenger experience and overall airport vision.
- Apart from arriving and departing passengers, the MMTH would cater to the airport community as well as the visitors from the city. Thus, the services of metro, bus, app taxi, APM and bag drop became core to the MMTH.
- Metro: BMRCL would have a metro station terminating at KIA and will be the primary transportation facility within the MMTH. All passengers, regardless of terminal, could arrive at the Airport Metro Station.
- Bus: Intercity bus pick-up and drop-off would be located within the MMTH. Facilities shall include loading bays, passenger waiting areas, ticketing areas, and office facilities. On-airport shuttles may also be located at the bus kerb, either for passengers going to the terminals or employees going to various work airport locations.
- App Taxi: It is proposed that each terminal have its own app taxi loading zone. The app taxi loading zone in the MMTH would primarily serve T2 passengers as well as other passengers arriving via metro or intercity bus.
- Automatic Passenger Movement (APM): The MMTH is designed to allow for future introduction of landside APM services, connecting to existing and future facilities such as terminals, commercial areas, and passenger services (such as remote parking or rental car facilities) and the requirement is factored in the MMTH.
- Bag Drop: Bag drop facilities are required to connect to the T2 baggage tunnel. The need to reserve a baggage connection to T1 is also factored in, given that there would be a need to renovate T1 in future and allow for such a facility in future.

- Following key elements have been synthesized to optimize functionality and throughput, while creating an architectural framework which is dynamic and appealing:
- Terminal roadways entering and exiting T2
- Internal roadways connecting passenger-facing ground transport facilities, and goods flow
- Multi-Storey Car Park
- Private Car Pick-Up
- App-based taxi pick-up
- Bus Station
- Metro Concourse and Platform
- Inter-Terminal Connecting Bridge
- Inter-Terminal Transfer Facility
- Baggage check-in facilities were also planned to be provided at the terminal metro station. It was also important to have a free, seamless and safe pedestrian walkway connectivity between Terminal T2/ Metro Station / T1/CUP such that passengers/staff/other service providers can have a hassle free and safe walking experience.
- In order to meet all the above-mentioned requirements, the complete redesign of the area resulted in the following facilities:
- Baggage processing at the minus level 3 of the MMTH basement. From here, one tunnel is planned towards the T1 Terminal and the second tunnel connects the T2 Terminal.
- Two basements for car parking
- Part of the basement number one for the bus parking.
- Common services areas for the metro and the MMTH.
- A level 0 walking area connecting the Terminal 2, MMTH and Metro.
- An elevated pedestrian walkway connecting Metro &Terminal 1.
- Terminal metro station as a subgrade open to sky metro station with platform screen doors and the MMTH / Metro interfacing and enabling works.
- The rainwater harvesting ponds re-orientation

b) *Landside Facilities (Rs. 177.44 crores)*

- At the planned Trumpet expansion, land acquisition was to be carried out by NHAI. The Way Leave Charges towards the acquisition was borne was BIAL. The cost incurred is Rs. 8.75 crores.
- At the time of finalization of Metro Terminal Station, it was found optimum to align the road network connectivity to the Terminal 2 along with the metro vertical alignment. At the time of MYTP submission for Second Control Period, elevated road network was considered to connect to/from T2 Terminal from the existing ATC tower. In the current scheme the road network connectivity to/from T2 reaches approx. minus 6 metres at the current ATC tower and continues at minus 6 metres till it reaches T1 arrivals road. From here it again starts to ramp upwards towards

the Terminal 2. Deep drains had to be added to the list of projects due to the shift from elevated network to a -6m level network.

- Based on the development plans and further detailing to meet the connectivity requirements, there is an increase in the road development area by approx. 20% as compared to the areas that had been submitted as part of the earlier submission. This increase has resulted into an additional cost of approximately Rs 90 crores.
- A major CISF checkpoint for a 10-lane road system along with bollards are planned on the main access road to monitor and control the access to/from the terminals. This is facility is to meet the security requirements. This checkpoint will be equipped with offices, checkpoints, CCTV cameras, bollards, parking spaces etc. and is designed for 24x7 operations. The estimated cost towards this entire arrangement is Rs. 12 crores.
- A Vehicular Underpass (VUP) has been added to cross beneath the main access road from the north cargo road to the southern access road. This is a 2-lane vehicular under pass and the total length of the pass is 380 metre Two tracks of the metro along with the road network to the terminals passes above the underpass. The VUP is an asphalt road, with drains, steel lighting and other road furniture. The clear width at the VUP is 10.5m and approaches have a width of 7.5m.
- A pedestrian walkway facility has been added for safe and seamless pedestrian access from the car park to T1 forecourt. This is semi enclosed facility with elevators, escalators and travellators. Landscaping has been added to the walkway. The total length of the pedestrian walkway is 450m. The breakup is elevated walkway of 240m length, 70m long bridge crossing the main access road and 140m of at-grade portion. This facility is planned to have 4 elevators, 2 escalators and 4 travellators. The estimated costs here is Rs 41.04 crores.
- Other important features of the Landside Facilities
- Curved street lighting is being considered as against the standard light poles. As regards the Elevated Roads, special architectural lights are planned. These include pier and deck girder uplights, LED lighting for the full length of the flyovers.
- A landscape plan along the main access road has been planned from start of the road network within KIA till the Terminal 2.
- Latest and modern ICT systems is planned for effective CCTV coverage and data storage for the landside."

5.2.24 The Authority noted that the increase in the forecourts, landside and roadways cost is on account of development of a multi-modal transport hub and landside facilities.

5.2.25 Regarding the development of the multi-modal transport hub, the Authority noted that it had approved multi-level car park in the SCP order. BIAL has proposed to convert the multi-level car park into a multi-modal transport hub which integrates bus station, car park, metro station, premium car park, baggage sorting area as well as taxi/ cabs and also includes retail area as part of MMTH. The Authority notes that the MMTH has both aeronautical and non-aeronautical components. The Authority proposes to bifurcate the MMTH cost into aeronautical and non-aeronautical components based on the floor wise area usage for aeronautical and non-aeronautical activities.

Table 78: Allocation of MMTH cost into aeronautical and non-aeronautical

S no	Floor	Usage	Area (sq m)	Type (A/ NA/ C)*
1	Basement 3	Baggage sorting area	6555	A

S no	Floor	Usage	Area (sq m)	Type (A/ NA/ C)*
2	Basement 2	Private car parking	35722	NA
3	Basement 1.5	Bus station	14791	A
4	Basement 1	Private parking	36419	NA
5	Level 0	App taxi and premium taxi (considered NA presently as Metro expected to be operationalized in FY26)	47401	NA
6	Level 1	Passenger circulation and landscape	33704	A
	Total		**174592**	
	Total aero		55050	
	Total non-aero		119542	
	% non-aero ratio		**68%**	

5.2.26 The Authority noted that the majority of the increase in MMTH cost (68% is non-aero as per the table above) can be attributed to the non-aeronautical activities.

5.2.27 Regarding the landside facilities, the Authority noted that the additional cost in forecourts, landside and roadways is on account of the need to provide the metro connectivity to the airport which has resulted in the re-alignment of the approach roads.

5.2.28 Based on the above, the Authority proposes to consider the additional cost on account of forecourts, landside and roadways as part of the RAB.

5.2.29 Further, Phase 1 of MMTH which is proposed to be commissioned in FY22 does not include the metro station but only the enabling works for metro station and the baggage sorting area. BIAL has submitted that these assets will be capitalized in FY22. The Authority noted that the enabling works for metro station and the baggage sorting area will be put to use at the time metro commissioning its operations, that is, in FY26. The Authority is of the view that the passengers cannot be charged for the assets not available for their use and therefore, proposes to capitalize the enabling works for metro station and the baggage sorting area in the year of metro commissioning, that is, FY26.

5.2.30 Below table provides the break-up of the forecourt, roadways & landside development - Phase 1b cost as proposed by the Authority.

Table 79: Break-up of the forecourt, roadways & landside development - Phase 1b

S no	Particulars* (in INR cr.)	Proposed capex as per BIAL's MYTP submission for TCP	Proposed capex as per Authority
1	Forecourt, roadways & landside development - Phase 1b (except MMTH)	1,250.45	1,250.45
2	MMTH - Phase 1	535.94	462.51
	Total	**1,786.40**	**1,712.96**

* capital expenditure provided is excluding the design, PMC, contingency, pre-operative expenses and IDC

A5 – T2 Apron - Phase 2 - Cost overruns

5.2.31 The Authority noted that the approved T2 – Apron cost based on the independent consultant study was INR 385 cr. in the Second Control Period order of BIAL while BIAL has estimated the cost as INR 428 cr., an increase of INR 43 cr.

5.2.32 The justification submitted by BIAL for increase in cost for T2 Apron – Phase 2 is as follows:

- "The major reason for the increase in costs is on account of having additional rainwater harvesting ponds. In order to meet the water requirement through sustainable additional 3 rainwater harvesting ponds are added on the landside. The total capacity of the ponds added is 227 ML. Construction of these ponds involve earthworks, pond lining, pump rooms and piping works. The cost towards this is Rs. 22.50 crores.
- The apron construction works were planned to be carried out using the Ground Support Equipment (GSE) tunnel or the Eastern Connectivity Tunnel (ECT). However, due to security reasons, approval from BCAS/CISF is awaited for using the tunnels for movement of men, materials and equipment for construction activities on 24x7 basis. This non-availability of the tunnels has resulted in a significantly longer lead of approx. 20 kms for movement of men, material and equipment. This has contributed to the balance overrun to be incurred."

5.2.33 The Authority had asked BIAL to submit the details of the water cost savings due to the additional rainwater harvesting (RWH) ponds. BIAL had submitted that 50% of the potable water requirement from FY23 onwards will be sourced from these RWH ponds and accordingly, the cost of procuring water from external sources will decrease. The Authority has noted the cost benefit of the RWH ponds and proposes to consider the increase in the cost of T2 Apron Phase 2 due to RWH ponds upto 22.50 cr. The Authority proposes to consider the actual cost of the RWH ponds during true-up for the next control period. Based on the asset allocation study (refer Annexure 3 for summary of the report), the Authority proposes to bifurcate the RWH ponds into aeronautical and non-aeronautical based on the average terminal area ratio.

5.2.34 In the response to the Authority's query, BIAL had mentioned that the ECT had been constructed in November 2019, however, it was not utilized due to pending BCAS approval. The Authority notes that the construction activities were limited from March 2020 onwards due to Covid-19 and BIAL has received the BCAS approval for operations in September 2020. As a result, the Authority is of the view that BIAL's claim of increase in cost of INR 20.50 cr. is not reasonable. The Authority proposes to exclude the estimated additional cost of T2 Apron Phase 2 from RAB due to the delay in the commissioning of the ECT.

A6 – South Parallel Runway – Phase II

5.2.35 The Authority asked BIAL to submit the details of the works proposed under the South Parallel Runway – Phase II project which is proposed to be capitalized in the Third Control Period. BIAL submitted the following response:

"Certain projects which were completed in 2019-20 were capitalized and recognized as assets while some Projects which were in progress got carried over beyond 31st Mar 2020 and are estimated to be completed in the ensuing period FY 2021 and FY 2022.

Hence, for ease of reference, out of the total Estimated Cost at completion for the NSPR program (in the PAL-I projects) submitted as part of MYTP, the projects which were carried over beyond FY2020 and planned to be completed in the subsequent years have been captured in the Business Plan as Phase II. The list of key projects for the line item "South Runway Phase II" is given below:

i. Ground Support Equipment Underpass

ii. North Airfield connections

iii. Earthwork, asphalt & drainage along the areas - Crossfield taxiway P&Q

iv. Airfield Ground Lighting (AGL) Works

v. Irrigation & utility related work

vi. Perimeter wall related works

vii. Perimeter Intrusion Detection Works (PIDS)

We wish to clarify that no new projects are getting implemented under Phase II, beyond what was originally approved by AERA in the 2nd CP tariff order."

5.2.36 The Authority noted that RITES had approved a consolidated project for the new south airfield works while BIAL has proposed capitalization of the project in two parts. The Authority asked BIAL to submit the reason for bifurcating the project into two parts and the justification on whether these projects can be capitalized independently. BIAL submitted the following response:

"The complete second runway system is commissioned and is operational after obtaining necessary approvals from the Regulator – DGCA. Based on this, the statutory auditors have also approved the capitalization of the 2nd runway and the same is reflected in IGAPP FY2020 reports.

RITES has provided one consolidated cost. It may be noted NSPR is mega infrastructure project. Any mega project has subprojects which once completed can be put to beneficial occupancy. As and when each of these projects can be put into beneficial occupancy, the commissioning and operations is carried out for beneficial service to the passengers and airlines."

5.2.37 The Authority has noted the above responses of BIAL on the South Parallel Runway – Phase II project which has given the details of the proposed project and explained the reason for capitalization in two parts. Accordingly, the Authority proposes to consider the capital expenditure for South Parallel Runway – Phase II in the RAB of the Third Control Period.

A7 – Design, PMC and Pre-ops cost - Cost overruns

5.2.38 The Authority noted that the approved Design and PMC cost based on the independent consultant study was 5% of the total project cost in the Second Control Period order of BIAL while BIAL has estimated the cost as 6.94%, an increase of 1.94%. The Authority had approved INR 150 cr. as the pre-operative expenses in the Second Control Period order of BIAL while BIAL has estimated the cost as INR 402 cr. (inclusive of ORAT cost), an increase of INR 252 cr..

5.2.39 The following justification is submitted by BIAL for increase in cost for Design, PMC, pre-operative expenses and ORAT cost:

- "The estimated actual cost of Rs. 354 crores includes a committed design costs of Rs. 328 crores for major designs activities which have been awarded towards the following Projects:
- Terminal 2 – Phase 1
- NSPR and associated airside works
- MMTH & landside design services
- Landscape design
- Provision for specialized design services: peer review and study, third party design checks.
- PMC has been engaged for overseeing and managing the project.
- Pre-Operative Cost:
- BIAL has undertaken an integrated large-scale Airside and Terminal development program with associated road and other infrastructure facilities comprising of more than 80 sub-projects. Such a mega scale development program has the following requirements to be adhered to:
- High safety standards (target zero)

- World class quality
- Specialized and customized construction works
- Challenging and aggressive time schedule
- Delivery to budget
- Interdependent and large-scale works undertaken at the same time across the premises – airside, terminal and landside.
- Resources required are specialized by nature for managing such large-scale expansions. Due to the above requirements, BIAL had to ensure proper staffing to achieve the quality expectation as set out in the scope and specification for a world class project delivery.
- BIAL had to work out a judicious mix of PMC (specialist and short term) staffing and own staffing (long term requirements) to meet these safety, quality, time and cost challenges.
- BIAL has an exclusive team of Planning, Design, Construction, Airport Systems, Quality, Procurement, Contract Administration, Project Control besides support services like HR and Finance. This team is totally dedicated to development of the project. Besides, specialists are also hired to support the existing project team. The salaries and office related expenses of this team are 'Pre-Operative Expenses'. It is pertinent to submit that the team is involved from a pre-concept stage starting with design, planning and adding to that the service support teams like Procurement, QA, HSE, Project Controls etc., besides construction teams as and when required. Besides, some specialists in areas like design, airport systems etc., are being roped in from PMC agency wherever required.
- Operational Readiness and Transition (ORAT) was not provided as part of the PAL 1-Capex submissions. These are incurred towards trials, customization of the airport staff/airline community towards smooth operations of various project facilities such as the runway, terminal 2, etc., from the day of operations.
- BIAL has carried out benchmark study by engaging M/s Turner on various Airports – India and International Airports as well as other mega infrastructure projects in India and South-east Asia.
- List of Airports chosen for benchmarking:
- Indira Gandhi International Airport, Delhi - Terminal 3 (DEL)
- Chhatrapati Shivaji Maharaj International Airport, Mumbai – Terminal 2 (BOM)
- Rajiv Gandhi International Airport, Hyderabad – Terminal 1 Expansion (HYD)
- King Abdul-Aziz International Airport, Jeddah, Kingdom of Saudi Arabia - Terminal 1 (JED)
- Tan Son Nhat International Airport, Vietnam - Terminal 1 (SGN)
- When looking at the range and average of pre-ops, PMC, and design costs based on hard cost of projects that achieve similar global rankings, cost per passenger, timeliness of construction, and LEED rated facilities in India is as follows:

Table 80: Benchmarking study submitted by BIAL

S no	*Cost head*	*Range*	*Average*	*BIAL's estimate*
1	*Design and PMC*	*5.1-11.1%*	*8.03%*	*6.94%*
2	*Pre-operative expenses*	*3 – 8.9%*	*5.63%*	*4.33%*

S no	*Cost head*	*Range*	*Average*	*BIAL's estimate*
	Total	***10.1 – 20.0%***	***13.67%***	***11.63%***

- Hence, the total soft cost for BIAL as a % of the estimated cost of 11.63% is within the soft cost benchmarked with leading airport and infrastructure project in India and globally. Further, the break-up of individual elements of soft costs (Design & PMC, Pre-Operative cost)is also well within the average levels shown above.
- The below table compares the various elements of soft costs for BIAL against the 3 projects (Indira Gandhi International Airport, Delhi - Terminal 3 (DIAL), Chhatrapati Shivaji Maharaj International Airport, Mumbai – Terminal 2 (MIAL) and Rajiv Gandhi International Airport, Hyderabad – Terminal 1 Expansion (HIAL)) and also includes data on T1 A expansion of BIAL. Project cost excluding Interest during construction has been taken as the base for computing the % depiction.

Rs In crores	DIAL	MIAL	HIAL	BIAL - T1A	BIAL - T2 Mar-22	BIAL - T2 Mar-21
Project cost	10,657.00	9,245.00	1,989.00	1,335.75	9,183.00	9,183.00
Design cost	286.00	818.00	50.00	75.28	354.00	354.00
PMC	203.00		92.00		209.00	159.00
Pre-operatives expenses	488.00	684.00	54.00	35.00	401.00	329.00
Total soft cost	**977.00**	**1,502.00**	**196.00**	**110.28**	**964.00**	**842.00**
Net project cost other than soft costs	**9,680.00**	**7,743.00**	**1,793.00**	**1,225.47**	**8,219.00**	**8,341.00**
% Design cost	2.95%	10.56%	2.79%	6.14%	4.31%	4.24%
% PMC	2.10%		5.13%		2.54%	1.91%
% Pre-operatives expenses	5.04%	8.83%	3.01%	2.86%	4.88%	3.94%
Total soft cost	**10.09%**	**19.40%**	**10.93%**	**9.00%**	**11.73%**	**10.09%**

- As can be seen from the above table, BIAL soft costs are comparable to the expansion projects of DIAL, MIAL and GHIAL. The essential difference being the Design costs, which is a reflection of the Detailed Design done by BIAL, prior to award of construction contracts in comparison to the Schematic Design dine by the other airport operators.
- Additionally, BIAL actual completion dates have been severely impacted by COVID 19 pandemic which had resulted in a delay of 12 months in the completion of the Project."

5.2.40 The Authority has examined the submission of BIAL on justification of the increase in the design, PMC, pre-operative and ORAT costs.

5.2.41 The Authority has decided to allow 5% of the project cost for Design and PMC costs based on the independent study undertaken by RITES Limited in the Second Control Period order. The Authority proposes to consider 5% of the project cost for Design and PMC costs for the capital expenditure deferred from Second Control Period. The Authority proposes to review and true-up the design and PMC costs after the project is commissioned and subject to its reasonableness.

5.2.42 The Authority has noted that the pre-operative expenses claimed by BIAL is INR 402 cr. inclusive of ORAT cost.

5.2.43 The Authority has noted that BIAL has submitted INR 46 cr. as Operational Readiness and Airport Transfer (ORAT) expenses as part of the pre-operative expenses to operationalize the Terminal 2. BIAL has submitted that it is undertaking the ORAT program with its own employees. Since ORAT expenses are part of the airport operations, the Authority is of the view that these costs should be part of the operational expenditure. The Authority proposes to include the ORAT expenses as part of the operational expenditure and exclude it from the RAB of the Third Control Period.

5.2.44 BIAL has submitted that the it has an exclusive team for Planning, Design, Construction, Quality control, Procurement, Contract Administration, Project Control besides support services like HR, legal and Finance and this team is totally dedicated to the implementation of projects proposed in Second Control Period. The Authority has noted that the pre-operative expenses includes the personnel cost and office related expenses of this team involved in the capital expenditure projects.

5.2.45 The Authority has noted that BIAL has appointed a separate Design and PMC consultants for the capital expenditure projects. Therefore, the Authority has asked BIAL to submit the justification for employing the team of BIAL for the capital expenditure projects and also the cost savings for BIAL due to this team. BIAL has submitted the following response:

- "Any Mega Program delivery essentially consists of client organization team members and specialist consultants to successfully handle the challenges that are typically encountered in such large and complex project delivery environment.
- Airport projects are complex, multiyear undertakings that involve various consultants, contractors, subcontractors, and suppliers. The Owner's project team is required to manage large numbers of commercial agreements, along with ongoing changes, progress measurements, and other administrative challenges.
- Owner's Project Team generally take care of the pre-construction activities, strategy development for the project delivery in-line with the vision and mission of the organization, fiduciary responsibilities, running of the procurement process for appointment of consultants & contractors, bill certification, statutory compliances, progress monitoring, safety and quality.
- Specialists consultants such as design consultants, project management consultants, construction management consultants are appointed to bring in their skills, expertise, processes, systems based on their vast experience in mega projects involving multiple international organization. The specialist input ensures the client organization is able to effectively and smoothly discharge its responsibility for achieving successful project closures. The services from the specialist consultants can be availed in various degrees and measures which have a direct bearing on the project parameters such as - control of the project development, liability being incurred, costs incurred for such services etc.
- Based on the project delivery strategy adopted by the client organization the consultancy services scope is tailored accordingly.
- The planned projects at BIAL, touch almost every aspect of civil engineering from earth retaining structures, pavements to large span buildings and water treatment facilities. These projects are challenging and at peak activity, there were more than 100 projects, minor and major, running concurrently. All projects needed to fit together like a jigsaw puzzle and be completed in time for the operationalization of Terminal 2.
- With the above background, BIAL has adopted the following strategy:

DESIGN WORKS

- Specialist design consultants have been appointed by BIAL to carry out the design services. The process and the role of the BIAL Project team during the design phase is provided in the below table. It may be noted that to carry out the below mentioned functions, a very competent and professional team needs to be in place to carry out these roles.

S No	*Design Activities*	*Role of BIAL Project Team*
1	*Competent and Specialist Design Consultants appointed for providing the concept design, schematic design, detailed designs, cost estimates and technical tender documents.*	*Identification of the potential consultants.* *Preparation of the scope document for bidding purposes.* *Ensuring all consultants scope are properly tied-up.* *Technical clarifications to bidders* *Evaluation and Review of the documents submitted by the bidders*
2	*Prior to commencement of the consultancy assignment detailed interactions between BIAL Project team and the consultant team on the expectations*	*Discussion on the scope, the list of deliverables.* *Discuss and agree on the formats, standards, sequence, and timing of deliverables*
3	*Basis the input received: Consultant commences the work activities.*	*Regular progress review meetings.* *Provide inputs and decisions as required.* *Raise delay alarms and work out mitigation measures*
4	*At each stage the consultants submit their deliverables for review by BIAL. BIAL project head, BIAL design head, BIAL construction head along with the team members review and comment on the submissions. These comments and observations are on functionality, specifications, constructability, costs, safety and quality related matters.*	*In dept and detailed review of the submissions.* *The document is shared with other internal stakeholders (Operations, Maintenance team etc.) for their review and acceptance.* *All observations are noted and communicated to the consultant for incorporation in the next submissions.* *Value engineering solutions are identified and communicated.*
5	*The consultant further modifies the submission and after an interactive process the submissions are closed.*	*Ensure all comments are incorporated.* *Regular follow up to meet the completion timelines.*

Areas of design work not covered by the design consultants

- Changes to the project initiated by the BIAL End User. BIAL Project team co-ordinates with the end user team (Operations Department) and arrives at a Project Brief such that the same can then be taken forward into the design stage either through consultants, BIAL or contractors' consultants.
- Review and approval of the designs/drawings submissions carried out by the Contractors.
- Design changes raised by the Contractors. The same needs to be evaluated by the BIAL's design team and suitable actions taken to approve or reject the changes.
- Explaining the designs to the Statutory Authorities (BCAS, Fire, DGCA, etc.) for receiving commencement and completion certificates.
- Clarification to Lender Engineers.

Benefits of the above approach:

- Relevant work portions carried out by world class specialists.
- Client control always ensured thus ensuring the vision and mission of the projects are safeguarded.
- Ability to effect changes as required by BIAL
- Optimal direct hiring by BIAL, thus significant cost benefits and no long-term staffing issues.

PROJECT & CONSTRUCTION MANAGEMENT WORKS

- BIAL PAL 1 Projects are a mixture of wide range of project activities which can be categorized into the following 2 major parts:
- Mega Projects - technologically advanced, multidisciplinary, international vendors, first of its kind systems, complex co-ordination and aggressive timelines
- Terminal 2 Project,
- Second Runway, Apron, AGL Lighting & Related Airside Works,
- Large, Medium and Small Project involving various different disciplines, co-ordination.
- Multimodal transport hub
- Buildings, roads, vehicular underpass, grade separators, substation, sewage treatment plant, utility network, IT network, drainage systems, huge landscaping etc.
- In order to effectively manage the entire mix of projects activities BIAL adopted a strategy wherein the PMC (project management consultant) joined as the extended arm of BIAL for delivering the mega, complex and time bound projects with active participation of BIAL Project team. With this, BIAL ensured the right and competent staff allocation for the management of these 2 large projects. For Large, Medium & Small sized projects, the project management and construction management are by the BIAL Project team. In order to have high standards of safety and quality a competent team comprising of BIAL staff and consultancy staff was formed.
- Through leveraging the skillset and expertise of a PMC that has specific personnel and processes, focused on delivering mega, complex, and time bound projects, integrated with the BIAL team limits the financial ramifications of a contractor not delivering a project at the level of quality, safety, timeliness, and costs established at the outset. Even deployment of large contractors with reputation and established track record could still result in delay of the project handover and thereon significant cost claims upon the project completion and result in significant financial impact. By engaging specialist consultants who have successfully delivered large, similar projects, together with BIAL team will help mitigate the potential negative financial impacts through such following measures: ,
- Developing detailed designs and specifications to provide comprehensive project information which limits contractor change orders due to ambiguity. The creation of exhaustive tenders and ultimately contract which are awarded below the established budget.
- Generating innovative construction methodologies that help expedite contractor works to recover and negate schedule slippages. Thus safeguarding the operational date.
- Providing comprehensive contractual evaluation and strategy to directly address and eliminate contractual grievances with the Contractor. Significantly minimizing contractual claims.
- Providing innovative safety measures for the contractor to comply with and strict oversight to ensure implementation. This fundamental protection of worker safety is of utmost importance from a societal, ethical, financial, and moral perspective. Projects have achieved over 25 million hours worked without a lost time incidence.
- Implementing world-class quality measures both within the contractor and through operational processes that ensure a level of quality is provided at an international standard. This directly impacts the passenger experience along with limits additional operational expenses through a reduction of reparatory maintenance expenses.

It may be noted that as part of the PAL 1 Projects, 30 key construction contracts (mega sized to medium sized) have been awarded by BIAL. The scope of works carried out by the BIAL team (Pre-Operative) are provided below:

Department	**BIAL Staff Role**
Design	Has been explained in detail in the above Design Works. BIAL team primarily carries out the role of defining the scope of consultants, review and approve consultant work scope. Apply value engineering measures Incorporate latest requirements into the designs
Procurement & Contract Admin	Procurement team is led by BIAL and completely managed by BIAL for both Mega Project and Large, Medium & Small Projects. Preparation of commercial conditions for tender documents. Carry out the procurement process in line with the procurement policy – EOI, RFQ, RFP etc. Contract Administration for all Large, Medium & Small Project Contractual correspondence Raising and Closing Change Order & Change Notice Contractually safeguarding BIAL interest with respect to awarded contracts.
Construction	Large, Medium & Small sized project directly managed by BIAL team Construction methodology finalization Co-ordination with various operations stakeholders as most of the works being carried out in operational areas Day to day construction management Construction supervision and co-ordination with designer Site inspection, inspection reports etc. Progress review and mitigation measures Ensure safe working is being carried out. Ensure quality of the works are being achieved. Clear material approval sample, material inspection report
Landscape	Complete landscape development execution activities are taken care by the landscape team for the Mega and Large, Medium & Small Projects: Working level drawings Site works management -earth preparation, irrigation works, planting, coordination with stakeholders Setup and maintain nursery for the plants
Support (Billing, Admin, finance, legal, etc.)	BIAL team for Mega Projects and Large, Medium & Small Projects Bill certification and processing Budgetary controls Document management Legal inputs on various matters Office management
Estimation and Costing	Large, Medium & Small Projects Pre-feasibility estimates New facility estimates. Review of consultant cost estimates Value engineering and cost optimization suggestions Changes price negotiations finalization
Project Controls	Medium and Small sized projects Establish project schedules Track projects Prepare Progress Report – daily weekly and monthly

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Department	*BIAL Staff Role*
Safety	*Joint team by BIAL and PMC* *Establish HSE manual* *Ensure safety standards are met all project site.* *Round the clock supervision*
Quality	*Joint team by BIAL and PMC* *Establish and implement Quality Systems.* *Develop checklist to be inline with the QA plan* *Review and Approve method statement* *Site quality checks* *Raise and close NCRs.*

CONCLUSION

- It may be noted that there is no over-lapping of responsibilities between the BIAL Project team and the Consultancy staff in the above listed activities to be carried out. It would have been a costlier and an inefficient situation if either the complete design, project & construction management and direct staffing was done by BIAL alone or was handed over to Consultants only without BIAL Project team
- BIAL does not have any subsidiary company that will take care of Design and Engineering services nor does BIAL have any "shared services" arrangement with its parent, to avail the services of Procurement, Contract management, Legal, etc. Hence, all of these had to be done by in-house team that will only look at Projects and are not involved in day to day operations of the Airport
- AAI has developed a large number of specialists in almost every aspect of airport planning, construction, maintenance and operations. Project teams are specially developed to take full advantage of the central pool of specialized strengths to meet the specific requirement for each project. This advantage is not available with BIAL.
- BIAL being a SPV created for developing, operating and maintaining the KIA, does not have the AAI/other large airport developers background and organizational support and hence has to deploy dedicated Project team to perform the above-mentioned activities.

Savings in Capital Expenditure

- Owner's project team is always required as the responsibility of ultimate delivery of the project lies with the Airport operator and not the consultant
- Projects of this magnitude will always have scope changes and change orders and hence it is the Owner who has the final say in this regard. If the approach was a 100% consultant led model, then the consultant will be responsible for all of these and this approach is impractical.
- In case of opting for a 100% Consultant led construction approach, the underlying contract with the Owner would have to incorporate potential LDs/penalties that would be payable by the Consultant, on account of non-delivery of the project within the approved timelines and cost budget. This will only increase the cost of Consultants vis-à-vis having a hybrid model wherein Owner's team is ultimately responsible for Project delivery. It is well known that LDs/penalties can never be a true reflection of the actual loss in time and increase in costs.
- All statutory compliances and responsibility for the same, as a "primary employer" rests with the owner and not with the consultant. So, a 100% Consultant led model is not feasible to implement

- Therefore, savings in capital expenditure by avoiding Owner's team and opting for a 100% consultant led project construction model is a hypothetical analysis and we have not done such cost benefit analysis. In our view, such an approach will be costlier than the hybrid model that has been adopted by BIAL
- Most of the private sector airport projects like DIAL T3 and MIAL T2 have all been implemented by adopting this hybrid approach only. In our Summary note on Soft costs, we have compared the pre-operative costs incurred by DIAL, MIAL and GHIAL vis-à-vis BIAL Expansion project.
- Additionally, Lenders when they evaluate our project and sanction loans, clearly require us to have our own team that will coordinate, supervise and project manage the Expansion project along with specialized consultants. For the lenders, BIAL is ultimately responsible for project delivery within approved timelines and cost budget."

5.2.46 The Authority has examined the submission of BIAL with respect to the pre-operative expenses. The Authority is of the view that the tasks of the BIAL's project team are generally part of the airport's scope of work and these costs should not be capitalized. Further, the Authority notes that the magnitude of the pre-operative expenses proposed by BIAL (INR 356 cr. exclusive of ORAT costs) is not justified given the additional costs proposed by BIAL for the design and project management consultants. Therefore, the Authority proposes to exclude the pre-operative expenses on the deferred projects of the Second Control Period from the RAB of Third Control Period.

5.2.47 Based on the above proposals, the Authority proposes to Design, PMC and Pre-ops cost as per the following table:

Table 81: Design, PMC and pre-ops cost of the deferred capex of the SCP proposed by the Authority for the Third Control Period

Project*	Proposed capitalization in TCP - BIAL	Proposed capitalization in TCP – Authority
Design and PMC	504.87	350.20*
Add: Pre-Operating Expenses and ORAT	324.98	0
Total of design, PMC, pre-operative and ORAT	**829.84**	**350.20**

* difference is due to rounding off; computed such that the design and PMC cost is 5% of the total hard cost of the projects in the Second Control Period and the projects deferred to the Third Control Period

5.2.48 The Authority has noted that BIAL has proposed to fund the asset through debt and equity. However, BIAL has computed the financing allowance on the entire project cost. The Authority noted that the financing allowance is a notional amount and while true-up of the Second Control Period the Authority has allowed the interest during construction instead of the financing allowance as per para 3.3.40. Accordingly, the Authority proposes to consider the interest during construction on the project cost for the Third Control Period.

Capital expenditure proposed by the Authority for group A

5.2.49 Based on the above examination, the Authority proposes the capital expenditure of projects deferred from SCP to TCP as per the following table:

Table 82: Capital expenditure projects deferred from Second Control Period to the Third Control Period as proposed by the Authority

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority (3)	Difference (4 = 3-2)
A	Capex projects deferred from SCP to TCP	A1	Terminal 2 - Phase I	3,565.67	3,565.67	3,565.67	0.00
		A2	Forecourt, roadways & landside development - Phase Ib	1,786.40	1,786.40	1,712.96	-73.44
		A3	Aircraft Maintenance & Airport Maintenance Facilities	41.16	41.16	41.16	0.00
		A4	Utilities	104.22	104.22	104.22	0.00
		A5	T2 - Apron Phase 2	0.00	427.73	407.23	-20.50
		A6	South Parallel Runway - Phase 2	0.00	362.95	362.95	0.00
		A7	Design, PMC and Pre-ops cost	710.16	830.57	350.20	-480.37
		A	**Capex projects deferred from SCP to TCP (sub-total)**	**6,207.60**	**7,118.69**	**6,544.38**	**-574.31**
	IDC			814.39	904.80	853.78	-51.02
	Total (including IDC)			**7,021.99**	**8,023.50**	**7,398.17**	**-625.33**

B. Capital expenditure projects for the Third Control Period

5.2.50 Following table gives the details of the capital expenditure in Group B - capex projects proposed in TCP as submitted by BIAL in its MYTP and the revised submission dated 2 February 2021:

Table 83: Capital expenditure projects for the Third Control Period as proposed by BIAL

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP	Revised proposed capex as per BIAL for TCP
B	Capex projects for the TCP	B1	Airside Security wall	3.88	3.88
		B2	Airside perimeter Road	18.21	18.20
		B3	T1 Optimization	249.51	249.51
		B4	Cycle Track along SAR / SWR / NCR plus docking stations	12.89	0.00
		B5	MMTH - Phase 2	268.59	129.41
		B6	Airport Terminal Metro Station	156.82	156.82
		B7	City Side Metro Station	97.60	97.60
		B8	North west road expansion	41.13	41.13
		B9	CISF Barrack Expansion and Access Road	44.79	44.79
		B10	BIAL Campus Parking and Canteen	69.65	0.00
		B11	Animal Quarantine facility	3.65	3.65
		B12	New cargo domestic terminal including Cool Port	101.88	101.88
		B13	Refurbishment of existing cargo terminals	118.76	118.76
		B14	Refurbishment of catering buildings	25.81	25.81
		B15	Water Treatment Plant	6.80	6.80
		B16	Landscape Works	69.39	69.39
		B17	Alpha 4	204.37	204.38
		B18	Landside Maintenance Building	12.48	12.48
		B19	Design, PMC, Pre-ops cost and Contingency	399.15	340.39
		B20	CISF Permanent Housing - Phase I	369.68	369.68
		B	**Capex projects for the TCP**	**2,275.04**	**1,994.57**
	Financing Allowance			166.49	156.42
	Total (including FA)			**2,441.53**	**2,150.98**

5.2.51 The Authority has examined the estimated capital expenditure projects submitted by BIAL for the Third Control Period.

5.2.52 BIAL, in its submission dated 2 Feb 2021, had revised the capital expenditure projects proposed in the Third Control Period. The revisions included the following changes:

a) B4 - Deferment of Cycle Track along SAR / SWR / NCR plus docking stations

b) B5 - Reduction of scope in the MMTH Phase 2 project which has reduced the cost as given in the Table 83

c) B10 - Deferment of BIAL Campus Parking and Canteen

5.2.53 For its analysis, the Authority has considered the capital expenditure projects for the Third Control Period based on the revised submission of BIAL.

B3 – T1 Optimization

5.2.54 The Authority has noted that T1 – Optimization is proposed by BIAL as a project instead of including it in the sustaining capex as it includes the operational repairs. The Authority had asked BIAL to provide the justification for including T1 – Optimization as a separate cost. BIAL had submitted the below response:

a) *"The sustaining capex includes repairs and maintenance, minor projects, special repairs and facility augmentation to cater to the growth in traffic. Additionally, initiatives such as Aadhar enabled entry and biometric boarding system ("Digi Yatra") etc. are initiatives forming part of sustaining capex. BIAL also does regulatory and safety compliance related capex which are mandated from BCAS, DGCA, MOEF etc. which form part of sustaining capex. Most of the sustaining capex are carried out with limited interruptions to existing operations.*

b) *T1 Optimization is a list of inter related and connected projects which are in the nature of major overhaul of the Terminal T1 and is proposed to be carried out in optimum time and efficient manner once T2 Phase 1 becomes operational. Most of the existing system in Terminal T1 are being replaced on account of end of life of the asset, replaced for reliability augmentation and redundancy creation, improving operational efficiency, mandatory capex etc. ...."*

c) *The T1 refurbishment works are planned in FY 2022-23, once Terminal T2 Phase 1 is operational and to avoid further degrade in targeted LoS which compromises the passenger experience and impacts the overall operational efficiency.*

d) *Therefore, as can be seen from above, T1 refurbishment is not a part of Sustaining capex /Minor project which is only to maintain the asset, but this is to actually ensure permanent capacity to handle the increase in domestic passenger growth at KIA."*

5.2.55 The Authority has noted from the above response from BIAL that the T1 optimization capital expenditure includes the end of life assets replacement.

5.2.56 The Authority has noted that BIAL has undertaken the Interim Terminal Improvement (ITI) works during the Second Control Period as part of the sustaining capital expenditure or special repairs. The Authority is of the view that the majority of works proposed under T1 optimization project are similar to the interim terminal improvement works. Therefore, the Authority proposes to reduce the scope of the T1 optimization project such that it includes only the one-time project cost other than the proposed sustaining capital expenditure.

5.2.57 Accordingly, the Authority proposes to consider INR 50 cr. (excl. design, PMC, contingency and IDC cost) for the T1 optimization project in the Third Control Period. The Authority proposes to true-up the actual T1 optimization project cost during the next control period based on the evaluation of its reasonableness.

B5 and B6 – MMTH - Phase 2 and Airport terminal metro station

5.2.58 The Authority has reviewed the details submitted by BIAL on the MMTH Phase 2 and Airport terminal metro station project.

5.2.59 BIAL has submitted in its MYTP submission that the MMTH Phase 2 and airport terminal metro station will be commissioned in FY26. The Authority noted that these projects can be commissioned only after the commissioning of the entire airport metro line. The Authority is of the view that the commissioning of the airport metro line might be delayed beyond FY26.

5.2.60 Therefore, the Authority proposes to exclude the cost for MMTH Phase 2 and Airport terminal metro station project from the Third Control Period. In case BIAL capitalizes the asset in the Third Control Period, the Authority proposes to true-up the actual cost of these assets during the next control period.

B7 – City metro station

5.2.61 BIAL has submitted the capital expenditure proposal of city side metro station, which serves the airport employees and the users of commercial services. However, the Authority is of the view that the city side metro station is constructed by BIAL for its employees and does not serve the airport passengers. The Authority is of the view that in principle the airport operator cannot charge the airport users for the facility which is not used by them. Therefore, the Authority proposes to exclude the capital expenditure of city side metro station from the RAB of BIAL.

B9 - CISF Barrack Expansion and Access Road

5.2.62 The Authority reviewed the submission of BIAL for the CISF barrack expansion and access road project.

5.2.63 The Authority noted that BIAL has proposed a four-lane access road for the access to the new CISF barrack. The Authority is of the view that a four-lane access road will exceed the actual traffic demand and the lanes can be reduced based on the estimated traffic to optimize the cost.

5.2.64 Accordingly, the Authority propose to consider a reduced cost of INR 22.40 cr. (excluding design, PMC, contingency and IDC) for the CISF barrack expansion and access road project in the Third Control Period.

B12 and B13 - New cargo domestic terminal including Cool Port and Refurbishment of existing cargo terminals

5.2.65 The Authority noted that BIAL's existing annual cargo capacity is 600,000 tonnes and the existing cargo traffic capacity in FY 2020 is ~374,000 tonnes as per the MYTP submission of BIAL. The Authority sought a justification from BIAL regarding the need for cargo terminal capitalization by FY23. BIAL submitted the below response:

a) *"The existing cargo terminals of AISATS and MABB are expected to reach their peak design capacity in international export non – sterile, international import sterile and domestic outbound by FY 2023."*

b) *The cargo concessionaire contracts of AISATS and MABB are valid till May 2023 and post this, the cargo infra would be transferred to BIAL. These assets are 15 years old and most of it would need refurbishment.*

c) *There are 2 dedicated cold chain facilities at BLR Airport i.e. AISATS Cool port and MABB's Cold Zone which have a design capacity of 60,000MT per annum which was operating at 81% utilization in FY 2020*

d) *The stated design capacity of 570,000 MT is based on a dwell time of 24 hours. However the dwell time of international cargo varies every month there by impacting the processing and storing capacity at the cargo terminals. The average dwell time for the last 12 months for exports was 16.5 hours and 51 hrs for imports at AISATS and MABB. Because of the above, the actual utilization % is much higher for imports vs actual throughput, thereby necessitating augmentation of capacity."*

5.2.66 The Authority examined the justification for cargo terminal capital expenditure submitted by BIAL and has noted the utilization levels of the cold chain facilities. The Authority proposes to allow the cargo terminal capital expenditure in the RAB of BIAL.

B16 and B17 – Landscape works and Alpha 4 project

5.2.67 The Authority reviewed the submission of BIAL for the Landscape works and Alpha 4 project.

5.2.68 On the backdrop of the impact on air traffic and the entire aviation industry due to COVID-19, the Authority is of the view that there is a need to postpone the capital expenditure which is not urgent or not ongoing from the Third Control Period. This would reduce the tariff burden on the airport users.

5.2.69 In its MYTP, BIAL has submitted that the Alpha 4 is proposed in the later part of the Third Control Period due to the impact of COVID-19 on air traffic and its current staff are accommodated at different locations across the airport on the short-term basis. The Authority noted that BIAL has already accommodated its employees and BIAL has also acknowledged the impact of COVID-19 on the capital expenditure plans of the airport. Therefore, the Authority is of the view that Alpha 4 is not an urgent requirement of the airport and it can be postponed to the next control period.

5.2.70 Similarly, the Authority noted that the landscape works are also proposed to be capitalized in the last year of the Third Control Period, that is, FY26. BIAL has proposed these landscape works through sustainable drainage along with a network of footpaths and cycle paths for sustainable transport. The Authority is of the view that these capital expenditure projects are not urgent for the airport and can be postponed to the next control period.

5.2.71 Accordingly, the Authority proposes to exclude the Landscape works and Alpha 4 project cost from the Third Control Period.

B19 – Design, PMC and Pre-ops cost

5.2.72 BIAL in its MYTP has submitted to the Authority to consider the Design and PMC costs as 10% of the project cost. The Authority in the Second Control Period order had decided to allow design and PMC cost as 5% of the project cost based on the independent consultant's study. In line with the decision of the Second Control Period order, the Authority proposes to consider the Design and PMC cost as 5% of the Third Control Period project cost.

5.2.73 BIAL in its MYTP has submitted to the Authority to consider the contingency costs as 10% of the project cost. The Authority in the Second Control Period order had decided to allow contingency cost as 3% of the project cost. In line with the decision of the Second Control Period order, the Authority proposes to consider the contingency cost as 3% of the Third Control Period project cost.

5.2.74 BIAL in its MYTP has submitted to the Authority to consider the pre-operative expenses as 5% of the project cost. The Authority has detailed its reason in section 5.2.46 to exclude the pre-operative expenses from the RAB of BIAL and accordingly, the Authority proposes to exclude the pre-operative expenses from the Third Control Period project cost.

B20 – CISF Permanent Housing – Phase I

5.2.75 BIAL has proposed to include the CISF quarters cost as part of the RAB of the Third Control Period.

5.2.76 The Authority has noted that the CISF is an integral part of the airport security. However, the funding of the quarters for the CISF staff by the airport users needs to be analysed as similar infrastructure is required at all the other major airports.

5.2.77 The Authority noted that BIAL has submitted the Detailed Project Report on the CISF housing project based on the requirements submitted by CISF. The Authority noted that BIAL has not undertaken its own detailed due diligence of the project requirement which includes, among other things, evaluation of the projections of the CISF staff at the airport based on the traffic forecast/ expansion at the airport and diligence of the proposed housing facilities.

5.2.78 The Authority also noted that the cost benefit analysis for the construction of the entire township is not submitted by BIAL. The Authority is of the view the cost benefit analysis needs to take into consideration construction cost of the entire township and the savings from reimbursement of existing house rent allowance (HRA).

5.2.79 The Authority proposes to exclude the proposal for CISF permanent housing project from the Third Control Period and consider it during the fourth control period after reviewing the above requirements.

Other observations of the Authority for the capital expenditure in group B

5.2.80 The Authority noted that BIAL has submitted the stage II Stakeholder Consultation and has not submitted the stage III stakeholder consultation (cost approval). BIAL has submitted that it is undertaking the detailed design for the Third Control Period projects and will submit the stage III of the AUCC once it is completed. The Authority directs BIAL to undertake the stakeholder consultation process as per the AERA guidelines for the projects proposed in the Third Control Period.

5.2.81 The Authority has noted that the study on the asset allocation (refer Annexure 3 for summary of the report) has made the following suggestion to BIAL: "The fixed asset register does not provide the project-wise total capital expenditure. Therefore, it is difficult to compare the projected capital expenditure approved by AERA in its order for a particular project with the actual capital expenditure incurred by BIAL for it. BIAL should include the same terminology used by it during the submission to AERA for the asset capitalized in the fixed asset register." The Authority directs BIAL to maintain its fixed asset register as per the above suggestion.

Capital expenditure proposed by the Authority for group B

5.2.82 Based on the above revisions the capital expenditure proposed by the Authority for the Third Control Period other than the sustaining capex and deferred projects of Second Control Period is given in the table below:

Table 84: Fresh capital expenditure proposed by the Authority for the Third Control Period

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority (3)	Difference (4 = 3-2)	Para in the consultation paper
B	Capex projects for the TCP	B1	Airside Security wall	3.88	3.88	3.88	0.00	
		B2	Airside perimeter Road	18.21	18.20	18.20	0.00	
		B3	T1 Optimization	249.51	249.51	50.00	-199.51	5.2.57
		B4	Cycle Track along SAR / SWR / NCR plus docking stations	12.89	0.00	0.00	0.00	
		B5	MMTH - Phase 2	268.59	129.41	0.00	-129.41	5.2.60
		B6	Airport Terminal Metro Station	156.82	156.82	0.00	-156.82	5.2.60
		B7	City Side Metro Station	97.60	97.60	0.00	-97.60	5.2.61

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority (3)	Difference (4 = 3-2)	Para in the consultation paper
		B8	North west road expansion	41.13	41.13	41.13	0.00	
		B9	CISF Barrack Expansion and Access Road	44.79	44.79	22.40	-22.40	5.2.64
		B10	BIAL Campus Parking and Canteen	69.65	0.00	0.00	0.00	
		B11	Animal Quarantine facility	3.65	3.65	3.65	0.00	
		B12	New cargo domestic terminal including Cool Port	101.88	101.88	101.88	0.00	
		B13	Refurbishment of existing cargo terminals	118.76	118.76	118.76	0.00	
		B14	Refurbishment of catering buildings	25.81	25.81	25.81	0.00	
		B15	Water Treatment Plant	6.80	6.80	6.80	0.00	
		B16	Landscape Works	69.39	69.39	0.00	-69.39	5.2.71
		B17	Alpha 4	204.37	204.38	0.00	-204.38	5.2.71
		B18	Landside Maintenance Building	12.48	12.48	12.48	0.00	
		B19	Design, PMC, Pre-ops cost and Contingency	399.15	340.39	33.01	-307.38	5.2.72, 5.2.73 and 5.2.74
		B20	CISF Permanent Housing - Phase I	369.68	369.68	0.00	-369.68	5.2.79
		B	**Capex projects for the TCP**	**2,275.04**	**1,994.57**	**438.00**	**-1556.57**	
	IDC			166.49	156.42	3.20	-153.22	5.2.48
	Total (including IDC)			**2,441.53**	**2,150.98**	**441.20**	**-1709.78**	

C. Sustaining Capital Expenditure for the Third Control Period

5.2.83 BIAL in its submission dated 2 March 2021 had proposed to defer sustaining capital expenditure of INR 239.56 cr. from FY21 to FY22. Accordingly, the sustaining capital expenditure proposed by BIAL in the Third Control Period is given in the table below:

Table 85: Sustaining capital expenditure proposed by BIAL for the Third Control Period

Reference	Project/ Group	Proposed capex as per BIAL's MYTP submission for TCP	Revised proposed capex as per BIAL for TCP
C	Sustaining capital expenditure	**1,344.59**	**1,584.15**

5.2.84 The detailed break-up of the sustaining capex proposed by BIAL in the Third Control Period is given in the Annexure 7.

5.2.85 The Authority has examined the submission of BIAL on the sustaining capital expenditure.

5.2.86 The Authority had allowed a sustaining capex to BIAL of INR 200 cr. per year from FY19 to FY21 in the Second Control Period order based on average of the sustaining capex in FY17 and FY18. The Authority has noted that the average sustaining capex is INR 197.45 cr. per year for the Second Control Period based on the actuals from FY17 to FY20 and forecast for FY21. Below table provides the details of the sustaining capex for the Second Control Period:

Table 86: Sustaining capital expenditure of the Second Control Period

Particulars (INR cr.)	2017	2018	2019	2020	2021 (forecasted)	Total	Average
Sustaining Capex	225.70	132.11	159.51	183.41	286.50	**987.23**	**197.45**

5.2.87 Accordingly, the Authority proposes to consider the sustaining capex of INR 197.45 cr. per year in the Third Control Period for BIAL as given in the table below.

Table 87: Sustaining capital expenditure proposed by the Authority for the Third Control Period

Reference	Project/ Group	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority (3)	Difference (4 = 3-2)
C	Sustaining Capex for TCP	1,344.59	1,584.15	**987.23**	**-596.92**

5.2.88 The Authority proposes to consider only the sustaining capex works proposed by BIAL in the Third Control Period (refer Annexure 7) during the true-up of the next control period, that is, the Authority will not consider new sustaining capex works during the true-up of the next control period. The Authority directs BIAL to submit a work-item wise comparison between the sustaining capex submitted by BIAL as part of the Third Control Period (refer Annexure 7) and the actual sustaining capex incurred by BIAL in the Third Control Period in its MYTP submission of the next control period.

Total asset addition proposed by the Authority in the Third Control Period

5.2.89 Based on the above, the Authority proposes to consider the following total asset addition in the Third Control Period:

Table 88: Total asset addition for the Third Control Period proposed by the Authority

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority for TCP (3)	Difference (4=3-2)
A	Capex projects deferred from	A1	Terminal 2 - Phase I	3,565.67	3,565.67	3,565.67	0.00

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority for TCP (3)	Difference (4=3-2)
	SCP to TCP						
		A2	Forecourt, roadways & landside development - Phase 1b	1,786.40	1,786.40	1,712.96	-73.44
		A3	Aircraft Maintenance & Airport Maintenance Facilities	41.16	41.16	41.16	0.00
		A4	Utilities	104.22	104.22	104.22	0.00
		A5	T2 - Apron Phase 2	0.00	427.73	407.23	-20.50
		A6	South Parallel Runway - Phase 2	0.00	362.95	362.95	0.00
		A7	Design, PMC and Pre-ops cost	710.16	830.57	350.20	-480.37
		A	**Capex projects deferred from SCP to TCP (sub-total)**	**6,207.60**	**7,118.69**	**6,544.38**	-574.31
B	Capex projects for the TCP	B1	Airside Security wall	3.88	3.88	3.88	0.00
		B2	Airside perimeter Road	18.21	18.20	18.20	0.00
		B3	T1 Optimization	249.51	249.51	50.00	-199.51
		B4	Cycle Track along SAR / SWR / NCR plus docking stations	12.89	0.00	0.00	0.00
		B5	MMTH - Phase 2	268.59	129.41	0.00	-129.41
		B6	Airport Terminal Metro Station	156.82	156.82	0.00	-156.82
		B7	City Side Metro Station	97.60	97.60	0.00	-97.60
		B8	North west road expansion	41.13	41.13	41.13	0.00
		B9	CISF Barrack Expansion and Access Road	44.79	44.79	22.40	-22.40
		B10	BIAL Campus Parking and Canteen	69.65	0.00	0.00	0.00
		B11	Animal Quarantine facility	3.65	3.65	3.65	0.00
		B12	New cargo domestic terminal including Cool Port	101.88	101.88	101.88	0.00
		B13	Refurbishment of existing cargo terminals	118.76	118.76	118.76	0.00
		B14	Refurbishment of catering buildings	25.81	25.81	25.81	0.00
		B15	Water Treatment Plant	6.80	6.80	6.80	0.00
		B16	Landscape Works	69.39	69.39	0.00	-69.39
		B17	Alpha 4	204.37	204.38	0.00	-204.38
		B18	Landside Maintenance Building	12.48	12.48	12.48	0.00
		B19	Design, PMC and Pre-ops cost	399.15	340.39	33.01	-307.38
		B20	CISF Permanent Housing - Phase I	369.68	369.68	0.00	-369.68

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Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Proposed capex as per Authority for TCP (3)	Difference (4=3-2)
		B	**Capex projects for the TCP**	**2275.04**	**1994.57**	**438.00**	-1,556.57
C	Sustaining capex for the TCP			1,344.59	1,584.15	987.23	-596.92
	Grand Total			**9827.23**	**10697.41**	**7969.61**	-2,727.80
D	IDC			980.88	1,061.22	856.99	-204.23
E	**Total (including IDC)**			**10,808.11**	**11,758.63**	**8,826.60**	-2,932.04

5.2.90 Following table provides the year-wise total asset addition proposed by the Authority during the Third Control Period:

Table 89: Total year-wise asset addition proposed by the Authority in the Third Control Period

Ref	Project#	2022	2023	2024	2025	2026	Total
A1	Terminal 2 - Phase I	4,355.53					4,355.53
A2.1	Forecourt, roadways & landside development - Phase Ib (except MMTH)	1,426.29					1,426.29
A2.2	MMTH - Phase I	527.54					527.54
A3	Aircraft Maintenance & Airport Maintenance Facilities	44.92					44.92
A4	Utilities	123.58					123.58
A5	T2 Apron - Phase II	444.00					444.00
A6	South Runway - Phase II	476.30					476.30
A	**Sub-Total - Deferred projects from SCP**	**7,398.16**	**0.00**	**0.00**	**0.00**	**0.00**	**7,398.16**
B1	Airside Security wall		4.32				4.32
B2	Airside perimeter Road		20.25				20.25
B3	T1 Optimization				54.08		54.08
B4	Cycle Track along SAR / SWR / NCR plus docking stations						0.00
B5	MMTH - Phase 2					0.00	0.00
B6	Airport Terminal Metro Station					0.00	0.00
B7	City Side Metro Station						0.00
B8	North west road expansion					44.48	44.48
B9	CISF Barrack Expansion					24.22	24.22
B10	BIAL Campus Parking and Canteen						0.00
B11	Animal Quarantine facility					3.95	3.95

Ref	Project#	2022	2023	2024	2025	2026	Total
B12	New cargo domestic terminal including Cool Port		110.97				110.97
B13	Refurbishment of existing cargo terminals		129.35				129.35
B14	Refurbishment of existing catering buildings		28.57				28.57
B15	Water Treatment Plant		7.53				7.53
B16	Landscape Works					0.00	0.00
B17	Alpha 4					0.00	0.00
B18	Landside Maintenance Building					13.50	13.50
B20	CISF Permanent housing - Phase I					0.00	0.00
B	**Sub-Total - Projects proposed in TCP**	**0.00**	**300.98**	**0.00**	**54.08**	**86.14**	**441.20**
C	Sustaining capex	197.45	197.45	197.45	197.45	197.45	987.23
	Total	**7,595.61**	**498.43**	**197.45**	**251.52**	**283.59**	**8,826.60**

* for FY22, the asset allocation ratio for sustaining capex is 85.73%; # total asset additions includes the design, PMC, contingency and IDC

Asset allocation and aeronautical asset additions for the Third Control Period

5.2.91 BIAL has bifurcated the Terminal 2 assets based on the aero to non-aero floor area ratio of 88% to 12% as per Second Control Period order. The Authority has noted from the submission by BIAL on the area break-up for Terminal 2 that the proposed aero to non-aero floor area ratio is 87.7%. The Authority proposes to consider the bifurcate the Terminal 2 asset into aeronautical and non-aeronautical based on the floor area ratio of Terminal 2 of 87.7%.

5.2.92 BIAL has classified the broader categories of capex addition into aeronautical, non-aeronautical, Terminal 2 and common assets. BIAL has bifurcated the common assets based on average of FY19 and FY20 gross block ratio which is also 91% to 9%. The Authority notes that the gross block ratio is a composite ratio and a weighted average of aero, common and non-aero assets. Hence, the Authority notes that the gross block ratio should be applied on entire capex addition irrespective of it being aero, common or non-aero instead of BIAL's approach of applying it selectively on common assets. Common assets have been segregated by BIAL in its asset register based on terminal area ratio and therefore, the Authority proposes to apply the same ratio (85.73% based on Terminal 1 area) for common assets capitalized in FY22. Terminal 2 is proposed to be capitalized in FY22. The Authority proposes to apply weighted average terminal area ratio of 86.85% from FY23 to FY26. Based on the above, the Authority proposes to revise bifurcation ratio for common assets of the Third Control Period.

5.2.93 The Authority noted that BIAL has considered the refurbishment of existing cargo terminals and new cargo terminal. Based on the AERA guidelines, the Authority proposes to consider refurbishment of existing cargo terminals and new cargo terminal as aeronautical assets.

5.2.94 As per the discussion in section 5.2.33 on the bifurcation of the rainwater harvesting ponds, the Authority proposes to bifurcate the RWH ponds into aeronautical and non-aeronautical based on the average terminal area ratio.

5.2.95 The Authority proposes to consider the aeronautical asset allocation for the Third Control Period as given in the table below:

Table 90: Aeronautical capital expenditure proposed by the Authority in the Third Control Period

				Aero Additions					
S no	**Asset additions (INR cr.)***	**Total addition**	**Aero Allocation ratio (%)**	**2022**	**2023**	**2024**	**2025**	**2026**	**Total aero**
A1	Terminal 2 - Phase I	4,355.53	87.66%	3,818.06	-	-	-	-	3,818.06
A2.1	Forecourt, roadways & landside development - Phase 1b (except MMTH)	1,426.29	85.73%	1,222.76	-	-	-	-	1,222.76
A2.2	MMTH - Phase 1	527.54	31.53%	166.34	-	-	-	-	166.34
A3	Aircraft Maintenance & Airport Maintenance Facilities	44.92	85.73%	38.51	-	-	-	-	38.51
A4	Utilities	123.58	85.73%	105.94	-	-	-	-	105.94
A5	T2 Apron - Phase II	444.00	99.19%	440.40	-	-	-	-	440.40
A6	South Runway - Phase II	476.30	100.00%	476.30	-	-	-	-	476.30
A	**Sub-Total - Deferred projects from SCP**	**7,398.16**		**6,268.31**	-	-	-	-	**6,268.31**
B1	Airside Security wall	4.32	100.00%	-	4.32	-	-	-	4.32
B2	Airside perimeter Road	20.25	100.00%	-	20.25	-	-	-	20.25
B3	T1 Optimization	54.08	86.85%	-	-	-	46.96	-	46.96
B4	Cycle Track along SAR / SWR / NCR plus docking stations	0.00	100.00%	-	-	-	-	-	-
B5	MMTH - Phase 2	0.00	31.53%	-	-	-	-	-	-
B6	Airport Terminal Metro Station	0.00	100.00%	-	-	-	-	-	-
B7	City side Metro Station	0.00	0.00%	-	-	-	-	-	-
B8	North west road expansion	44.48	100.00%	-	-	-	-	44.48	44.48
B9	CISF Barrack Expansion	24.22	100.00%	-	-	-	-	24.22	24.22
B10	BIAL Campus Parking and Canteen	0.00	100.00%	-	-	-	-	-	-
B11	Animal Quarantine facility	3.95	100.00%	-	-	-	-	3.95	3.95
B12	New cargo domestic terminal including Cool Port	110.97	100.00%	-	110.97	-	-	-	110.97
B13	Refurbishment of existing cargo terminals	129.35	100.00%	-	129.35	-	-	-	129.35
B14	Refurbishment of existing catering buildings	28.57	0.00%	-	-	-	-	-	-
B15	Water Treatment Plant	7.53	100.00%	-	7.53	-	-	-	7.53

				Aero Additions					
S no	**Asset additions (INR cr.)***	**Total addition**	**Aero Allocation ratio (%)**	**2022**	**2023**	**2024**	**2025**	**2026**	**Total aero**
B16	Landscape Works	0.00	100.00%	-	-	-	-	-	-
B17	Alpha 4	0.00	86.85%	-	-	-	-	-	-
B18	Landside Maintenance Building	13.50	86.85%	-	-	-	-	11.72	11.72
B20	CISF Permanent housing - Phase I	0.00	100.00%	-	-	-	-	-	-
B	**Sub-Total - Projects proposed in TCP**	**441.20**		-	**272.41**	-	**46.96**	**84.37**	**403.74**
C	Sustaining capex	987.23		169.27	171.49	171.49	171.49	171.49	855.22
	Total	**8,826.60**		**6,437.58**	**443.90**	**171.49**	**218.45**	**255.86**	**7,527.27**

* aeronautical asset additions include the design, PMC, contingency and IDC

5.2.96 The Authority proposes to true-up the total asset addition and the aeronautical asset addition for the Third Control Period based on the actual asset addition undertaken in the next control period and subject to its reasonableness.

5.2.97 The Authority proposes to true-up the asset allocation of the assets capitalized in the Third Control Period based on the actual asset addition undertaken in the next control period and subject to its reasonableness.

Authority's examination regarding depreciation for the Third Control Period

5.2.98 The Authority proposes to revise the useful life of the assets based on the Order no. 35/ 2017-18 applicable from 1 April 2018 onwards for the Third Control Period.

5.2.99 The Authority's observation in this regard are given in section 3.6.6 of the true-up chapter. Following are the revisions proposed:

a) Asset Class – Plant and Machinery (Aerobridges, Airport Communication, Baggage Handling, Escalators/ Elevators, HVAC Equipment, Other Airport Equipment and Security/ Safety Equipment) – Revised from 7.5 years to 15 years

b) Asset Class – Buildings (Canopy, New Project Office building and nursery unit under Building category)– Revised to 30 years

c) Asset Class – Runway and Taxiway – Revised to 30 years

5.2.100 Additionally, the Authority proposes to undertake the following changes to the submission of BIAL relating to depreciation:

a) BIAL has commissioned the land development capex in FY20 and therefore has considered the useful life as 48.5 years based on the available lease period. However, while projecting the depreciation for Third Control Period, BIAL has considered the useful life of land development capex as 30 years. Based on the useful life in FY20, the Authority proposes to consider the same useful life of 48.5 years for land development capex in the Third Control Period.

b) Adjustment of depreciation of the assets excluded as per EIL study

c) Adjustment of depreciation on the pre-operative expenses excluded from the RAB

5.2.101 Based on the above, the Authority proposes to consider the below useful life for the Third Control Period.

Table 91: Useful life considered by the Authority for the Third Control Period

Asset type	Useful life (years)
Earthwork	48.5
Terminal, utility, office and other buildings	30
Runway, taxiway and apron	30
Water management system	30
Roads	5
Roads (Trumpet)	20
Baggage handling, aerobridges, HVAC equipment, other airport equipment	15
Electrical fittings	10
Security/ safety equipments	15
IT Equipment	6
Software	5
Furniture and fixtures	7
Vehicles	8
Office equipment	5
Intangibles (agreements)	30

5.2.102 The Authority has recomputed the total depreciation based on the revised useful life of assets and revised asset addition. The Authority proposes to apply the proportion of the aeronautical assets on total depreciation to determine the depreciation on aeronautical assets. The Authority noted that the proportion of the aeronautical assets is varying from year-on-year basis since BIAL has undertaken expansion of the airport facilities. Therefore, the Authority proposes to apply the proportion of the aeronautical assets of a particular year to the depreciation amount of the respective year.

5.2.103 Based on the changes suggested above, the depreciation proposed by the Authority for the Third Control Period is given in the table below:

Table 92: Depreciation proposed by the Authority for the Third Control Period

Particulars (In INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total depreciation as per BIAL (A)	**541.48**	**726.38**	**752.18**	**760.23**	**797.08**	**3,577.35**
Adj. - Change in useful life, revision in asset addition (B)	-91.27	-103.81	-114.12	-129.52	-165.36	-604.08
Adj. - EIL assets (C)	-0.90	-0.90	-0.90	-0.90	-0.90	-4.48
Adj. - Depreciation on excluded pre-operative expenses (D)	-2.48	-2.48	-2.48	-2.48	-2.48	-12.41
Total adjusted depreciation (E = A+B+C+D)	**446.83**	**619.19**	**634.68**	**627.33**	**628.34**	**2,956.38**

Particulars (In INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical proportion of gross block (F)	87.46%	87.51%	87.50%	87.49%	87.54%	
Aeronautical depreciation as per the Authority (G = E*F)	**390.78**	**541.86**	**555.35**	**548.86**	**550.05**	**2,586.90**

5.2.104 The Authority notes the depreciation will change based on the changes in the asset additions and the date of capitalization. The Authority proposes to true-up the depreciation of the Third Control Period based on the actual asset additions and the actual date of capitalization.

Regulated Asset Base

5.2.105 Based on the discussions in the previous sections on the aeronautical asset addition and the aeronautical depreciation, the Authority proposes to consider the following RAB for the Third Control Period:

Table 93: RAB proposed by the Authority for the Third Control Period

Particulars	2022	2023	2024	2025	2026	Total
Aero opening RAB	4,091.07	10,137.86	10,039.90	9,656.04	9,325.63	
Add: Aero assets capitalized (refer *Table 90*)	6,437.58	443.90	171.49	218.45	255.86	**7,527.27**
Less: Aero disposals	0.00	0.00	0.00	0.00	0.00	**0.00**
Less: Aero depreciation (refer *Table 92*)	390.78	541.86	555.35	548.86	550.05	**2,586.90**
Aero closing RAB	**10,137.86**	**10,039.90**	**9,656.04**	**9,325.63**	**9,031.44**	
Average RAB	**7,114.47**	**10,088.88**	**9,847.97**	**9,490.84**	**9,178.54**	

* FY22 asset addition includes the T2 Apron and South Runway – Phase 2 deferred from FY21 to FY22 which was capitalized by BIAL in its MYTP submission in FY21 and FY23 asset addition includes the cargo terminal project which was considered by BIAL as non-aeronautical and hence excluded

5.3 Stakeholder comments regarding regulated asset base and depreciation 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. 10/ 2021-22 with respect to regulated asset base and depreciation for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on regulated asset base and depreciation for the Third Control Period

5.3.2 BIAL commented as follows on the PMC cost for Terminal 2 in FY22:

- *"BIAL has undertaken an integrated large-scale Airside and Terminal development program with associated road and other infrastructure facilities comprising of more than 80 sub-projects. The PMC has been engaged for overseeing and managing the project as per stringent safety and quality standards. BIAL had adopted a judicious mix of PMC staffing and own staffing to meet these safety, quality, time and cost challenges.*

- *The PMC services are based on fixed duration and on a fixed cost basis. PMC services will be provided until the completion date and fee is based on deployment of resources at agreed rates as per the contract. The contracted scope of services includes pre-construction support, construction management and project closeout, handover and operationalization primarily for NSPR & Terminal-2 projects and support for landside projects.*

- *The initial deployment by PMC was planned based on Project completion timeline for March'2021.*
- *However, due to Covid-19 pandemic from Jan'2020, the projects suffered various delays on account of material supplies, skilled workers and availability of required machinery on the job site. Also due to lockdown restrictions imposed by the Government, the projects have slowed down at various stages leading to extension of the planned completion timeline. Consequently, the project completion timeline got extended to March 2022 (as submitted in MYTP).*
- *This Covid-19 induced delay in Project completion, necessitated the extension of duration of services by the PMC to support project completion, which has a direct impact on the PMC cost. The number of man-months to complete the scope of services is revised to 2,787 with deployment extended until June 2022 to cover project closeout phase which is a 22% increase as summarized below.*

	Planned	***Revised***	***Increase***
Project Completion	*March-2021*	*March-2022*	*12 months*
Duration of deployment	*48 months*	*55 months*	*7 months*
Man-months deployed	*2291*	*2787*	*22%*

- *Project Management Contracts are typically based on man months (time related). Hence, any change in the completion date would automatically result in increase in the man months needed for completing the Project and hence an increase in the PMC cost.*
- *Given the Covid-19 situation, BIAL has negotiated with the PMC to reduce cost by removal of escalation clause, changes in deployment plan etc. to optimize the use of PMC on the project.*
- *Authority, vide letter dated 13th September 2018, has clarified that, in case there is delay in completion of project beyond March 2021, due to any reason beyond the control of BIAL or its contracting agency and is justified, the same would be considered by the Authority while truing up the actual cost at the time of determination of tariff for the Third Control Period in respect of IDC and PMC. Hence, this clarification is intended only for time related delay in Project completion and not scope related.*
- *BIAL is requesting the additional cost for only time delay in project completion.*
- *Based on the above clarificatory letter, BIAL has gone ahead and executed contracts and achieved Financial closure.*
- *Having specifically clarified that the IDC and PMC cost would be considered if it is justified, the Authority has not allowed the additional PMC cost for the additional time period required to complete the project. This is despite the Authority acknowledging the fact that the Covid-19 pandemic has created genuine issues for completion of the project in Mar 2021. Hence the Authority cannot pick and choose from its own clarificatory letter.*
- *BIAL also notes that Authority has, in Paras 5.2.17 and 5.2.18 contradicted its stated position regarding additional PMC for extended period. From a reading of these two paragraphs, it is BIAL's understanding that while AERA may not currently approve the additional PMC cost to be added to RAB, the Authority will true up the same at the time of determination of tariff during fourth control period.*

- *BIAL wishes to submit that given the current circumstances, it is not possible to let go of the PMC abruptly and put the entire T2 and associated projects at risk and hence request the Authority to consider these costs towards PMC and true up the same at the time of next control period.*
- *Covid-19 pandemic is an undeniable global reality. There is no denying the fact that work was brought to a halt or rendered sluggish by the pandemic. In these circumstances, it is just, fair and necessary that additional PMC expenses be considered."*

5.3.3 BIAL commented as follows on the allocation ratio of the MMTH for bifurcation into aeronautical and non-aeronautical:

- *"One of the important determinants of tariff determination is the segregation of assets into aero and non-aero assets. The bifurcation is based on number of factors such as usage of the assets, location of the assets, revenue generation from the assets etc. The MMTH is an integrated structure that has bus station, metro station, car park, baggage sorting, forecourt, kerbside and retail areas. The Authority has bifurcated the areas into aero and non-aero as per Table 64. The Authority has considered the baggage sorting, bus station and Level 1 of passenger circulation and landscape as Aero areas.*
- *Having established that the MMTH concept as envisaged by BIAL is a Common asset having both aero and non-aero services, the treatment of the MMTH is to be done similar to that of Terminal building which has both aero and non-aero services. A Terminal building AERA is divided into aero, non-aero and Common area. On similar lines, BIAL had submitted the detailed area working for MMTH showing the level wise floor plans with the areas clearly demarcated as aero, non-aero and common areas.*
- *Each floor includes common areas like elevators/staircase, MEPF, Toilets etc. Based on the area allocation into aero, non-aero and common areas, BIAL submits the allocation as below:*

Area description	***Usage***	***Area***	***Allocn – Consultation Paper***	***Allocn - BIAL***	***Remarks***
MULTI LEVEL CAR PARKING AREA DESCRIPTION		***174592***			
BASMENT 3 OVER ALL AREA	***Baggage***	***6555***			
Baggage sort and Conveyor		*5137*	*Aero*	*Aero*	
Staircase, Lift		*328*	*Aero*	*Aero*	
MEPF (Service Zones)		*1090*	*Aero*	*Aero*	
BASMENT 2 OVER ALL AREA	***Parking***	***35722***			
Staircase, Lift, Escalator		*1226*	*Non-Aero*	*Aero*	*Staircases, Lifts and escalators serves the passenger to come to Terminal and hence considered as Aero facility*
Lift and Staircase Public Lobby		*943*	*Non-Aero*	*Common*	*Lift Lobbies and Staircases serve the passengers arriving and departing terminal 2, this area is a common area*

Area description	Usage	Area	Allocn – Consultation Paper	Allocn - BIAL	Remarks
Public Toilets		198	Non-Aero	Aero	Toilets are serving the passengers arriving and departing to Terminal 2 hence this has to be considered as part of Aero
Car Parking		15947	Non-Aero	Non-Aero	
6M wide driveway		14537	Non-Aero	Non-Aero	
Ramps		625	Non-Aero	Non-Aero	
MEPF (Service Zones)		2246	Non-Aero	Aero	These MEPF service zones are designed to ventilated the underground basement providing adequate lighting and services. Fan rooms and electrical rooms with sprinklers and water curtain systems during emergency. These are as part National Building code requirements meeting the fire standards. Considered as Aero
BASMENT 1.5 OVER ALL AREA	**Bus Bay**	**14791**			
Bus Kerb Area		3537	Aero	Aero	
Bus Driveway and Bus Parking for 18 buses		7440	Aero	Aero	
Loading Dock, Garbage service zone		1132	Aero	Aero	
Staircase, Lift, Escalator		517	Aero	Aero	Staircases, Lifts and escalators serves as common travel cores connecting all the basements. Facilitating passenger movement to the car park and pick up and drop off kerb. This has to be considered Aero.
MEPF (Service Zones)		1783	Aero	Aero	These MEPF service zones are designed to ventilate the underground basement providing adequate lighting and services. Fan rooms and electrical rooms with sprinklers and water curtain systems during emergency. These are as part National Building code requirements meeting the fire standards. Considered as Aero
Public Toilets		179	Aero	Aero	Toilets are serving the passengers arriving and departing to Terminal 2 hence this has to be considered as part of Aero
Metro Service Zone		203	Aero	Aero	Metro Service zone is used for facilitating the services of Metro as MMTH is an integrated structure this has to be considered Aero

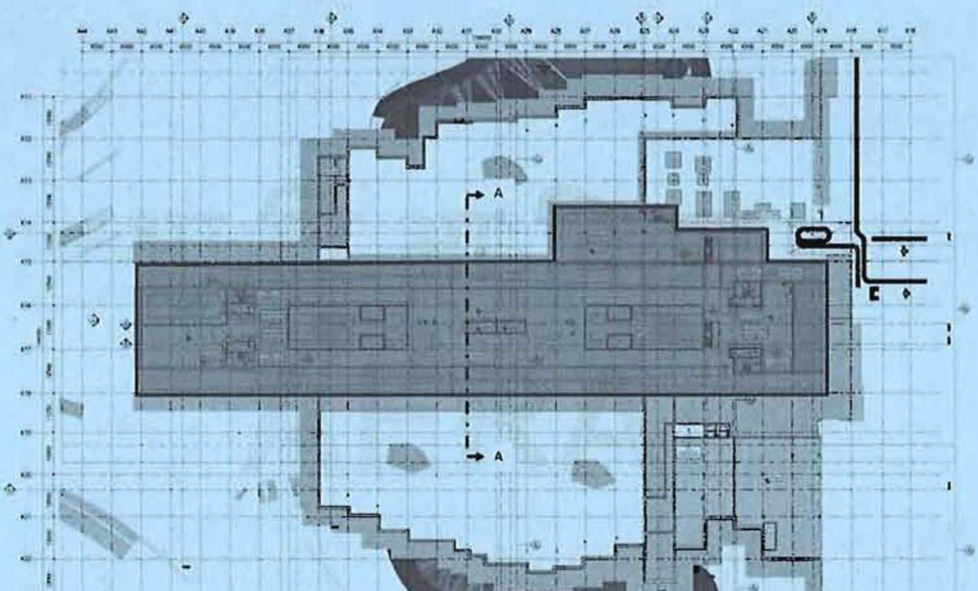
Area description	*Usage*	*Area*	*Allocn – Consultation Paper*	*Allocn - BIAL*	*Remarks*
BASEMENT I OVER ALL AREA	***Parking***	***36419***			
Pick up and drop off road		*5063*	*Non-Aero*	*Aero*	*Terminal 2 Arrivals pick up is designed within MMTH Basement I at the extreme East end all along the length of Terminal 2 forecourt. This is only kerb serving Terminal 2 passenger arriving and part of the integral road network. Hence this has to be considered Aero.*
Pick up and drop off kerb		*5160*	*Non-Aero*	*Aero*	*Terminal 2 Arrivals pick up is designed within MMTH Basement I at the extreme East end all along the length of Terminal 2 forecourt. This is only kerb serving Terminal 2 passenger arriving. Hence this has to be considered Aero.*
Landscape		*1013*	*Non-Aero*	*Aero*	*There is landscape at the pickup and drop area which is accessible to passengers arriving at the pick up and drop off kerb and hence considered as Aero.*
Medians and Walkways		*2234*	*Non-Aero*	*Aero*	*Medians all along the length of the pick-up and drop off kerb which has total 2+2 Lanes has medians dividing the roads, which has considered as part of aero.*
Public Toilets		*200*	*Non-Aero*	*Aero*	*Toilets are serving the passengers arriving and departing to Terminal 2 hence this has to be considered as part of Aero*
Misc. Area		*551*	*Non-Aero*	*Common*	
MEPF (Service Zones)		*4680*	*Non-Aero*	*Aero*	*These MEPF service zones are designed to ventilate the underground basement providing adequate lighting and services. Fan rooms and electrical rooms with sprinklers and water curtain systems during emergency. These are as part National Building code requirements meeting the fire standards. Considered as Aero*
Staircase, Lift, Escalator		*1194*	*Non-Aero*	*Aero*	*Staircases, Lifts and escalators serves as common travel cores connecting all the basements. Facilitating passenger movement to the car park and pick up and drop off kerb. This has to be considered Aero.*
Central Lift Lobby		*1071*	*Non-Aero*	*Aero*	*Staircases, Lifts and escalators serves as common travel cores connecting all the basements. Facilitating passenger movement to the car park and pick up and drop off kerb. This has to be considered Aero.*

Area description	*Usage*	*Area*	*Allocn – Consultation Paper*	*Allocn - BIAL*	*Remarks*
Car Parking 336 slots		*6052*	*Non-Aero*	*Non-Aero*	
Driveway incl. Entry and exit points		*9201*	*Non-Aero*	*Non-Aero*	
LEVEL 0 OVER ALL AREA	***Terminal, Metro, Taxi, Retail***	***47401***			
Terminal 2 Metro connection zone		*10572*	*Non-Aero*	*Aero*	*Metro Connection zone has to be considered Aero, as this zone facilitates the passenger access from Terminal 2 to Metro Station.*
Public Toilets		*1040*	*Non-Aero*	*Aero*	*Toilets are serving the passengers arriving and departing to Terminal 2 hence this has to be considered as part of Aero*
Landscape		*4268*	*Non-Aero*	*Aero*	*This is the Landscape designed for the passengers arriving and departing to Terminal 2, this is the main space across MMTH connecting from the Metro Station to the Terminal 2. This has to be considered as Aero*
Utilities		*721*	*Non-Aero*	*Aero*	*These MEPF service zones are designed to ventilate the underground basement providing adequate lighting and services. Fan rooms and electrical rooms with sprinklers and water curtain systems during emergency. These are as part National Building code requirements meeting the fire standards. Considered as Aero*
Staircase, Lift, Escalator		*1916*	*Non-Aero*	*Aero*	*Staircases, Lifts and escalators serves as common travel cores connecting all the basements. Facilitating passenger movement to the car park and pick up and drop off kerb. This has to be considered Aero.*
Premium car park zone		*4237*	*Non-Aero*	*Non-Aero*	
App taxi kerb area		*6734*	*Non-Aero*	*Non-Aero*	
Driveway		*13048*	*Non-Aero*	*Non-Aero*	
Retail		*4000*	*Non-Aero*	*Non-Aero*	
Retail circulation zone		*865*	*Non-Aero*	*Non-Aero*	
LEVEL 1 OVER ALL AREA	***Landscape and circulation***	***33704***	*Aero*	*Aero*	
Aero Area %			***31.53%***	***56.53%***	

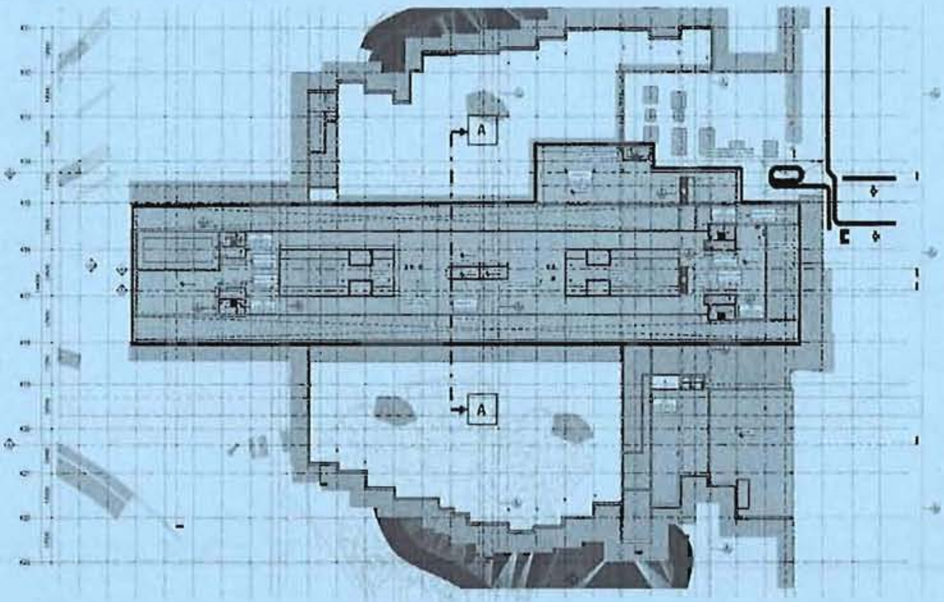
- *BIAL submits that based on the above allocation, the aero area is 57% as against 32% as taken by the Authority. We request the Authority to consider this allocation.*

5.3.4 BIAL commented as follows on inclusion of the metro enabling work in the RAB:

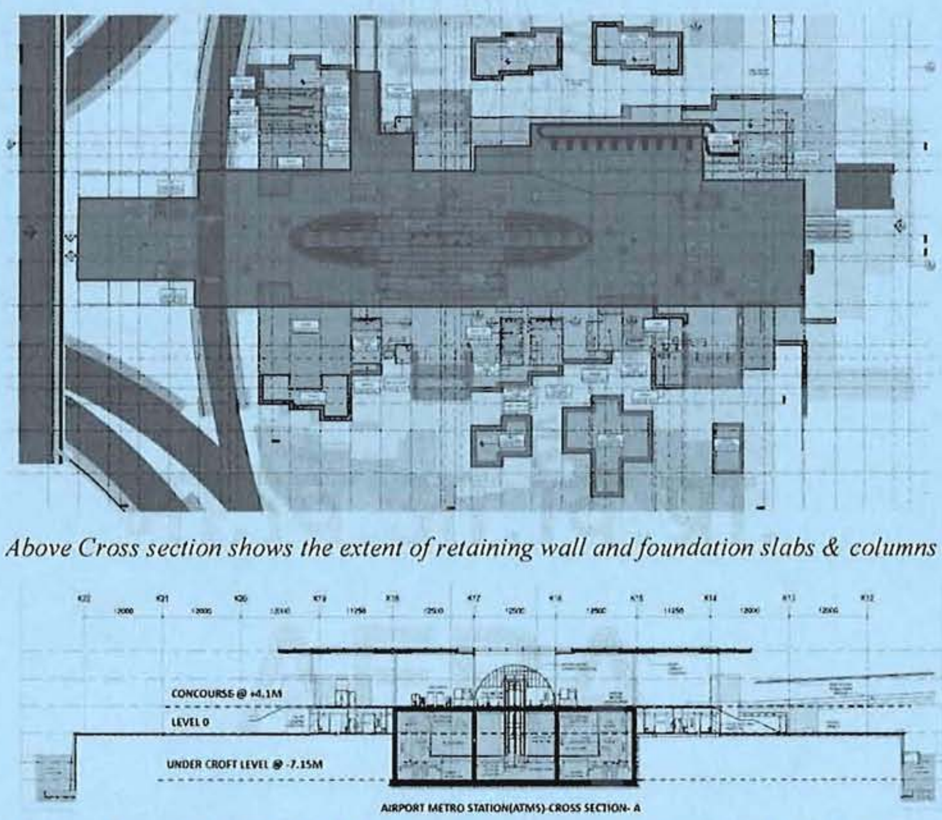
- *Metro Enabling work is an integral part of the MMTH structure. The metro enabling works included in Phase 1 of MMTH which is proposed to be commissioned in FY22 includes the following works:*
- *Earth works on Main Access Road (MAR), vertical level alignment related enabling works inside airport premises.*
- *Drains/Utilities relocation, addition being done along the route for Metro on MAR.*
- *The architectural design & engineering costs of the metro stations, so that there is architectural integration of the metro stations with the theme of the new terminal & other surrounding buildings.*
- *Design of Airport Terminal Metro Station Concourse has a concrete foundation raft at minus 8 meters with retaining walls on either side and interior columns to support the Concourse Level.*
- *Due to the depth of the foundations and the close proximity to other facilities required to open Terminal 2 (the Main Access Road, Lagoons and MLCP) it is necessary to excavate the Metro Station and construct the associated concrete structures along with the other heavy construction in the T2 Forecourt.*
- *The resulting structure will allow the Metro and the majority of the Station to be constructed in an enclosed and protected area while isolating this work from the operating Terminal T2 and related passenger movement.*
- *The diagrams below depict the location of the enabling works and the nature of works carried out as below:*
  - *Area considered in blue above - Under croft level Foundation raft @ -8M from Level 0*



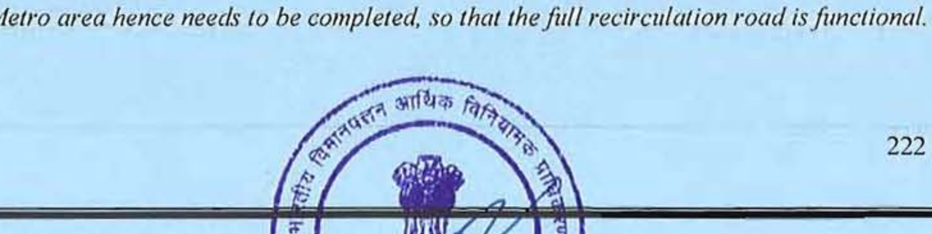
- *Extent of retaining wall considered in red above: Trackside retaining walls from Under croft level (@-8M) to Concourse level (@ +4.1M from Level 0) total height of 12M.*



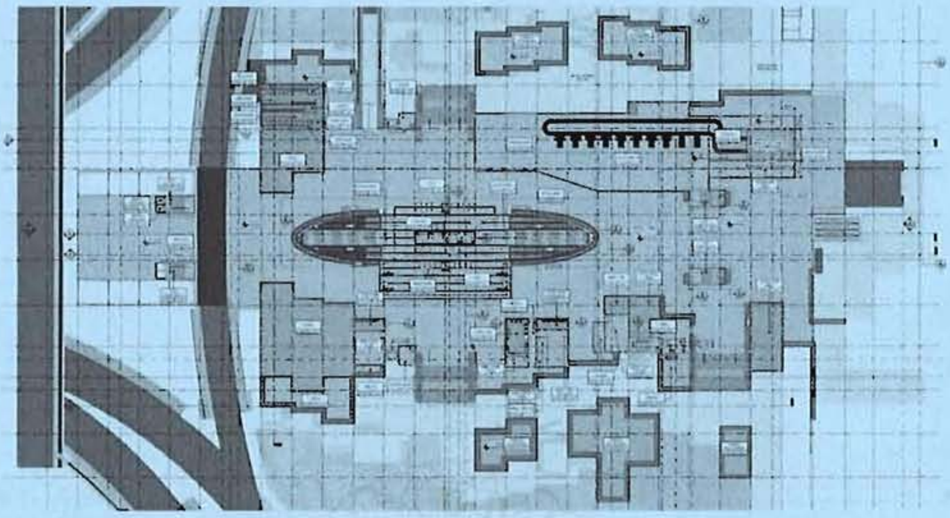
- *Extent of concourse slab considered in blue above*



- *Above Cross section shows the extent of retaining wall and foundation slabs & columns only.*



- *The area highlighted red which forms part of the recirculation road falls in the foot print of the Metro area hence needs to be completed, so that the full recirculation road is functional.*



- *From the above it is seen that the deign framework is integrated in such a manner that the recirculation of the road forms a part of the Metro area and it needs to be completed at the time of commissioning of the MMTH and it will be utilized as part of MMTH road access. Any delay in construction will have the following risks:*
    - *The Concourse and retaining walls are heavy construction requiring mass excavation, concrete works, cranes and a large construction crew and movement of heavy vehicles. Such construction is dirty, noisy and impacts adjacent areas.*
    - *Carrying on such works in the middle of the forecourt of a major operating airport will seriously impact passenger safety and passenger experience. Besides dirt and noise, there will be delays for both arriving and departing passengers.*
    - *Currently the area is a heavy construction zone and if the works are done now will not impact the passengers using Terminal 1.*
    - *Concourse construction will require laydown areas within the T2 Forecourt, which is already congested. There will also be worker movement across heavily trafficked roads, impacting Airport operations should work be done after Terminal 2 is operational.*
    - *Constructing the Concourse and other heavy works now will allow BMRCL to do all their work by accessing the work area from the Metro right of way, thereby avoiding construction traffic in the Terminal forecourts.*
- *The construction the Metro Station itself will need to commence by 2nd quarter 2022 to complete to support the completion and commissioning of the BMRCL works by 2025. Doing this Concourse work early will support both the station construction schedule and the rail and traction works which BMRCL needs to start as soon as the Concourse is complete.*
- *Construction cost will be less if built now as opposed building later in front of an operational Terminal 2.*
- *Thus, delaying the Metro Concourse work will seriously impact the passenger experience and safety at the airport, will cost more and has the potential to delay the completion of the BMRCL project to link the airport with the City.*
- *BIAL request the Authority to consider the capitalization of the Metro enabling works as proposed by BIAL together with Forecourt/ MMTH.*

- *Also, BIAL notes from the details provided in the Consultation Paper that the 'Metro Enabling Works' have not been added to RAB, even in FY 26*

5.3.5 BIAL commented as follows on the inclusion of the airport metro line in FY26:

Airport Metro line commissioning by FY 26

Background:

- *The Bangalore Metro Rail Corporation Limited (BMRCL) is a Joint venture of Government of India and Government of Karnataka and is a special Purpose Vehicle entrusted with the responsibility of implementation of Bangalore Metro Rail Project.*
- *GoK has given Cabinet approval to the Airport Metro Line and the Union Government has also approved the Metro scheme.*
- *BIAL entered into an MOU with BMRCL wherein BIAL agreed that it will develop the two (2) metro stations that will be located within the Airport boundary ("Metro station").*
- *The arrangement between BIAL and BMRCL is based on the understanding that the cost of designing and constructing the metro stations shall be borne by BIAL and necessary approvals required from AERA for such capital expenditure, would also be obtained by BIAL. Thus, BIAL did a detailed estimate of the cost and included the same in the MYTP submission.*
- *Further, the Chief Secretary, Govt. of Karnataka reiterated in the Stakeholder meeting the importance of Airport Metro line. GoK has completed major part of land acquisition and utility relocation and ready to commence work. GoK has set a deadline of June 2025 to complete phases 2A and 2B of the metro rail project.*

Progress of the Airport Metro Line

- *The Tenders for Construction for the Phase 2B – KR Puram to BIAL has been floated and the bidders have submitted their bids. The completion period for construction of via ducts and stations is estimated as 27 months.*
- *BIAL wishes to submit that the Airport Metro Line is a critical project for the connectivity of the airport and has received clearance from the Government of India and Government of Karnataka and is progressing well to achieve the deadlines of commissioning in June 2025.*
- *BIAL also has to adhere to the deadline set of June 2025 by GoK and has in turn initiated the works required such as Metro Enabling works, detailed design for Metro Stations etc. so as to complete of these stations in the 3rd Control period.*
- *Being a priority project for GoK and considering the importance of connectivity to the Airport, BIAL request the Authority to consider the cost of the Airport Metro Station.*

5.3.6 BIAL commented as follows on KIA West Metro Station:

- *The metro rail connectivity to KIAB will help air passengers and airport community who travel 35 kms by road from the city reach the airport faster with metro transit. This infrastructure also decongests access roads, landside roads and improves the overall level of service at the airport. With this objective, BIAL has proposed two metro stations inside the campus:*
  - *located close to first roundabout / trumpet on west to serve both BIAL and other concessionaire employees working in airport community. This includes both landside and airside employees.*
  - *located in terminal forecourt area inside the Multi Modal Transport Hub (MMTH) to serve mainly passengers, meeter / greeters and employees working inside terminal as shown below.*

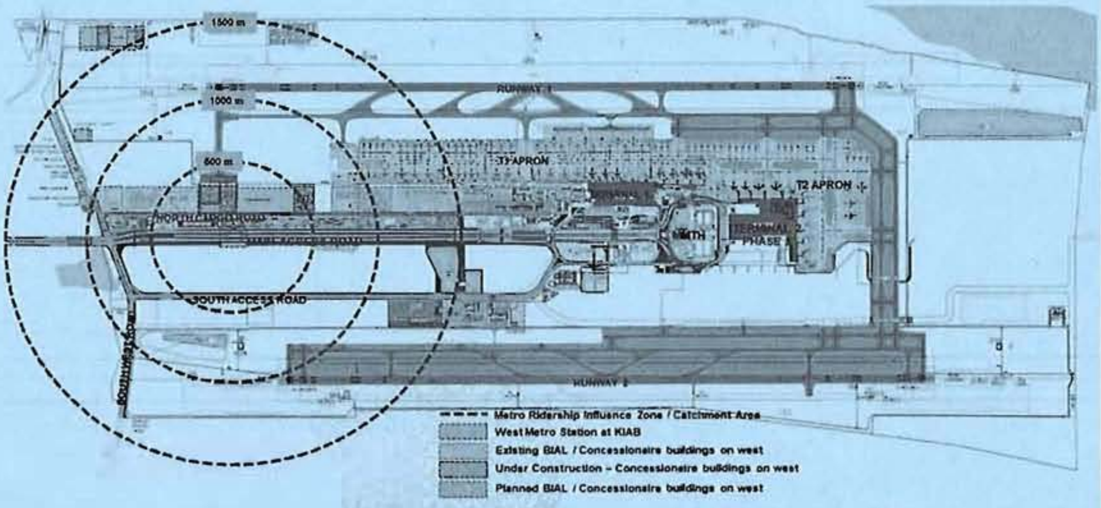
Major Users or Beneficiary of West Metro Station at KIAB

- *The total airport wide employees working at KIAB (including BIAL and Concessionaires) are approximately 22,000 in year 2019.*
- *There will be a substantial requirement for skilled, semi-skilled personnel to helm the growth at KIAB. Hence, a potential increase is expected in aviation related employment at the airport and* ***approximately 117000 employees are expected by the end of the final /ultimate development phase of BIAL i.e. by FY 33-35****.*
- *The forecast details are shown in the table below.*

Forecast	**Total Users (including both BIAL and Concessionaires)**	**Total Cargo personnel**	**Total**
FY 24-25	26500	30000	56500
FY 29-30	41000	46000	87000
FY 33-35	61000	56000	117000

- *Out of these employees, 50% of them are working in and around terminal forecourt area and the remaining 50% are working with:*
  - *Cargo Terminal Operators*
  - *Cargo Warehouses*
  - *Ground Handling Agencies*
  - *IOCL Fuel Farm*
  - *LSG and Taj Stats Catering*
  - *CISF and Other Government Agencies*
  - *Retailers and Other Concessionaires at the Airport*
  - *BIAL and Airlines staff on landside and airside and other*
  - *BIAL staff working at Utility centers and other airport support facilities.*
- *All these buildings/ facilities are located around west metro station as shown in the layout below.*
- *Currently 70% of the employees are commuting by public transport or the transport provided by the concessionaire/ airport operator.*
- *In future, when metro is available, a significant shift in mode of transport is expected as it reduces the travel cost, travel time and provides great convenience to the Airport Community including Aeronautical and Non-Aeronautical Concessionaires who have to commute long distances through the congested roads to reach the airport and back from airport to their place of work / residence etc.*
- *These users are expected to use west metro station to commute as their workplaces are located within the transit influence zone / or catchment area as shown in the layout below.*
- *The alternate choice of boarding/ alighting from the Terminal metro station will only increase the traffic movement in and around the terminal forecourt area and this will create congestion on landside roads due to provision of shuttle service to commute from terminal metro station to areas located on the west and vice versa.*

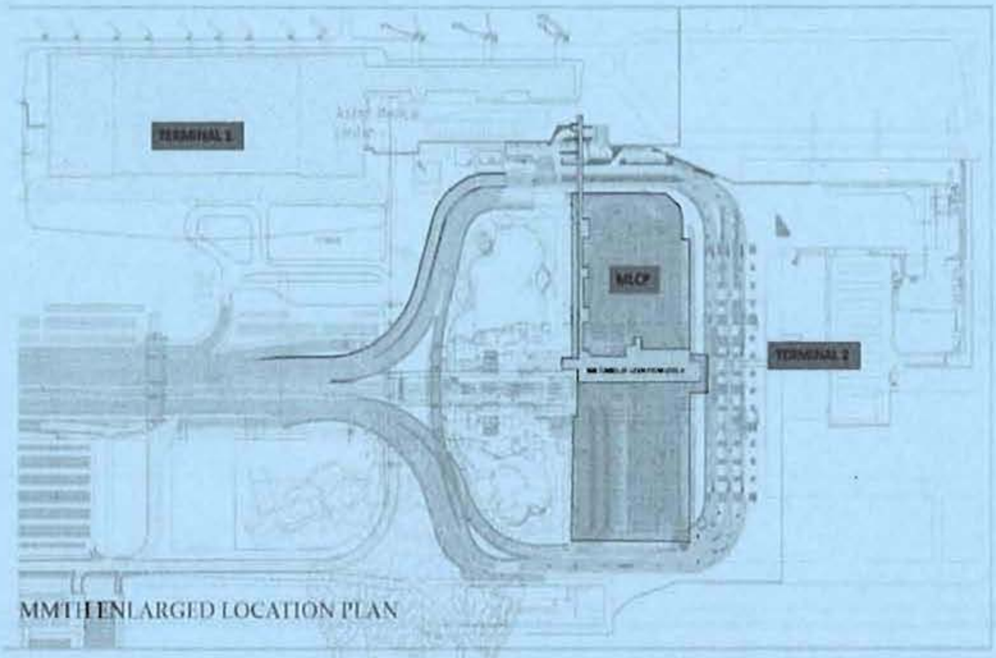
- *Also, additional infrastructure needs to be provided to meet this increased ridership in MMTH which would impact the current sizing of MMTH and ongoing construction of T2, roads, car park and the rainwater harvesting water body planned in the T2 forecourt area.*



- *From the above diagram, it can be seen that as there is 2-3 kms distance between the 2 stations, and to decongest the area near Terminal Metro station, the KIA West metro station is required.*
- *BIAL requests the Authority to consider the KIA West Station as an addition to RAB.*

5.3.7 BIAL commented as follows on inclusion of the Baggage Sorting Area in the RAB:

- *BHS (Baggage Handling system) Sorting area which is located in Basement 3 of MMTH (@ -12.6M From Level 0) is part of the basic foundation works and retaining walls of MMTH.*
- *Without constructing and completing the civil works of Basement 3, it is not possible to construct the other Basements which are just above the Basement 3.*
- *Civil works for BHS Tunnel to Terminal 1 and 2 and BHS sorting area at the central zone of MMTH has to be completed in full to complete the Basements and roads above of MMTH. Below diagram gives the details of location of Basement 3 within MMTH.*



- *As detailed above, the Baggage Handling system is an integral part of the MMTH and hence will be capitalized and commissioned along with MMTH. Hence we request the Authority to consider the same as addition to RAB together with MMTH.*
- *BIAL notes from the details provided in the Consultation Paper, that the Baggage Sorting works have not been added to RAB, even in FY 26 contrary to Authority's proposals.*

5.3.8 BIAL commented as follows on the allocation ratio for the rainwater harvesting ponds:

- *Assets relating to water harvesting – Mainly the ponds and other pipelines are considered as Common by AERA.*
- *These assets are part of the Utility infrastructure being created by BIAL as part of its Environment and Sustainability initiatives.*
- *As submitted earlier, the Utility assets which are for core Airport Operations should be treated as Aeronautical*
- *Also, any cost recoveries from these assets are adjusted from Operating Expenditure and the entire cost is treated as Aeronautical*
- *Accordingly, we request the Authority to treat these Assets as Aeronautical*

5.3.9 BIAL commented as follows to justify the increase in the T2 Apron cost on account of closure of the ECT and increased transportation cost:

- *The T2 Apron is located on the western side of the ECT tunnel and the earth stockpiles are on the eastern side of the ECT.*
- *Upon commissioning of the NSPR facility in Dec 2019, works were in full swing for the earthworks for the T2 Aprons. The ECT which was completed in November 2019 could not be used till Sep 2020 as BCAS Approval was given only in Sep 2020.*
- *Even though the other construction activities had slowed down, earthworks activity for T2 aprons was in full swing.*

- *Please find below the details of material shifted using the village road due to closure of ECT between 5th December 2019 and 18th April 2020 and 16th June 2020 and 15th October 2020.*

Material Shifting through village route					
Sl.no.	**Month**	**Item description**	**Unit**	**Quantity**	**Remark**
1	Dec'2019	Msand/fill sand/dust	MT	9004.5	From source to project site using additional lead from village road
		GSB	MT	6692.57	
		CTB	Cum	1096	from east side plant to SP-03 construction site from village road
		Reinforcement	MT	43.8	East side stockyard to SP-03 project side from village road
2	Jan'2020	Msand/fill sand/dust	MT	11216.5	From source to project site using additional lead from village road
		GSB	MT	20619	
		Msand/fill sand/dust	MT	4460	From East side stockyard to project site using additional lead from village road
		CTB	Cum	1380	from east side plant to SP-03 construction site from village road
		Reinforcement	MT	38	East side stockyard to SP-03 project side from village road
3	Feb'2020	Msand/fill sand/dust	MT	15676.5	From source to project site using additional lead from village road
		GSB	MT	5030	
		Msand/fill sand/dust	MT	8595.5	From East side stockyard to project site using additional lead from village road
		CTB	CUM	834	From east side plant to SP-03 construction site from village road
		WMM	MT	3111.5	
		Reinforcement	MT	29.2	East side stockyard to SP-03 project side from village road
4	Mar'2020	Msand	MT	10130.9	From source to project site using additional lead from village road
		GSB	MT	2883.3	
		CTB	Cum	433	from east side plant to SP-03 construction site from village road
		Msand/fill sand/dust	MT	5605.5	using additional lead from village road
		WMM	MT	1932	from east side plant to SP-03 construction site from village road
		Asphalt	MT	1991	
		Reinforcement	MT	22	East side stockyard to SP-03 project side from village road
5	April'2020	Msand/fill sand/dust	Cum	6121	From east stock pile to west construction area
		Unsuitable soil	Cum	5488	Excavated surplus soil shifted from SP-03 construction site to stockpile at east of cross field taxiway
7	Jun'2020	Msand/fill sand/dust	Cum	40759	From east stock pile to west construction area
		Unsuitable soil	Cum	29834	Excavated surplus soil shifted from SP-03 construction site to stockpile at east of cross field taxiway
8	July'2020	Msand/fill sand/dust	Cum	37120	From east stock pile to west construction area
		Unsuitable soil	Cum	28574	Excavated surplus soil shifted from SP-03 construction site to stockpile at east of cross field taxiway
9	Aug'2020	Msand/fill sand/dust	Cum	5097	From east stock pile to west construction area

- *There was no additional space available for stockpiling of the T2 excavated earth on the western side, and hence shifting of the soil was carried out through the longer route passing through the villages.*

- *As soon as the unlocking approvals in Jun 2020 were provided by the Government, maximum efforts were carried out by BIAL to ensure works resumed at the earliest in lines with the lockdown guidelines.*

- *Work activities which were mechanized, and where labor requirement and interactions were minimum was given topmost priority. The shifting of the earth involved basically lifting of the soil by excavator and loading the soil to the dumpers which was driven and soil unloaded at the designated location on the eastern side. There was minimal interaction between the excavator operator and the dumper driver. Works were carried out to the maximum extent possible during this period.*

- *Even after BCAS gave the approval for ECT in Sep 2020, there has been tremendous amount of checking for the dumpers/tippers passing through the tunnel. This lowered the productivity of the dumpers usage significantly. Also, it may be noted that the BCAS approval had also mentioned that usage of ECT was also based on the CISF assessment at site. Hence during such closure times as decided by CISF, the dumpers were forced to use the village road and take the longer leads.*
- *Hence, BIAL requests AERA to allow the justified cost increases that was necessitated due to non-availability of ECT on account delay in getting approval from the Statutory Regulator – BCAS, as part of addition to RAB.*

5.3.10 BIAL commented as follows regarding 1% penalty for delay in commissioning of Terminal 2:

- *The Authority in the Second Control Period order decided to impose a penalty/ adjustment of 1% of the cost of Terminal-2 Phase 1, if BIAL fails to commission and capitalize Terminal 2 Phase 1 by March 2021. However, on account of 1st wave of Covid-19, this date was revised to 31st March 2022 and AERA has accepted the same and decided not to apply the 1% penalty on BIAL.*
- *However, it has laid a condition that if the completion of Terminal T2 is delayed beyond 31st Mar 2022 date, it will apply 1% penalty, under any circumstances.*
- *Due to the crushing impact of 2nd wave of Covid-19 which has resulted in lockdowns in Karnataka and the strong likelihood of further Covid-19 waves, construction activities at site have been severely impacted and there is steady migration of labor back to their native places, resulting in further delays in completion of Terminal T2.*
- *If the delay is for Covid-19 reasons or for similar events (which are beyond the control of BIAL), it would be wholly wrong to impose such a penalty.*
- *Per TDSAT, AERA had agreed to examine the levy of 1% penalty on its own merits and stated that it if a convincing case is made out by BIAL for any delay, AERA may vary or waive the penalty, but only for good reasons. The current proposal is against its own stated intent in TDSAT.*
- *BIAL notes that AERA has also proposed as follows:*

  "5.3.18 To reduce 1% of the project cost from the ARR/ Target Revenue as re-adjustment, in case any particular capital project is not completed/ capitalized as per the capitalization schedule as per the approval in tariff order."
- *We request the Authority to not levy any penalty in case any projects are not completed due to circumstances that may be beyond the control of the Airport.*
- *Based on the feedback given by AERA during the Stakeholder consultation meeting, considering the impact of the second wave of Covid-19 pandemic (not factored during the MYTP submissions) and the forecasted potential third wave, BIAL has re-evaluated the Project Progress and the balance activities required to complete and commission the same. Based on this re-evaluation, BIAL proposes the date of completion to be 31st December 2022. BIAL also requests the Authority to true up any consequential cost increases due to shifting the date from 31st March 2022 to 31st December 2022 as part of the True up in the fourth control period.*
- *BIAL requests the Authority to accordingly consider this as the completion date of the Project.*

5.3.11 Regarding the ORAT expenses, BIAL submitted that it has estimated the same as part of Capital Expenditure as per applicable accounting principles and guidelines and the same treatment was also accorded by the Authority earlier in case of DIAL wherein ORAT was considered together with the

Pre-Operative Expenses. Therefore, BIAL requests the Authority to consider the same as Capital Expenditure.

5.3.12 Regarding the design, PMC, pre-operative expense and financing allowance BIAL submitted that it would request the Authority to refer to the detailed explanations provided in comments to the Second Control Period True up.

5.3.13 BIAL commented as follows on the T1 optimization project:

- *The sustaining capex includes repairs and maintenance, minor projects, special repairs and facility augmentation to cater to the growth in traffic. BIAL also does regulatory, digital initiatives and safety compliance related capex which are mandated from BCAS, DGCA, MOEF etc. which form part of sustaining capex. Most of the sustaining capex are carried out with limited interruptions to existing operations. Therefore, T1 Optimization Project is not the same as projects undertaken under Sustaining Capex.*
- *The Interim Terminal Improvements were undertaken with an objective of managing the increased demand for airport facilities to cater to the high growth in passengers being witnessed in KIAB. This was done by increasing the facilities like Check in counter, additional reclamation belt, additional bus gates, security lanes, additional kerb area without major civil construction of expanding the Terminal building. These measures resulted in increasing the capacity of the existing Terminal from existing 20 mmpa to 26.5 mmpa. Some of the projects undertaken included:*
    - *Security Hold Area (SHA) Swing Gate: Involves a swing partition for 2 international gates at SHA and an additional gate counter. This is for facilitating handling of domestic passengers in swing conditions during domestic peak.*
    - *Baggage Reclaim Belt No 10: One more additional international baggage reclaim belt in the existing available space to increase the capacity of baggage reclaims for international arrivals. Project is completed and put to use.*
    - *West Bus Gates: Addition of 3 bus gates and seating capacity of 375 at West side of the existing terminal to facilitate passenger seating and allow for increased operations.*
    - *Additional Check-in Counters/ BHS: Additional 16 check-in counters added to handle additional passenger traffic. A Baggage Handling System (BHS)to handle the check-in baggage is also added.*
    - *Domestic PESC: Involves addition of 4 rows domestic security lanes.*
    - *Immigration and Customs modification at Level 2: Involved relocation of four existing immigration counters to accommodate additional two hand baggage screening units for Customs. Project completed.*
    - *Utility Augmentation: To enhance the existing chiller plant capacity in T1A, a 500 TR chiller unit and all associated systems are added.*
    - *3rd Kerbside Departure: A third departure kerb was to be added to decongest the existing drop off points. The works involved demolition of current parking lanes and construction works to increase width of existing kerb from 1.5m to 5m, creating pedestrian crossing, construction of canopy, signages and streetlights.*
- *As can be seen from the above, Interim Terminal Improvement projects completed in the second control period is not at all connected to the T1 Optimisation project proposed in the third control period.*

- *T1 Optimization is a list of interrelated and connected projects which are in the nature of major overhaul of the Terminal T1 and is proposed to be carried out in optimum time and efficient manner once T2 Phase 1 becomes operational. Most of the existing system in Terminal T1 are being replaced on account of end of life of the asset, replaced for reliability augmentation and redundancy creation, improving operational efficiency, mandatory capex etc. The Projects include:*
    - *End of Life replacement - BHS related upgradation, PTB fire hydrant and MS pipeline network replacement, Escalator/Elevator replacement, Automatic doors- Landside & Airside replacement, Arrival/Departure carousel replacement.*
    - *Operational efficiency – Wastewater discharge lines, Solid waste Management upgradation, Plumbing system upgradation, Additional Terminal Exit gates etc.*
    - *Mandatory- Addition of staircase form level 1 to level 0 to access west bus boarding gates; Compliance to GOI/PMO office initiative of "Sugamya bharat abhiyan", Reconfiguration of International area to fit domestic requirement to achieve service target levels.*
- *Details of the projects and the cost estimates were shared with the Authority.*
- *From the above it can be seen that the T1 optimization programs are not similar to regular sustaining capex or Interim Terminal Measures and needs to be undertaken as a program with dedicated focus and minimal disruptions to passenger.*
- *While BIAL has adequately demonstrated the need and the cost estimates submitted as part of MYTP, considering the current situation, in the interest of all stakeholders, BIAL proposes to implement Terminal 1 Optimisation in a staggered manner. This will be planned based on the evolving Traffic conditions and the anticipated increase in Terminal utilization.*

5.3.14 BIAL commented as follows on the four lane access road to CISF barrack:

- *As per Table 69, the Authority has shown the Projected Capex of BIAL wherein the cost for CISF Barrack Expansion and Access Road is shown as Rs. 44.79 crore.*
- *BIAL had, in the MYTP submission, combined 2 cost items – CISF Barrack expansion and Access roads and projected a value of Rs 44.79 crores. As per page 8 of the Cost Plan report submitted along with the MYTP submissions, the breakup of the same is Rs 15.42 crores towards Access Roads and Rs 29.37 crores towards CISF Barrack Expansion. The Authority has proposed reducing the combined cost of Rs 44.79 crores by 50% erroneously. The reduction of 50% must be applied only on the Access Road cost component and not on the entire sum.*
- *Accordingly, BIAL requests the Authority to make the necessary changes as explained above.*

5.3.15 BIAL submitted that it has evaluated the requirement of Alpha 4 and Landscape works and in view of the current situation and disruption in traffic, it is agreeable to defer these projects to the 4th Control Period.

5.3.16 BIAL commented as follows on the CISF housing project:

- *Security is one of the important functions in the airport and is handled by CISF and falls under the "reserved activities" as defined in the Concession Agreement. CISF has repeatedly approached BIAL to provide a permanent CISF Township and hence BIAL proposed to develop a housing facility near the airport so that the operational and emergency needs can be met.*
- *The staffing of CISF personnel at the Airport is decided by CISF alone based on established standards and procedures of CISF.*

- *The request for housing had come based on a request from CISF quoting CISF Rules 2001. The requirements of Bachelors/married accommodation etc. were specific to CISF and cannot be subjected to BIAL scrutiny.*
- *In view of the request coming from a Statutory Agency like CISF, BIAL had to include the same in its Capital Expenditure program, subject to AERA approval. BIAL did the required due diligence for estimating cost for the requirement projected by CISF. It is to be noted that there is no permanent housing provided since the last 12 years of operations.*
- *BIAL concurs with the Authority's views to not consider this project for the current control period.*
- *BIAL also requests the Authority to provide suitable guidance on matters relating to such CISF related Capital Expenditure to all Airport Operators.*

5.3.17 BIAL commented as follows on the stakeholder consultation meeting – stage III:

- *BIAL had carried out the planning activities for PAL-2 projects and based on the plans, convened the Stakeholder meeting for Stage I and Stage II review and approvals.*
- *Considering the evolving Covid-19 pandemic situation, BIAL has continually re-evaluated the Capital expenditure needs, including options for re-sizing/ deferment of projects etc. Accordingly, BIAL had, during the process of review of MYTP by AERA submitted that BIAL would like to drop/ defer/ re-size certain projects and had accordingly revised the PAL-2 Capex estimates for Third Control Period downwards.*
- *On issue of MYTO by the Authority, based on the projects proposed to be carried out in Third Control period, BIAL will prepare the detailed design/ cost estimates and conduct Stage III stakeholder consultations, well in time before commencement of any activities relating to the said projects.*

5.3.18 Regarding the fixed asset register, BIAL submitted that it has been maintained in accordance with the Accounting prescriptions and guidelines and Authority's directions are noted and will be implemented from 2021-22.

5.3.19 BIAL commented as follows on the revised capital expenditure for the third control period:

- *BIAL has reviewed its capital expenditure plan, it has further revised the capital expenditure for the Group B projects as given below:*

Cost Code	Program		Amount (in Crores)
A	Airfield Works		22.55
B	Passenger Terminal		50.00
C	Landside Access and Parking		400.85
D	Support Facilities		307.21
E	SUB TOTAL - CONSTRUCTION COST (GST & Indexation)		780.61
F	Design & PMC Fee	5.00%	39.03
G	Pre-Operative Expenses	2.00%	15.61
H	SUB TOTAL - SOFT COST		54.64
I	TOTAL		835.25
J	Contingency (with high level of concept design)	3.00%	25.06
K	GRAND TOTAL		860.31

- *The break-up of the above Construction Cost (defined as "E" in above table) is given below:*

Sl. Nr.	Cost Code	Program / Projects	Cost including taxes and indexation
1	**A**	**Airfield Works**	**22,54,75,233**
1.01	A-12	Airside Security wall	3,96,29,202
1.02	A-13	Airside perimeter Road	18,58,46,031
2	**B**	**Passenger Terminal**	**50,00,00,000**
2.01	B-03	T1 Optimisation	50,00,00,000
3	**C**	**Landside Access and Parking**	**4,00,85,34,857**
3.01	C-14	Cycle Track along SAR / SWR / NCR plus docking stations	-
3.02	C-2	Canopy fo rTerminal Metro Station	80,90,62,470
3.03	C-2A	Terminal Metro Station	1,65,30,19,685
3.04	C-2B	KIA West Station	1,03,06,92,325
3.05	C-7	North west road expansion	43,43,24,528
3.06	C-5	CISF Barrack Expansion - Access Road	8,14,35,849
4		**Support Facilities**	**2,94,02,61,796**
4.01	C-13	BIAL Campus parking and Canteen	-
4.02	K5	CISF Barrack Expansion	31,01,68,030
4.03	K8	Animal Quarantine facility	3,85,35,847
4.04	D01	New cargo domestic terminal	55,26,81,651
4.05	D02	Additional Cool Port Building	49,10,17,849
4.06	D03	Refurbishment of existing cargo terminals - Menzies Aviation Bobba	53,90,70,856
4.07	D04	Refurbishment of existing cargo terminals - Air India SATS	60,61,35,386
4.08	D05	Refurbishment of existing cargo terminals - Air India SATS Cool Port	6,95,05,842
4.09	D06	Refurbishment of catering buildings - TAJ SATS	16,61,62,195
4.10	D07	Refurbishment of catering buildings - LSG Skychef	9,74,78,299
4.11	U59	Water Treatment Plant	6,95,05,842
4.12	TR-LA	Landscape Works	-
4.13	S38	Alpha 4	-
4.14	S71	Landside Maintenance Building	13,18,43,213
		-	**7,80,61,15,099**

Comparison with AERA's proposed costs in the Consultation Paper:

- *AERA has proposed Rs 438 cr. as the capital expenditure for the Group B projects and the breakup of the same is Rs 405 cr. for Hard cost ad Rs 33 cr. towards Design, PMC and contingency costs. No Pre-operative expenses have been considered.*
- *BIAL had submitted the Cost plan report as a part of MYTP submission in July 2020, wherein earlier inflation rates were considered. The Authority has proposed 4.9% as the inflation factor in the Consultation Paper, based on 69th round of survey of professional forecasters. We request Authority to consider 4.9% as inflation factor for capex in the Group B projects. The impact of this change is factored in the above revised table.*
- *BIAL has considered costs pertaining to Terminal Metro Station & its canopy and the KIA West Station in our revised capital expenditure table for Group B projects. AERA has opined that the Metro Scheme may not be ready by end of FY26 and hence had not considered the same in its Table 70. BIAL has executed a binding MOU with BMRCL in regard to Metro scheme. Govt of Karnataka has set a deadline of June 2025 for commencement of Airport metro line and BIAL also has to adhere to this timeline. In the Stakeholder meeting for the 3rd Control Period held in 9th Jul 21, GoK has also requested the Authority to consider Metro stations' capitalization in FY25 in line with Karnataka government target date & provide BIAL with adequate cashflows to undertake the Metro stations' works. We request AERA to consider the same.*
- *BIAL needs a project team to implement these projects and it cannot be made zero as proposed by the Authority, as elaborated in the previous sections. These manpower costs are not duplicated in the operations side also. Authority has considered Rs 98 crores against a Hard Cost of Rs. 5030 crores amounting to 2% for Pre-operative Expenses in the case of Consultation Paper issued for*

GHIAL for the 3rd control period. We request Authority to consider the same 2% for BIAL as an interim solution and approve the pre-operative expenses for the Group B projects.

- *We also request AERA to true up the Design, PMC and Pre-operative costs based on actuals and subject to reasonableness and proper justification.*
- *BIAL also notes from the Table detailing the proposed Third Control addition that the Interest During Construction is estimated at Rs. 3 crores which prima facie appears very less. BIAL requests the Authority to look into the computations of the IDC estimates.*
- *We are not aware of the funding pattern estimated by the Authority while calculating the RAB. BIAL requests the Authority to re-estimate the funding pattern.*

5.3.20 BIAL commented as follows on the sustaining capital expenditure:

- *Average Sustaining Capital Expenditure incurred in the Second Control Period is predominantly for one Terminal and One Runway and related infrastructure. Additional facilities such as the Second Runway and the Terminal 2-Phase 1, Forecourts and the landside infrastructure will be in use for most period in the 5-year timeline of the Third Control Period.*
- *With considerable increase in the overall Infrastructure and facilities in the Third Control Period, once domestic traffic recovers to pre-covid levels, the estimated cost of Rs. 197.45 crores per annum is insufficient and not sustainable from the point of maintaining the required service quality standards.*
- *Considering that the Authority has drastically cut the Capital Expenditure projects and has allowed a paltry sum of Rs. 50 crores towards Terminal-1 Optimization (which is more than 13 years old and had been sweated fully beyond its rated capacity in the past and cannot bear any more load) it may not be sustainable to keep the estimated Sustainable capital expenditure spend restricted at Rs 197.45 crores per annum. Majority of the Capital Expenditure in T-1 Optimization is for refurbishing End of Life assets which have been confirmed by the respective OEMs and the same has been shared with the Authority also. Authority has also overridden such OEM recommendations while determining the amount of spend to be allowed. Neither is the Original Capital Expenditure proposed for various projects allowed nor is sufficient Sustaining Capex provided by the Authority.*
- *We request the Authority to approve the estimate that BIAL has submitted as part of MYTP as the same is made based on realistic estimation of the actual activities that need to be incurred.*
- *Also,*
    - *Table 12 of the Consultation Paper indicates that AERA has considered the revised Sustaining Capex estimates submitted by BIAL for FY 21 wherein BIAL has requested the unspent amount to be carried to the next year FY 22. It is noted that AERA has not considered the same.*
    - *Estimate of Rs. 197.45 crores considered by AERA for the Third control period is based on the average spend in the Second control period, without considering any inflation. BIAL requests the Authority to correct this error.*
- *On Authority's comment on Para 5.2.88 that only the works proposed by BIAL has to be incurred, we submit that the estimates made currently are based on the need and requirements that have been assessed currently. In the dynamic business environment, the need has to be constantly updated based on changes to the business, traffic estimates, changes/ fresh advisories issued on account of Security reasons and any other Government directions. Also, Authority has approved a total block estimated cost per annum and has not listed the approved cost against individual line*

items submitted by BIAL. Hence, BIAL should be given the flexibility (depending upon the factors mentioned above) to incur the Sustaining Capex costs.

- *BIAL will provide a break-up of the Sustaining Capital Expenditure line items at the time of MYTP submission for the next control period.*

5.3.21 BIAL commented as follows on the common asset allocation ratio:

- *BIAL has, in response to the allocation ratios applied by the Authority for Assets in Second Control period elaborated the reasoning for considering 91% as the basis, which is the overall Gross Block Ratio. As the same principle is applicable for the Project proposed to be commissioned in the Third Control Period also, BIAL requests the Authority to consider the same and allocate the projects that are assigned based on Terminal Ratio to be changed to the overall asset Ratio.*
- *Based on the actual list of additions in the Fixed Asset Register at the end of the control period (Including Terminal-2 Phase 1), these can be trued up after the direct Aeronautical, Non-Aeronautical and common asset items are identified and trued up*

5.3.22 BIAL commented as follows on the deferral of projects:

Projects deferred in 1st Control period

- *The Authority has incorrectly shown non-execution of projects for 1st Control period to the extent of Rs. 491 crores. However, in the 2nd Control Order No. 18/2018-19 in Table 22, AERA has shown the comparison of Additions to RAB of the 1st Control period Tariff Order vis-à-vis the actuals and the difference on account of unspent maintenance capex is shown as Rs. 447 crores, as per table given below.*

Table 22: Comparison of Additions to RAB - As considered in MYTO-CP1 and actuals (Rs. Crores)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16	Total
Addition as per MYTO-CP1	15.43	22.52	1,671.60	443.04	61.66	2,214.25
Actuals as per BIAL Submissions	15.36	23.84	1,637.49	60.21	30.07	1,766.97
Difference (unspent mainly from Maintenance Capex)	0.07	-1.32	34.11	382.83	31.59	447.28

- *As can be seen from the table (which is self-explanatory), the difference is mainly on account of unspent amount in maintenance capex. The below table compares the AERA approved traffic for the 1st control period vis-à-vis the actual traffic handled at KIAB for the same period.*

Details in Millions	*FY 12*	*FY 13*	*FY 14*	*FY 15*	*FY 16*
As per MYTO 1					
Domestic	*10.33*	*9.49*	*10.23*	*11.40*	*12.66*
International	*2.38*	*2.50*	*2.63*	*2.97*	*3.34*
Actual Traffic					
Domestic	*10.33*	*9.49*	*10.23*	*12.47*	*15.61*
International	*2.38*	*2.50*	*2.63*	*2.93*	*3.37*
Actual Growth Rate					
Domestic	*10.38%*	*-8.14%*	*7.85%*	*21.83%*	*25.15%*
International	*4.60%*	*5.26%*	*5.19%*	*11.31%*	*14.78%*

- *BIAL wishes to further submit that the 2 years – FY15 & FY16 were the years wherein BIAL saw a huge increase in traffic and witnessed ~22-25% growth rates and any project undertaken or deferred needs to be assessed in the context of high traffic and hence projects that would hamper or inconvenience passengers were deferred to a later date in view of the situation.*

- *The Authority had taken cognizance of this fact at the time of true up in the Second Control Period Order.*

Projects deferred in 2nd Control period

- *The 2nd control period has seen Projects getting delayed on account of Covid-19 and certain projects getting deferred. The Authority has erroneously classified all the projects that did not get completed in 2nd control period as deferred projects. The main reason for not completing the projects is on account of 1st wave of Covid-19.*

- *BIAL had deferred some projects on account of Covid-19 (1st wave) in order to conserve cash, considering that the traffic had collapsed completely on account of the government-imposed lockdown for 2 months and that recovery in traffic was uncertain. These deferred projects amounted to Rs 278 cr., as referred to Table 6 of the Consultation Paper, which amounts to 2.79% of the total capex approved by the Authority in the 2nd control period. The details of the projects deferred and the specific reasons for the same has been explained in section 7.3.7 of the MYTP submission.*

- *With regards to the sustaining capex, BIAL had made a submission for need to construct a 220KVA substation within the Airport to cater to the required demand of 33 MVA due to KERC regulations which stated that any demand above 20 MVA, shall be provided by the Power distribution company at 220 KV level only. BIAL had multiple discussions with Karnataka Power Transmission Company Limited which has agreed to establish a 100 MVA additional transformer on lease basis and deliver the required 33 MVA power from their 220/ 66 KV substation till BIAL establishes 220 KV substation for a maximum demand of 33 MVA. This project has now been deferred to 4th control period. Hence, this deferment was on the basis of BIAL successfully convincing the state utility to accept an interim solution and not burdening the passengers with this capex in the 2nd control period.*

- *The major project that has got delayed in 2nd Control period is the Terminal T2 and associated landside infrastructure projects. The delay has been on account of Covid-19 which impacted procurement of material due to supply chain issues, drastic reduction of availability of manpower and the Authority has itself acknowledged this fact in para 5.2.14 as given below:*

  "5.2.14 The Authority has noted that Covid-19 has affected the Indian infrastructure projects and has led to delay in the projects. The Authority is of the view that the reasons provided by BIAL with the data on labour shortages and supply chain seems reasonable to justify that the project will get delayed beyond 31 March 2021."

- *The Authority is convinced of the genuineness of the reasons of delay in completion of Terminal T2 & its spill over to the next control Period on account of the Covid-19 Pandemic. The Authority is also cognizant of the fact that the delay has not resulted in passenger inconvenience due to lack of timely capacity augmentation, as mentioned in Para 5.2.15.*

- *BIAL undertakes capex project after required due diligence, Board approvals and transparent procurement process. BIAL has always adopted a modular approach in construction and does not believe in saddling the passengers/ airlines with high capital costs. There is detailed deliberation for assessment of infrastructure and wherever it was possible to defer the costs, the same has been done.*

- *The Authority has not taken into consideration the real reasons for this deferment and genuine delay in construction activities on account of Covid-19 and has painted an image that BIAL has* *not kept its commitment in terms of capex and thereby leading to services not being available to the passengers, which is totally incorrect and unfair to BIAL.*

- *This type of conclusion, besides contradicting AERA's observations elsewhere in the consultation paper, is entirely wrong and unjust. We request AERA not to make such unjustified references and remove the same from the Consultation Paper.*

5.3.23 BIAL commented as follows on the depreciation computation for the third control period:

- *BIAL has submitted its detailed responses on various aspects of Depreciation as part of comments on the True up of Second control period.*
- *BIAL requests the Authority to consider the same for the Third Control period.*
- *BIAL submits that while the Authority has proposed to Aeronautical Depreciation estimate for a year based on the Aeronautical Asset Ratio of the year, BIAL requests that the same be trued up based on actual asset wise identification of Aeronautical and Non-Aeronautical, based on the explanations submitted by BIAL in its response above.*

Other stakeholder comments on regulated asset base and depreciation for the Third Control Period

5.3.24 Government of Karnataka commented as follows:

- *Levy of penalty: The construction of T2 has been delayed as a result of the impact of COVID-19, due to migration, lock-down. AERA should consider this as an extraordinary situation and not to levy 1% penalty for delay on account of the impact of COVID-19.*
- *Reconsideration of key projects directed by Government of Karnataka: The Metro Rail Scheme and Appurtenant works and the tunnel works under the active run way for connecting the terminal to the eastern access road have been mandated by Government of Karnataka to provide better connectivity to passengers travelling to their home. The capital cost for these projects should be considered in this control period.*

5.3.25 Infrastructure Development Department (GoK) and APAO have stated that there has to be consistency in the approach of AERA and that existing guidelines of AERA and decisions taken in the past tariff orders must not be reversed/rolled back in a retrospective manner, unless there is a statutory ruling or such a change is a part of wider consultation in regard to revision of existing airport regulations. These frequent reversals will affect Airport operator's financials and create cause of concern in the minds of Investors. With the above background, Government of Karnataka requests the Authority to continue the established approach based on decisions taken in the past tariff orders in regard to Financing Allowance, Depreciation and Pre-operative expenses (for the Expansion project) for BIAL.

Infrastructure Development Department (GoK) also stated that the Authority should not levy 1% penalty for delay in completion of T2 beyond 31 March 2022 in case the delay is on account of COVID-19.

Regarding the airport metro stations, Infrastructure Development Department (GoK) stated that the Government of Karnataka has set a deadline of June 2025 for the commencement of airport metro line and an MoU is signed between BMRCL and BIAL in regard to the metro scheme. IDD mentioned that majority of works on these lines are tendered and it expects the work to be completed by end of FY25 and therefore, it requested the Authority to include the airport metro line with its enabling works as part of BIAL's capital expenditure.

5.3.26 FIH Mauritius Investments Ltd. submitted as follows regarding the disallowance of project pre-operative expenses:

- *"These are expenses incurred for having a dedicated Project team that is responsible for implementation of Expansion Project by working along with team of international consultants.*
- *Contrary to the decision taken in the 2nd control period tariff order, AERA has now disallowed the entire cost of Rs.355 crores and this disallowance will severely impact the cash flows of BIAL.*
- *In the 2nd control period order, Authority had acknowledged that there is a need to have a dedicated Project Management team when large scale capital expenditure Projects are being executed.*
- *Authority had approved pre-operative expenses in the case of Delhi and Mumbai airport expansion projects in the recent past and has also proposed pre-operative expenses in the consultation paper issued for GHIAL recently.*

We request the Authority to reinstate the pre-operative expenses as approved in the 2nd tariff order and true up the same at the time of completion of the projects based on actual costs incurred and its reasonableness."

5.3.27 FIH submitted the following regarding the withdrawal of financing allowance:

- *"Financing Allowance as per Direction No. 05 was followed by AERA in the last 2 tariff orders. This was the basis for lenders and shareholders to commit their share of investment in the Expansion Project*
- *AERA has inconsistently revised the concept of Financing allowance in the 3rd Control Period and this will seriously affect the cash flows and ability to service debt service obligations of the company, especially since BIAL has invested100% of the equity (amounting to Rs 2,425 crs) prior to debt disbursement.*
- *Such changes to Regulatory principles, in contravention to Authority's own Guidelines and one which had been followed in the past tariff orders, creates doubts regarding consistency of the Regulator's approach while adding to the doubts in the minds of Investors & Lenders.*

We request the Authority to honour its own guidelines and airport regulations and allow Financing Allowance in line with the principles applied in the tariff orders of the prior control periods."

5.3.28 FIH has stated in its comments that the Authority has proposed changes to the useful life for computation of depreciation, which has been approved in the previous tariff orders.

5.3.29 Siemens has stated that with 20% stake it is the 2nd largest shareholder in BIAL and it is one of the most prominent German investments into India's infrastructure to date. Further, Siemens has stated that for the success of the PPP model, a fair and consistent regulatory framework is a critical requirement for the success of the entire privatization process adopted by GoI. Siemens further stated that Consultation Paper has raised serious concerns, both on the Expansion Project under implementation, and the adequacy of cash flows towards meeting BIAL's operational costs and debt-service obligations over the period of 5 years in the 3rd Control Period and the impact of this will significantly impact the confidence of the investors like Siemens, who have committed to infrastructure growth in India. Regarding the issues of concern in the consultation paper, Siemens stated the below issues.

Siemens has stated that the Authority should not levy 1% penalty for delay in completion of T2 beyond 31 March 2022 in case the delay is on account of COVID-19.

Similar to the comments of FIH, Siemens has also stated that the Authority should uphold its guidelines and airport regulations and allow financing allowance and depreciation as claimed by BIAL.

Similar to the comments of FIH, Siemens has also stated that the Authority should reinstate the pre-operative expenses as approved in the 2nd control period order and true-up the same at the time of the completion of the projects based on actual costs incurred and its reasonableness.

5.3.30 MIAL stated that the Authority needs to consistently follow its own guidelines and is requested to allow the financing allowance as per its own guidelines and the past practice for tariff determination of BIAL.

MIAL stated that the extra shift depreciation had been specifically allowed by the Authority vide Amendment dated 9 April 2018 to the Order no. 35/ 2017-18 dated 12 January 2018. MIAL submitted that the Authority should allow the extra shift depreciation based on the technical justification provided by BIAL and also allow the useful life of assets based on the technical justification provided by BIAL.

5.3.31 APAO stated that the Authority should honour its own guidelines and airport regulations and allow the financing allowance claimed by BIAL.

APAO stated that the Order no. 35/ 2017-18 allows for the useful life of runways/ taxiways to be between 20-30 years and further, extra shift depreciation for Plant and Machinery in the case of large airports, running continuously for extra shift, was also allowed, based on technical justification. APAO further stated that the Authority had accepted the justification given by BIAL in the 2nd control period in the 2nd control period order while the Authority has reversed its position and had gone against its own orders. APAO requests Authority to honour its own decisions taken in previous tariff and consider useful lives as claimed by BIAL.

APAO stated that the Authority had approved INR 150 cr. in the 2nd control period after acknowledging that there is a need to have dedicated project management team when large scale capital expenditure projects are being executed. APAO stated that the disallowance of pre-operative expenses will severely affect the cash flows of BIAL and the Authority has not conducted the study when the project is still under construction. APAO requested AERA to allow pre-operative expenses as approved in the 2nd control period order and true-up the same at the time of completion of the projects based on the actual costs incurred and its reasonableness.

APAO also submitted that penalty proposed for the capital programs may be relooked as the aviation sector is under deep distress due to the lower passenger traffic, multiple covid waves and lockdowns which has resulted in labour migration leading to construction delays and hence it will be unfair to impose any penalty on airports for any delays in completion of the projects.

5.3.32 FIA submitted that it appreciates the rationalization of capital expenditure by AERA on account of lower traffic.

5.3.33 FIA acknowledged the decision of AERA to levy 1% of project cost as adjustment in case the capital expenditure is not completed as per the approval in the tariff order.

5.3.34 FIA submitted that in the current scenario post COVID-19, all the non-essential capital expenditure should be put on hold or deferred, and only such capital expenditure deemed critical from a safety or security compliance perspective may be undertaken.

5.3.35 FIA stated that it will await BIAL to complete the process of stakeholder consultation (by way of AUCC meetings) for capital expenditure projects for the Third Control Period. FIA stated that in case BIAL wants to undertake any capital expenditure, then it needs to be ensured that no additional expense is borne by the airlines until the project is completed and put for use to the airlines/passengers.

5.3.36 FIA requested that independent study for allocation of assets in the Third Control Period is undertaken by AERA.

5.3.37 On the useful life of terminal building, FIA stated that the Authority should consider 60 years of useful life as per Order no. 35/ 2017-18 read with schedule II of Companies Act, 2013. FIA stated 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 sixty (60) years and aprons have it for as long as ninety nine (99) years. FIA submitted that the useful life of terminal building for Kannur and Cochin airports have been considered sixty (60) years by AERA. AERA should prescribe sixty (60) years for the Building including Terminal Building as is practiced by some of the developed aviation ecosystem.

5.3.38 FIA requested the Authority to consider 10% residual value of the assets instead of 0% as per Para 5.3.3 of the AERA guidelines.

5.3.39 The comments of IATA on the regulated asset base and depreciation are given below:

"IATA proposes all non-essential investments are deferred or cancelled taking into account the crippling effects of Covid on our airline members resulting in a heavy debt burden and the ongoing threat of bankruptcy.

We welcome AERA's efforts to scrutinize BIAL's investment plans and reduce the total capex by INR2,932.04 crores that goes some way to addressing capital cost inefficiencies, a reduction in unnecessary project scope and major changes that have not been meaningfully consulted upon or where there is a lack of detail available to make a reasonable assessment.

However we remain concerned that a substantial deferment from the SCP (INR6544.38 crores) is contributing to an investment plan of over 8,800 crores (circa USD1.19bn), with a backdrop of limited AUCC user consultation regarding major capital items.

Given the exceptional circumstances our airline members face resulting from Covid, a capital plan of this scale is not economically sustainable for users, will add to airlines' debt and more likely suppress rather than stimulate demand.

As such we strongly request the Authority considers alternative mechanisms to reduce the cost burden for users recognising the fragile state of airlines by avoiding capex related charges in the TCP to the greatest extent possible. Ideas for discussion with the airline community could include:

- *Identifying when new capacity is required taking into account traffic demand forecasts, to link the actual/beneficial use of assets with the tariff on an annual basis, for instance for T2 Phase 1 and T1 refurbishment costs.*
- *Reconsidering Level of Service ranges and tolerances for the period to phase in when capacity is required and cost can be incurred.*
- *Providing assurances that existing infrastructure is being used as efficiently as possible in advance of investing in new infrastructure through process improvements, technology and digitisation.*
- *Notwithstanding these suggestions addressing the cost burden on users resulting from approved TCP capital costs would enable some respite for airlines and better balance the commercial impacts across the aviation supply chain, for instance by avoiding all tariff increases during the period until a later specified date.*

Regarding project details and cost assessments, we refer the Authority to IATA and the airline community's letter of 14th September 2020 to BIAL identifying a number of important TCP queries that remain outstanding following its AUCC meeting on 26th August 2020. In fact, we have not received a reply from BIAL's management and there has been no effort to engage with the airline community since then.

Capital plans that translate into airport charges should be agreed by consensus with users and not advance without their approval in line with AERA's consultation protocol. Basic details such as Project Investment Files indicating the return on investment, capital efficiency, outcomes and benefits are needed however have not been shared with airlines on the majority of projects to date. Noting not all projects are in a mature state we do not expect forensic level details for all projects, however fundamental questions remain regarding some major projects and we expect high level costs and benefits to be shared for all projects

Comments on specific investments follow based on details shared with IATA and the airline community that we would appreciate the Authority taking into account in its determination:

For category A capex projects deferred from SCP to TCP:

- *A1 Terminal 2 – Phase 1, we agree with the Authority's position:*
  - *To waive the adjustment of 1% on delay in operationalization of Terminal 2 - Phase 1 till 31 March 2022.*
  - *To exclude the additional PMC costs estimated by BIAL for Terminal 2 for FY22 as the scope of work has remained the same. We suggest the same logic should be applied to the SCP true-up given the projects deferral.*
  - *To levy the reduction (adjustment) of 1% in the project cost of Terminal 2 in case BIAL fails to commission and capitalize Terminal 2 Phase 1 by 31 March 2022 under any circumstances.*
  - *We also request a review to identify the incremental capacity BIAL anticipates will be used on an annual basis, and its underlying assumptions.*
- *A2 Forecourt, roadways and landside development - Phase 1b costs have risen substantially since the CP2 determination resulting primarily from the inclusion of Multi-Mode Transport Hub (MMTH) in the region of INR480 crores. A number of fundamental questions remain unanswered raised in our September 2020 letter regarding BIAL's funding arrangements and obligations noting:*
  - *Users should not fund or pre-fund capex investments that are commercialized with revenue generated through services provided by an external party.*
  - *In addition to the MMTH itself, the costs associated with changes to the design and scope for other infrastructure such as roads etc. should not be funded by airport users.*
  - *Investments should be recovered and split by the actual users of the metro that would also include non-passenger traffic such as airport workers, visitors and non-flying members of the public using the metro as a transport interchange.*
  - *We also seek more clarity regarding the construction of the airport metro station to reassure ourselves users will not fund or cross-subsidise capital costs.*

Until we are able to satisfy ourselves this investment is justified and delivers a return on investment for users, we object to the capex being included in the TCP.

- *A7 – Design, PMC and Pre-Op's costs reduction by INR 480.37 crores – we agree with the Authority's position to reduce these costs in line with market benchmarks and to avoid duplication.*

For proposed category B projects we broadly agree with the Authority's position to defer, reduce or cancel new capex for the TCP for the reasons provided, noting a few specific comments as follows:

- *B3 - T1 Optimisation reduction of 199.51 crores is supported in principle reflecting the lack of clarity regarding essential asset replacement and potential cross-over with sustainable capex. The reduction however seems arbitrary and requires further review and consultation with users, A review to understand capex that is required in the TCP is requested.*
  - *Asset reliability and regulatory will be addressed via quantitative metrics*
  - *Capacity is optimised through technology and digitisation taking users needs and costs into account*
- *B5, B6 – MMTH Phase 2 reduction of 129.41 crores. We agree with the Authority's assessment to exclude the cost for MMTH Phase 2 and Airport terminal metro station project from the TCP. We would also need greater clarity about the funding commitment from the metro authority for the associated metro infrastructure within the MMTH as future revenue generated will only benefit the metro authority. There is no reason for airport users to fund the metro infrastructure within the MMTH if the future revenue will not contribute to offsetting the costs of the investment made.*
- *B7 – City Metro Station – we agree with the assessment to exclude this project on the basis it does not serve airport users. Our position is that the related investments in this infrastructure should not be funded by airport users. The agreement/MOU between BIAL and the rail authority was done without any prior consultation with airport users (who are expected to fund the development). Any such commitment for investment should be segregated from the calculation of the RAB. Furthermore, this investment does not generate any aeronautical revenue for BIAL. If this is to proceed, the investment should be funded from the revenue generated by future users of the metro.*
- *B16 and B17- Landscaping works and Alpha 4 investments are non-essential capex and we agree with their postponement and review regarding the need for investment in a future control period.*
- *B19 - Design, PMC and Pre-Op's allowances. We agree with the Authority's logic based on RITES assessment as per Table 67.*
- *B20 – CISF Permanent Housing for the TCP – we certainly agree with the deferral of INR 369.68 crores and would add this project requires a more fundamental review beyond the scope of the Authority's comments referencing traffic, and cost benefit analysis of the township construction costs. Per IATA's previous comments to BIAL in our September 2020 letter:*
  - *We seek clarity on the funding aspects for this project given a separate charge is collected through the Aviation Security Fee (ASF) from passengers payable to the Authority, also noting significant increases over the past 2 years. We also request clarity if it is BIAL's sole responsibility to provide housing after the removal of the PSF security component and query the reason for BIAL purchasing the land to construct the housing.*

Regarding category C Sustaining capex we agree with the Authority's logic to exclude INR 596.92 crore from new sustaining capex works until these costs are properly justified through user consultation.

IATA is also of the view that structural enhancements will improve capex efficiency and deliver user requirements in the passengers' interests by introducing some specific project controls. In particular, we suggest:

- *A change control mechanism is introduced for / approved for major projects in the design and development phase where there are significant impacts to costs, scope or programme to assess the reasonableness of these changes when they can be best influenced. This approach is much preferred compared with the Authority's retrospective assessment for true-up purposes.*

- *A rebate mechanism for all major projects where outcomes and benefits are not delivered on time, similar in principle to the Authority's approach for T2 phase 1. Such mechanisms have been successfully introduced at airports such as Heathrow and incentivise the airport to deliver as expected.*
- *A mechanism to provide an on-going assessment of the reasonableness of all key decisions made on key projects and, in undertaking capital projects ensure the capital is being used effectively to deliver the outcomes determined by the business case. This approach is being actively applied at various airports and provides assurance for both the airport and stakeholders through an independent expert to monitor progress and highlight risks and issues.*

A key related element is to ensure the agreement of both the airport and airlines before key projects proceed within the control period (i.e. over a certain capital value, of strategic importance, with complex scope or stakeholder impact) at certain pre-approved project stages or gateways."

5.3.40 The comments of AOC are given below:

- *"Traffic projections although uncertain presents a bleak picture, this again entails that all unnecessary expenditure must be kept in abeyance until the actual requirement surfaces.*
- *The present terminal itself seems to be large enough to accommodate the current operations and the addition of a larger terminal, although a state of the art facility, will not be actually needed for the near future.*
- *All public works like the multi modal transport hub, roadways, CISF housing and metro must be financed separately without the burden being imposed on airline or passenger."*

5.4 BIAL's response to stakeholder comments regarding regulated asset base and depreciation for the Third Control Period

5.4.1 BIAL's response to IATA's comments regarding the capital expenditure for the Third Control Period, fresh capital expenditure and AUCC is as follows:

- *"We strongly object to IATA's characterization of BIAL's proposed capex in the 3rd control period. IATA cannot throw wild allegations such as capital cost inefficiencies, unnecessary project scope etc.*
- *It appears that IATA is mixing up the projects approved in the Second control period which are getting capitalised in the third control period (on account of delay due to Covid 19 pandemic) with the fresh capital expenditure proposed as Group B projects in the third control period. To clarify, most of the capital expenditure being added to asset base in the 3rd control period is on account of the spill over of capital expenditure relating to approved projects that were supposed to be completed in the 2nd control period. The completion of these projects has been delayed on account of the impact of Covid-19. The AUCC for the 2nd control period projects have been made way back in 2015-16. These details are captured in the 2nd control period tariff order, and we request IATA to please refer the same. After such AUCC meetings, AERA had considered these projects and approved the same in the 2nd control period tariff order. There has been a cost increase in certain of these approved projects. The reasons for the cost increase have also been submitted to AERA.*
- *Notwithstanding IATA's comments, BIAL has deferred most of the proposed projects to the 4th control period. We have been very judicious in the investment in capacity (airside, terminal and landside + support) over the past 15 years and would like to remind IATA that, in the past, we have been criticised for not providing adequate capacity or level-of-service.*

Fresh Capital Expenditure for 3rd Control period

- *BIAL had submitted a cost estimate of Rs. 2275 crores for Group B projects as part of MYTP. Of this, AERA had proposed only Rs. 438 crores to be added to RAB.*
- *BIAL has already conducted Stage 1 and 2 AUCC for the list of projects mentioned under Group B in CP 10. Hence, IATA's comments on AUCC process if any, can only refer to Rs. 438 crores worth project proposed to be added and not the total of Rs. 8800 crores investment that will be capitalised in the third control period.*
- *The details of Capacity Utilization in 3rd Control period is as given below:*

Details	***Terminal Capacity (MPA)***	***Total Traffic as per AERA Consultation Paper***	***Total Traffic as per BIAL***	***Capacity utilization as per Consultation Paper***	***Capacity utilization as per BIAL Traffic***
FY 22	*26.5*	*21.24*	*15.24*	*80%*	*58%*
FY 23	*32.75**	*34.09*	*31.16*	*104%*	*95%*
FY 24	*52.5*	*39.81*	*36.55*	*76%*	*70%*
FY 25	*52.5*	*46.36*	*42.53*	*88%*	*81%*
FY 26	*52.5*	*54.02*	*49.41*	*103%*	*94%*
Sub total		*195.22*	*174.89*		

**assumed T1 plus 3 months of T2 availability*

- *From the above table, it clear that in 3 out of the 5 years of the 3rd control period, BIAL is operating at peak capacity levels of more than 80%. Hence, there is a need for the 2nd terminal in the current control period.*
- *We have taken enough care to ensure that Terminal capacity and Airside capacity augmentation are not planned, and these costs relate to other Infrastructure proposed to be created such as Cargo, Metro, and certain additional roads.*

Comment on AUCC – Lack of effort to engage with Airline community

- *IATA had been invited to the AUCC (Stage I and Stage II for the Group B Projects (26th August 2020) and they had also attended this meeting. Pursuant to this meeting, IATA had sent a letter to BIAL dated 14th Sep 2020 seeking certain clarifications on the proposed projects.*
- *BIAL had looked into the contents of the said letter and then circulated the MOM and the presentation made by BIAL in the AUCC meeting with all stakeholders.*
- *The presentation had detailed information on each of the projects - need for the project, the nature of work being proposed, associated benefits to the stakeholders.*
- *The list of recipients of MOM and the AUCC presentation were Airlines, MoCA, Govt of Karnataka, AERA and other stakeholders, totalling to more than 200 in number and this includes IATA also.*
- *Hence, to say that there has been no effort from BIAL to engage with airline community, that too 10 months after the MoM was circulated, is surprising.*
- *Authority has rationalised the capital expenditure in Group B projects in CP 10 vis a vis MYTP submissions. In parallel, BIAL has also re-looked at the MYTP submissions made in July 2020 and reduced the capital expenditure requirements to be in line with what is proposed in CP10 except that BIAL has added the 2 metro stations and the canopy of the Terminal metro station to the list of projects proposed in CP10.*

- *The need for this addition is because the Metro scheme to airport is going to be operationalised in June 2025 and the same has been confirmed through the statement made by the Chief Secretary, Government of Karnataka, who also happens to be the Chairman of BIAL Board, in the stakeholder meeting held on 9th July 2021. The 2 metro stations will be a part of RAB of BIAL and will be implemented by BIAL alone.*
- *Further AERA has confirmed to BMRCL that the cost of metro stations, when the same is commissioned and capitalised will be part of the addition to RAB*
- *Direction 5 defines the Consultation Protocol for projects and the stages of consultation. BIAL has accordingly complied with the requirement of AUCC consultation process. For essential Infrastructure such as Metro connectivity to the Airport, cost benefit analysis or return on Investment are not measured numerically but are qualitatively addressed.*
- *Detailed analysis of need identification, Option development analysis are shared as part the AUCC process. BIAL, as a policy, adopts competitive bidding basis for project implementation."*

5.4.2 BIAL's response to IATA's comment regarding the design, PMC and pre-operative expenses was similar to the BIAL's comments and BIAL has requested the Authority to review and consider the same.

5.4.3 BIAL's response to IATA's comment on the MMTH is give below:

- *"No Pre-funding principle is applicable to BIAL. We do not understand what IATA is trying to ask.*
- *Metro stations are to be constructed by BIAL and will be a part of its RAB. This Terminal Metro station is intended for departing and arrival passengers who are using the airport terminals. BIAL is not authorised to construct and run metro services. Hence, it is required to build the Metro stations located within the airport boundary. The ticket revenues from running the metro scheme accrue to BMRCL which is the agency responsible for implementing and running the metro line. Non-aeronautical revenues that accrue from the commercial activities at the Metro stations are subsidised towards the Aeronautical charges as per applicable principles.*
- *On the observation that "In addition to the MMTH itself, the costs associated with changes to the design and scope for other infrastructure such as roads etc. should not be funded by airport users., we find this bereft of logic. Airport operator is required to create adequate infrastructure for passenger convenience. The reasons for increase in landside requirements have been captured in our earlier replies and response to CP 10.*
- *IATA has stated that "Investments should be recovered and split by the actual users of the metro that would also include non-passenger traffic such as airport workers, visitors and non-flying members of the public using the metro as a transport interchange.". Metro assets are 100% aero in nature.*
- *IATA has noted that "We also seek more clarity regarding the construction of the airport metro station to reassure ourselves users will not fund or cross-subsidise capital costs." Adequate clarity has been provided in the above sections and as part of the AUCC meetings."*

5.4.4 BIAL's response to the IATA's comments regarding the metro rail project of BIAL was similar to the BIAL's stakeholder comments with following additional points:

- *"As per AERA Act, Airport users means any person availing of passenger or cargo facilities at the airport. Hence, IATA cannot state that Cargo, Ground Handling and Fuel Farm are Aeronautical services while the personnel performing these functions are not related to the Aeronautical activity of the Airport.*

- *The users of this KIA West station are personnel attached to aeronautical service providers like Cargo Terminal operators, Ground handling agencies and Fuel Farm, besides "reserved activities" like CISF. IATA cannot deny that such facilities provided to aeronautical service providers will not form a part of RAB. To say that will negate the very definition of aeronautical services as defined in AERA Act.*

- *In case of KIA West Station not being constructed, the alternate choice of boarding/ alighting from the Terminal metro station will only increase the traffic movement in and around the terminal forecourt area and this will create congestion on landside roads due to provision of shuttle service to commute from terminal metro station to areas located on the west and vice versa. This will only result in additional costs (both on capex and opex fronts)."*

5.4.5 BIAL's response to the IATA's comments on the sustaining capex, CISF quarters and capital efficiency measures is as follows:

- *"IATA has proposed changes to the AUCC protocols, which is not part of specific proposals in the Consultation Paper. BIAL desires broad based consultation with all stakeholders on these suggestions.*

- *On other comments relating to rationalising Capital Expenditure, Sustaining Capital Expenditure, Design / PMC costs etc as commented by IATA, BIAL has submitted its detailed response in addition to a revised project list, together with detailed justification and reasoning. We request the Authority to review the same and approve."*

5.4.6 BIAL's response to FIA's comments regarding the capital expenditure and depreciation for the Third Control Period is as follows:

- *"BIAL has, as detailed in its response to Consultation Paper, provided individual reasoning and justification for various projects.*

- *BIAL has also, as explained, rationalized the Capital Expenditure before MYTP submission, during the MYTP review process and also after the issue of CP submitted revised Capital Expenditure estimates.*

- *BIAL has also submitted its response on carrying out Stage III Consultation process which will be done once the MYTO is issued.*

- *AERA had, as per the Consultation Paper issued on Useful lives of Assets CP 09/2017-18, in proposal 1(f) noted that*

  "1.f. As the residual value of most of the Airport Specific Asset is often insignificant, it is proposed to allow 100 % depreciation on the Asset over the useful life of the Asset."

- *Hence, BIAL has accordingly depreciated the asset upto 100% of the value of asset.*

- *Order 35 also carried a note on the useful lives of buildings as follows:*

3	Terminal Building (including VIP Terminal, Bus Terminal, Haj Terminal)	30/ 60	3.33/ 1.67	Either 30 years or 60 years as evaluated by the Airport Operator

- *Accordingly, in BIAL's estimation, the useful life was considered to be 30 years and the same has been applied consistently and considered by the Authority."*

5.4.7 BIAL concurred with the Govt of Karnataka and Addl. Chief Secretary's views that a realistic, consistent, and fair approach should be adopted in determination of tariff which should provide for adequate cash flows needed to complete the projects, meet the debt servicing obligations and the operational needs of the airport. BIAL concurred with the Govt. of Karnataka and Addl. Chief Secretary on the need for the Metro related expenditure and the eastern connectivity tunnel.

5.4.8 BIAL concurred with the shareholders, airport operators and APAO and requested the Authority to consider their well-reasoned comments.

5.4.9 BIAL's response to AOC's comment on the capital expenditure is given below:

- *"Terminal 2 is being developed, based on traffic forecasts, that saw growth rates of 20% year-on-year for three years in the second control period and based on service level requests by the airlines and other stakeholders. T2 design had also been presented as a part of AUCC process.*
- *Pursuant to issue of CP 10, BIAL has relooked at the capital expenditure and has submitted the bare minimum capital expenditure of Rs 860.31 crores as detailed in Para 1. Hence, BIAL has already done 3 rounds of capital expenditure optimization and deferred most of the capital expenditure to the 4th control period. Other than the delayed projects of 2nd CP and the revised capital expenditure submitted for Group B projects (which has been kept at bare minimum) and the sustaining capex, BIAL has not proposed any additional capex for this control period.*
- *The details of Terminal Capacity Utilization in 3rd Control period were below by BIAL similar to its response to IATA comments.*
- *From the above table, it clearly evident that in 3 out of the 5 years of the 3rd control period, BIAL is operating at peak capacity levels of more than 80%. Hence, there is a need for the 2nd terminal in the current control period.*
- *Based on discussions with the Bengaluru Metro Rail Corporation Limited (BMRCL), airport metro connectivity was felt necessary. Hence the forecourt and land side facilities at BIAL had to cater to this new requirement. The concept further evolved into a Multi-Modal Transport Hub (MMTH), which could accommodate private vehicles, taxis, city buses and the metro rail. MMTH is not a public works but is an integrated facility offered by BIAL with the focus to be a passenger-oriented and a focused transit node for the city. Connections between the terminals and the transportation hub are a key component of the passenger experience and overall airport vision.*
- *Security is one of the important functions in the airport and is handled by CISF and this service falls under the "reserved activities" as defined in the Concession Agreement. CISF has repeatedly approached BIAL to provide a permanent CISF Township and hence BIAL proposed to develop a housing facility near the airport so that the operational and emergency needs can be met. However, CISF Housing project has been deferred by Authority in the Consultation paper and BIAL requests the Authority to provide suitable guidance on matters relating to such CISF related Capital Expenditure to all Airport Operators.*
- *All roadways inside the airport are to be developed by the airport operator as per the Concession Agreement and hence BIAL is responsible for the development of all roadways within the airport boundary. Roads constructed within the airport premises are for the sole purpose of connectivity for the arriving and departing passengers and hence is considered as part of the capex plan.*
- *BIAL has considered costs pertaining to Terminal Metro Station & its canopy and the KIA West Station in our revised capital expenditure table for Group B projects. BIAL has executed a binding MOU with BMRCL in regard to Metro scheme. As per the said MOU, BIAL is responsible for construction of the 2 metro stations. Govt of Karnataka has set a deadline of June 2025 for commencement of Airport metro line and BIAL also has to adhere to this timeline. The metro line is dedicated to the airport and terminates at the Terminal station and hence the Metro is of utmost*

importance for connectivity of passengers to the Airport. Further, AERA has already approved funding of Metro Stations' related capital expenditure in Delhi and Mumbai (even though the Metro lines in these cities are not dedicated for the airport) unlike the case of BIAL where the metro station terminates in Terminal 2.

- *As detailed above, MMTH, Roadways and the Metro stations are for the exclusive use of the Airport, particularly to the passengers arriving and departing from the airport. The road network within the Airport premises is dedicated for the Airport and is not a public purpose road. MMTH and Metro have been conceived and developed with the sole purpose of reducing the cost and time of the commute of the passengers from the city to the airport.*
- *Therefore, these costs are Aeronautical in nature, aforesaid assets are owned by BIAL and are to be added to the RAB."*

5.5 Authority's examination after reviewing stakeholder comments on regulated asset base and depreciation for the Third Control Period

5.5.1 The Authority has examined the comments of IATA, FIA and AOC and the response to their comments by BIAL regarding the review of the capex so that only essential capex is undertaken. In the Consultation Paper no. 10/ 2020-21, the Authority has already rationalized the capital expenditure of BIAL and deferred non-essential capital expenditure.

5.5.2 The Authority has noted FIA's comment on the independent study on asset allocation for the Third Control Period. The Authority will take the decision on the need for the asset allocation study at the time of the true-up of the Third Control Period.

5.5.3 The Authority has noted IATA's comments on the issues highlighted by it after AUCC meeting conducted on 26 August 2020 and also its comment on the MMTH project. The Authority has noted that BIAL's response to IATA's comments is adequate.

5.5.4 The Authority also noted the comments from Infrastructure Development Department (GoK) and APAO stating that the Authority should ensure consistency in its approach and its guidelines and accordingly based on the past tariff orders, apply the approach for Financing Allowance, Depreciation and Pre-operative expenses. The Authority has presented its view on these subjects in the sections below.

Projects deferred by BIAL in the first and second control period

5.5.5 The Authority has noted BIAL's comments on the deferral of projects. The Authority has corrected the comparison of actual capital expenditure with the approved capital expenditure of the first control period. The Authority has also noted the explanation given by BIAL for deferment of projects on account of COVID-19, changes in project requirement for construction of substation and sudden increase in passenger traffic in the first control period. However, the Authority notes that it remains a fact that users have paid additional tariffs for BIAL's deferred capital expenditure in the said control period. It is also a fact that even after the traffic plunged in FY21, BIAL has garnered an over-recovery for the second control period (FY17 to FY21). The intent of the Authority from including these comparisons of capital expenditure is to ensure that realistic capital expenditure is forecasted so that users are levied fair and reasonable tariffs. The Authority has also noted that BIAL has revised its capital expenditure for Group B projects from INR 2,275 cr. in July 2020 (post-COVID) to INR 1,995 cr. in Feb, 2021 to INR 860 cr. in July 2021. The Authority appreciates BIAL's efforts to rationalize the capital expenditure however such large changes within a span of one year does not instill the confidence in the Authority on the projections of BIAL. In conclusion, the Authority expects BIAL to submit realistic and reasonable capital expenditure forecast for the future control periods.

Readjustment of 1% in case of delay in capitalization of projects as per the tariff order

5.5.6 The Authority has examined the comments of BIAL, GoK, IDD, Siemens and FIA on the 1% readjustment in case of delay in implementation of the project. The Authority understands that BIAL has done due diligence while proposing the capitalization plan on which tariffs are determined for users. Thus, the contention of BIAL to not adjust 1% of the project cost does not make any justification. Accordingly, the Authority decides to reduce 1% of the project cost from ARR/Target Revenue as re-adjustment in case any particular project is not capitalized as per approval in the tariff order. It is further clarified that in case there is a delay in completion of the project beyond the timeline given in the tariff order, due to any reason beyond the control of BIAL or its contracting agency and is properly justified, the same would be considered by the Authority while truing up the actual cost at the time of determination of tariff for the 4th control period. Further, this decision is applicable to all the projects forecasted to be capitalized in the third control period given in this tariff order. Hon'ble TDSAT in its judgement dated 16 December 2020 has also upheld the Authority's decision in this regard.

5.5.7 The Authority has examined the comment of APAO regarding reconsideration of the penalty proposed for capital programs for the Third Control Period. The Authority as part of its analysis in the Consultation Paper no. 10/ 2021-22 had detailed reasons for the 1% re-adjustment and accordingly sees no reason to revise the same.

A. Capital expenditure projects deferred from Second Control Period to Third Control Period

A1 – Terminal 2 – Phase 1 – Delay in commissioning

5.5.8 The Authority has noted BIAL's submission to postpone the commissioning date of Terminal 2 to December 2022 and accordingly, the Authority has made changes to the capitalization of the Terminal 2.

Additional PMC cost on account of delay in Terminal 2

5.5.9 The Authority has examined the submission of BIAL to allow the additional PMC cost on account of delay in the Terminal 2 capitalization. BIAL has submitted that the increase in the PMC cost is on account of the increase in the man-months of the PMC consultant and not related to scope. The Authority is of the view that in case the work at the project site has been disrupted by the COVID-19 pandemic, then BIAL should have incurred only the staff cost of the PMC consultant which is required for the limited ongoing work undertaken during this time and not for the entire or unnecessary staff of the PMC consultant. The delay in execution of Terminal 2 is not on account of the airport users and hence the users should not be loaded with additional costs. Further, the Authority noted that it is a general practice to consider the PMC cost as a percentage of the total capital expenditure on the project. Therefore, the Authority does not consider it correct to link the PMC cost with the project duration. Hence, the Authority is of the view that the increase in the PMC cost as submitted by BIAL lacks sufficient justification and rationale and therefore, the increase in PMC cost for Terminal 2 is considered by the Authority as inefficient. Accordingly, the Authority decides to disallow increase in PMC cost of Terminal 2 incurred after 31 March 2021.

A2 – Forecourt, roadways & landside development – Phase 1b – Cost overruns

5.5.10 The Authority has noted in response to the Authority's query, BIAL has submitted on 7 August 2021 to postpone the commissioning of forecourt, roadways & landside development from FY22 to FY23 and accordingly, the Authority has made changes to the capitalization of the same.

Bifurcation of MMTH into aeronautical and non – aeronautical

5.5.11 The Authority has noted BIAL's comment on the bifurcation of the MMTH into aeronautical and non-aeronautical components. The Authority noted that BIAL has proposed pick-up and drop off kerb, landscape in the car park area, medians and walkways, public toilets, MEPF zones, staircase, lift, escalator, utilities, lifts and staircase public lobby in the car park area as aeronautical area. However, the Authority has observed that in case BIAL had constructed only the Multi-Level Car Park, the entire MLCP would have been considered as non-aeronautical which would have included the pick-up and drop off kerb, landscape in the car park area, medians and walkways, public toilets, MEPF zones, staircase, lift, escalator, utilities, lifts and staircase public lobby. The Authority is of the view that these areas, demarcated on the parking floor of the MMTH, have to be given the same treatment as would have been given to an MLCP and therefore, these are considered as non-aeronautical area by the Authority.

5.5.12 BIAL has proposed that the Terminal 2 metro connection zone on Level 0 of the MMTH as aeronautical area. The Authority notes that airport metro line will not be operational till FY26 and therefore, such area, based on the expected usage in the Third Control Period needs to be considered as non-aeronautical area as it lies on the floor used for car parking.

5.5.13 The Authority noted that BIAL has proposed to consider the MMTH facility as a common asset which has both aeronautical and non-aeronautical component. The Authority has further noted that BIAL has proposed to use the Level 1 for landscape and circulation and considered the area as aeronautical. However, since the MMTH is a common asset, the Level 1 area can also be considered as common area since it is not used specifically used for aeronautical or non-aeronautical purposes. However, the Authority in the Consultation Paper has proposed to consider it as aeronautical area since the usage of the proposed MMTH cannot be ascertained at this stage.

5.5.14 Based on the above, the Authority decides to consider the bifurcation ratio (68% as non-aero and 32% as aero) as proposed in Table 78 for the allocation of the MMTH into aeronautical and non-aeronautical components and decides to review the bifurcation ratio based on the examination of the actual usage of the MMTH facility during true-up of the Third Control Period.

Metro enabling works and Baggage sorting area

5.5.15 The Authority has noted BIAL, Government of Karnataka and IDD (GoK) comment on inclusion of the metro enabling works and baggage sorting area in the RAB. The Authority noted that these works are undertaken by BIAL in FY22 which will be put to use once the metro line will commission. The Authority has followed the principle that the passengers cannot be charged for the facility which is not available for their usage and the projects cannot be pre-funded by the passengers. Further, the Authority noted that Hon'ble TDSAT judgement dated 16 December 2020 had adjudged regarding the eastern connectivity tunnel that only completed projects which are put to use should be capitalized. Therefore, the Authority decides to capitalize the metro enabling works and baggage sorting area in the year of metro commissioning. The Authority clarifies that since the metro commissioning is not proposed by the Authority in the third control period, the metro enabling works and baggage sorting area have not been added to the RAB of the third control period.

A5 – T2 Apron – Phase 2 – Cost overruns

Rainwater Harvesting (RWH) Ponds

5.5.16 The Authority has examined BIAL's comment on the allocation ratio for the rainwater harvesting (RWH) ponds. The Authority notes that the water supplied by the rainwater harvesting ponds will be mostly used to serve the terminal building and the services attached to it. Since, the terminal building is used to provide both aeronautical and non-aeronautical facilities at the airport, hence, it is justified to bifurcate the RWH ponds into aeronautical and non-aeronautical based on the average terminal area ratio.

Closure of Eastern Connectivity Tunnel (ECT)

5.5.17 The Authority noted BIAL's comment to justify the increase in the T2 Apron cost on account of closure of the ECT and the consequential increased transportation cost. The Authority noted from BIAL's response that the material was transported from December, 2019 till September 2020 even during the COVID-19 pandemic induced lockdown post March, 2020. However, the Authority is of the view that it is the responsibility of the airport operator to obtain the necessary approvals in a timebound manner as per the requirement of the project. Therefore, the Authority noted that it is unfair to penalize the passengers with the increased cost on account of the delay in receiving necessary approvals from BCAS. Therefore, the Authority decides to exclude the estimated additional cost of T2 Apron Phase 2 from RAB due to the delay in the commissioning of the ECT.

A7 – Design, PMC and Pre-ops cost – Cost overruns

Design, PMC Cost and Financing Allowance

5.5.18 The Authority has noted BIAL's request to consider the design and PMC cost as per its justification provided in the true-up of the second control period. The Authority in the true-up of the Second Control Period had decided to allow design and PMC cost as 5% of the project cost based on the independent consultant's study. In line with the decision for the true-up of the Second Control Period, the Authority decides to consider the Design and PMC cost as 5% of the project cost for the Third Control Period.

5.5.19 On the financing allowance, the Authority noted that the financing allowance is a notional amount arising from the return of cost of debt given to the equity investment in the capital work in progress assets. The Authority is of the view that the equity invested in work in progress assets cannot be treated as a debt instrument with an assured return of cost of debt. The Authority noted that such assured return on equity investments on the work in progress assets are not available to the developers of other infrastructure. It is expected that the future returns from the project should generate adequate returns to cover the cost of the equity during the construction stage. Therefore, the Authority adequately compensates the risks associated with the equity investments in a construction project once the project is capitalized by means of a reasonable cost of equity.

5.5.20 The Authority considers that giving an assured return on the equity investment even on the work in progress assets would result in reducing the risks associated with equity investment in capital projects which then needs to be accounted while determining the cost of equity. Therefore, the Authority is of the opinion that the return on equity that is entitled to the airport operator would remain the same whether the Authority allows or disallows financing allowance.

5.5.21 Further, the Authority notes that in case of greenfield developments, the airport operator would have to wait for a considerable length of time before getting return on the large capital outlay incurred by it as these projects take longer durations to commission and operationalise. It was with this consideration that the Authority had earlier provided Financing Allowance in initial stages to such airports. The Authority notes that BIAL can now be considered as brownfield airport as the operations have matured over the last decade. Since the operations are now stable, this has reduced the construction and traffic risk for the new construction at the airport. Further, it may be noted that Financing Allowance has never been provided in the case of other airports such as DIAL, MIAL and KIAL. Moreover, it is also noted that BIAL's equity investment for the new construction projects is largely through internal accruals instead of direct equity infusion by its shareholders. Thus, the Authority is of the view that the locked-up equity in the capital work in progress assets henceforth cannot be given the assured return of cost of debt. Based on the above, the Authority decides to disallow the Financing Allowance (FA) for BIAL on the assets which will be capitalized from Third Control Period onwards.

5.5.22 The Authority's response in the above para addresses the concerns put forward by FIH and Siemens relating to Financing Allowance.

5.5.23 Based on the Authority's decision to allow the pre-operative cost of BIAL's project monitoring division in the true-up of the SCP in para 3.3.71, the Authority decides to allow the pre-operative on the capital expenditure projects deferred from the Second Control Period to the Third Control Period subject to the total cap of INR 156 cr.. The Authority noted that BIAL has capitalized INR 93.61 cr. in SCP and therefore, decides to allow the remaining INR 62.39 cr. in TCP. The Authority based on its decision in the Second Control Period Order decides to true-up the pre-operative expenses for the capital expenditure projects deferred from the Second Control Period to the Third Control Period after the projects are commissioned based on the review of the actual cost incurred and its reasonableness.

ORAT

5.5.24 The Authority has examined BIAL's submission to consider the ORAT expenses as part of the capital expenditure instead of operational expenditure so that it is consistent with the Authority's approach for DIAL. The Authority noted that if the ORAT expenses are taken as part of the capital expenditure then the ORAT costs will spread out over a longer period which will lead to lower tariffs. Accordingly, the Authority decides to consider the ORAT expenses as part of the capital expenditure and include it as part of the RAB.

Capital expenditure projects decided by the Authority for Group A (Projects deferred from Second Control Period to Third Control Period)

5.5.25 Based on the above examination, the Authority decides the capital expenditure of projects deferred from SCP to TCP as per the following table:

Table 94: Capital expenditure projects deferred from Second Control Period to Third Control Period as decided by the Authority

Reference	Project / Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority (3)	Difference (4 = 3-2)
A	Capex projects deferred from SCP to TCP	A1	Terminal 2 - Phase I	3,565.67	3,565.67	3,565.67	0.00
		A2	Forecourt, roadways & landside development - Phase 1b	1,786.40	1,786.40	1,703.96	-82.44*
		A3	Aircraft Maintenance & Airport Maintenance Facilities	41.16	41.16	41.16	0.00
		A4	Utilities	104.22	104.22	55.55	-48.67*
		A5	T2 - Apron Phase 2	0.00	427.73	407.23	-20.50
		A6	South Parallel Runway - Phase 2 including site preparation and earthworks	0.00	383.71	194.34	-189.37*
		A7	Design, PMC and Pre-ops cost	710.16	830.57	446.09	-384.48
		A	**Capex projects deferred from SCP to TCP (sub-total)**	**6,207.60**	**7,139.45**	**6,413.99**	**-725.46**
	IDC^			814.39	904.80	1,044.83	140.03#

Reference	Project / Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority (3)	Difference (4 = 3-2)
	Total (including IDC)			**7,021.99**	**8,044.25**	**7,458.57**	**-585.43**

* reduction in the capex for these projects on account of part capitalization of these projects in FY21 (SCP)
\# increase in the IDC on account of the postponement of capitalization of Terminal 2 Phase I and Forecourt, roadways & landside development - Phase Ib from FY22 to FY23
^ BIAL has computed FA on its capital expenditure

B. Capital expenditure projects for the Third Control Period

B3 – T1 Optimization

5.5.26 The Authority has noted BIAL's submission to undertake the T1 optimization project in a staggered manner based on the traffic demand and the requirement of additional terminal capacity. Accordingly, the Authority decides to consider INR 50 cr. (excl. design, PMC, contingency and IDC cost) for the T1 optimization project in the Third Control Period. The Authority decides to true-up the actual T1 optimization project cost during the next control period based on the evaluation of its reasonableness subject to a maximum limit of INR 100 cr.

B5 – MMTH – Phase 2 and Airport terminal metro station

5.5.27 The Authority noted BIAL, Government of Karnataka and IDD (GoK) comment to capitalize the airport metro station in FY26. The Authority has noted the assurances provided by the BIAL, GoK and IDD (GoK) to commence the airport metro line in June, 2025. However, the Authority has noted that such large scale projects in India are delayed due to bottlenecks faced at the time of execution which cannot be ascertained now. Therefore, the Authority decides to include it in the RAB if it is completed by FY26 while undertaking true-up in the next control period.

B7 – City Metro Station

5.5.28 The Authority noted BIAL's comment for consideration of the City Side Metro Station (KIA West Metro Station) in the RAB. The Authority is of the view that the city side metro station is constructed by BIAL for its employees and the users of commercial services and does not serve the airport passengers. Hence, the airport operator cannot charge the passengers/airlines for the facility which is not used by them. Therefore, the Authority decides to exclude the capital expenditure of city side metro station from the RAB of BIAL.

B9 – CISF barrack expansion and Access Road

5.5.29 The Authority has examined the comments of BIAL on the four-lane access road to CISF barrack. The Authority noted that BIAL has given the bifurcation of cost into CISF barrack expansion and the four-lane access road as part of its stakeholder response. BIAL has requested the Authority to consider the cost reduction of 50% only on the access road component instead of the entire project cost. Accordingly, the Authority decides to consider a reduced cost of INR 39.16 cr. (excluding design, PMC, contingency and IDC) for the CISF barrack expansion (INR 31.02 cr.) and access road (INR 8.14 cr.) project in the Third Control Period.

B12 and B13 - New cargo domestic terminal including Cool Port and Refurbishment of existing cargo terminals

5.5.30 The Authority examined the justification for cargo terminal capital expenditure submitted by BIAL and accordingly decides to allow the cargo terminal capital expenditure in the RAB of BIAL. However, the Authority expects BIAL to generate higher aeronautical cargo revenues from this facility once completed. The Authority would examine this issue in the next control period.

B16 and B17 – Landscape works and Alpha 4 project

5.5.31 The Authority noted that BIAL has agreed with the Authority's proposal in the Consultation Paper no. 10/ 2021-22 to defer the landscape works and Alpha 4.

B20 – CISF Permanent Housing – Phase I

5.5.32 The Authority has noted BIAL's comments on the criticality of the CISF quarters and its concurrence with the proposal of Authority to exclude it from the Third Control Period. The Authority has decided to exclude the CISF quarters from the capital expenditure in the Third Control Period and the airport operator should carry out cost-benefit analysis and examine the government/ BCAS directive before taking up any security related projects.

5.5.33 The Authority has noted IATA's comment on the funding mechanism for the CISF related capital expenditure. The Authority is of the view that funding mechanism for such security related projects should be as per government directives on the Aviation Security Fee.

Other observations of the Authority for Capital expenditure in Group B

<u>Stakeholder Consultation Process</u>

5.5.34 The Authority has examined IATA's comment on the structural enhancements to improve capex efficiency and the response given by BIAL. The Authority had issued the AUCC consultation process in its guidelines to ensure the capex efficiency and expects the airport operator to comply with these guidelines.

<u>Inflation Rate</u>

5.5.35 The Authority noted BIAL's request to consider the revised inflation rate of 4.9% to project the capital expenditure for the third control period. The Authority has revised the capital expenditure based on the inflation rate considered by the Authority in the Chapter 11.

<u>Pre-operative expenses</u>

5.5.36 The Authority examined BIAL's submission to consider 2% of the total project cost as pre-operative expenses for the Group B projects. In line with Authority's decision for the true-up of the second control period to consider the pre-operative expenses, the Authority decides to consider the pre-operative expenses as 2% of the total project cost of Group B projects for the Third Control Period. However, this is subject to true-up on review of the total pre-operative expenses and its apportionment over all the eligible work.

<u>IDC Computations</u>

5.5.37 The Authority has examined BIAL's request to review the IDC computations for the Group B projects. The Authority noted that the revenues of BIAL in the Consultation Paper no. 10/ 2021-22 have been revised in the tariff order based on the finalized tariff card of the third control period. Accordingly, the Authority has revised the funding estimates for the Third Control Period.

<u>Capital expenditure projects decided by the Authority for Group B (Fresh capital expenditure proposed in the Third Control Period)</u>

5.5.38 Based on the above examination, the Authority decides the capital expenditure of projects for the Third Control Period other than sustaining capex and deferred projects of Second Control Period as given in the table below:

Table 95: Fresh capital expenditure decided by the Authority for the Third Control Period

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority (3)	Difference (4 = 3-2)
B	Capex projects for the TCP	B1	Airside Security wall	3.88	3.96	3.96	0.00
		B2	Airside perimeter Road	18.21	18.58	18.58	0.00
		B3	T1 Optimization	249.51	50.00	50.00	0.00
		B4	Cycle Track along SAR / SWR / NCR plus docking stations	12.89	0.00	0.00	0.00
		B5	MMTH - Phase 2	268.59	80.91	0.00	-80.91
		B6	Airport Terminal Metro Station	156.82	165.30	0.00	-165.30
		B7	City Side Metro Station	97.60	103.07	0.00	-103.07
		B8	North west road expansion	41.13	43.43	43.43	0.00
		B9	CISF Barrack Expansion and Access Road	44.79	39.16	39.16	0.00
		B10	BIAL Campus Parking and Canteen	69.65	0.00	0.00	0.00
		B11	Animal Quarantine facility	3.65	3.85	3.85	0.00
		B12	New cargo domestic terminal including Cool Port	101.88	104.37	104.37	0.00
		B13	Refurbishment of existing cargo terminals	118.76	121.47	121.47	0.00
		B14	Refurbishment of catering buildings	25.81	26.36	26.36	0.00
		B15	Water Treatment Plant	6.80	6.95	6.95	0.00
		B16	Landscape Works	69.39	0.00	0.00	0.00
		B17	Alpha 4	204.37	0.00	0.00	0.00
		B18	Landside Maintenance Building	12.48	13.18	13.18	0.00
		B19	Design, PMC, Pre-ops cost and Contingency	399.15	79.70	44.04	-35.66
		B20	CISF Permanent Housing - Phase I	369.68	0.00	0.00	0.00

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority (3)	Difference (4 = 3-2)
		B	**Capex projects for the TCP**	**2,275.04**	**860.31**	**475.37**	**-384.94**
	IDC			166.49	156.42	20.32	-136.10
	Total (including IDC)			**2,441.53**	**1,016.73**	**495.69**	**-521.04**

C. Sustaining Capital Expenditure for the Third Control Period

5.5.39 The Authority has examined BIAL's request to consider the sustaining capex as per BIAL's submission due to increase in the airport facilities in the Third Control Period. The Authority notes that the projected traffic at the airport will be significantly lower than the capacity of the airport in the initial years of the third control period. In these challenging circumstances for the aviation industry, the Authority expects BIAL to postpone all unnecessary sustaining capital expenditure to future control period.

5.5.40 On BIAL's comment that the Authority has not listed the approved cost line items of sustaining capex, the Authority would point out to BIAL that it has given the list of sustaining capital expenditure line items in the Annexure 7 of Consultation Paper no. 10/ 2021-22.

Flexibility to incur sustaining capital expenditure

5.5.41 The Authority has examined BIAL's request to provide flexibility to incur the sustaining capital expenditure costs in the Third Control Period. The list given by the Authority comprises of all the projects submitted by BIAL and therefore, BIAL has the flexibility and choice to undertake the necessary projects within the approved sustaining capital expenditure for the Third Control Period. The Authority noted that the sustaining capital expenditure of more than INR 900 cr. is approved in the Third Control Period which is more than the total cost of Group B projects. The Authority is of the view that the airport operator should be accountable for the all the capital expenditure including the proposed sustaining capital expenditure. In case such accountability is not maintained, then the airport operators will become inclined to break-up projects into small amounts to escape the scrutiny of the Authority. Further, on BIAL's comment that the sustaining capital expenditure is subject to change based on the dynamic business environment, the Authority notes that this uncertainty is applicable to all the building blocks and therefore, the Authority does not consider it as a valid argument. However, the Authority would clarify that BIAL can undertake capital expenditure if it is essentially required for the operations, safety and security of the airport other than those listed in Annexure 7 of Consultation Paper no. 10/ 2021-22 subject to its reasonableness and proper justification.

Unspent sustaining capex of FY21

5.5.42 The Authority has noted BIAL's comment on the unspent amount of sustaining capex of FY21. The Authority had proposed the sustaining capex for the Third Control Period based on the average of the last 5 years. Therefore, the Authority has not considered the unspent amount of the sustaining capex of FY21 to be carried forward to FY22 as it is expected to form part of the total approved sustaining capex for the Third Control Period.

Inflation indexation to Sustaining Capex

5.5.43 Based on BIAL's request to consider inflation indexation to the sustaining capex for the Third Control Period, the Authority has revised the sustaining capex with the inflation adjustment for the Third Control Period.

Capital expenditure decided by the Authority for Group C (Sustaining Capital expenditure)

5.5.44 The Authority has recomputed the average sustaining capex for the second control period after revising the sustaining capital expenditure for FY21 based on the actual sustaining capex of FY21. Below table provides the details of the actual sustaining capex for the Second Control Period:

Table 96: Sustaining capital expenditure of the Second Control Period

Particulars (INR cr.)	2017	2018	2019	2020	2021	Total	Average
Sustaining Capex	225.70	132.11	159.51	183.41	102.38	**803.11**	**160.62**

5.5.45 Based on the above examination, the Authority decides the sustaining capital expenditure of INR 160.62 cr. per year with inflation indexation for the Third Control Period for BIAL as given in the table below:

Table 97: Sustaining capital expenditure decided by the Authority for the Third Control Period

Reference	Project/ Group	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority (3)	Difference (4 = 3-2)
C	Sustaining Capex for TCP	1,344.59	1,584.15	**929.17**	**-654.98**

Total asset addition decided by the Authority in the Third Control Period

5.5.46 Based on the above, the total asset addition decided by the Authority for the Third Control Period is given in the table below:

Table 98: Total asset addition decided by the Authority for the Third Control Period

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority for TCP (3)	Difference (4=3-2)
A	Capex projects deferred from SCP to TCP	A1	Terminal 2 - Phase I	3,565.67	3,565.67	3,565.67	0.00
		A2	Forecourt, roadways & landside development - Phase 1b	1,786.40	1,786.40	1,703.96	-82.44
		A3	Aircraft Maintenance & Airport Maintenance Facilities	41.16	41.16	41.16	0.00
		A4	Utilities	104.22	104.22	55.55	-48.67
		A5	T2 - Apron Phase 2	0.00	427.73	407.23	-20.50

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority for TCP (3)	Difference (4=3-2)
		A6	South Parallel Runway - Phase 2	0.00	383.71	194.34	-189.37
		A7	Design, PMC and Pre-ops cost	710.16	830.57	446.09	-384.48
		A	**Capex projects deferred from SCP to TCP (sub-total)**	**6,207.60**	**7,139.45**	**6,413.99**	-725.46
B	Capex projects for the TCP	B1	Airside Security wall	3.88	3.96	3.96	0.00
		B2	Airside perimeter Road	18.21	18.58	18.58	0.00
		B3	T1 Optimization	249.51	50.00	50.00	0.00
		B4	Cycle Track along SAR / SWR / NCR plus docking stations	12.89	0.00	0.00	0.00
		B5	MMTH - Phase 2	268.59	80.91	0.00	-80.91
		B6	Airport Terminal Metro Station	156.82	165.30	0.00	-165.30
		B7	City Side Metro Station	97.60	103.07	0.00	-103.07
		B8	North west road expansion	41.13	43.43	43.43	0.00
		B9	CISF Barrack Expansion and Access Road	44.79	39.16	39.16	0.00
		B10	BIAL Campus Parking and Canteen	69.65	0.00	0.00	0.00
		B11	Animal Quarantine facility	3.65	3.85	3.85	0.00
		B12	New cargo domestic terminal including Cool Port	101.88	104.37	104.37	0.00
		B13	Refurbishment of existing cargo terminals	118.76	121.47	121.47	0.00
		B14	Refurbishment of catering buildings	25.81	26.36	26.36	0.00
		B15	Water Treatment Plant	6.80	6.95	6.95	0.00
		B16	Landscape Works	69.39	0.00	0.00	0.00
		B17	Alpha 4	204.37	0.00	0.00	0.00
		B18	Landside Maintenance Building	12.48	13.18	13.18	0.00
		B19	Design, PMC and Pre-ops cost	399.15	79.70	44.04	-35.66
		B20	CISF Permanent Housing - Phase I	369.68	0.00	0.00	0.00
		B	**Capex projects for the TCP**	**2275.04**	**860.31**	**475.37**	-384.94
C	Sustaining capex for the TCP			1,344.59	1,584.15	929.17	-654.98
	Grand Total			**9827.23**	**9583.92**	**7818.53**	-1,765.38
D	IDC			980.88	1,061.22	1065.15	3.93

Reference	Project/ Group	No.	Particulars	Proposed capex as per BIAL's MYTP submission for TCP (1)	Revised proposed capex as per BIAL for TCP (2)	Approved capex as per Authority for TCP (3)	Difference (4=3-2)
E	**Total (including IDC)**			**10,808.11**	**10,645.14**	**8,883.44**	-1,761.45

5.5.47 The following table provides the year-wise total asset addition decided by the Authority for the Third Control Period:

Table 99: Total year-wise asset addition decided by the Authority in the Third Control Period

Ref	Project#	2022	2023	2024	2025	2026	Total
A1	Terminal 2 - Phase I		4,579.32				4,579.32
A2.1	Forecourt, roadways & landside development - Phase 1b (except MMTH)		1,495.65				1,495.65
A2.2	MMTH - Phase I		537.34				537.34
A3	Aircraft Maintenance & Airport Maintenance Facilities	45.05					45.05
A4	Utilities	67.48					67.48
A5	T2 Apron - Phase II	447.17					447.17
A6	South Runway - Phase II	286.56					286.56
A	**Sub-Total - Deferred projects from SCP**	**846.27**	**6,612.30**	**0.00**	**0.00**	**0.00**	**7,458.57**
B1	Airside Security wall		4.62				4.62
B2	Airside perimeter Road		21.65				21.65
B3	T1 Optimization				62.52		62.52
B4	Cycle Track along SAR / SWR / NCR plus docking stations						0.00
B5	MMTH - Phase 2					0.00	0.00
B6	Airport Terminal Metro Station					0.00	0.00
B7	City Side Metro Station						0.00
B8	North west road expansion					47.87	47.87
B9	CISF Barrack Expansion					43.16	43.16
B10	BIAL Campus Parking and Canteen						0.00
B11	Animal Quarantine facility					4.25	4.25
B12	New cargo domestic terminal including Cool Port		119.44				119.44
B13	Refurbishment of existing cargo terminals		139.01				139.01
B14	Refurbishment of existing catering buildings		30.59				30.59
B15	Water Treatment Plant		8.07				8.07
B16	Landscape Works					0.00	0.00
B17	Alpha 4					0.00	0.00

Ref	Project#	2022	2023	2024	2025	2026	Total
B18	Landside Maintenance Building					14.53	14.53
B20	CISF Permanent housing - Phase I					0.00	0.00
B	**Sub-Total - Projects proposed in TCP**	**0.00**	**323.38**	**0.00**	**62.52**	**109.80**	**495.69**
C	Sustaining capex	168.49	176.75	185.41	194.49	204.02	929.17
	Total	**1,014.76**	**7,112.43**	**185.41**	**257.01**	**313.83**	**8,883.44**

capex including IDC, PMC, Design, pre-operative expenses and contingency expenses

Asset allocation and aeronautical asset additions for the Third Control Period

5.5.48 The Authority examined BIAL's submission on the common asset allocation ratio. The Authority does not agree with the BIAL's proposition that the Gross Block Ratio needs to be applied to the common projects. The Authority is of the view that Gross Block Ratio can be applied on the entire block of project cost approved for the Third Control Period without differentiating between different projects instead of BIAL's proposition of applying it on individual projects. Since, the Authority has proposed project wise ratio for bifurcation into aeronautical and non-aeronautical assets in the Third Control Period, the use of terminal area ratio for common projects is appropriate.

5.5.49 Based on the above, the aeronautical asset allocation decided by the Authority for the Third Control Period is given in the table below:

Table 100: Aeronautical capital expenditure decided by the Authority for the Third Control Period

				Aero Additions					
S no	**Asset additions (INR cr.)#**	**Total addition**	**Aero Allocation ratio (%)**	**2022**	**2023**	**2024**	**2025**	**2026**	**Total aero**
A1	Terminal 2 - Phase I	4,579.32	87.66%	-	4,014.23	-	-	-	4,014.23
A2.1	Forecourt, roadways & landside development - Phase 1b (except MMTH)	1,495.65	85.73%	-	1,282.22	-	-	-	1,282.22
A2.2	MMTH - Phase 1	537.34	31.53%	-	169.43	-	-	-	169.43
A3	Aircraft Maintenance & Airport Maintenance Facilities	45.05	85.73%	38.63		-	-	-	38.63
A4	Utilities	67.48	85.73%	57.85		-	-	-	57.85
A5	T2 Apron - Phase II	447.17	99.20%	443.58		-	-	-	443.58
A6	South Runway - Phase II	286.56	100.00%	286.56		-	-	-	286.56
A	**Sub-Total - Deferred projects from SCP**	**7,458.57**		**826.62**	**5,465.87**	-	-	-	**6,292.50**
B1	Airside Security wall	4.62	100.00%	-	4.62	-	-	-	4.62
B2	Airside perimeter Road	21.65	100.00%	-	21.65	-	-	-	21.65
B3	T1 Optimization	62.52	86.85%	-	-	-	54.29	-	54.29
B4	Cycle Track along SAR / SWR / NCR plus docking stations	0.00	100.00%	-	-	-	-	-	-
B5	MMTH - Phase 2	0.00	31.53%	-	-	-	-	-	-
B6	Airport Terminal Metro Station	0.00	100.00%	-	-	-	-	-	-

				Aero Additions					
S no	**Asset additions (INR cr.)#**	**Total addition**	**Aero Allocation ratio (%)**	**2022**	**2023**	**2024**	**2025**	**2026**	**Total aero**
B7	City side Metro Station	0.00	0.00%	-	-	-	-	-	-
B8	North west road expansion	47.87	100.00%	-	-	-	-	47.87	47.87
B9	CISF Barrack Expansion	43.16	100.00%	-	-	-	-	43.16	43.16
B10	BIAL Campus Parking and Canteen	0.00	100.00%	-	-	-	-	-	-
B11	Animal Quarantine facility	4.25	100.00%	-	-	-	-	4.25	4.25
B12	New cargo domestic terminal including Cool Port	119.44	100.00%	-	119.44	-	-	-	119.44
B13	Refurbishment of existing cargo terminals	139.01	100.00%	-	139.01	-	-	-	139.01
B14	Refurbishment of existing catering buildings	30.59	0.00%	-	-	-	-	-	-
B15	Water Treatment Plant	8.07	100.00%	-	8.07	-	-	-	8.07
B16	Landscape Works	0.00	100.00%	-	-	-	-	-	-
B17	Alpha 4	0.00	86.85%	-	-	-	-	-	-
B18	Landside Maintenance Building	14.53	86.85%	-	-	-	-	12.62	12.62
B20	CISF Permanent housing - Phase I	0.00	100.00%	-	-	-	-	-	-
B	**Sub-Total - Projects proposed in TCP**	**495.69**		-	**292.78**	-	**54.29**	**107.89**	**454.97**
C	Sustaining capex	929.17		144.45	153.51	161.0	168.9	177.20	805.12
	Total	**8,883.44**		**971.07**	**5,912.17**	**161.0**	**223.2**	**285.09**	**7,552.58**

capex including IDC, PMC, Design, pre-operative expenses and contingency expenses

5.5.50 The Authority decides to true-up the total asset addition and the aeronautical asset addition for the Third Control Period based on the actual asset addition undertaken in the next control period and subject to its reasonableness.

5.5.51 The Authority decides to true-up the asset allocation of the assets capitalized in the Third Control Period based on the actual asset addition undertaken in the next control period and subject to its reasonableness.

Depreciation for the Third Control Period

5.5.52 The Authority has examined the comment of BIAL regarding the actual asset wise identification of aeronautical and non-aeronautical depreciation instead of applying the aeronautical asset ratio of the year. The Authority is of the view that the aeronautical asset ratio captures the aeronautical to non-aeronautical bifurcation of assets and the same can be adopted for computation of the aeronautical and non-aeronautical depreciation for the Third Control Period.

5.5.53 The Authority has noted FIA's comment on the useful life of terminal building and residual value of assets. The Authority had given the option to the airport operator to decide the useful life for the terminal building as either 30 years or 60 years. Based on the assessment of the airport operator, the useful life submitted by BIAL was 30 years with residual value as 0% and the same has been considered by the Authority as the useful life for terminal building and residual value of assets.

5.5.54 Based on the above, the depreciation decided by the Authority for the Third Control Period is given in the table below:

Table 101: Depreciation decided by the Authority for the Third Control Period

Particulars (In INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Total depreciation as per BIAL (A)	**541.48**	**726.38**	**752.18**	**760.23**	**797.08**	**3,577.35**
Adj. - Change in useful life, revision in asset addition (B)	-217.73	-224.04	-89.33	-105.31	-138.81	-775.23
Adj. - EIL assets (C)	-0.90	-0.90	-0.90	-0.90	-0.90	-4.48
Adj. - Less: Depreciation on excluded ECT cost (D)	-20.31	-20.31	-20.31	-20.31	-18.64	-99.86
Adj. - Add: Depreciation on FA assets (E)	11.19	11.19	11.19	10.03	8.40	52.01
Total adjusted depreciation (F = A+B+C+D+E)	**313.75**	**492.33**	**652.83**	**643.75**	**647.14**	**2,749.79**
Aeronautical proportion of gross block (G)	91.99%	87.81%	87.79%	87.78%	87.84%	
Aeronautical depreciation as per the Authority (H = F*G)	**288.61**	**432.29**	**573.15**	**565.07**	**568.44**	**2,427.57**

5.5.55 The Authority notes the depreciation will change based on the changes in the asset additions and the date of capitalization. The Authority decides to true-up the depreciation of the Third Control Period based on the actual asset additions and the actual date of capitalization.

Regulated Asset Base for the Third Control Period

5.5.56 Based on the discussions in the previous sections on the aeronautical asset addition and the aeronautical depreciation, the Authority decides to consider the following RAB for the Third Control Period:

Table 102: RAB decided by the Authority for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Aero opening RAB	4,427.38	5,109.84	10,589.72	10,177.60	9,835.75	
Add: Aero assets capitalized (refer *Table 100*)	971.07	5,912.17	161.03	223.22	285.09	**7,552.58**
Less: Aero disposals	0.00	0.00	0.00	0.00	0.00	**0.00**
Less: Aero depreciation (refer *Table 101*)	288.61	432.29	573.15	565.07	568.44	**2,427.57**
Aero closing RAB	**5,109.84**	**10,589.72**	**10,177.60**	**9,835.75**	**9,552.40**	
Average RAB	**4,768.61**	**7,849.78**	**10,383.66**	**10,006.68**	**9,694.08**	

5.6 Authority's decisions regarding regulatory asset base and depreciation for the Third Control Period

Based on the material before it and based on its analysis, the Authority has decided the following with regards to regulated asset base and depreciation for the Third Control Period:

5.6.1 To reduce (adjustment) 1% of the project cost from the ARR in case any particular capital project is not completed/ capitalized as per the capitalization schedule as per the approval in tariff order including Terminal 2 (Refer Para 5.5.6).

5.6.2 To include the pre-operative expenses of INR 62.39 cr. for the deferred projects of the Second Control Period in the RAB of Third Control Period such that the total pre-operative expenses for the Second Control Period projects is capped at INR 156 cr. To true-up the pre-operative expenses for the capital expenditure projects deferred from the Second Control Period to the Third Control Period after the projects are commissioned based on the review of the actual cost incurred and its reasonableness.

5.6.3 To consider the pre-operative expenses as 2% of the total project cost of Group B projects for the Third Control Period. However, this is subject to true-up on review of the total pre-operative expenses and its apportionment over all the eligible work. (Refer Para 5.5.36).

5.6.4 To consider the contingency cost as 3% of the Third Control Period project cost (Refer Para 5.2.73).

5.6.5 To consider the total asset addition and aeronautical asset addition given in Table 99 and Table 100 respectively for the Third Control Period

5.6.6 To true-up the total asset addition, asset allocation and the aeronautical asset addition for the Third Control Period based on the actual asset addition undertaken in the next control period and subject to its reasonableness.

5.6.7 To consider the aeronautical depreciation given in Table 101 for the Third Control Period

5.6.8 To consider the aeronautical RAB given in Table 102 for the Third Control Period.

6 WEIGHTED AVERAGE COST OF CAPITAL (WACC) FOR THE THIRD CONTROL PERIOD

6.1 BIAL's submission regarding WACC for the Third Control Period

Cost of equity

6.1.1 BIAL had appointed CRISIL Risk and Infrastructure Solutions Limited to carry out a study on evaluating Cost of Equity applicable to BIAL. Based on the CRISIL study, BIAL has considered the cost of equity for BIAL at 23.61%.

6.1.2 BIAL submitted the following assumptions for estimating the cost of equity:

a) Risk free rate is calculated by taking 10-year average yield on a daily basis for 10-year government securities.

b) Rate of market return is estimated by taking last 40 years data of BSE Sensex using Geometric Mean method and adding Dividend Yield based on longest available data on BSE Sensex.

c) Asset beta is taken as average of developing countries' asset beta. The asset beta for developing countries under consideration is 0.75.

d) D/E ratio is taken based on the normative approach and standard adopted by regulators across various infrastructure sectors in India and is computed to be 2.33.

Table 103: Cost of equity computation submitted by BIAL

Parameter	Value
Risk free rate	7.62%
Market Return	16.04%
D/E ratio	2.33
Equity beta	1.9
Cost of equity	**23.61%**

Cost of debt

6.1.3 BIAL submitted that cost of debt assumed for the Third Control Period is 10%. BIAL has given the following basis for arriving at 10%:

a) Based on the report of the RBI on Lending Rates of Scheduled Commercial Banks for the month of June 2020, following interest rates were submitted by BIAL:

Table 104: Interest rate as per RBI as submitted by BIAL

Average Interest Rate (as per RBI publication Jun 20)	PSU Banks	Private Banks
Month Wise from FY13 -FY20 on O/s Loans disbursed	11.08%	11.66%
Month Wise from FY16 -FY20 on Fresh Loans Sanctioned	9.71%	10.50%
Month wise 1 year MLCR from FY17-20	8.71%	9.32%

b) BIAL submitted that the independent consultant, in the Consultation Paper issued by the Authority for determination of aeronautical tariff for the Third Control Period for DIAL had analysed yields of 13 debt instruments issued by various Infrastructure Companies and had arrived at a simple average of 9.97% as given below.

Table 105: Interest rate on bond issued as submitted by BIAL

Issuer	Number issued	Rate
Adani Infra (India) Limited	1	10.50%
AP Capital Region Dev Auth	5	10.32%
Ashoka Buildcon Limited	1	9.80%
G R Infra projects Limited	6	9.24%
Simple Average		**9.97%**

6.1.4 BIAL submitted that the average interest rate for both outstanding loans and fresh loans sanctioned are in the range of 10% to 11%. BIAL submitted that the 1-year MCLR is also around 9% (approx.) and BIAL, being an AA rated company is estimated to have a spread of 50 to 80 bps on the MCLR. BIAL submitted that the average interest rate of bonds issued by similar companies is also in the range of 10%. Hence, considering various range of interest rates depicted in tables above and the existing loan facilities availed by BIAL, BIAL submitted that it has considered 10% as the average cost of debt for the Third Control Period.

Weighted average cost of capital

6.1.5 Based on the cost of equity, cost of debt and gearing ratio, BIAL submitted the following FRoR for the Third Control Period:

Table 106: Weighted average cost of capital computation submitted by BIAL

Parameter	Value
Cost of equity	23.61%
Cost of State Support	0%
Cost of debt	10.0%
Weighted average gearing of equity	49.4%
Weighted average gearing of State Support	2.1%
Weighted average gearing of debt	48.6%
Weighted Average Cost of Capital	**16.51%**

6.2 Authority's examination regarding WACC for the Third Control Period

Cost of equity

6.2.1 As per the decision taken by the Authority in the Second Control Period order of BIAL, the Authority has commissioned a separate independent study through IIM Bangalore for evaluation of cost of capital for BIAL for the Third Control Period.

6.2.2 The independent study has drawn from the international experience of airports having comparability to BIAL in terms of hybrid till, ownership structure and scale of operations and has also studied the regulatory framework of other regulators for the study. The summary of the independent study is given at Annexure 5. The independent study has recommended the Cost of Equity of 15.05% which is arrived at as shown in the table below:

Table 107: Computation of cost of equity as per the independent study

Variables	Value
Asset beta based on Proximity Score Weights of comparable set	0.564689
Gearing Ratio (D/E)	0.9231
Gearing Ratio (D/D+E)	48%

Variables	**Value**
Equity beta	0.9296
Risk Free Rate	7.56%
Equity Risk Premium	8.06%
Cost of equity	**15.05%**

6.2.3 The independent study has computed the Cost of Equity at 15.05% by using Capital Asset Pricing Model and using a notional Debt : Equity ratio of 48%:52%. While the study has used a nominal debt rate of 10.05% for illustrative purpose to arrive at the Weighted Average Cost of Capital, the Authority proposes to use the actual cost of debt for the purpose of calculation of WACC for tariff determination.

6.2.4 The Authority proposes to adopt the recommendations of the independent study in the tariff determination for the Third Control Period.

Cost of debt

6.2.5 The Authority noted that BIAL has considered cost of debt at 10% for the Third Control Period.

6.2.6 The Authority sought from BIAL the prevailing interest rate on the existing Rupee Term Loan of BIAL.

6.2.7 BIAL has submitted the mail from State Bank of India which stated that interest rate on the Rupee Term Loan of BIAL is set to 7.85% effective from 21 August 2020.

6.2.8 The Authority proposes to consider the prevailing interest rate of 7.85% as cost of debt for the Third Control Period.

6.2.9 The Authority proposes to true-up the cost of debt of BIAL for the Third Control Period based on actuals.

Weighted average cost of capital

6.2.10 Based on the above, the Authority proposes to consider the following WACC for the Third Control Period for BIAL:

Table 108: Weighted average cost of capital proposed by the Authority for the Third Control Period

Parameter	**Value**
Cost of equity	15.05%
Cost of debt	7.85%
Weighted average gearing of equity	52.0%
Weighted average gearing of debt	48.0%
Weighted Average Cost of Capital	**11.59%**

6.3 Stakeholder comments regarding WACC 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. 10/ 2021-22 with respect to WACC for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on WACC for the Third Control Period

6.3.2 The comments from BIAL with regards to the WACC are given below:

Cost of Equity

- *We appreciate the decision of the Authority to do study on Cost of Equity from an acknowledged expert body.*

- *While we appreciate Authority's view of conducting a scientific study for the determination of Cost of Equity for Indian airports, we would also like to highlight the inadequacies in the Cost of Equity study by IIM Bangalore as below:*

  1) Incorrect use of asset beta of airports in developed economies as comparable for Indian airports

- *It must also be noted that most of the airports considered for asset beta estimation by IIM B Study are operating in a developed economy, wherein passenger's air travel pattern is very different from developing countries and there are only two airport entities which are considered by the Authority in its review, which operates in developing economies, i.e., MAHB and AoT. Referring to such companies from developed economies for the beta computation will result in an inaccurate estimate.*

  a) Wide variance between asset beta of developed and developing economies

- *Asset beta of airports in the developing countries is consistently higher than the asset beta of airports in developed economies. This can be demonstrated by the data provided by IIM B also, at table 3.1 of the study the derived asset beta for Sydney airport is 0.40 whereas that for AoT is 0.86. This shows the quantum of variation in risk perception between developed and developing countries. Similar differential was also highlighted in the CRISIL report on BIAL's Cost of Equity.*

Table 6: Asset Beta comparison of Developed and Developing Countries

Asset Beta	Developing Countries	Developed Countries	All Countries
Average Asset Beta	0.75	0.47	0.60

Source: CRIS Analysis

  b) Incorrect assessment of risks faced by Indian airport operators

- *The Study by IIM B states that asset beta of airports in developed economies may be an appropriate comparable to Indian context given that there is limited demand risk and Indian airports get "generous" true-ups.*

- *The IIM B Study states that only real risk is the demand risk, i.e., the airport's exposure to the macroeconomic conditions. It measures the sensitivity of growth in passenger volumes to market returns through regression analysis and concludes that demand risk is low given very low regression coefficient (~0.3). The R squared value of this regression analysis is very low (0.0379), i.e., the stock market movement explains only 3.79% of the demand growth at BIAL. As such it is incorrect to conclude that demand risk is low.*

- *Under efficient market assumptions, stock market index should be reflective of the economic condition of the country. However, this is not true in real world where there is little co-relation in the stock market movement with the economic growth of the country, especially in India in recent years. Further, most of the traffic forecasting studies estimate long term demand based on economic growth in terms of GDP / GDP per capita and not based on stock market movement.*

  In addition to the economic conditions which affect demand, the aviation demand in India is highly price-sensitive to air fare which may result in higher traffic volatility. Further Indian airports face significant Counterparty Risk. It's a known fact that India has witnessed failures of two major Indian airlines in the past decade. Further, majority of the airlines in India have made continued losses even when traffic was increasing at double digit growth rate and maintained weak balance

- *sheets. There are concerns of these airlines being considered as a going concern and represent a significant counterparty risk for the airports.*

- *Further, Covid-19 pandemic has already highlighted the risk that the aviation industry faces from demand and supply perspective (Even though the stock market is at an all-time high).*
- *With respect to the true-ups, while the traffic is trued up there is no true up mechanism available to the airport operators in India of the potential loss in non-aeronautical revenues due to the demand risk under the existing regulatory regime. While true-up reduces a part of the risk to the extent of aeronautical revenues, the airport operator is exposed to the demand risks associated with non-aeronautical revenues.*
- *Hence, we disagree with the assessment that demand risk to BIAL can be considered low and it can be compared to an airport in developed market*

2) Impact of outlier bias and flawed proximity score on derived asset beta

a) Selection of sample comparable airports seems inadequate

- *The IIM B Study mentions that it has considered airports under different jurisdiction to determine the comparable airports.*
- *However, the Study has excluded majority of the airports from developing economies. While excluding airports of Canada and US is understandable given these are Government / Municipality owned, the Study excludes airports from Brazil citing recent privatization while completing ignoring the airports from Mexico. The airports from China are excluded based on argument that no credible data is available without providing any basis or evidence.*
- *Further, the Study has considered six airport companies out of which only four have data on share prices movement, i.e. Sydney Airport Limited, Malaysia Airports Holdings Berhad (MAHB), Airports of Thailand Public Company Limited (AoT) and Auckland International Airport Limited and the other two do not have any share price data.*
- *While the Study has ignored Brazil by providing a reason that privatization is a recent activity, it has also not considered any of the listed airports in the developed economies of Europe where the private airport operations have been an established practice (e.g. Copenhagen Airport, Zurich Airport, Fraport, Aéroports de Paris (ADP), Aeroporti di Roma, etc.)*

b) Comparable airports with wide range of Asset Beta exposes the analysis to outlier bias

- *The IIM B Study has considered a set of comparable airports with wide range of asset beta which exposes the analysis to be biased due to the outlier values. Two airports (Sydney and AoT) have asset beta which are beyond the ± 1.5 standard deviation from the mean and should ideally be excluded as outliers. The outlier has significant impact on the derived asset beta which is further highlighted by use of proximity score for determining weighted average.*

c) Selection of parameters for determination of Proximity Score are inadequate and not justified

- *The IIM B Study has selected parameters of Regulatory till, Ownership structure and Size of operations for determining the Proximity Score and derive weighted average. The Study does not provide any reference to literature or similar practices adopted for other international airports or infrastructure sector to support its selection of these parameters. While impact of Regulatory Till on the risk assessment of an airport is understandable, the Study does not provide any clarity on:*

1) How do Ownership structure and Size of operations impact Asset Beta?

2) Why are only these three parameters considered sufficient to determine comparable airports?

3) Why should not the operations in developed / developing economy be considered as a parameter for determining comparability?

- *The IIM B Study classifies airports into three categories: (1) 100% Government owned, (2) Govt/ private owned/funded, not being PPP and (3) PPP. However, it doesn't clarify the reasons for segregating PPP and non-PPP airports and its impact on Asset Beta even though they have similar ownership structure comprising of a mix of government and private shareholders.*
- *Further, it is not substantiated in the Study as to how the size of operations impacts the asset beta. For instance, London Heathrow (LHR) airport and Gatwick airport operate in same country under the same regulatory till and have similar ownership structure. The size of operations of LHR is almost twice that of Gatwick, yet their Asset Beta is nearly same.*
- *Just by changing the parameters and the scale of scoring, a totally different set of values for Proximity Score can be derived for the same set of comparable airports used in IIM B study.*

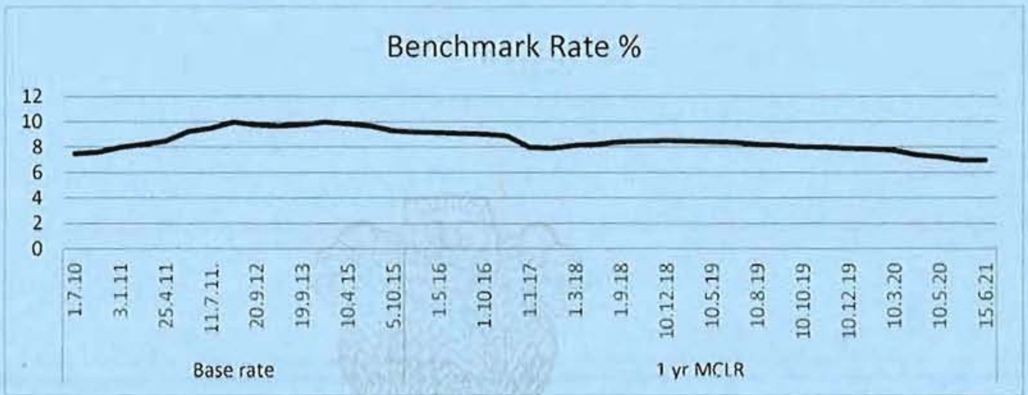
d) Incorrect use of Proximity Score as weights for deriving average Asset Beta

- *As per the outcome of the IIM B study, Cochin and Hyderabad airports whose operations are smaller than Bangalore airport as well as Delhi and Mumbai airports whose operations are bigger than Bangalore airport have higher Asset Beta as compared to Bangalore airport. This clearly indicates that as per the IIM B Study the Asset beta is not correlated with the size of the operations but rather is influenced by the proximity score with respect to the airport with outlier asset beta (i.e. Sydney airport with asset beta of 0.40 as compared to sample mean value of 0.62 and median value of 0.58).*
- *Again, just by eliminating the outliers (Sydney and AoT) from the selected sample, the values of derived asset beta shall change.*
- *Given that all airports in India are exposed to same set of regulatory regime and market risks, it is incorrect to consider that the proximity score to a sample airport with outlier asset beta value is the main driver of the economic risk that the shareholders of airport operators undertake.*
- *As per the proximity score calculated in IIM B study, Bangalore Airport is closer to Sydney Airport, an outlier, which reduces its weighted average asset beta. This clearly showcases the impact of bias in the selection of the sample and the non-removal of outliers on the end output of the study.*
- *Hence, we disagree with the methodology of considering airports with wide range of asset beta thus exposing the analysis to outlier bias and incorrect assessment of Proximity Score which is used as weights for deriving weighted average Asset Beta, which further highlights the impact of outlier bias in case of BIAL.*
- *Cost of Equity is a major driver of the returns to the stakeholders of the airport operator. We would request the Authority to finalize the Cost of Equity for the airports only after conducting a thorough review of the IIM B study based on the comments provided by BIAL and other airport stakeholders.*
- *Hence, we request the Authority to not consider Sydney Airport and re-assess the Cost of Equity.*

Cost of Debt

- *BIAL has negotiated with the lenders to arrive at the lowest possible debt rates, including at the time of finalizing the terms for the expansion loan of Rs.10,206 Cr.. The interest rate on the loan is presently at 7.85% p.a., linked to the 1-year MCLR rate. Thus, this is a floating rate loan, with annual reset clause, linked to MCLR levels prevailing at the time of reset.*

- *Therefore, to keep the cost of debt to 7.85% for entire 5 years of Third Control Period is very over optimistic assumption taken by the Authority. The Authority is aware about the historical annual fluctuations in the interest rates and has determined the actual cost of debt for Second Control period as 9.11%. Hence, the Authority cannot consider the current year interest rate, which happens to be at the lowest point as the basis for the entire 5 years of Third Control Period.*
- *The benchmark lending rate such as MCLR is at record low currently. Please see the below trend of benchmark lending rates of SBI in the last 10 years:*



(Source of Data: SBI website)

- *In the second control period, SBI 1-year MCLR has ranged between 7%-9.20%. In the first six months of calendar year 2020, it has fallen from 7.90% to 7%. In a rising interest rate scenario also, we may see such rapid rate increases as well. It may be noted that the transmission of interest rate reduction by private sector banks has not been to the same extent as SBI or other public sector banks. BIAL also has a private sector bank (Axis Bank) in its fold and the MCLR of this bank will also be a determinant of interest rate on BIAL's expansion loan.*
- *BIAL's loan for Expansion is based on SBI 1-year MCLR with a spread of 50 basis points or Axis Bank 1-year MCLR with a spread of 30 basis points, whichever may be higher, subject to the effective lending rate of any lender not being less than the MCLR of that lender.*
- *Historical MCLR Rates movement for SBI & Axis Bank is given below.*

Average 1-year MCLR %	FY 17	FY 18	FY 19	FY 20	FY 21
Axis Bank	9.01	8.28	8.69	8.42	7.57
SBI	8.81	8.00	8.39	8.14	7.05

Average 1-year MCLR %	For 4 years (excluding Covid year of FY 21)
Axis Bank	8.60
SBI	8.33

- *Adding the spreads as described above, the interest rates work out to 8.8-8.9% and hence the Authority has to take cognizance of this trend and not consider the rock bottom interest rates that is currently applicable for BIAL.*

Macro-Economic Situation:

- *Currently, the monetary policy is in an accommodative mode across the world. The rate of interest is at their lowest in advanced economies and trending south in emerging market economies. Central banks have maintained low rate to support the growth post Covid-19. However, global landscape is changing in favour of hardening rates. In the Indian context, given the huge borrowings indicated by the Government of India as well as by various states and the rising inflation due to high fuel costs and commodity prices, there will be pressure on yield, and this would lead to increase in benchmark rates as well.*
- *The economic growth forecast for India for FY22 has also been revised downward with RBI lowering its forecast to 9.50% while World Bank has lowered the forecast to 8.3%. S&P Global Ratings has also cut India's growth forecast for the current fiscal to 9.50%, from 11.00% earlier, and warned of risk to the outlook from further waves of the Covid-19 pandemic. S&P has said RBI has no room to cut interest rates with inflation above 6.00 % the upper end of the central bank target range. Therefore, interest rates are only expected to rise and not stay at the current levels.*
- *The long-term interest rate forecast by the Organisation for Economic Co-operation and Development (OECD) indicates interest rates in India going up from Q1 2022, with an increase of 50 bps during the year.*
- *Economists in India expect the 10-year G-Sec rates to gradually go up from around 6% presently to about 7.5% over a five-year period.*

Summary

- *With the past track record of BIAL as a borrower and other factors, and also owing to the present credit rating levels, the airport has been able to keep the spread over the benchmark rates at very fine levels. The credit rating presently has a negative outlook owing to the Covid-19 impact on the sector as a whole. The airport's ability to meet its debt servicing requirement and achieve the financial covenants under the financing agreements is also a key determinant of the credit rating. Inability to adhere to these requirements could also lead to credit rating downgrade with attendant consequences including increase of spread over the benchmark interest rates. Therefore, it is essential to ensure that the airport has adequate cashflows to meet its debt obligations.*
- *Given these inputs, the interest rate allowed to BIAL over the third control period should be adequate to take care of the indicated increase in the benchmark rate.*
- *Clearly, the Authority has to consider this apparent reality while arriving at the cost of debt for the airport operator.*
- *Considering the Axis Bank average MCLR rate and the spread the Interest rate works out to approx. 8.9%*
- *Thus, we would request the Authority to consider the likely increase of 1.50% in the interest rates in the 3rd control period and allow the same over the prevailing rate of 7.85%, leading to an effective cost of debt at 9.35%. It is to be noted that the interest at these levels is payable monthly. The cost of debt at 9.35% can be considered for entire Third Control Period.*
- *The Authority also should take note of the fact this cost of debt @ 9.35% is also considerably lesser compared to the cost of debt allowed to other airport operators having a similar credit profile. Further, as proposed by the Authority, the cost of debt for the Third Control Period can be trued up based on actuals.*

Other stakeholder comments on WACC for the Third Control Period

6.3.3 FIH Mauritius Investments Ltd. commented on cost of debt as follows:

- *"AERA has considered BIAL's existing interest rate of 7.85% for the entire tenure of 5 years of the 3rd Control Period as against BIAL submission of 10%.*

  BIAL has tied up debt for the Expansion project at a floating rate of 7.85% and this is one of the lowest in the airport sector. Interest rates have bottomed out and they are only expected to rise in future and not stay at the current levels. The Bank MCLR rates at their historic lows and the past experiences have shown that over a 5-year period, they definitely average higher than their historical lows.

  We request Authority to consider 9% (interest rate for 2nd Control Period) as cost of debt for the 3rd control period and true up of the same in the subsequent control period."

6.3.4 Siemens commented on cost of debt as follows:

- *"AERA has considered BIAL's existing interest rate of 7.85% for the entire tenure of 5 years of the 3rd Control Period as against BIAL submission of 10%.*

  The economic growth forecast for India for FY22 has also been revised downward by RBI, World Bank and S&P Global ratings.

  BIAL has tied up debt for the Expansion project at 7.85% and this is one of the lowest in the airport sector. Interest rates have bottomed out and they are only expected to raise and not stay at the current levels.

  We request Authority to consider 9% (interest rate for 2nd Control Period) as cost of debt for the 3rd control period and true up of the same in the subsequent control period."

6.3.5 MIAL commented on cost of debt as follows:

- *"Authority has considered existing interest rate of 7.85% for the entire tenure of 5 years of the TCP as against BIAL submission of 10%. Since the project loan interest rates are linked to MCLR issued by the lending banks, the upward movement of the MCLR shall also increase the interest rates on the project loans. Authority should reconsider its stance on the cost of debt proposed and allow a rate which is fair considering the expected rise in interest rates as considered by BIAL, which should be trued up."*

6.3.6 APAO also commented on cost of debt as follows:

- *AERA has considered BIAL's existing interest rate of 7.85% for the entire tenure of 5 years of the 3rd Control Period as against BIAL submission of 10%. The economic growth forecast for India for FY22 has also been revised downward with RBI lowering its forecast to 9.50% while World Bank and S&P have lowered the forecast to 8.3% and 9.50%, respectively. BIAL has tied up debt for the Expansion project at 7.85% and this is one of the lowest in the airport sector. Interest rates have bottomed out and they are only expected to raise and not stay at the current levels. Since the project loan interest rates are linked to MCLR rates issued by the lending banks, the movement upwards of the MCLR rates also necessarily increase the interest rates on the project loans. The Bank MCLR rates at their historic lows and the past experience have shown that over a 5-year period, they definitely average higher than their historical lows.*

  We request Authority to consider 9% (interest rate for 2nd Control Period) as cost of debt for the 3rd control period and true up of the same in the subsequent control period."

6.3.7 IATA commented as follows:

- *"6.3.1 To consider the cost of equity at 15.05% as per the outcome of the independent study.*

We would like to make the following comments in relation to assumptions underpinning the calculation of the cost of equity in the study:

Beta:

In order to determine an appropriate Beta (which is a reflection of the risk the airport faces vis a vis the market), the study should have first started by understanding what are the risks faced by BIAL (regulatory, demand, supply risks) and then how these risks compare to those faced by airports where financial/regulatory information is available. The study intends to do this through the application of the proximity scores, which is a good approach, but we think that the factors that are used for the calculation of the proximity scores are not complete enough to provide an adequate result.

The regulatory regime of BIAL is close to a "rate of return" regulation. At the end of the regulatory period, AERA "trues up" most of the components that underpin the calculation of charges. There are true ups on traffic, non-aeronautical revenues, OPEX, CAPEX (with certain disallowances), taxes and the WACC (with the exception of cost of debt ceiling). So, in practical terms, BIAL is protected from a series of risks (not all) that many of the other regulated airports do face.

One of the biggest business risks upfronted by an airport is demand risk, as has been made evident by the pandemic. If the demand risk is eliminated via the implementation of true ups, then the risks borne by this airport would tend to be closer to that of water or electricity companies rather than that of other airports. As far as we understand, none of the final comparator airports is under a regulatory regime in which there is a 100% true up of demand.

We understand that some risks still remain in the non-aeronautical side, but that is a consequence of having a hybrid model (Which users did not ask, as our position has always been to implement a Single till). Consumers were against the proposal to move to a hybrid till and now should not be further penalised by rewarding a higher WACC due to this decision.

We note that page 47 of the study mentions that Betas of developed countries could be used because traffic is trued up. We would like to make the point that the Beta for BLR could (and should) be even lower than these since most of such airports do still have traffic risk.

With this in mind, we strongly request AERA to reconsider the calculation of the Beta for BIAL, by making a significant downwards adjustment of the Beta calculated in the report since the risks faced by the comparator group are much higher than those faced by BIAL (at least to somewhere around or below 0.4). This downwards adjustment should be informed by Betas applied by regulators for utilities companies.

On a separate note:

- *Table 2.17 is out of date in relation to the determination of the Beta for Dublin airport. The table makes reference to the 2014-19 determination, when 2020-24 determination has already been made and can be downloaded from here (And the supporting study from here). The allowed asset beta for Dublin airport is 0.50 (noting that traffic risk is faced by the airport, and therefore MIALs beta should arguable be lower than that). We also do not see what the study references as "complicated"*

- *Only Beta decisions or studies commissioned by the UK CAA should be included in table 2.15. This table makes a reference to a study (NERA) that has not been commissioned by the regulator.*

- *We note that the study calculates equity betas from Bloomberg. We would appreciate for AERA to confirm whether the consultants have used the "raw" or "adjusted" Beta from Bloomberg. The* *problem is that the adjusted based (aka Blume adjustment) assumes that Beta tends to the value of 1 over time, which is fundamentally wrong in the context of determining a Beta of a regulated company.*

Equity Risk premium

From what we have seen for regulatory decisions, the most accepted and used method for calculating the ERP is based on historic information (and the longer in time the dataset, the better).

Models based on predicted future ERP (e.g. dividend growth model) are much less reliable as they are constructed on the basis of a number of assumptions and introduce certain optimism bias, and therefore we would request AERA not to consider it.

There is more recent data to feed into the Damodaran approaches (i.e. Bond linked & CDS). The latest available information from Damodaran (see link), the equity risk premium for India is 6.23% on the basis of the bond rating approach (rather than the 8.60% mentioned in the report), and 5.5% on the basis of the CDS approach (rather than the 7.87% provided in the study). The calculation are as follow:

*Bond approach: 4.38% (mature market implied risk premium) + 1.82% (rating based default spread) * 1.0154 (multiplier) = 6.23%*

*CDS approach: 4.38% (mature market implied risk premium) + 1.1% (sovereign CDS net of US) * 1.0154 (multiplier) = 5.50%*

There is also an inconsistency issue in the ERP comparators and the other Return on Equity assumptions. While the study introduces the Damodaran approximations for an Indian ERP by adding a sovereign risk estimate (based on CDS and sovereign bond ratings) on top of the ERP of a mature market, it then double counts the same risk by using Indian government bond yields as the basis for the Risk Free Rate (which by definition, as it is not a AAA rated bond, its yield already includes a sovereign risk). In fact, as highlighted by Damodaran in its paper "Country Risk: Determinants, Measures and Implications – The 2020 Edition", (Table 30: Risk free rates in Currencies with non-AAA Rated government issuers), the author calculates the risk free rate for India as of 1 July 2020 (Government bond rate: 5.82%, Rating Moody's Baa2, Default spread 2.23% with the consequent "risk free rate" of 3.59% (5.82%-2.23%).

So, while the approximation done by Damodaran for an Indian ERP is perfectly valid, and to be taken into account when assessing the ERP for BIAL, the study should then make the necessary adjustments in the Risk Free rate to avoid any "double counting" of risk.

So, there are two items for AERA's consideration with regards to equity risk premium

o Consider using latest data available for the calculation of the ERP under the bond rating and CDS approach.

o Ensure that there is no "double counting" of risk in between assumption for the equity risk premium and Risk free rates.

Risk free rate:

- There is no justification as to why an 18-year average has been used for the calculation of the government bond. Since this average is on nominal yields, it picks up inflation expectation from more than a decade ago which may not be the same as nowadays. More generally the worldwide situation is completely different from more than decade ago. We recommend AERA to consider a much shorter period (somewhere between 1 and 5 years).

- We also note that over the past year the Indian Government bonds have been significantly lower than that assumed in the study. While the risk free rate is assumed to be 7.56%, the 10-year government bonds yield has been less than that rate since April 2019. AERA may need to take this into consideration.

In summary, below are the recommendations with respect to the Return on Equity:

• Acknowledge that BIAL (as well as the other Indian regulated airports) demand risks are significantly mitigated (due to the true up mechanism) and therefore use a lower asset beta relative to any other comparator airport (or even consider using betas of utilities).

• Ensure that there is consistency between the ERP assumption and the Risk free rate to avoid "double counting" of risks.

• Consider updating data for the bond based and CDS based approaches for calculating the Return on Equity

• Consider dropping the forward-looking analysis on ERP

We are convinced that, once the recommendations above are taken into account, the Return on Equity would be significantly lower than that proposed by AERA.

- *6.3.2 To consider the notional debt to equity (gearing) ratio of 48%:52% as suggested by the independent Study.*

  We support the usage of a notional gearing, as the regulated companies should be encouraged to implement the most efficient capital structure.

- *6.3.3 To consider 7.85% as cost of debt for the TCP.*

  We are in agreement with the utilization of this rate. We would also like to reiterate the point made in chapter 3 which relates to the recommendation for AERA to compare cost of debt of the various airports it regulates and only consider allowing the lowest available cost of debt.

- *6.3.4 To true-up the cost of debt of BIAL for the TCP based on actuals.*

  It would be important for AERA to consider implementing a limit as to how much this rate could increase throughout the third control period. Without such cap, we fear that there wont be any incentive to maintain a low cost of debt. In other determination AERA used to impose such caps.

- *6.3.5 To consider the WACC of 11.59% for the TCP based on above mentioned cost of equity, cost of debt and considering the notional gearing ratio as suggested by the independent study.*

  We welcome the fact that AERA has reviewed BIALs (fully unjustified) proposed level of WACC and made appropriate amendments to reach a level significantly lower compared to such proposals. However, we believe that, based on the analysis provided throughout this section, the level of allowed WACC should be even lower. We would appreciate for AERA to take into consideration our recommendations for the final order."

6.3.8 FIA commented as follows:

- *"FIA appreciates that the AERA has considered a lower Weighted Average Cost of Capital of 11.59 % for the Third Control Period, including an independent study on Cost of Equity. However, FIA submits that fixed/ assured return favours the airport operators, and creates an imbalance against the airline, which are already suffering from huge losses and bear the adverse financial impact through higher tariffs.*

Further, due to such fixed / assured returns, service providers like BIAL have no incentive to look for the productivity improvement or ways of increasing efficiencies or take steps to drastically reduce costs as they are fully covered for all the costs plus their returns. Such a scenario may result in inefficiencies and higher costs, which are ultimately borne by the airlines. In the present scenario any assured return on investment (i.e., return on investment after the income tax), in excess of three (3) %, i.e., being at par with bank fixed deposits, will be onerous for the airlines.

In view of the above, AERA is requested to immediately review WACC/FRoR by capping the returns to a maximum of three (3)%."

6.3.9 Blue Dart commented as follows:

"AERA has considered 7.85% as cost of debt for third control period. The said rate is considered based on present interest rate charged by State Bank of India for Rupee Term Loan offered to BIAL. As there has been overall reduction in the interest rates and said trend is going to be continue in near future, we request AERA to further reduce the interest rate for cost of debt. The said reduction will provide a window of opportunity for KIAL to look at various options to reduce the interest cost further to benefit KIAL and all users, as the Fair Rate of Return is linked to cost of debt."

6.4 BIAL's response to stakeholder comments regarding WACC for the Third Control Period

6.4.1 On IATA's comments regarding cost of equity, BIAL has submitted as follows:

- *"On the above issue, BIAL believes that its submissions made to AERA / TDSAT, and its legal positions are as per the provisions of Contracts entered into with Sovereign governments, tenable in law and BIAL reiterates the same. BIAL has exercised its rights to appeal against the said TDSAT order and AERA's decision is subject to outcome of the legal proceedings.*

  For brevity, BIAL is not reiterating its earlier positions and contentions contained in its submissions to various consultation papers, memoranda of appeal, written submissions and requests that the same be read as a part of this submission. BIAL respectfully states that all its submissions in this response are without prejudice to whatever BIAL has contended earlier."

6.4.2 On FIA's comments regarding WACC, BIAL has submitted as follows:

- *"FIA's above comment does not merit a reply. It has become fashionable for FIA to suggest such irrational and illogical proposals regarding airport operators' business.*

  Airport operators cannot be held responsible for the performance of the airlines sector, which is totally an unregulated market.

  If Airlines are unable to raise adequate revenues in their business, it cannot be a corollary that airport operators too should not make revenues for the asset created solely for the purpose of passengers and airlines.

  The airport charges (payable for use of Indian and International airports)) that an airline pays is in the range of 8-10% of its total costs, based on the study of last 3 years annual reports of major Indian airlines such as Indigo, Spicejet, GoAir, Vistara and Air Asia. Hence, the Airports' contribution to the Airline cost structure is very limited and does not deserve such comments."

6.4.3 On Blue Dart's comments regarding WACC, BIAL has submitted as follows:

- *"AERA has considered BIAL's existing interest rate of 7.85% for the entire tenure of 5 years of the 3rd Control Period as against BIAL submission of 10%.*

  BIAL has tied up debt for the Expansion project at a floating interest rate of 7.85% and this is one of the lowest in the airport sector.

Interest rates have bottomed out and they are only expected to rise in future and not stay at the current levels.

The Bank MCLR rates are at their historic lows and the past experiences have shown that over a 5-year period, they definitely average higher than their historical lows. Therefore, 7.85%cannot be considered as the interest rate for 3rd control period

BIAL has accordingly requested for 9.35% to be the cost of debt for the 3rd control period with the same being trued up at the end of the control period.

BIAL's detailed analysis and submission are part of its response to the Consultation Paper."

6.5 Authority's examination after reviewing stakeholder comments on WACC for the Third Control Period

6.5.1 The Authority has carefully reviewed the comments received from BIAL and other stakeholders on WACC.

Response to BIAL's comments on WACC

6.5.2 The Authority notes that BIAL has raised concerns regarding the Authority's proposal for cost of equity based on the study by IIM Bangalore. The concerns/issues raised by BIAL are summarized below:

- Risk in developed market economies is lesser than developing market economies
- Risk estimation for airports in India (Airports face other risks such as counterparty risk, loss in non-aeronautical revenue etc.)
- Shortlisting criteria of airports and inadequate sample of airports for estimation of asset beta for BIAL.
- Estimation of cost of debt at lower levels for BIAL in comparison to the market outlook and to the other airports.

6.5.3 The Authority has noted BIAL's comments stating that comparator airports from developed economies will lead to an inaccurate result as air travel pattern and risks are different in developed economies as compared to developing economies. In this regard, the Authority is of the view that proximity score weighted average beta used in the study, captures the differences in airport operations between BIAL and comparator airports and ensures that more weightage is given to airports which are similar to BIAL. In addition, the Authority also provides true up for all building blocks of tariff determination which is not provided elsewhere leading to significantly lesser risk than developing countries and even compared to developed countries. Thus, the Authority considers that the risk considered for determining asset beta has not been understated.

6.5.4 The Authority has also noted BIAL's comment on the riskiness of non – aeronautical revenue due to the demand risk under existing regulatory regime. The Authority is of the view that the riskiness is a result of the hybrid till model which was supported by Airport operators such as BIAL though it was not part of its concession agreement. It gave them an added advantage as only 30% of revenue was used to cross subsidize ARR and the operator was getting incremental return on the remaining 70%. However, with reduced demand as a result of the pandemic, the airport users cannot be penalized for the position taken by the airport operator in the past.

6.5.5 The Authority has taken note of BIAL's comment that the shortlisting criteria for selection of airports was not sufficient and airports from some developing economies were excluded. The emphasis on developing vs developed countries is exaggerated by BIAL in view of the fact already given in 6.5.3. The Authority examined the contents of the study and is of the view that the study has adopted a comprehensive shortlisting criterion for identifying comparative airports including regulatory framework, revenue till, ownership structure and scale of operations. It also clearly mentions the shortlisting criteria which was governed based on the proximity score, data availability and to ensure that a healthy mix of similar and dissimilar airports for comparison and contrast. The report also clearly details out the reasons for not considering airports from certain geographies which are self-explanatory. Thus, the Authority considers that the shortlisting criteria and sample of airports as adequate to ensure a fair estimation of BIAL's beta.

6.5.6 The Authority has noted BIAL's comments on cost of debt stating that the estimate is at lower levels compared to the market outlook as well as in comparison to other Indian airports. The Authority appreciates the efforts and negotiations put in by BIAL with its lenders which has led to an interest rate of 7.85% p.a. The Authority is of the view that the pandemic has had significant impact on the Indian economy and its future outlook with the demand estimated to be subdued in the coming years. As a result, the interest rates on loans is expected to be at the same level or lower than the 2020 levels agreed between BIAL and SBI. Additionally, the Authority also reviewed the current 1-year MCLR rate for SBI and has found the current rates to be at 7% as of 15th June 2021. Hence, the Authority sees no merit in revising the cost of debt for BIAL and has decided to consider the cost of debt as 7.85% for the Third Control Period. Further, the Authority decides to true-up the cost of debt for the Third Control Period based on the actuals subject to its reasonableness and efficiency.

Response to IATA's comments on WACC

6.5.7 The Authority also noted comments from IATA on Cost of Equity stating that:

- Biggest business risk faced by an airport is the demand risk which is virtually eliminated for Indian airports such as BIAL through the true ups as part of the regulatory framework.
- The risk on the non-aeronautical side is a result of the hybrid till model which was supported by the airport operators as it is beneficial to them in comparison to the single till framework. As a result, the users should not be penalized for the preference of the airport operator.
- Beta for BIAL could be lower (than what is proposed by the Authority) than the developed countries airports since most of these airports do not have the benefit of the true up mechanism which is available to BIAL and hence are subjected to traffic risk involved.
- Models based on future ERPs are less reliable
- For calculation of Equity Risk Premium (ERP), estimates of ERP for Damodaran may be revised based on recent market data.
- Concerns around over estimating risk-free rate
- Use of notional gearing of 48%:52% and considering cost of debt at 7.85%

6.5.8 The Authority has taken note of IATA's comments that the cost of equity should be lower for BIAL as it faces lesser risk compared to developed countries airports due to the true up mechanism. The Authority noted the comments from IATA stating that complete true up implies no traffic risk for the airport operator however BIAL still faces systemic risks that may arise due to natural calamities, global trade restrictions, war, etc. The Authority has taken a conservative view while determining demand risk for BIAL and has accordingly given more weightage to airports which are operationally similar to BIAL captured in the proximity score weighted average beta used in the study.

6.5.9 The Authority noted IATA's comments on the risk related to non-aeronautical revenue which are as a result of the hybrid till model which has been supported by airport operators such as BIAL in the past.

However, with reduced demand and loss of revenue, the airport users cannot be penalized for the position taken by the airport operator earlier.

6.5.10 The Authority noted IATA's comment on beta that it could be lower for BIAL in comparison to developed country airports due to the benefit of the true up mechanism. In this regard, the Authority is of the view that proximity score weighted average beta used in the study, captures the differences in airport operations between BIAL and comparator airports and ensures that more weightage is given to airports which are similar to BIAL.

6.5.11 The Authority has taken note of IATA's comment stating that models based on future ERPs are less reliable. The Authority is of the view that forward looking estimate can be considered as it contains relevant information. The Authority also wishes to highlight that only one of the four approaches in the study considers forward looking ERP which account for only 25% of weightage on outcome. Hence, the Authority decides to not consider any revision to the ERP estimate used by the Independent study while determining the cost of equity.

6.5.12 The Authority has taken note of IATA's comments suggesting revision in Damodaran's estimates based on recent market data. The Authority is of the view that the independent study used all relevant information as available prior to December 2020, as required for determining the ERP for the Third Control Period. The Authority considers that the correct procedure is to base ERP estimates on the information available at the beginning of the control period and is of the view that the ERP estimates cannot be considered based on hindsight. Thus, the Authority has not considered any revision to ERP used to determine cost of equity.

6.5.13 The Authority has taken note of IATA's comment that risk-free rate is significantly over estimated and should be net of sovereign risk. The Authority is of the view that the independent study has considered the same procedures as in NIPFP (2011-12) which employs the same risk exposure to country risk as to market risk thereby adding country risk premium to mature market ERP. IATA also commented that a much shorter period of 1-5 years should be considered for estimating risk free rate. In this regard, the Authority has considered a longer period of 18 years (2000 – 2018), as the risk-free rate is volatile and thus a longer historical period provides a better proxy for future risk-free rate.

6.5.14 The Authority noted comments from IATA on the notional gearing of 48%:52% and cost of debt at 7.85%. The Authority also noted that IATA's comments on gearing ratio and cost of debt are in line with the Authority's proposal in the Consultation Paper no. 10/ 2021-22 wherein the gearing ratio was determined based on the average gearing ratio of comparative airports in the study while the cost of debt is based on the actual interest rate agreed between BIAL and SBI.

6.5.15 The Authority has also taken note of the counter comments given by BIAL in response to IATA. With reference to BIAL's comments regarding its earlier positions, it is stated that the stand taken by BIAL is very vague and does not add value to the consultation process and AERA doesn't need to take the note of it.

Response to FIH, Siemens, MIAL, APAO and Blue Dart's comments on Cost of Debt

6.5.16 The Authority's response to BIAL's comments in Para 6.5.6 duly addresses the comments made by FIH, Siemens, MIAL, APAO and Blue Dart with respect to cost of debt for BIAL in the Third Control Period.

Response to FIA's comments on WACC

6.5.17 The Authority has noted FIA's comments on WACC stating that fixed/assured return favors the airport operators and with no incentive in place for increasing productivity improvement or efficiencies, the operator is fully covered for their costs plus their returns. The Authority' also noted FIA's comments that in the present scenario, any assured return on investment in excess of 3% will create further trouble for the already stressed airline sector. The Authority is of the view that an airport is a long-term asset whereas the pandemic is a short-term phenomenon and will likely not have a long-term impact. In addition, the Authority has noted BIAL's comments in response to FIA's views stating that the airport operators which operate in a regulated market cannot be penalized for the performance of other sectors in the value chain which are operating in an unregulated market. However, the Authority would like to state that each sector of civil aviation has its own dynamics and challenges. Airlines are regulated too, even the airfares many a times and they don't have the advantage of monopoly of service and assured returns in a cutthroat competition conditions.

6.6 Authority's decisions regarding WACC for the Third Control Period

Based on the materials before it and based on its analysis, the Authority has decided the following with regards to WACC for the Third Control Period:

6.6.1 To consider the cost of equity at 15.05% as per the outcome of the independent study.

6.6.2 To consider the notional debt to equity (gearing) ratio of 48%:52% as suggested by the independent study

6.6.3 To consider 7.85% as cost of debt for the Third Control Period.

6.6.4 To true-up the cost of debt of BIAL for the Third Control Period based on actuals subject to its reasonableness and efficiency.

6.6.5 To consider the WACC of 11.59% for the Third Control Period based on above mentioned cost of equity, cost of debt and considering the notional gearing ratio as suggested by the independent study.

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
सत्यमेव जयते
Airports Economic Regulatory Authority of India

7 OPERATING EXPENSES FOR THE THIRD CONTROL PERIOD

7.1 BIAL's submission on operating expenses for the Third Control Period

7.1.1 BIAL in its MYTP submission has stated that the operating expenditure for the Third Control Period has been estimated based on the following assumptions:

- Impact of COVID-19 pandemic on passenger processing time, passenger flow mandating additional spending, and outsourced manpower deployment.
- Opening of new Terminal T2 in FY22 resulting in additional costs across various expense categories
- Increased area of operation including parking, MMTH, peripheral road network etc.
- BIAL has also submitted that a large proportion of spend is fixed in nature and do not bear a direct correlation to traffic.

7.1.2 BIAL's submission on projections of individual expense heads is summarized in the table below:

Table 109: Basis of projections of operating expenditure as submitted by BIAL

Expense Head	Basis of projection as adopted by BIAL
Personnel Cost	• Manpower requirements for T2 Phase 1 has been estimated on a staggered basis with 340 employees added post commissioning in FY23 and additional 189 employees added in FY25. • Personnel costs have been estimated keeping base year as FY21. Annual pay increase of 10% is considered by BIAL on a y-o-y basis with a market correction of 2% once in every 3 years.
O&M Cost	• Increased area and space for management and maintenance after opening of T2 Phase 1, MMTH, 2 parallel runways, ECT etc. • The O&M expenditure has been estimated as a percentage of the gross block.
Utility Cost	• Utility cost has been calculated after netting off recoveries from concessionaires. • BIAL has initiated sustainability measures such as implementation of Solar and Wind Power projects to be additional sources of supply of power, leading to reduction in average power cost. • The utility cost has been estimated considering an increase of 5% in demand charges for power and 7% in consumption charges of power and potable water cost
Concession Fees	Calculated as 4% of gross revenue requirement
Lease Rent	Calculated based on the land lease deed executed between KSIIDC and BIAL.
Insurance Cost	The Insurance cost has been estimated as a percentage of the asset block with CPI increase.
Rates and Taxes	Rates and taxes mainly comprise of property tax which is estimated considering the additional area after commissioning of T2 and CPI based increase.
Marketing & Advertisement	Marketing costs are estimated considering benchmarking based on actual costs with an annual increase of 10%. Collection costs are estimated as part of the marketing cost based on the estimate of collection charges to be paid to airlines on the UDF collections.
General Administration Costs	• Estimated based on actual costs with an annual increase of 10%. • BIAL has also considered incremental security costs (other than CISF) considered from FY23 onwards for security and safeguard of the increased facility and infrastructure created.
CSR	Costs as mandated by the Companies Act are based on prescribed regulations.

7.1.3 Based on the above, the total operating expenditure submitted by BIAL as part of its MYTP submission is given in the table below:

Table 110: Total operating expenditure for the Third Control Period as submitted by BIAL

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Personnel expenses	247.50	348.03	392.61	513.61	582.21	2,083.97
O&M	215.74	347.23	385.67	445.34	602.70	1,996.68
Lease Rent	15.11	15.56	16.03	16.51	17.00	80.21
Utilities	39.81	52.35	56.02	59.94	64.13	272.25
Insurance	11.59	22.68	24.27	25.48	26.99	111.00
Rates & taxes (other than IT)	9.46	13.54	13.98	14.42	14.88	66.28
Marketing & Advertising	27.17	25.57	28.50	31.79	35.49	148.52
CSR	13.70	13.22	11.90	15.72	19.86	74.41
General admin costs	43.38	60.95	67.05	73.75	81.13	326.26
Total operating expenses	**623.46**	**899.15**	**996.02**	**1,196.56**	**1,444.40**	**5,159.59**
Less: Disallowance - Interest/hotel cost						-
Concession fee	146.22	202.99	241.16	286.83	341.30	1,218.50
Waiver and bad debts	-	-	-	-	-	-
Total operating expenditure	**769.68**	**1,102.14**	**1,237.18**	**1,483.39**	**1,785.70**	**6,378.09**

7.1.4 The allocation ratios for the Third Control Period are based on the allocation ratio arrived for the year FY20. The allocation ratio submitted by BIAL are given below:

Table 111: Operating expenditure allocation ratio for the Third Control Period as submitted by BIAL

Operating expenses	FY 2020	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026
Personnel expenses	92.10%	92.10%	92.10%	92.10%	92.10%	92.10%	92.10%
O&M cost - Others	89.01%	89.01%	89.01%	89.01%	89.01%	89.01%	89.01%
Lease Rent	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Utilities	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Insurance	90.03%	90.03%	90.03%	90.03%	90.03%	90.03%	90.03%
Rates & taxes (other than IT)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Collection Cost	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Other Marketing costs	86.42%	86.42%	86.42%	86.42%	86.42%	86.42%	86.42%
CSR	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
General admin costs	91.33%	91.33%	91.33%	91.33%	91.33%	91.33%	91.33%

7.1.5 Based on the above allocation ratio, the aeronautical operating expenditure submitted by BIAL for the Third Control Period is given below:

Table 112: Aeronautical operating expenditure for the Third Control Period as submitted by BIAL

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Personnel expenses	227.95	320.54	361.59	473.03	536.22	1,919.33
O&M	193.24	310.49	342.76	398.03	550.00	1,794.52
Lease Rent	15.11	15.56	16.03	16.51	17.00	80.21
Utilities	39.81	52.35	56.02	59.94	64.13	272.25
Insurance	10.43	20.42	21.85	22.94	24.30	99.93
Rates & taxes (other than IT)	9.46	13.54	13.98	14.42	14.88	66.28
Marketing & Advertising	24.10	22.93	25.60	28.60	31.97	133.21
CSR	13.70	13.22	11.90	15.72	19.86	74.41
General admin costs	39.62	55.67	61.24	67.36	74.10	297.98

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Total operating expenses	**573.41**	**824.73**	**910.96**	**1,096.55**	**1,332.47**	**4,738.12**
Less: Disallowance - Interest/hotel cost						-
Concession fee	111.26	147.46	152.40	167.60	213.01	**791.73**
Waiver and bad debts						
Total operating expenditure	**684.67**	**972.19**	**1,063.36**	**1,264.15**	**1,545.48**	**5,529.85**

7.2 Authority's examination regarding operating expenses for the Third Control Period

7.2.1 The Authority has evaluated the submissions made by BIAL relating to operational expenditure. The Authority's analysis of various expenses under operational expenditure is given below.

Personnel Cost

7.2.2 The Authority noted the submissions of BIAL relating to personnel cost. The Authority analyzed the trend in total personnel cost for the Third Control Period and observed that BIAL had projected the personnel cost to increase by 41% in FY23 and 31% in FY25. The details are produced below:

Table 113: Trend in total personnel cost as submitted by BIAL

Operating expenses	FY 2020	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026
Personnel expenses	202	221	248	348	393	514	582
% change		9%	12%	41%	13%	31%	13%

7.2.3 The Authority sought clarifications from BIAL on the basis of projections of personnel cost. BIAL submitted that the increase in personnel cost was due to two factors:

- Addition of manpower due to business growth and opening of T2 Phase 1
- Annual increment of 10% each year with market correction of 2% once in 3 years

7.2.4 The submission of BIAL is produced below for reference:

Table 114: Basis of projections of personnel cost as submitted by BIAL

Particulars	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Manpower proposed by BIAL	881	1,052	1,227	1,247	1,258	1,624	1,663	1,878	1,904
Manpower additions towards business growth					11	26	39	26	26
Manpower additions towards T2 Phase 1					0	340	0	189	0
Annual increments (in %)*		**171**	**175**	**20**	**11**	**366**	**39**	**215**	**26**
% increase in manpower		19.41 %	16.63 %	1.63%	0.88%	29.09 %	2.40%	12.93 %	1.38%
Annual increments (in %)					10%	12%	10%	10%	12%

* annual increments are different than the increase in the personnel cost due to addition of employees in the mid-year

7.2.5 The Authority noted that the manpower increase was largely attributed to the commissioning of Terminal 2 Phase 1. The Authority noted that the BIAL has already added 171 and 175 employees in FY19 and FY20 respectively before the impact of COVID on traffic in FY21. The Authority notes that the employee addition during FY19 and FY20 will be for the new south parallel runway operations and the new facilities proposed to be commissioned in FY21 which is now expected to commission in

FY22. Further, the Authority noted from the traffic forecast that the proposed Terminal 2 will not operate at peak capacity till the end of the Third Control Period and the usage of Terminal 2 can be optimized to cater to the limited traffic. Therefore, the Authority is of the view that the manpower addition proposed by BIAL is not in proportion to the increase in traffic at the airport and also the manpower requirement can be met by the manpower addition already undertaken by BIAL in FY19, FY20 and FY21. Therefore, the Authority proposes to consider 10% increase in manpower in FY23 and FY25 during the Third Control Period.

7.2.6 The Authority analyzed the personnel cost/employee and observed the following trend:

Table 115: Trends in personnel cost/employee

Operating expenses	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Personnel cost/employee (INR lakhs)	10.17	11.37	11.93	13.31	13.89	14.64	13.77	14.56	15.97
% change		11.79%	4.89%	11.55%	4.34%	5.43%	-5.96%	5.77%	9.70%
5-year CAGR						7.55%	3.89%	4.06%	3.72%
8-year CAGR (FY12-FY20)									**5.80%**

7.2.7 The Authority noted that BIAL had projected the personnel cost/employee at a higher growth rate for the Third Control Period. The Authority proposes to revise the growth rate of personnel cost/ employee for the Third Control Period to 5.8% (8-year CAGR for the period FY12-FY20) and accordingly proposes to recalculate the personnel cost for BIAL.

7.2.8 The Authority proposes to consider the allocation ratio of FY20 as the allocation ratio for the Third Control Period.

7.2.9 The Authority has also considered the revised FY21 personnel costs based on the true-up chapter to forecast the personnel cost for the Third Control Period.

7.2.10 The Authority proposes to true-up the personnel cost based on actuals during the next control period.

7.2.11 Based on the above, the personnel cost proposed by the Authority for the Third Control Period is as follows:

Table 116: Personnel cost for the Third Control Period proposed by the Authority

Operating expenses	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Personnel cost/employee	15.97	16.93	17.91	18.95	20.05	21.21	22.44	101
% increase		6.01%	5.80%	5.80%	5.80%	5.80%	5.80%	
Number of Employees	1,227	1,247	1,247	1,372	1,372	1,509	1,509	7,008
% increase		1.63%	0.00%	10.00%	0.00%	10.00%	0.00%	
Total Personnel Cost	**195.97**	**211.14**	**223.38**	**259.97**	**275.04**	**320.09**	**338.65**	**1,417**
Aero allocation ratio	88.94%	88.94%	88.94%	88.94%	88.94%	88.94%	88.94%	
Aero personnel cost	**174.29**	**187.78**	**198.67**	**231.21**	**244.61**	**284.68**	**301.18**	**1,260**

O&M Cost

7.2.12 The Authority noted the submissions of BIAL relating to O&M cost. The Authority analyzed the trend in total O&M cost for the Third Control Period and observed that BIAL had projected the O&M cost to increase by 61% in FY22 & FY23 and thereafter an increase of 35% in FY26. The details are produced below:

Table 117: Trends in total O&M cost as submitted by BIAL

Operating expenses	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Total O&M cost as per BIAL	138	134	216	347	386	445	603	**1,997**
% change		-3%	61%	61%	11%	15%	35%	

7.2.13 The Authority made the following observations with regards to the submissions made by BIAL on O&M:

- BIAL had calculated the O&M cost as a percentage of gross block. BIAL has computed O&M-Landside, O&M-Airfield, O&M-Utilities and O&M-ICT cost based on the percentage gross block that is, 1.92%, 0.63%, 1.88% and 7.00% for landside, airside, utilities and ICT, respectively.
- The increase in total O&M costs is largely attributable to the increase in O&M – Infra costs from FY22 to FY23 due to asset addition. In addition, the O&M ICT costs have also shown an increase from FY21 to FY22 and then later from FY25 to FY26.
- O&M Infra costs, O&M ICT and O&M-others costs have been projected to increase by 10% year on year by BIAL.

7.2.14 The Authority noted that BIAL had incorrectly added the O&M-Landside cost in the O&M-ICT expenses and had incorrectly linked some of the asset addition to compute the O&M costs. The Authority has undertaken appropriate revisions in this regard.

7.2.15 The Authority proposes to calculate the O&M costs based on the percentage of gross block. However, the Authority noted that BIAL has considered higher percentages for the maintenance of the newer assets based on past trends. The Authority is of the view that comparison with the historical O&M costs as a % of gross block will not provide the right benchmark for forecasting the future O&M costs as BIAL's facilities were operating at peak capacity till FY20 and the Authority has noted from the proposed traffic forecast that the new terminal building, new apron and new south parallel runway would not operate at their peak capacity till the end of the Third Control Period.

7.2.16 Further, the Authority is of the view that the newer assets generally require less O&M costs as a percentage of their gross block compared to older assets.

7.2.17 The Authority has also noted that it is providing BIAL with the sustaining capital expenditure to undertake the special repairs in addition to the O&M costs.

7.2.18 Considering the above factors, the Authority proposes to consider the following percentages of the respective gross block to forecast the O&M costs for the Third Control Period:

Table 118: O&M cost % of the respective gross block proposed by the Authority for the Third Control Period for the assets proposed to be capitalized in the Third Control Period

Year	O&M - Infrastructure (landside, airfield and utilities)	O&M - ICT
Year 1 (year of capitalization)	0.00%	0.00%
Year 2	0.50%	5.00%
Year 3	0.60%	5.00%
Year 4	0.75%	5.00%
Year 5 onwards	1.00%	5.00%

7.2.19 The Authority noted that BIAL has considered the FY20 capital expenditure as new asset addition to forecast the O&M costs for the Third Control Period instead of considering it as part of the existing O&M costs of FY21. The Authority proposes to consider the existing O&M costs of FY21 as base to forecast the O&M costs for assets capitalized till FY20 and consider only the additions from FY21 onwards to forecast the O&M costs of Third Control Period (note that the O&M costs for capitalized assets of FY21 in year 1 is 0 and therefore, it has to be considered in FY22).

7.2.20 The Authority noted that BIAL had forecasted the O&M costs to increase by 10% year on year. The Authority proposes to forecast the O&M costs to increase by inflation in line with the growth rate proposed for general admin cost and unit cost of utility.

7.2.21 The Authority proposes to consider allocation ratio of O&M cost for the Third Control Period based on the allocation ratio of assets for the Third Control Period.

7.2.22 The Authority noted that BIAL has considered its savings due to cost optimization measures in the O&M-Other costs. The Authority proposes to consider these cost savings in the O&M-Other costs.

7.2.23 The Authority proposes to review the need and justification for incurring the actual O&M costs during the Third Control Period and proposes to true-up the O&M costs, accordingly.

7.2.24 Based on the above, the O&M cost proposed by the Authority for the Third Control Period is as follows:

Table 119: O&M cost proposed by the Authority for the Third Control Period

Operating expenses	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Total (FY22-FY26)**
Total O&M running cost - Infra	79.89	86.64	121.89	136.29	153.82	177.29	**675.93**
Total O&M costs - ICT	28.61	30.01	54.26	56.92	59.71	62.64	**263.54**
Total other O&M costs	25.48	13.68	14.84	16.05	17.33	18.67	**80.57**
Total O&M costs	**133.98**	**130.32**	**190.99**	**209.27**	**230.86**	**258.60**	**1,020.04**
Allocation Ratio - Other O&M costs	89.64%	89.59%	88.42%	88.28%	88.07%	87.84%	
Total aero O&M costs	**120.10**	**116.76**	**168.87**	**184.74**	**203.31**	**227.15**	**900.84**

Lease Rent

7.2.25 The Authority noted that a land lease deed was executed between Karnataka State Industrial Investment and Development Corporation Limited (KSIIDC) and BIAL on 30th April 2005 according to which:

- The lease rental from airport opening date till end of 7 years will be 3% of total site cost (INR 175 cr.).
- For the 8th year, the lease rental shall be 6% of total site cost (INR 175 Cr.).
- For every following year, the lease rent shall be equivalent to lease rental of previous year plus additional 3%.

7.2.26 The Authority noted that additional land was leased to BIAL by KSIIDC as per the following terms:

- The lease rental from airport opening date till end of 7 years will be 3% of total cost of additional land (INR 36.78 Cr.).
- For the 8th year, the lease rental shall be 6% of the additional land cost (INR 36.78 Cr.).

- For every following year, the lease rent shall be equivalent to lease rental of previous year plus additional 3%.

7.2.27 The Authority noted that BIAL had allocated 100% of lease rentals to aeronautical expenditure.

7.2.28 The Authority noted from the land lease deed that a total of 4009 acres of land has been allocated to BIAL. The Authority also notes that BIAL through its subsidiary BACL shall be monetizing land for non-aero activities in the Third Control Period. Accordingly, the Authority proposes to consider land usage by BACL as non – aeronautical and revise the allocation ratio accordingly. The computation of revised allocation ratio (based on land usage) is given below:

Table 120: Revised allocation ratio for lease rent as per the Authority

Particulars	FY 2022	FY 2023	FY 2024	FY2025	FY 2026
BACL land use (in acres)	1.00	26.70	22.55	47.75	55.00
Cumulative BACL land use	1.00	27.70	50.25	98.00	153.00
Total Land (in acres)	4008.77	4008.77	4008.77	4008.77	4008.77
Aero area	4007.77	3981.07	3958.52	3910.77	3855.77
Aero %	99.98%	99.31%	98.75%	97.56%	96.18%

7.2.29 Accordingly, the revised lease rentals for the Third Control Period considered by the Authority is given below:

Table 121: Lease Rentals for the Third Control Period considered by the Authority

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Lease Rentals	15.11	15.56	16.03	16.51	17.00	80.21
Revised allocation ratio	99.98%	99.31%	98.75%	97.56%	96.18%	
Aeronautical lease rentals	**15.10**	**15.45**	**15.83**	**16.11**	**16.36**	**78.85**

Utility

7.2.30 Utility cost includes power, water and fuel expenses. The Authority noted the submissions of BIAL relating to utility costs.

7.2.31 BIAL submitted on 13 January 2021 that it has omitted the additional contract demand and power requirement for the expansion in facilities during the Third Control Period and requested the Authority to include it for the computation of the power cost. The Authority examined the submission of BIAL and proposes to include the additional contract demand and power consumptions for the expansion of facilities in the Third Control Period.

7.2.32 The Authority sought from BIAL the existing demand charges and the consumptions charges applicable in FY21. BIAL submitted that the demand charges is INR 240 per kVA per month and power unit charges is INR 6.39 per kWh for FY21.

7.2.33 The Authority noted that BIAL has proposed to increase the demand charges by 5% per annum in the Third Control Period. The Authority noted from the previous years that the CAGR of demand charges is 1.5% from 2009 to 2021 and therefore, proposes to consider nil increase in the demand charges for the Third Control Period.

7.2.34 The Authority noted that BIAL had proposed to increase the power and water unit charges by 7% per annum. The Authority proposes to increase the power and water unit charges by inflation during the Third Control Period.

7.2.35 The Authority noted that BIAL has proposed a recovery % as ~35% of the total power costs. The Authority noted from the previous years that the recovery % has been ~50% of the power costs. The Authority proposes to consider the recovery % as ~50% of the total power costs for the Third Control Period.

7.2.36 The Authority had sought BIAL's response on the water savings on account of commissioning of the rainwater harvesting ponds (RWH) from FY22 onwards. BIAL had submitted that it will source 50% of the potable water requirements of the airport from the rainwater harvesting ponds. The Authority proposes to revise the potable water consumption to be outsourced by BIAL after reducing the demand met by the RWH.

7.2.37 The Authority understood from the submission that BIAL has taken utility costs (net of recovery) as aeronautical. The Authority noted that BIAL had considered the utility recoveries from aeronautical concessionaires such as cargo, ground handling, fuel farm and CUTE/ CUSS as non-aeronautical revenues. Based on the Authority's decision in the Second Control Period, the Authority proposes to adjust these aeronautical utility recoveries from the aeronautical utility cost. The utility (net of recovery) cost has been considered as 100% aeronautical. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

7.2.38 Based on the above changes, the net power cost computed by the Authority for the Third Control Period is given in the table below:

Table 122: Net power cost proposed by the Authority for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Contract demand (kVA)	15000	33000	45000	45000	45000	183000
Consumption (mn kWh)	77	125	125	125	125	576.73
Contract demand charges (INR per KVA per annum)	2880	2880	2880	2880	2880	14400
% increase		0.0%	0.0%	0.0%	0.0%	
Power unit tariff (INR per kWh)	6.70	7.03	7.38	7.74	8.12	36.96
% increase		4.90%	4.90%	4.90%	4.90%	
Contract demand cost (INR cr.)	4.32	9.50	12.96	12.96	12.96	52.70
Power consumption cost (INR cr.)	51.79	87.80	92.10	96.62	101.35	429.66
Total power cost (INR cr.)	**56.11**	**97.30**	**105.06**	**109.58**	**114.31**	**482.37**
Recovery %	51%	51%	49%	49%	50%	
Net power cost (INR cr.)	**28.49**	**49.17**	**51.58**	**54.10**	**56.76**	**240.09**

7.2.39 Based on the above changes, the net water cost computed by the Authority for the Third Control Period is given in the table below:

Table 123: Net water cost proposed by the Authority for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Potable water requirement - Existing (kL per day)	1694	1778	1778	1778	1778	8806
Potable water requirement - Future (kL per day)	0	2600	2600	2600	2600	10400
Potable water requirement (kL per day)	**1694**	**4378**	**4378**	**4378**	**4378**	**19206**
Potable water requirement met through RWH	50%	50%	50%	50%	50%	
Potable water requirement - payable by BIAL (kL per day)	**847**	**2189**	**2189**	**2189**	**2189**	**9603**

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Cost of potable water (INR per kL)	98.21	103.03	108.07	113.37	118.92	**542**
% increase		4.90%	4.90%	4.90%	4.90%	
Potable water cost (INR cr.)	**3.04**	**8.23**	**8.63**	**9.06**	**9.50**	**38.46**
Recovery % - potable water	45.00%	45.00%	45.00%	45.00%	45.00%	
Net potable water cost (INR cr.)	**1.67**	**4.53**	**4.75**	**4.98**	**5.23**	**21.15**
Raw water - consumption (crore kL)	0.04	0.07	0.07	0.07	0.07	**0.33**
Cost of raw water (INR per kL)	26.60	27.90	29.27	30.70	32.21	**146.68**
% increase		4.90%	4.90%	4.90%	4.90%	
Raw water cost (INR cr.)	**0.97**	**2.04**	**2.14**	**2.24**	**2.35**	**9.74**
Net water cost (INR cr.)	**2.64**	**6.56**	**6.89**	**7.22**	**7.58**	**30.89**

7.2.40 Accordingly, the revised aeronautical utility cost for the Third Control Period proposed by the Authority is given below:

Table 124: Aeronautical utility cost proposed by the Authority for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Net power cost	28.49	49.17	51.58	54.10	56.76	**240.09**
Net water cost	2.64	6.56	6.89	7.22	7.58	**30.89**
Less: Aero utility recoveries	2.91	5.22	5.47	5.74	6.02	**25.37**
Aeronautical utility cost	**28.21**	**50.51**	**52.99**	**55.59**	**58.31**	**245.61**

Insurance

7.2.41 The Authority noted the submissions of BIAL relating to insurance. The Authority noted that BIAL had considered a higher premium rate for the Third Control Period while historical trends reveal a comparatively lower premium rate. The Authority accordingly proposes to:

- Revise the premium rate as 0.07%, based on the average premium rate for the period FY17-FY21, to forecast insurance cost for the Third Control Period.
- Consider the aeronautical gross block ratio for allocation of insurance cost for the Third Control Period.

7.2.42 The insurance cost considered by the Authority for the Third Control Period is given below:

Table 125: Insurance cost considered by the Authority for Third Control Period

Operating expenses	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Total**
Insurance Cost	**4.96**	**10.32**	**10.67**	**10.81**	**10.99**	**47.76**
Allocation Ratio	87.46%	87.51%	87.50%	87.49%	87.54%	
Aero insurance cost	**4.34**	**9.03**	**9.34**	**9.46**	**9.62**	**41.79**

Rates and Taxes

7.2.43 The rates and taxes majorly include the expenses related to payment of property tax. The Authority noted that BIAL had allocated 100% of rates and taxes to aeronautical expenditure.

7.2.44 The Authority noted that the BIAL has projected the rates and taxes by linking it with the inflation and the increase in area due to capacity addition. The Authority proposes to consider these growth rates on the revised rates and taxes of FY 2021.

7.2.45 Similar to the treatment followed by the Authority for lease rentals, the Authority proposes to allocate the rates and taxes into aeronautical and non – aeronautical based on the land usage. Accordingly, the rates and taxes proposed by the Authority for the Third Control Period is as follows:

Table 126: Rates and taxes for the Third Control Period considered by the Authority

Operating expenses (INR cr.)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Total Rates and Taxes as per Authority	**8.29**	**8.70**	**12.60**	**13.22**	**13.87**	**14.55**	**62.93**
Inflation (%)		4.90%	4.90%	4.90%	4.90%	4.90%	
% growth due to increase in area (%)		0.00%	40.00%	0.00%	0.00%	0.00%	
Revised allocation ratio (%)		99.98%	99.31%	98.75%	97.56%	96.18%	
Aeronautical Rates and Taxes as per Authority		**8.69**	**12.51**	**13.05**	**13.53**	**13.99**	**61.78**

Marketing & Advertisement

7.2.46 The marketing & advertisement expenses include collection cost and sales & marketing expenses.

7.2.47 The Authority noted the submissions of BIAL relating to marketing and advertisement expenses. The Authority proposes to calculate the marketing and advertisement by calculating the collection cost and sales & marketing cost separately and adding them to arrive at the total marketing and advertisement cost for the airport.

7.2.48 The approach taken by the Authority to forecast the collection cost is given below:

- The Authority proposes to forecast the collection cost based on the revised domestic and international traffic numbers projected by the Authority.
- To consider collection cost as 100% aeronautical

7.2.49 The Authority noted that BIAL had considered an increase of 10% year on year for the sales and marketing cost along with a one-time expense of INR 5 cr. in FY22 for the marketing of new Terminal 2.

7.2.50 The approach taken by the Authority to forecast the sales and marketing cost is given below:

- Similar to the approach taken by the Authority in the Second Control Period, the Authority proposes to consider the increase in sales and marketing expenses as 10% year on year.
- The Authority noted that the study on operating expenses has considered the revised sales and marketing costs for the Second Control Period. The Authority proposes to consider the revised sales of marketing cost of FY20 as base to forecast the sales and marketing for the Third Control Period.
- The Authority proposes to consider the expense related to marketing of T2 as a one-off expense in FY22.
- To consider allocation ratio of sales and marketing expenses of FY20 to forecast the aeronautical sales and marketing for the Third Control Period

7.2.51 Accordingly, the sales and marketing expenses considered by the Authority for the Third Control Period is given in the table below:

Table 127: Sales and marketing expenses considered by the Authority for the Third Control Period

Operating expenses	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total*
Sales and marketing cost - Nominal increase	4.31	4.74	5.22	5.74	6.31	6.95	28.96
% increase		10%	10%	10%	10%	10%	
Sales and marketing cost - Onetime expense (relating to T2)		5.00					5.00
Total sales and marketing cost	**4.31**	**9.74**	**5.22**	**5.74**	**6.31**	**6.95**	**33.96**
Aeronautical ratio	84.80%	84.80%	84.80%	84.80%	84.80%	84.80%	
Aeronautical sales and marketing cost - Revised	**3.66**	**8.26**	**4.42**	**4.87**	**5.35**	**5.89**	**28.80**

*Total is calculated for the period FY22 – FY26.

7.2.52 Based on the above, the aeronautical marketing and advertisement expenses considered by the Authority for the Third Control Period is given below:

Table 128: Marketing and advertisement expenses considered by the Authority for Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical collection cost	4.67	7.50	8.75	10.18	11.86	42.96
Aeronautical sales and marketing cost	8.26	4.42	4.87	5.35	5.89	28.80
Aeronautical marketing and advertisement cost	**12.93**	**11.92**	**13.62**	**15.54**	**17.75**	**71.76**

Corporate Social Responsibility

7.2.53 The Authority noted from the directions given by Hon'ble TDSAT in its judgement dated 16th December 2020 that the CSR expenditure is considered as part of operating expenditure. The decision of Hon'ble TDSAT is produced below for reference:

"*...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...*"

7.2.54 Accordingly, the Authority has categorized the CSR expenses as common and computed the aeronautical CSR based on the aeronautical profit before tax. The revised aeronautical CSR expenses is given below:

Table 129: Aeronautical CSR considered by the Authority for the Third Control Period

Particulars	2019	2020	2021	2022	2023	2024	2025	2026	Total (FY22-FY26)
Aero revenues	959	829	333	951	1,601	1,960	2,395	2,928	9,834
30% of non-aero revenues	0	0	0	0	0	0	0	0	0
Aero operational expense	-370	-422	-408	-494	-594	-645	-731	-804	-3,268

Particulars	2019	2020	2021	2022	2023	2024	2025	2026	Total (FY22-FY26)
EBITDA	590	406	-76	457	1,007	1,315	1,664	2,123	6,567
Aero Depreciation	-276	-193	-250	-391	-542	-555	-549	-550	-2,587
Interest expenses	-94	-118	-162	-203	-597	-580	-549	-515	-2,443
Aero PBT	**220**	**95**	**-488**	**-137**	**-132**	**180**	**567**	**1,059**	**1,537**
Average Aero PBT (last 3 financial years)				**-58**	**-177**	**-252**	**-30**	**205**	**-311**
Aeronautical CSR expenses (2% of average PBT)				**0.00**	**0.00**	**0.00**	**0.00**	**4.10**	**4.10**

General Administration Cost

7.2.55 The general admin costs consist of consultancy & legal, travel costs and office costs.

7.2.56 The Authority noted the submissions of BIAL relating to general admin costs. The Authority noted that BIAL had considered a year on year increase of 10% for travel costs and consultancy & legal. Similarly, BIAL had also considered a year on year increase of 10% for office costs with the exception of FY23, where the office costs have increased by 80%. The submission of BIAL is detailed in the table below:

Table 130: % increase in general admin costs submitted by BIAL

Revenues	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total*
Consultancy and Legal	16.02	17.63	19.39	21.33	23.46	25.80	107.60
Travel Costs	6.22	6.84	7.52	8.27	9.10	10.01	41.74
Office Costs	17.19	18.91	34.04	37.45	41.19	45.31	176.91
% increase in consultancy & legal		10%	10%	10%	10%	10%	
% increase in travel costs		10%	10%	10%	10%	10%	
% increase in office costs		10%	80%	10%	10%	10%	
Total general admin cost	39.43	43.38	60.95	67.05	73.75	81.13	326.26
Allocation Ratio	91.33%	91.33%	91.33%	91.33%	91.33%	91.33%	
Aeronautical General admin cost	**36.01**	**39.62**	**55.67**	**61.24**	**67.36**	**74.10**	**297.98**

*Total is calculated for the period FY22 – FY26.

7.2.57 The Authority proposes to calculate the general admin costs as below:

- The Authority proposes to increase in consultancy & legal by inflation year on year.
- The Authority proposes to increase of inflation for office costs with the exception of FY23, where the office costs have been moderated to increase by 30% to account for the increase in the number of employees
- The Authority proposes to consider the increase in travel costs to reach pre-COVID levels by FY25.
- The Authority noted that consultancy and legal and office expenses are costs of fixed nature and therefore, proposes to consider their costs of FY21 as base value for Third Control Period forecast
- To consider allocation ratio of general admin expenses as 90%, that is, the allocation ratio for FY21.

7.2.58 Based on the above, the general admin expenses considered by the Authority for the Third Control Period is given below:

Table 131: General admin costs considered by the Authority for Third Control Period

Operating expenses	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Consultancy and Legal	15.16	15.90	16.68	17.50	18.35	19.25	87.68
% increase		4.90%	4.90%	4.90%	4.90%	4.90%	
Travel Costs	0.18	0.20	1.41	2.83	5.65	6.22	16.30
% recovery to pre-COVID levels		10.00%	25.00%	50.00%	100.00%	110.00%	
Office Costs	11.43	11.99	15.59	16.35	17.15	17.99	79.08
% increase		4.90%	30.00%	4.90%	4.90%	4.90%	
Total general admin cost	**26.77**	**28.09**	**33.68**	**36.67**	**41.16**	**43.46**	**183.07**
Allocation Ratio	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	
Aeronautical general admin cost	**24.09**	**25.28**	**30.31**	**33.01**	**37.04**	**39.12**	**164.76**

* pre-COVID travel costs considered as travel costs for FY20 as per Business Plan submitted by BIAL

Concession Fee

7.2.59 As per Clause 3.3 of the concession agreement signed between BIAL and the Government of India, BIAL has to pay a concession fee amounting to 4% of the gross annual revenue every year.

7.2.60 The Authority noted the submissions of BIAL relating to concession fee. The Authority notes that the tariff computation for BIAL is undertaken on hybrid till basis and the aeronautical concession fee for BIAL will be computed as 4% of the aeronautical revenues.

7.2.61 The Authority noted that BIAL has computed the concession fee on the net aggregate revenue requirement instead of the forecasted aeronautical revenues. The Authority proposes to consider the concession fee on the forecasted aeronautical revenues.

7.2.62 Accordingly, the aeronautical concession fee considered by the Authority for the Third Control Period is given below:

Table 132: Aeronautical concession fee considered by the Authority for the Third Control Period

Revenues	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Aviation Revenues	743.76	1,362.73	1,696.06	2,085.21	2,580.70	8,468
Aviation Concession Revenues	206.85	237.87	264.33	309.90	346.99	1,366
Less: Collection cost	4.67	7.50	8.75	10.18	11.86	43
Total revenues	**945.94**	**1,593.10**	**1,951.63**	**2,384.93**	**2,915.82**	**9,791**
Percentage	4.00%	4.00%	4.00%	4.00%	4.00%	
Aeronautical Concession Fees	**37.84**	**63.72**	**78.07**	**95.40**	**116.63**	**391.66**

ORAT

7.2.63 BIAL in its submission has proposed an Operational Readiness and Airport Transfer (ORAT) program which is a 2-year program till FY22 for planning, executing and successful opening of the new Terminal 2.

7.2.64 BIAL has further submitted the following key components of the ORAT program:

- **"Operational Readiness** – Plan, detail and develop all operational documentation such as SOPs, Manuals and SLA (Service Level Agreements) with all internal and external stakeholders, such as airlines, ground handlers and authorities.
- **Familiarization & Training** - Plan, develop and execute familiarization and training sessions for all stakeholders to operate in Terminal 2 with new systems. This workstream includes a budget for procuring logistics as well as state of the art training and familiarization methodologies.

- **Trial Program** – Plan, develop and execute a Trial Program that will encourage all BIAL Terminal 2 users to test and trial all facilities and procedures prior to the opening. This program contains basic, advanced, and fully integrated trials to simulate future operations in order to anticipate and mitigate any operational challenges of the airport. This workstream responds to a large amount of the ORAT budget as it includes all stakeholders and a rehearsal of future operations up to 180 times prior to the opening.
- **Airport Transfer** – This workstream focusses on the planning and physical relocation of airlines, authorities and all other stakeholders that will be future end-users of Terminal 2. The main budget here is for planning, logistics and security of the airport (or terminal) transfer."

7.2.65 BIAL has submitted ORAT expenses of INR 46.14 cr. whose breakup is given below:

Table 133: Breakup of ORAT expenses as per BIAL's submission

Project	Total cost (in INR cr.)
ORAT core team	7.55
ORAT SPOC's	16.64
ORAT delivery specialists	12.90
Facilities for training rooms	1.25
Cost of external trainers	1.25
Preparing footprints, barricading, systems operating costs	2.00
Transportation required for taking staff & public volunteers to site for trials	0.50
Fees for facilitating and extending support services for trials	2.00
Signages, folders, hard helmet, jackets and safety shoes	0.50
Bags, boarding cards, Mock up's, megaphones & other materials for trials	1.00
Vehicles for site	0.55
Total	**46.14**

7.2.66 The Authority noted the submissions of BIAL on ORAT. BIAL has submitted ORAT as a part of capital expenditure for the Third Control Period. However, the Authority is of the view that since this is an expense related to airport operations, it should be a part of operational expenditure and hence, proposes to consider it as part of opex for the Third Control Period.

7.2.67 Accordingly, the ORAT expenses proposed by the Authority for the Third Control Period is as follows:

Table 134: ORAT proposed by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
ORAT	46.14	0.0	0.0	0.0	0.0	46.14

Summary of Operational expenditure

7.2.68 Based on the material produced above, the total operational expenditure proposed by the Authority for the Third Control Period is given below:

Table 135: Total opex proposed by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Personnel expenses	223.38	259.97	275.04	320.09	338.65	1,417.14
O&M	130.32	190.99	209.27	230.86	258.60	1,020.04
Lease Rent	15.11	15.56	16.03	16.51	17.00	80.21
Utilities	28.21	50.51	52.99	55.59	58.31	245.61
Insurance	4.96	10.32	10.67	10.81	10.99	47.76

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Rates & taxes (other than IT)	8.70	12.60	13.22	13.87	14.55	62.93
Marketing & Advertising	14.42	12.72	14.49	16.50	18.81	76.92
CSR	13.70	13.22	11.90	15.72	19.86	74.41
General admin costs	28.09	33.68	36.67	41.16	43.46	183.07
Total operating expenses	**466.89**	**599.58**	**640.29**	**721.11**	**780.23**	**3,208.10**
Concession fee	50.55	84.49	103.47	126.71	155.25	520.47
ORAT	46.14	0.00	0.00	0.00	0.00	46.14
Total operating expenditure	**563.58**	**684.08**	**743.76**	**847.81**	**935.48**	**3,774.71**

7.2.69 The allocation ratio considered by the Authority for the Third Control Period is given below:

Table 136: Operational expenditure aeronautical allocation ratio proposed by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026
Personnel expenses	88.94%	88.94%	88.94%	88.94%	88.94%
O&M (others)	89.59%	88.42%	88.28%	88.07%	87.84%
Lease Rent	99.98%	99.31%	98.75%	97.56%	96.18%
Utilities	100.00%	100.00%	100.00%	100.00%	100.00%
Insurance	87.46%	87.51%	87.50%	87.49%	87.54%
Rates & taxes (other than IT)	99.98%	99.31%	98.75%	97.56%	96.18%
Collection Cost	100.00%	100.00%	100.00%	100.00%	100.00%
Marketing & Advertising	84.80%	84.80%	84.80%	84.80%	84.80%
General admin costs	90.00%	90.00%	90.00%	90.00%	90.00%

7.2.70 Accordingly, the aeronautical operating expenditure proposed by the Authority for the Third Control Period is given below:

Table 137: Aeronautical operating expenditure proposed by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Personnel expenses	198.67	231.21	244.61	284.68	301.18	1,260.35
O&M	116.76	168.87	184.74	203.31	227.15	900.84
Lease Rent	15.10	15.45	15.83	16.11	16.36	78.85
Utilities	28.21	50.51	52.99	55.59	58.31	245.61
Insurance	4.34	9.03	9.34	9.46	9.62	41.79
Rates & taxes (other than IT)	8.69	12.51	13.05	13.53	13.99	61.78
Marketing & Advertising	12.93	11.92	13.62	15.54	17.75	71.76
CSR	0.00	0.00	0.00	0.00	4.10	4.10
General admin costs	25.28	30.31	33.01	37.04	39.12	164.76
Total operating expenses	**409.99**	**529.83**	**567.19**	**635.25**	**687.58**	**2,829.84**
Concession fee	37.84	63.72	78.07	95.40	116.63	391.66
ORAT	46.14	0.00	0.00	0.00	0.00	46.14
Total operating expenditure - Aero	**493.96**	**593.56**	**645.25**	**730.65**	**804.21**	**3,267.63**

7.3 Stakeholder comments regarding operating expenses 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. 10/

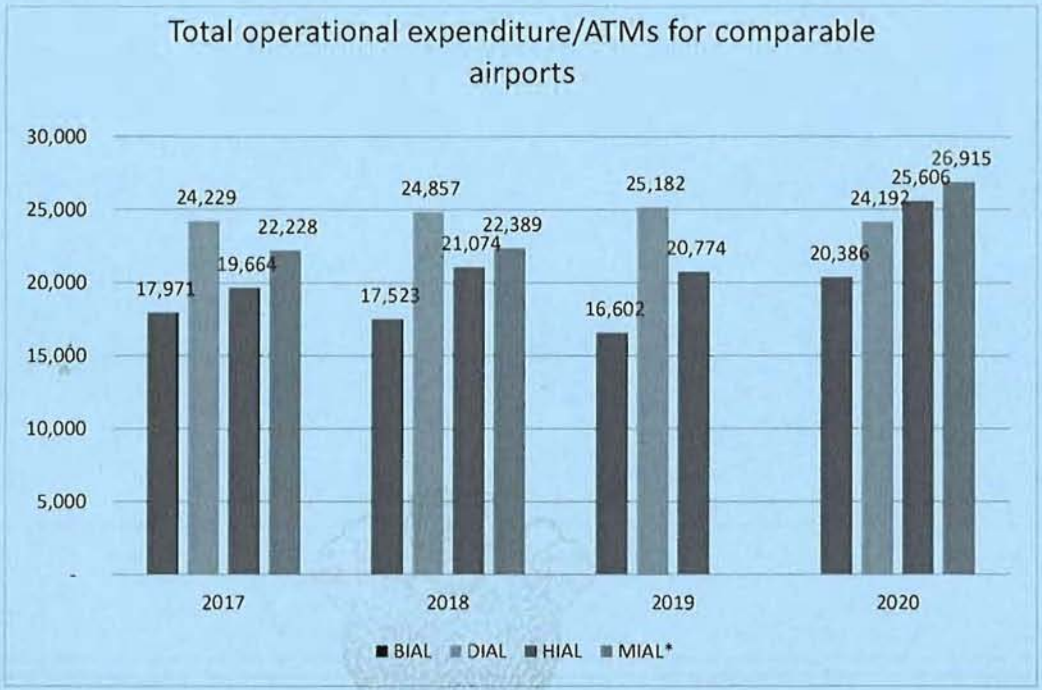
2021-22 with respect to operating expenses for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on operating expenses for the Third Control Period

7.3.2 The comments from BIAL with regards to the operating expenses are given below:

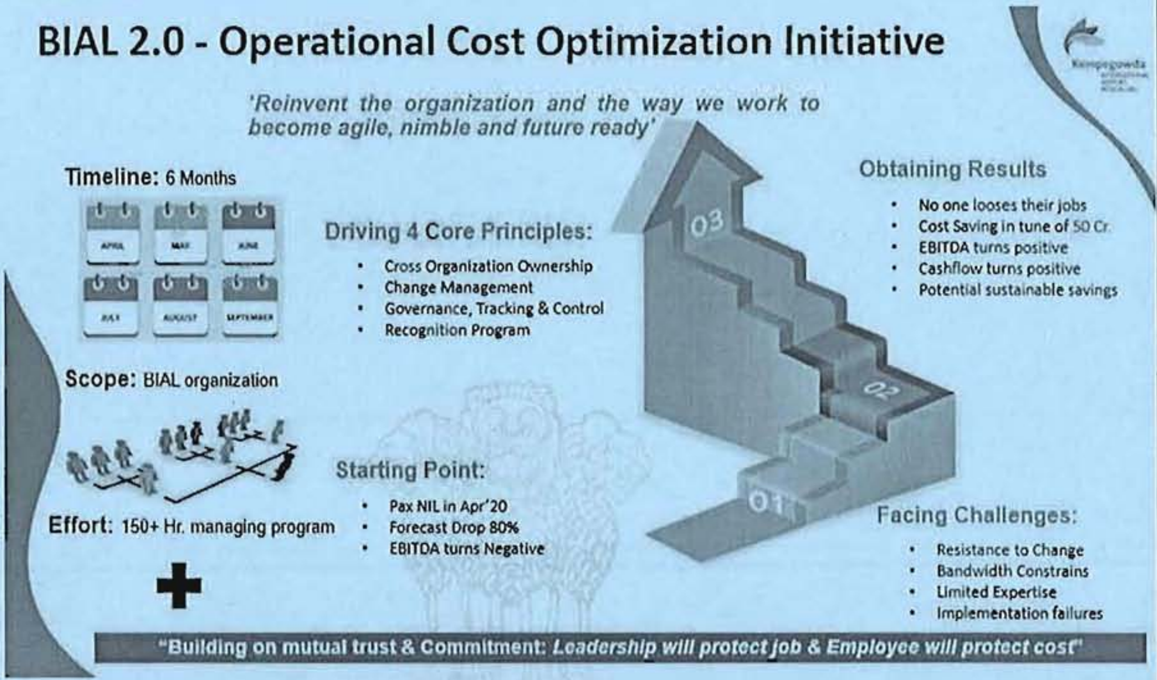
Context and basis for forecasting costs for Third Control Period

- *"BIAL has always managed its costs very efficiently with stringent measures of Budgeting, controlling and reviews together with staggering and postponements of costs wherever possible, at the same time maintaining service quality standards. These are demonstrated by BIAL's costs being benchmarked as one of the lowest as per the study report being published as part of the Consultation Paper (Appendix III) and the ASQ ratings consistently maintained by BIAL and the various awards conferred upon BIAL. Below graphs demonstrate BIAL's efficiency of Operating Expenses which has been duly noted and recognized by AERA.*



- *BIAL is in the midst of implementing a large-scale expansion project during unprecedented times, when the entire Industry is grappling with the Covid-19 pandemic situation. In addition to running efficient Airport Operations as confirmed in the study report, in order to adequately plan and be ready for facing this unprecedented challenging situation, BIAL has embarked upon cost savings initiatives as has been explained in the MYTP submissions and elaborated during the Stakeholder consultations. Some of the actions taken are reproduced below. These cost optimization measure have resulted in significant savings in FY 21:*
- *Optimum utilisation of machinery/assets/services in line with traffic (X ray machine, DFMD, HVAC, shutdown of areas in terminal, Shuttle bus service, employee transportation, pool vehicle, trolleys in circulation etc).*
- *Reduction in YOY escalation for all AMC/CAMC contracts and negotiated for onetime special discounts from vendor partners.*
- *Optimisation of outsourced manpower in line with business requirement and improvement in efficiency (Land side traffic, Security, Housekeeping, Safety, Trolley management etc)*
- *Concerted efforts towards lower consumables and spares spend*
- *Headcount and Personnel costs*
- *Freeze on all new hires for FY 21 (only mandatory replacements hired); no increments given in FY 20.*
- *Only rolled out committed new appointments made in Feb - Mar 2020*
- *Other Measures*
  - *Travel costs reduced with foreign travel reduced to nil*
  - *Most external consultancy contracts cancelled except for required ones - legal, AERA, tax, audit etc.*

- *Events like stakeholders' events, employee events, etc. being conducted on digital platform*
- *All discretionary spends are cancelled*



- *FY 21 cannot be considered as a base year as it is not a typical year due to drastic fall in traffic and certain austerity measures which were taken in this year on this account. These austerity measures cannot be continued during the coming years when the Traffic and Operations are expected to return to normalcy. BIAL had considered FY 20 as the basis for making all projections and the same should be adopted by the Authority for estimating the third control period costs. This is also the practice followed by the Authority in case of other airports such as Chandigarh, Mumbai, Delhi etc. as 2020-21 is not a representative year. The base year for traffic and the base year for cost cannot be different.*
- *BIAL has carried out a detailed bottom up estimation process for various expenses and based on the detailed analysis, estimated costs for the Third Control Period was submitted by BIAL. Certain assumptions made by the Authority do not appear reasonable and fair, given the past cost averages and bottom up estimation being the basis for BIAL's submissions. BIAL is giving below the detailed analysis and reasoning which BIAL requests the Authority to consider and update the same in the MYTO.*
- *In view of the large scale expansion project being carried out and all Internal accruals being already deployed for Capital Expenditure planned, it is imperative that the right level of Operating Expenditure is assessed and provided to BIAL, rather than a True up mechanism being available to re-coup the costs, which will lead to cash flow issues for BIAL in the Third control period.*

Responses on Head-wise estimates by BIAL

<u>Personnel Cost</u>

- *BIAL has managed the personnel cost efficiently in the past by ensuring optimal sizing of personnel, staggering the headcount increases wherever possible to be deployed to a later point in time, deferring replacement of open positions during Covid-19*

Headcount increase

- *BIAL has submitted the following head count increase estimate for the third control period.*

Particulars	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Manpower proposed by BIAL	1227	1247	1258	1624	1663	1878	1904
Manpower additions towards business growth			11	26	39	26	26
Manpower additions towards T2 Phase 1			0	340	0	189	0

- *Business Growth additions were necessitated due to the following reasons:*
  - *Vacancies on account of resignations in FY 21 could not be filled due to Covid-19 and hence recruitments were deferred to the extent possible.*
  - *Additional headcount for NSPR and other increased areas of operations in which the recruitments were staggered and deferred to future years.*
- *During FY 21 only the already offered employments were honoured (38 head count) and only 4 other critical positions were filled. This demonstrates BIAL's austerity and caution in hiring manpower and committing to additional costs.*
- *Manpower additions towards T2 Phase 1, Forecourts and allied functions were planned considering the need to ensure optimal and critical manpower are deployed in FY 23 and further additions are proposed in FY 25 once the traffic and operations starts growing post reaching Pre-Covid levels*

Headcount increase in proportion to infrastructure

- *Scale of Operations are expected to grow manifold with large scale Infrastructure being added as detailed below:*

Infrastructure	**Existing/ Second Control period**	**Third Control Period**
Airside facility	One Runway	Two Runway - CAT IIIB
	66 Aprons	147 Aprons
Terminal	Expanded Terminal – 1.5 lakh sq. m	Two Terminals – Total 4.0 lakh sq. m
Terminal Capacity	27 mppa	52 mppa
Landside connectivity	Main Access Road South Access Road	Main Access Road South Access Road Southwest Connectivity Secondary South Access Road
Landside access	Open Car Park, Bus bay	Multi modal Transport Hub

- *A comparison of the existing Manpower strength and the incremental additions proposed (as submitted in the MYTP forms) indicate that even though the Infrastructure capacity is being increased by over 200% as above table, the manpower addition is not proposed in the same proportion.*

Form F11 (a): Employee Strength								
S.No.	Particulars - with detailed breakup	Last available audited year	Financial Year before Tariff Year 1	Tariff Year 1	Tariff Year 2	Tariff Year 3	Tariff Year 4	Tariff Year 5
		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
	Department-wise Full-Time Employees							
1	**Support Services**	133	139	148	163	166	174	175
	MD & CEO	4	4	4	4	4	5	5
	Finance*	60	64	68	75	77	80	81
	Human Resources	18	20	21	24	25	25	25
	Administration	9	9	9	9	9	9	9
	Legal	9	9	9	11	11	15	15
	CMO Office	2	2	3	3	3	3	3
	Marketing	17	17	18	20	20	20	20
	Corporate Communications	3	3	5	6	6	6	6
	Corporate Affairs	6	6	6	6	6	6	6
	Corporate Social Value	5	5	5	5	5	5	5
2	**Commercial**	45	46	46	101	117	117	121
	VP - Commercial Office	4	4	4	10	13	13	13
	F & B and Retail	13	13	13	20	20	20	22
	Landside Traffic(Commercial)	22	23	23	59	72	72	74
	Advertising	6	6	6	12	12	12	12
3	**Operations**	771	791	793	1,001	1,021	1,211	1,232
	Director-Operations Office	3	3	3	3	3	4	4
	Aviation Stakeholder & Quality Management		-	-	-	-	-	-
	Customer Engagement and Service Quality	3	3	3	6	6	6	6
	Terminal Operations	138	148	148	264	264	264	264
	Airside Operations	98	100	100	106	106	137	144
	Landside Technical	19	19	19	27	27	27	27
	Aviation Safety	19	19	19	19	19	23	23
	Bird AirStrike Hazard Management	9	9	9	10	11	14	14
	Enterprise Risk & Corporate Resilience	6	6	6	6	6	7	7
	Security	38	38	38	38	38	70	70
	Security Screening	141	143	143	197	212	277	287
	ARFF	265	265	265	265	265	281	281
	ICT	32	38	40	60	64	101	105
4	**Corporate Strategy & Development**	41	43	43	61	61	61	61
	Corporate Strategy & Development	2	2	2	3	3	3	3
	Forecasting and Slots	5	5	5	8	8	8	8
	Centre of Excellence	10	10	10	15	15	15	15
	Corporate Strategy and Business Development	3	3	3	4	4	4	4
	Aviation Business	10	12	12	14	14	14	14
	Ops Planning & Project Co-ordination	4	4	4	4	4	4	4
	Innovation Lab	7	7	7	13	13	13	13
5	**Engineering & Maintenance**	221	228	228	298	298	315	315
	Technical & Engineering	20	21	21	26	26	26	26
	Landside Maintenance	71	73	73	124	124	126	126
	Environment, Landscaping & Utilities	56	58	58	70	70	78	78
	Airfield Maintenance	74	76	76	78	78	85	85
6	**Grand Total**	1,211	1,247	1,258	1,624	1,663	1,878	1,904

- *As can be seen from the above table, manpower additions are happening only in critical departments such as Terminal Operations, Security and Safety and E&M.*
  - *Despite a 200% increase in Terminal capacities, increase in manpower for Operations is only from 1019 numbers to 1527 numbers, less than 50%*
  - *BIAL has planned to effectively utilise the Engineering & Maintenance teams to manage the additional facilities and only a bare minimum increase in head count has been considered.*
  - *Certain additions for Airside Operations have been deferred towards the last of the control period considering that usage of Airside facilities will be increased during that time, hence these additions were deferred from FY 23 to FY 25.*
- *This demonstrates that BIAL has, wherever possible, synergized and managed efficiencies in planning the head count increases across the 5 years in the control period.*

<u>Headcount per pax ratio</u>

- *When a new infrastructure is added, the employee : passenger ratio tends to go up in the initial years reaching an optimal level as the infrastructure usage increases over a period of time. BIAL has submitted the following analysis during the discussions with the Authority on the manpower* *estimation. It is evident from the below table that with the headcount increase proposed by BIAL, and with traffic of 175 Mn as per the revised Traffic estimate submitted by BIAL during ATP, the employees to pax ratio is at its optimal levels. From the below, it is evident that the manpower deployment at BIAL is at its optimal levels and will be better than the past efficiency benchmarks set.*

1st Control Period					
Particulars	**FY 12**	**FY 13**	**FY 14**	**FY 15**	**FY 16**
Passenger (in million)	12.71	11.99	12.87	15.40	18.97
Employee (in Nos)	734	759	784	780	814
Employees per million pax (Nos)	58	63	61	51	43
2nd Control Period					
Particulars	**FY 17**	**FY 18**	**FY 19**	**FY 20**	**FY 21**
Passenger (in million)	22.88	26.91	33.31	32.36	10.91
Employee (in Nos)	811	820	1,052	1,227	1,181
Employees per million pax (Nos)	35	30	32	38	108
3rd Control Period					
Particulars	**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**
Passenger (in million)	15.20	31.20	36.60	42.50	49.40
Employee (in Nos)	1,258	1,624	1,663	1,878	1,904
Employees per million pax (Nos)	83	52	45	44	39

- *The headcount after commissioning of T2 Phase 1 translates to approx. 52 employees per million pax and is expected to progressively reduce to 39 employees per million pax by FY 26*
- *A similar trend was noted after commissioning of T1A, wherein 61 employees per million pax in FY 14 came down to 38 employees per million pax in FY 20 just before Covid-19 outbreak*
- *By FY 26, considering the employee strength submitted by BIAL in its MYTP of 1,904 handling a passenger through put of 49.40 Mn pax (as per BIAL traffic submission for ATP) will end up at 39 employees per million pax which is almost in line with pre-covid numbers of 38 employees per million pax*
- *Authority has noted the following in the Consultation Paper*
- *7.2.5 The Authority noted that the manpower increase was largely attributed to the commissioning of Terminal 2 Phase 1. The Authority noted that the BIAL has already added 171 and 175 employees in FY19 and FY20 respectively before the impact of Covid-19 on traffic in FY21. The Authority notes that the employee addition during FY19 and FY20 will be for the new south parallel runway operations and the new facilities proposed to be commissioned in FY21 which is now expected to commission in FY22. Further, the Authority noted from the traffic forecast that the proposed Terminal 2 will not operate at peak capacity till the end of the Third Control Period and the usage of Terminal 2 can be optimized to cater to the limited traffic. Therefore, the Authority is of the view that the manpower addition proposed by BIAL is not in proportion to the increase in traffic at the airport and also the manpower requirement can be met by the manpower addition already undertaken by BIAL in FY19, FY20 and FY21. Therefore, the Authority proposes to consider 10% increase in manpower in FY23 and FY25 during the Third Control Period.*
- *BIAL submits that the key Headcounts additions in FY 19 and FY 20 have happened across the below mentioned departments.*

Department	Addition in FY 2018-19	Addition in FY 2019-20	Remarks
ARFF	129	3	Mandatory Requirement – NSPR
Security Screening	21	31	Mandatory Requirement – Terminal 1 Operations
Terminal Operations	11	22	For Managing increase in passenger growth in Terminal 1
Airside Operations	9	26	For Managing airside and passenger growth in Terminal 1
Engineering and Maintenance	11	37	For managing NSPR and other facilities

- *It is evident from the above table that key additions have happened in ARFF/ Security Screening Airside operations etc. which were necessary to manage the increase in traffic and for the new airside infrastructure facilities.*
- *No headcounts have been added for facilities such as Terminal 2, Forecourt, MMTH and other Landside facilities that are under construction.*
- *Hence, the Authority cannot consider the above headcount additions in FY 19 and FY 20 towards the manpower requirement for the yet to be commissioned assets.*
- *Authority has noted that Terminal 2 will not operate at its peak capacity till the end of Third Control Period and usage can be optimized to cater to limited traffic.*

  - *As per Authority's projections of traffic or even considering BIAL's revised estimate, Terminal operations will be at 80% of capacity for 3 out of the 5 years. Therefore, to assume that the Terminals will not operate at peak capacity is incorrect.*
  - *While the Operating Costs and manpower head count cannot be planned fully linear in line with traffic and are largely driven by the need to run and maintain the facilities created, it is with this very purpose in mind that BIAL had proposed a staggered increase in manpower as submitted above, which, as explained achieves efficiencies and maintains optimal balance of team to ensure that service quality levels as required are maintained.*

- *While staggered head count additions have been implemented for Terminal Operations, Security, Safety and E&M in case of Terminal 1, Terminal 2 is an entirely new terminal and needs adequate staffing levels to handle the operations and meet the service quality standards committed in the Concession Agreement. BIAL has embarked on a staggered headcount addition approach for Terminal 2 and other areas, with an objective to keep the costs efficient.*
- *We request the Authority to take note of this approach as is evident from the proposed increase in headcount over the third control period and allow the headcount increases submitted by BIAL.*
- *Authority's headcount increase assumption of 10% does not have any rationale and is woefully short of the actual requirement needed to operate and maintain such a large terminal and the allied infrastructure.*
- *BIAL submits that the estimations made are at granular level, considering the necessities of the airport, keeping in mind the need to balance and rationalize costs to the extent possible while at the same time maintaining service quality level standards already set by BIAL, always striving to improve efficiencies. Manning Airport at the levels proposed by the Authority, at the time of such*

large facilities being created pose a serious threat of slippages in service quality level benchmarks set by up. Hence, BIAL request the Authority to approve the estimates of head count increase proposed by BIAL which can be trued up based on actuals.

Personnel cost per employee/escalation in employee cost

- *BIAL has submitted that the past trends of cost escalations are in the range of 10% with a 2% cost correction, every 3 years.*
- *Following analysis has been detailed by the Consultation Paper on the evaluation of past trends of CAGR of cost per employee*

Table 92: Trends in personnel cost/employee

Operating expenses	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Personnel cost/employee (INR lakhs)	10.17	11.37	11.93	13.31	13.89	14.64	13.77	14.56	15.97
% change		11.79%	4.89%	11.55%	4.34%	5.43%	-5.96%	5.77%	9.70%
5-year CAGR						7.55%	3.89%	4.06%	3.72%
8-year CAGR (FY12-FY20)									5.80%

7.2.7 The Authority noted that BIAL had projected the personnel cost/employee at a higher growth rate for the Third Control Period. The Authority proposes to revise the growth rate of personnel cost/ employee for the Third Control Period to 5.8% (8-year CAGR for the period FY12-FY20) and accordingly proposes to recalculate the personnel cost for BIAL.

- *BIAL would like to bring the following inconsistencies in this analysis for the consideration of the Authority*

  a. The computation has a fundamental flaw in the workings that the cost per employee is arrived at by dividing the total cost by number of employees. The workings do not factor varying changes in headcounts of employees joining / leaving in the middle of the year which is common for any organization.

  b. Changes in headcounts and costs across various grades over the years is not considered.

  c. The above table indicates a negative trend in FY 18. BIAL has never had a case of negative cost increase (i.e. decline in cost) as increments are given in line with Industry benchmarks

  d. The CAGR arrived at considers the reduction in one year and hence the same is not realistic as explained above

  e. The 5 year CAGR as shown by the Authority indicates volatility, which does not reflect the realistic situation.

  f. Authority has provided for a standard increase at other Airports but has adopted a different approach for BIAL.

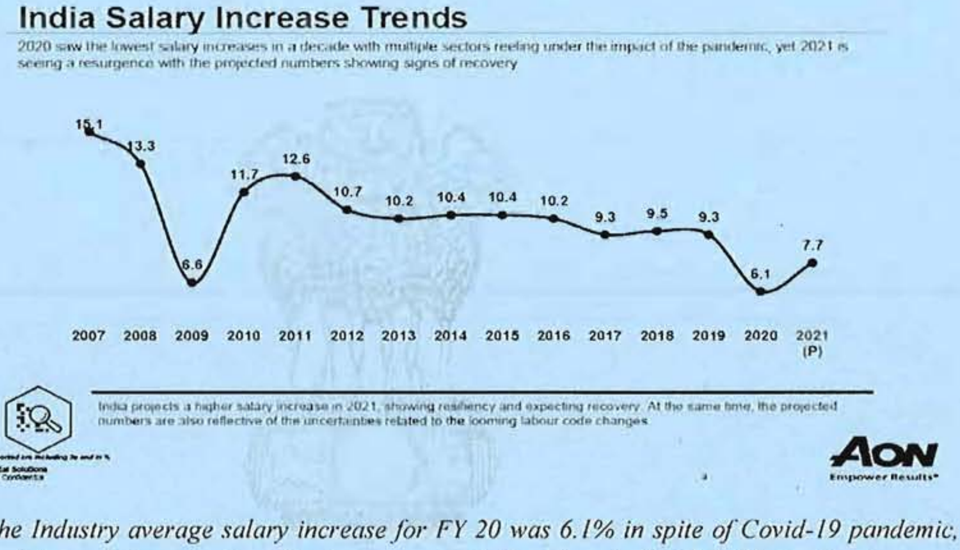
- *Following challenges are faced by BIAL:*

  a. Airport Industry is a niche area where Talent pool availability is limited, necessitating need to match salary expectations in line with industry standards.

b. With Privatisation and new airports coming up, there is a need to incentivize employees and ensuring talent retention is of key importance.

c. KIA is located in Bangalore, an IT hub where in the salary expectations are generally higher and talent retention in an airport which is situated far from the airport requires maintaining industry standard costs.

BIAL reproduces below one of the recent surveys carried out by AON on trends of salary increases. The average of salary increases across India in the last 10 years before Covid-19 is ranging from 11.7% to 9.3%.



- *While the Industry average salary increase for FY 20 was 6.1% in spite of Covid-19 pandemic, BIAL took immediate cost rationalization measures in the interest of stakeholder and no increase was given to employees. Also, for FY 21, BIAL's Board approved salary increase levels – 7% is below the Industry average of 7.7%. While BIAL has taken cost rationalization measures, in the coming years, appropriate increase is needed so as to be in line with market norms and to motivate and retain the required talent.*
- *The above table indicates that increases is in the range of 9.3% to 11.7% which is in line with BIAL MYTP submission. Hence, we request the Authority to consider the 10% salary increases together with a 2% correction once in 3 years which are required to acquire and retain talent. The same may be trued up by the Authority based on actuals at the end of the control period.*

Operations & Maintenance Cost

- *Not considering past cost as basis*
- *BIAL notes that "The Authority is of the view that comparison with the historical O&M costs as a % of gross block will not provide the right benchmark for forecasting the future O&M costs as BIAL's facilities were operating at peak capacity till FY20 and the Authority has noted from the proposed traffic forecast that the new terminal building, new apron and new south parallel runway would not operate at their peak capacity till the end of the Third Control Period."*
- *Details of Capacity Utilization in 3rd Control period is as given below*

Details	Terminal Capacity (MPA)	Total Traffic as per AERA Consultation Paper	Total Traffic as per BIAL	Capacity utilization as per Consultation Paper	Capacity utilization as per BIAL Traffic
FY 22	26.5	21.24	15.24	80%	58%
FY 23	32.75*	34.09	31.16	104%	95%
FY 24	52.5	39.81	36.55	76%	70%
FY 25	52.5	46.36	42.53	88%	81%
FY 26	52.5	54.02	49.41	103%	94%
Sub total		195.22	174.89		

assumed T1 plus 3 months of T2 availability

- *From the above table, it clearly evident that in 3 out of the 5 years of the 3rd control period, BIAL is operating at peak capacity levels of more than 80% and hence it is incorrect to disregard the use of historical basis of O&M costs. Authority has also evaluated and confirmed that the O&M cost as part of overall Operating & Maintenance cost is reasonable and efficient.*

- *Not considering the efficient O&M Cost report as the basis is inconsistent with Authority's approach adopted in other airports, wherein past trends were used as the basis for projecting future costs.*

- *Detailed workings for the basis of arriving at the individual % of cost estimates as a % of the asset block and additional details as sought for by AERA during the MYTP evaluation have been duly submitted by BIAL including analysis of assets and its related costs segregated into O&M – Infrastructure (further segregated into Airside, Landside and utilities), O&M – ICT and other costs, in order to facilitate a proper comparison and analysis. The Authority has not commented on the same; BIAL assumes that the % of Gross Block have been found to be acceptable by the Authority.*

Using FY21 costs as basis to project future cost estimates for existing assets

- *AERA has proposed to consider the cost base of FY 21 for forecasting the O&M cost for the existing assets for future years. As explained by BIAL, FY 21 was an extra-ordinary year and where the traffic has plummeted to a new low. Certain one-time cost saving / austerity measures taken considering the reduction in traffic and the pandemic conditions cannot be extended in the long run, when traffic is expected to return to normalcy.*

Principle of considering 0% as the cost in the year of asset capitalization

- *When an asset is put to use, either for full year or a part, there are associated O&M costs that has to be incurred and Authority cannot deny such valid operating costs. BIAL would like to bring to Authority's notice that even in the first year of commencement of Operations at BIAL there was cost towards O&M as detailed in table below. Hence, considering 0% O&M cost as a principle has no basis.*

- *Authority has noted that the assets capitalized in a year do not have a cost associated with it. In BIAL's business plan, most of the assets have been estimated to be capitalized at the end of the Financial year and were expected to have very limited operations in the year of capitalization and hence, these have not been considered. However, the Authority has not linked its proposal to this logic but has rather laid this as a principle. Hence, if there are assets proposed to be capitalized during the year, 0% cannot be applied for such assets but proportionate costs have to be estimated and provided for.*

Different %s for assets, based on year of commissioning

- *The Authority has proposed different %s for different years, post asset capitalization. Rationale / basis of these estimates have not been provided by the Authority including the references/ details used to derive such %s. Authority has not given any reference of any major airport in India which has such O&M costs %s.*
- *In both the categories – Infrastructure and ICT, the Authority has proposed estimates much lower than the % of assets proposed by BIAL. Reduction in estimates without any rationale/ basis leads to under provisioning of the costs that BIAL is expected to incur for the next 5 years period.*
- *Historical Trends: In the 13 years of Airport operations, BIAL has not witnessed the spend %s to be as low in the initial years as those envisaged by the Authority. It is not clear to BIAL on what basis and data, AERA has proposed such %s of 0.5%, 0.6%, 0.75% and 1% in the 2nd, 3rd 4th and 5th year of asset commissioning.*
- *Following Table summarizes O&M costs as a % to Gross Block of assets across different airports. Table below does not reflect any O&M costs to be in the ratio as indicated by AERA in any of the last 10 years in the consultation paper.*

Airport	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
BIAL	1.59%	1.58%	1.63%	1.97%	2.53%	2.35%	1.54%	1.59%	2.47%	2.74%	2.65%	3.02%	2.02%
DIAL				2.85%	2.04%	2.33%	2.21%	2.23%	2.32%	2.76%	2.90%	2.91%	2.74%
MIAL							1.77%	2.01%	2.16%	2.32%	2.57%	2.41%	2.37%
HIAL									2.47%	2.77%	3.06%	2.66%	2.07%
AAI-MAA				2.26%	2.86%	1.37%	2.79%	2.34%	4.26%	4.12%	4.23%	4.58%	4.51%

Source: AERA Orders detailing the actuals / estimated O&M costs and the Aeronautical RAB

To summarize

- *None of the above Airports have had, at any point of time in the last 10 years, the O&M cost %s as low as 0.5% to 1% as has been proposed by AERA.*
- *Authority has not given any rationale for the arbitrary percentages proposed by it.*
- *Such levels of costs are not practically possible to achieve without comprising on regular maintenance of key systems*

Minimum costs to be incurred for regular operations and upkeep (Not linked to traffic)

- *BIAL's O&M cost head includes both Operations and Repairs & Maintenance costs.*
- *It is to be noted that besides the Maintenance of Assets relating to Civil, Electro-Mechanical, Vehicles & Equipment and Utilities, there are various other expenses (as given in next paragraph) which are not directly related to the maintenance of Assets but are required to be spent for the running of the Airport Operations.*
- *Apart from maintenance expenses (AMC/CMC), there are other applicable expenses such as Housekeeping, facility maintenance, Vehicle running costs including fuel expenses, Wildlife management, Solid Waste Management, Consumables etc. which cannot be avoided and is considered as part of total O&M expenses.*
- *In addition to the above, BIAL also needs to take up certain one-time maintenance activities on periodical basis (once in 5 years) such as building waterproofing, trumpet flyover repairs, underground sump painting & waterproofing, etc. The same is not factored separately by BIAL in its submissions and have been considered to be managed within the overall O&M cost submitted. With AERA reducing O&M costs to 0%, 0.5%, 0.6%, 0.7% & 1% for year 1, year 2, year3, year 4 & year 5 respectively and 5% for ICT, such one-time maintenance activities cannot be carried out.*

Operations of the Airport and its facilities cannot be managed to meet the required Equipment and Service maintenance standards.

AMC costs (OEM contracts) to be incurred post commissioning

- *Maintenance of the asset starts from the date of its commissioning and hence AMCs are required to be entered into for various upkeep and maintenance activities right from the commissioning of assets.*
- *As part of O&M cost evaluation, BIAL has carried out evaluation of individual contracts to be executed for different categories of Equipment and infrastructure.*
- *AMC contracts are executed for certain key equipment as follows from Day 1 of Operations:*
    - *Baggage Handling System (Electro mechanical and Control System)*
    - *Passenger Boarding Bridges*
    - *Elevators & Escalators*
    - *All Equipment in the screening system – In line, Standalone, ETD etc.*
    - *Central Heating Ventilation and Air Conditioning system*
    - *Electrical System*
    - *Fire Alarm System and Fire Safety System*
    - *Fire Fighting System*
    - *PHE System*
- *If AMC Contracts are not recognized immediately from the day of capitalization, BIAL would not be compliant with OEM recommendations for Operation & Maintenance of the respective assets. This will prove detrimental in case of any break-down / non-functioning of such assets and there will be no vendor support.*
- *In addition, cost of spares, consumables etc. which are required for normal operations and not covered under the AMC, are required to be incurred by BIAL. Further, not ensuring adequate maintenance of assets increases the Insurable risk leading to higher Insurance premiums.*
- *To summarize, there is a need to incur Operation & Maintenance expenses, from Day 1 of commissioning/ capitalization, and Authority has to recognize all these costs.*

Inflation factor considered

- *AERA has proposed to consider the escalation of costs to be based on Inflation rates. Past trends indicate that the costs have increased at over 10% as key elements of the costs are linked to increase in Minimum wages rate etc. in addition to Inflation etc. Hence, considering only inflationary increase would not be a right basis for estimation the future costs. BIAL requests Authority to consider the proposed 10% increase, to be trued up based on actuals at the end of the control period.*

Sustaining capex link to O&M costs

- *AERA has noted that BIAL is provided with adequate sustaining capital expenditure to carry out special repairs in addition to O&M costs. BIAL submits that its sustaining capital expenditure estimates relate primarily to minor capital expenditure and certain costs for replacement of assets etc. which are as per OEM recommendations. These costs are Capital in nature and not part of*

Operational costs. These have been identified and a list has been submitted by BIAL. Hence, this list is totally different and should not be compared with the O&M cost estimates. Also, AERA has proposed to reduce the Sustaining capex estimates submitted by BIAL by approximately 33%

Summary

- *As noted by the Authority, BIAL has demonstrated diligence and caution in all its cost spends and has been found to have one of the lowest O&M costs per pax/ ATM and the costs spent have been found to be efficient. BIAL will continue to evaluate all costs before spend by applying due process of budgeting, controlling and monitoring.*
- *There is no 0% O&M cost principle applicable across any airport. Also, the graded range of increase proposed by AERA is not reflected in any past trends across airports.*
- *Past cost benchmarks and the costs across other airports are higher than the rates considered by BIAL for estimating O&M costs as a % of assets. Basis and rates proposed by the Authority have no reasoning or rationale.*
- *BIAL's estimates have been made diligently on a bottoms up basis and these cost estimates are necessary to be provided to ensure adequate operations and maintenance of equipments and operations of the airport to ensure meeting the service quality benchmarks.*
- *Hence, BIAL requests the Authority to consider the cost estimates provided by BIAL, subject to correction of error in formula as detailed in Para 7.2.14 and the same may be trued up based on actuals.*
- *In view of the large scale expansion project being carried out and all Internal accruals being already deployed for Capital Expenditure planned, it is imperative that the right level of Operating Expenditure is assessed and provided to BIAL, rather than a True up mechanism being available to re-coup the costs, which will lead to cash flow shortages for BIAL in the Third control period.*

Allocation of O&M costs

- *BIAL notes that the Authority proposes to consider allocation ratio of O&M cost for the Third Control Period based on the allocation ratio of assets for the Third Control Period.*

  BIAL notes that AERA has carried out allocation of O&M costs in the Second Control Period based on the costs segregated into different cost centres. Accordingly, BIAL requests Authority to consider the ratio arrived on this basis for FY 21 for the Third Control period, in line with the basis considered for allocation of Personnel costs in the Third control period.

Lease Rent

- *AERA has proposed to consider the same as cost after adjusting the Lease Rent relating to area given on lease to BACL. This is in line with BIAL's own submission in the MYTP submitted in July 2020.*
- *Further, after submission of MYTP, GoK has revised the lease rentals, as summarized below. Relevant document is enclosed as Annexure 11.*

Particulars		FY 22	FY 23	FY 24	FY 25	FY 26
Lease rent payable	Rs. Crore	15.11	21.26	22.87	23.55	24.26

Utility Charges

- *AERA has noted that the CAGR of the demand charges is 1.5% and had proposed to not consider any increase in demand charges for the Third Control period. While the details of computation of CAGR is not available with the Authority, BIAL assumes this is based on the details provided by it in the business plan.*
- *Considering the CAGR of past years from beginning may not be appropriate as, BIAL has witnessed increases in demand charges in 2015, 2016, 2018 and 2019. Relevant details are reproduced below.*

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22 proposed
Demand Charges	190	200	220	220	230	240	260
% increase		**5.3%**	**10.0%**	**0.0%**	**4.5%**	**4.3%**	**8.3%**

- *Hence, BIAL requests that the increase in demand charges as proposed by BIAL, which is in line with the recent trends be accepted by the Authority. These statutory costs can be trued up at actuals at the end of the control period.*
- *AERA has proposed to increase power and water charges by inflation instead of 7% proposed by BIAL. BIAL would endeavor to keep power charges increase in line with inflation rate of 4.9%. However, in case of water charges, considering that BIAL has already estimated part usage from the various rainwater harvesting ponds, BIAL requests for increase in cost to be based on the estimates provided by BIAL.*
- *Recovery of costs from Concessionaires has been proposed at 35% by BIAL which is aligned with past trends. The increase in space is more in Terminal Building areas wherein the renting out of space to concessionaires for lease is expected to take more time considering the pandemic situation. Also, the exiting recoveries are more from concessionaires occupying larger spaces viz Cargo, Ground handlers etc. outside Terminal, which is not expected to increase in the Third Control Period. While BIAL expects that the recovery ratio would indeed come down below 35% proposed, BIAL requests the Authority to consider the same at 35% as proposed and not increase the same to 50%*

Insurance

- *AERA has proposed to use the average premium rate of Second control period to forecast the cost for third control period.*
- *In view of the Covid-19 impact, the insurance premiums have risen on account of:*
  - *GIC Re, the national reinsurer, increasing its premiums for the property insurance segment for all occupancies since the year 2020,*
  - *IRDA coming down heavily on undercutting of costs and increasing cost of re-insurance, hardening of rates in the overseas reinsurance markets for liability lines as well as*
  - *A shrinkage of the aviation reinsurance market on account of huge losses in the past few years*
- *BIAL has submitted the rationale for increase in cost of insurance in the recent years. Considering Covid-19 risks, the Insurance costs are expected to rise higher.*

- *Accordingly, BIAL requests AERA to consider the current rate of insurance premium as estimated by BIAL and accordingly estimate the cost of Insurance which is in line with the current market trends*

Rates and Taxes

- *AERA has allocated the Rates & Taxes based on land usage. The estimates submitted by BIAL only relate to the costs proposed to be incurred by BIAL and not related to any of BACL activities, which is to be paid by BACL. Hence, BIAL requests AERA to consider the costs as fully Aeronautical.*

Marketing & Advertising

- *In response to the Operating Expenditure proposed to be considered by the Authority for the second control period, BIAL has submitted its response on why the actual cost incurred should be considered and not consider the estimation based on passenger and inflation increase.*
- *Accordingly, BIAL request the Authority to benchmark the costs at 2020 rates and provide for 10% increase.*
- *Aeronautical collection cost to be adjusted based on the revised traffic numbers*

General Admin Costs

- *On account of COVID, BIAL had delayed a number of initiatives including tenders for selection of new concessionaires for Terminal-2. With the situation expected to normalize by FY 23/ FY 24, BIAL needs to tie up with various concessionaires to achieve the best commercial terms. Considering this, BIAL requests the Authority to estimate increase in Consultancy and Legal based on the increment rates submitted by BIAL at 10% which is in line with the actual trends of the past years.*
- *Office costs are proposed to be increased mainly due to increase in security charges to be manned for the New infrastructure like T2, MMTH, new road network. Also, basis the past trends the normal annual increase in various other office costs are increase @ 10% & the same needs to be allowed. Hence, BIAL requests the Authority to allow the Office costs submitted by BIAL*
- *Travel costs are considered to reach pre-covid levels by FY 25. In Authority's considered view, passenger traffic will resume to more than pre-covid levels in FY 23. Hence, the travel costs are also to be revised to pre-covid levels by FY 23 and increased at 10% thereafter, considering that BIAL has to work hard to revive International traffic and bring in quality concessionaires for Terminal-2.*
- *Authority has proposed to consider Legal and office expenses at FY 21 levels for future. As explained by BIAL, Authority is requested to consider FY 20 levels as base for estimation. BIAL requests the Authority to consider the increase in rates as submitted by BIAL which is based on the past trends.*

Concession Fees

- *BIAL has estimated Concession fee based on ARR as the estimates of Aviation Revenues each year would depend on the ATP and the distribution of actual revenues. Accordingly, in BIAL's model, Concession Fee was estimated based on the ARR, which will be trued up in the next control period based on actual revenues and the 4% cost on the same.*
- *From Table 109, BIAL notes that the Authority has not grossed up the Concession Fee (i.e. Revenue * 4%/ (100%-4%)) but has estimated the same at 4% of the Revenues. BIAL requests the Authority to revise the same.*

CSR

- *BIAL request the same to be estimated based on the revenues and revised P&L, to be arrived at after making changes based on BIAL's submission and Authority's evaluation of the same*

ORAT

- *BIAL has estimated the same as part of Capital Expenditure as per applicable accounting principles and guidelines. Same treatment was also accorded by the Authority earlier in case of DIAL wherein ORAT was considered together with the Pre-Operative Expenses. BIAL requests the Authority to consider the same as Capital Expenditure.*

Summary

- *BIAL has always managed its costs very efficiently with stringent measures of Budgeting, controlling and reviews together with staggering and postponements of costs wherever possible, at the same time maintaining service quality standards. These are demonstrated by BIAL's costs being benchmarked as one of the lowest as per the study report being published as part of the Consultation Paper (Appendix III) and the ASQ ratings consistently maintained by BIAL and the various awards conferred upon BIAL.*
- *BIAL has embarked upon cost savings initiatives as has been explained in the MYTP submissions and elaborated during the Stakeholder consultations.*
- *As elaborated in the individual sections, BIAL has carried out a detailed bottom-up estimation process for various expenses and based on the detailed analysis, estimated costs for the Third Control Period was submitted by BIAL.*
- *Certain assumptions made by the Authority do not appear reasonable and fair, given the past cost averages and bottom-up estimation being the basis for BIAL's submissions as have been explained and justified above.*
- *BIAL accordingly requests that the Authority consider the estimates as provided by BIAL for the purpose of estimating the Operating & Maintenance cost in the Third Control period. In view of the large-scale expansion project being carried out and all Internal accruals being already deployed for Capital Expenditure planned, it is imperative that the right level of Operating Expenditure is assessed and provided to BIAL, rather than a True up mechanism being available to re-coup the costs, which will lead to cash flow shortages for BIAL in the Third control period.*
- *BIAL has submitted its responses to the allocation ratios used to determine the Aeronautical Operating Expenses as part of the responses to True up of Second control period. BIAL requests*

the Authority to consider the same for the allocation of expenses for the Third Control Period also."

Other stakeholder comments on operating expenses for the Third Control Period

7.3.3 FIH Mauritius Investments Ltd. commented on O&M costs as follows:

- *"The assumptions on O&M costs for new asset additions are unrealistic and unsustainable. The assets that are getting added to the Asset Base are new but as the Authority is aware, the nature of O&M in the airport sector is characterized by the heavy "fixed" nature of O&M costs. New assets added during the period would have costs including AMC, general maintenance, housekeeping, consumables etc. This critical input has been totally ignored by the Authority.*

  We request the Authority to apply rationale norms for estimating the O&M cost for new assets and follow the principles followed in DIAL and MIAL tariff orders, wherein the Efficient Costs report prepared by the independent consultant was used as the basis for projecting O&M expenses in the current control period."

7.3.4 Siemens also commented on O&M cost as follows:

- *"The Authority had appointed an independent consultant to determine efficient O&M costs for BIAL in the 2nd Control Period & the report says that the overall (total) operational expenditure incurred by BIAL appears reasonable and within the range of other private airports in India.*

  However, the Authority has completely ignored this report while projecting the O&M costs for the 3rd Control Period and has proceeded to adopt O&M norms which are hitherto unheard off in the airport sector & are unreasonable in nature

  We request the Authority to apply rationale norms for estimating the O&M cost for new assets and follow the principles followed in DIAL and MIAL 3rd tariff orders, wherein the Efficient Costs report prepared by the independent consultant was used as the basis for projecting O&M expenses in the current control period."

7.3.5 APAO commented on O&M costs as follows:

- *"We have observed that the Authority has projected O&M costs without considering the past trends and has proposed radical norms that have not been seen till date in any of the major airports or proposed in the past AERA Consultation papers or tariff orders.*

  The Authority had appointed an independent consultant to determine efficient O&M costs for BIAL with respect to its performance (Internal benchmarking) and its competitors (external benchmarking) for the 2nd Control Period (FY2017-2021). As per the report submitted by the independent consultant, the overall (total) operational expenditure incurred by BIAL for the period FY 2017 – FY 2020 appears reasonable and within the range of other private airports in India.

  However, the Authority has completely ignored this report while projecting the O&M costs for the 3rd Control Period and has proceeded to adopt O&M norms which are hitherto unheard of in the airport sector & is totally devoid of any rationale and reasoning.

  The assets that are getting added to the Asset Base are new but as the Authority is aware, the nature of O&M in the airport sector is characterized by the heavy "fixed" nature of O&M costs. New assets added during the period would have costs including AMC, general maintenance, housekeeping, consumables etc. This critical input has been totally ignored by the Authority.

  We request the Authority to apply rationale norms for estimating the O&M cost for new assets and also follow the principles followed in DIAL and MIAL 3rd tariff orders, wherein the Efficient Costs *report prepared by the independent consultant was used as the basis for projecting O&M expenses in the current control period."*

7.3.6 IATA commented as follows:

- *"Overall opex (COVID years)*

  As mentioned in the section addressing the true ups for the second control period for the FY21, we do not see operating costs have been adjusted down enough to reflect how competitive markets (i.e. airline) needed to survive as a consequence of COVID. It is important that AERA put this kind of pressure on its regulated airports, especially in a regulated environment reliant on true ups, as failing to do so would send an extremely wrong signal to them.

- *Personnel expenses*

  While we appreciate that AERA is limiting the increase in personnel numbers for years 2023 and 2025, we are concerned about the starting point. If BLR pursues a policy of maintaining its staff numbers, it cannot be at the expense of airlines (due to the true up mechanism) which have had the need to adapt their size to survive in the current situation.

  We are concerned that the Authority is proposing to true up on the basis of actuals, but without clarifying that such true up would be subject to an efficiency study. We urge the Authority to include a proposal that any true ups must be subject to an efficiency analysis.

- *O&M Costs*

  We fully agree with the Authority's assessment that O&M rates should be minimal (if at all) for new assets and therefore we find sensible the percentages provided on Table 95.

  We would still like to point out that the assumed O&M percentage (excluding new capex) is high relative to the comparable airports (as noted in the opex efficiency study, Figure 29, O&M is more than 2% of the gross block assets). We would appreciate for AERA to further consider which percentage to apply for O&M on the existing assets.

  As previously indicated, we note that the Authority proposes to true up O&M on the basis of actual. We find imperative that AERA should clarify that such actuals will be trued up after an efficiency assessment.

- *Utilities*

  In principle, the proposal appears reasonable. However, and as highlighted in the relevant section on the true up of the second control period, it is important to understand whether the airport electricity consumption is efficient. In this regard further benchmarking with comparable airports would be beneficial in order to determine potential efficiency targets.

- *Insurance*

  We note that the authority proposes to use 0.07% as the average premium rate (using the 2017-21 as a reference). However, we note that table 50 from the Cost efficiency study shows insurance costs between 0.05% and 0.06% of the gross block. AERA may wish to revisit its assumptions in the light of this information.

- *Marketing and Advertisement*

  As formulated in our comments on the true up for the Second Control Period, we do not believe that marketing costs should be allocated to aeronautical. Passengers will go through Bangalore *airport if the wish to visit Bangalore or live in Bangalore and wish to visit another city. We do not see that expenditure in marketing will make any difference to this fact.*

On the basis of the above we request AERA to reconsider its current approach towards allowing Marketing and advertisement costs towards aeronautical expenses.

- *CSR*

  We see that the inclusion of CSR costs is in response to the TDSAT ruling.

  Our comments provided in the True up for the Second Control period regarding CSR are also applicable for this section.

- *General Administration Costs*

  Usually General administration costs is the account in which most reductions are generally thought in times of crisis. For example, we do not see why travel costs & consultancy costs should be allowed unless under very exceptional circumstances. In this regard, we request AERA to start FY21 with a much lower base than currently proposed.

  We would appreciate for AERA to carry out more scrutiny in relation to office costs. We see that it has allowed a 30% increase when in fact staff numbers are only allowed to increase in 10%. We would request AERA to reconsider such an increase unless there is an appropriate justification for it.

- *Concession Fee*

  We support AERA proposal to calculate the concession fee on the basis of aeronautical revenues, since that is way in which the methodology that will be used by the government for determining such fee.

- *7.3.2 To consider allocation ratio as set out in Table 113 above for the Third Control Period*

  - As mentioned on numerous occasions, we consider that cost allocation applied for Indian airports does not reflect the fact that non-aeronautical activities would not exist without the aeronautical ones. This positive externality needs to be reflected in the allocation of costs. We would welcome the possibility to further present our views on the matter.

- *7.3.3 To consider aeronautical operating expenditure as set out in Table 114 for the Third Control Period*

  - We would appreciate for AERA to consider the points made above before deciding a final level of operating costs

- *7.3.4 To consider ORAT as part of operating expenditure as given in Table 111 for the Third Control Period*

  - We would prefer if the ORAT expenses are capitalized since those expenses are essential for a successful commissioning Terminal 2. Besides, this may be an opportunity to shift some of the costs over time and therefore lower the pressure on charges.

- *7.3.5 To true up the operating expenditure for the current control period based on actuals, at the time of determination of tariff for the next control period*

- As highlighted throughout this section, any proposals for true up needs to be subject to an efficiency analysis. Otherwise there is the serious risk that the airport will not be incentivized to deliver the lowest reasonable overall cost. We urge AERA to clarify this in the final order."

7.3.7 FIA commented as follows:

- *"While FIA appreciates that AERA has undertaken an independent study for Operating Expenditure/ Operations & Maintenance expenses has been done for the Second Control Period, AERA may undertake similar independent study for the Third Control Period.*

  Without prejudice to the above:

  1.AERA may advise BIAL to rationalize/re-negotiate all the cost/expenditure items or heads including 'Employee expenses', as deemed fit. Further, no escalations should be permitted under these items or heads.

  2.Expenses on account of CSR may be excluded in line with previous decisions by AERA".

7.3.8 Airline Operator's Committee, Bangalore commented on concession fees and relief measures as follows:

- *"Binding issues like concession fee should be abolished as these are pass through charges meant to acquire the right to conduct business. This is against ICAO policies and presents a negative business environment for the country as an investment destination.*
- *The current dispensation like many other concerned governments across the world must step in and help the industry recover. This could be in the form of waiver of concession fee and land lease costs or any other fee that the airport pays to the authorities. This grant would result in a pass through to airlines in the form of discounts and decreased charges"*

7.3.9 Blue Dart commented as follows:

- *"Corporate Social Responsibility (CSR) has been introduced in the Companies Act, 2013 as a concept, whereby companies are obliged to spend part of their profit for the betterment of their less privileged communities and/or the preservation of the environment. In the consultation paper AERA has considered Rs. 74.41 cr of CSR expenses, which needs to be incurred by KIAL for third control period as operating expenditure. This is contrary to the spirit of CSR provision, as it is no longer a CSR activity from the profits of KIAL, but an imposition of an additional obligation of a funding contribution by airport users who already have their own CSR obligations. Airport users cannot be made responsible for a government obligation deductible from the profits of the airport operator, especially not when this same obligation is already imposed on the users themselves. We request AERA not to consider the cost of CSR incurred by BIAL and disallow the same for recovery from other airport users."*

  Based on KIAL's submission, AERA has considered 16% increase in personnel expense for FY 2023 and FY 2025. The increase of personnel expenses appears excessive and does not appear to be line with the market increase in the aviation industry which is negatively impacted. We would request AERA to kindly review the same."

7.4 BIAL's response to stakeholder comments regarding operating expenses for the Third Control Period

7.4.1 On IATA's comments regarding operating expenses, BIAL has submitted as follows:

- *"BIAL has demonstrated cost efficiencies in the past, by adopting practices relating to cost control, review, and monitoring. BIAL has, as part of the response to Consultation Paper, submitted the cost saving measures undertaken by it.*

  BIAL has submitted detailed reasoning and basis for various Operating Expenses assumptions made by it and its responses to the proposals put up by the Authority as part of its comments to

Consultation Paper. BIAL requests the Authority to review and accordingly approve the Operating Expenditure proposed by BIAL for the third control period.

BIAL has noted the suggestions on cost optimisation measures made by IATA. Most of these have already been implemented by BIAL and a comparative analysis is enclosed in Annexure"

Personnel Cost

Suggested Measure by IATA	***Action Taken by BIAL***
Regular evaluation of which functions can be outsourced and the cost/benefit	*This is an ongoing process and most of the non- core activities have been outsourced*
Early retirement and departure packages	*Currently, there are no such plans at BIAL.*
Government wage subsidy, part-time work and unemployment schemes	*Not Applicable to BIAL*
Repurposing of staff across functions	*This happens on a continuous basis*
Wage reductions (Temporary or permanent)	*Directives have been issued by the Government to protect the wages of employees.*
Hiring freezes and non-renewals	*Freeze on all new hires in FY21. Only rolled out new appointments are being on-boarded*
Cut performance bonuses and executive salaries	*Increments have not been given for FY 2020 performance.*
Review benefits packages (as opposed to salaries)	
Identify a level of activity or a duration at which dismissing staff and re-hiring is less costly than keeping staff considering government benefit schemes	*Dismissal is a disciplinary action andgenerally imposed by the management against an employee on account of certain established misconduct. For evaluation of cost-benefit, dismissal is not a right mode.* *Further, no Government benefit schemes available to BIAL and hence this is not applicable to BIAL*
Change from defined benefit to defined contribution pension systems	*BIAL follows the statutory requirement as mandated by laws of India*

Contracted Services

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India
सत्यमेव जयते

Suggested Measure by IATA	**Action Taken by BIAL**
Re-evaluation of the business case for outsourcing where relevant	*Post Covid-19 pandemic, for FY 21, the following actions have been initiated* a) *All O&M, AMC and CMC contracts have been renegotiated for reducing the contracted cost and minimising escalations* b) *Post pandemic, for manpower outsourced contracts, service charges have been brought down from 10-15% to average 5%* c) *For specific contracts like VHT, Screening machines, BHS, SBD contracts: we have re- negotiated with the respective vendors for reduction in AMC/CMC scope due to idle machineries, optimised monthly AMC/CMC cost and escalation rates* d) *Invoked partial suspension of certain AMC/CMC contracts for a short duration while they are not operating to reduce the O&M / CMC cost of respective packages (like SBD, Smiths – X ray screening machines)* e) *Special discounts: HVAC package vendor M/s Mitsubishi has waived off the billing for one quarter as a special case after negotiations* f) *Contracted Manpower / Resources: Based on a detailed review with the respective user department, contracted manpower deployment has been reduced by 15-20% on average* g) *Merging of contracts to optimize the manpower deployment. For eg – traffic management of landside security and Parking areas have been clubbed for better optimization. This has happened in Terminal also - Digibuddy and SBD contracts were merged to optimise the manpower deployment and utilisation factor*
Review of force majeure clauses permitting prices and quantities to be modified	
Balancing fixed-price vs. variable-price contacts with ceiling and floor levels. Variable-price contracts based on volume are advantageous in a low-growth market but there should be caps to avoid costs exploding when traffic grows	
Eliminate redundancies (are multiple consultants used to produce reports for the same projects?)	

Materials, equipment, supplies

Suggested Measure by IATA	**Action Taken by BIAL**
Ensure there is appropriate inventory management to minimize stocks on hand	*We are using SAP material management software to optimize our inventory levels. Also, we adopt the principle of minimum stock level, insurance spares, common spares across departments in practice. Further, we are in the process of implementing asset management system, which will have a holistic approach to maintain optimal/minimum inventory level without compromising safety and reliability.*

Suggested Measure by IATA	Action Taken by BIAL
Consider multifunctional equipment where appropriate (snow-clearing equipment that can perform other functions in the summer, etc.)	We use rubber removal machine for paint mark removal. Considering the small but essential maintenance requirement, we use "BOB cats" with multi-functional attachments like grading, excavating etc. For shift operation the vehicle used or tool van/ staff movement vehicle. In essence, common usage and minimalism is followed in equipment procured.

Communication, Utilities, energy and waste

Suggested Measure by IATA	Action Taken by BIAL
Consider lowering and raising temperatures of HVAC system, where relevant to conserve energy	We have implemented Demand flow controller, before the start of pandemic, which helps in reducing the energy consumption in HVAC primary system more than 20%. Further Air Handling Units (AHU) s are equipped with VFD to moderate the airflow based on requirement. We had also implemented Zone temperature monitoring, based on which optimize the usage of AHUs. As air conditioning consumes maximum power in any airport, we have a focused attention towards optimizing the energy consumption of HVAC
Building shut down, pier shut down and gate consolidation to save Energy	This aspect is very optimally implemented in the terminal in coordination with stake holders like, airlines, ground handlers, security, commercial and internal operation teams to conserve energy, washroom consumables, housekeeping activities, staff optimization etc
Review use of Airfield lighting within the constraint of regulation to turn of lighting, when not needed	We have provided intelligent Airfield lighting system at ATC with inbuilt aspects of lighting control aligning with regulation, which can control unnecessary burning of lights. Also, the control system facilitates dynamic control from the ATCOs. Further, all our airfield lighting is converted to LED, which reduces the energy consumption as well reduce frequent replacement of halogen lamps which used to be the case earlier. Further it reduces the substation capital investment due to lower power requirement. The transformer and the cable sizing is optimized and the CCR required for lighting control also optimized.
Consider whether parts of baggage handling system can be switched off or with reorganization, a small subset of baggage handling system can be used	This is also implemented. With reduced traffic, some departure lines as well use of arrival lines are optimized. This is dynamic and executed in close coordination with Airlines and Ground handlers.
Consider temporary substitution of ground transportation solutions by less costly solutions if volumes justify (busses vs. people movers or trains)	Not applicable to BIAL

Review agreements with telecommunication and IT providers to shut down unneeded services when not in use	*O&M costs for non-utilised areas have been reduced. Eg – SBD, ATRS, Self-service kiosks. Further, we have also deferred the renewal of existing contracts and converted most of them in to AMCs*

Insurance, claims, settlements

Suggested Measure by IATA	***Action Taken by BIAL***
Review contracts to see whether they can be volume based	*We do not understand your comment. For the years 2020-21 and 2021-22, BIAL has managed to keep its insurance premium substantially lower than the rates quoted in the domestic market by placing the property insurance in the overseas reinsurance market.*

General and administrative expenses

Suggested Measure by IATA	***Action Taken by BIAL***
Consider outsourcing the invoicing and collection of revenues	*Wherever possible, we have outsourced the invoicing part. In the case of any proprietary software being used for billing, outsourcing of this function will not be effective.*
Cut business travel, internal and external events, marketing spend	*Initiatives have been taken to reduce transportation costs, incidental expenses, office consumables, positioning of printers, stopping shuttle service etc. All marketing events have been conducted online.*
Implement better A/P and A/R management	*Our A/P and A/R are integrated with SAP*
Consider renting and leasing equipment in the COVID context rather than purchasing	*Most of our operational purchases are on opex (rent or lease) mode only. Few examples are vehicles for staff transportation, printers and laptops (for employees)*

7.4.2 On FIA's comments regarding operating expenses, BIAL has submitted as follows:

- *"BIAL has embarked upon cost savings initiatives as has been explained in the MYTP submissions and elaborated during the Stakeholder consultations.*

  Some of the actions taken are reproduced below. These cost optimization measure have resulted in significant savings in FY 21:

  - *Optimum utilisation of machinery/assets/services in line with traffic (X ray machine, DFMD, HVAC, shutdown of areas in terminal, Shuttle bus service, employee transportation, pool vehicle, trolleys in circulation etc).*
  - *Reduction in YOY escalation for all AMC/CAMC contracts and negotiated for onetime special discounts from vendor partners.*
  - *Optimisation of outsourced manpower in line with business requirement and improvement in efficiency (Land side traffic, Security, Housekeeping, Safety, Trolley management etc)*
  - *Concerted efforts towards lower consumables and spares spend*

- *Headcount and Personnel costs*
- *Freeze on all new hires for FY 21 (only mandatory replacements hired); no increments given in FY 20.*
- *Only rolled out committed new appointments made in Feb - Mar 2020*
- *Other Measures*
- *Travel costs reduced with foreign travel reduced to nil*
- *Most external consultancy contracts cancelled except for required ones.*
- *Events like stakeholders' events, employee events, etc. being conducted on digital platform*
- *All discretionary spends are cancelled*

- *On CSR expenses, BIAL commented that the Authority's proposal are based on TDSAT order and hence, FIA is requested by BIAL to accept the TDSAT order as it was also a party in the TDSAT process."*

7.4.3 On Airline Operator's Committee Bangalore's comments regarding concession fee and relief measures, BIAL has submitted as follows:

- *"It is unclear as to the context in which the comment is made and whose concession fee is being referred to. BIAL pays 4% Concession Fee to GoI as per the concession agreement and this is an expense to BIAL and being an obligation under the Concession Agreement, it needs to be adhered to and cannot be abolished.*

  BIAL collects revenue share/concession fees from Ground Handlers, Into Plane service providers and Cargo service providers as per the agreements executed, pursuant to a competitive tender process followed for selection of these service providers. These amounts are treated as aeronautical revenues by the Authority, and they actually reduce the aeronautical tariffs and the burden on the passengers and airlines.

  Tariff for such service providers are being determined by AERA, taking into consideration principles set out in various guidelines, directions and orders issued by the Authority."

- *"Given the impact of 1st and 2nd wave of Covid-19 on the sector, we eagerly await for a positive action by MoCA to protect the interests of airport operators as well as stakeholders alike in this hour of need. Such a step by Government of India can alone revive the sector and assuage concerns of operators and investors who have always stood by the Ministry and have created much needed airport infrastructure in the country.*

  While BIAL welcomes the suggestion, BIAL requests that this needs to be separately taken up with MoCA, ensuring that one stakeholder of the Aviation ecosystem is not made to subsidise and face cash flow situations in order to provide relief to another suffering stakeholder of the same eco system."

7.4.4 On Blue Dart's comments regarding CSR and personnel expenses, BIAL has submitted as follows:

- *"CSR expenses has been considered as operational expenditure as per the directions of the TDSAT judgement dated 16 Dec 2020.*

  When the airport operator, under mandate of law, has to incur expenditure towards CSR, it is bound to adversely affect the regulated and determined fair return on equity."

- *"BIAL has always managed its costs very efficiently with stringent measures of Budgeting, controlling and reviews together with staggering and postponements of costs wherever possible, at the same time maintaining service quality standards.*

  These are demonstrated by BIAL's costs being benchmarked as one of the lowest as per the study report being published as part of the Consultation Paper.

  BIAL has managed the personnel cost efficiently in the past by ensuring optimal sizing of personnel, staggering the headcount increases wherever possible to be deployed to a later point in time, deferring replacement of open positions during Covid-19. Despite a 200% increase in Terminal capacities, increase in manpower for Operations is only from 1019 numbers to 1527 numbers, less than 50%.

  BIAL has submitted a detailed response as part of its comments to Consultation Paper 10, which it requests the Authority to review and consider."

7.5 Authority's examination after reviewing stakeholder comments on operating expenses for the Third Control Period

7.5.1 The Authority has carefully reviewed the comments received from BIAL and other stakeholders on Operating expenses. The Authority has addressed the comments given by the stakeholders in the below sections.

Response to BIAL's comments on Operating Expenses

7.5.2 The Authority notes that BIAL has raised concerns regarding the Authority's proposal for operating expenses for the Third Control Period. The Authority has addressed these concerns issue wise based on individual operating expenses line items.

Personnel Expenses

7.5.3 The Authority has examined the comments given by BIAL relating to personnel expenses. The Authority has taken note of the reasons submitted by BIAL for the increase in manpower as well as the headcount per pax analysis. The Authority has also taken note of the concerns highlighted by BIAL regarding the personnel cost/employee analysis done by the Authority as part of its Consultation Paper no. 10/ 2021-22. The Authority has also noted the study presented by BIAL on the salary increase trends in India in the past.

7.5.4 The Authority examined BIAL's submission on manpower increase for FY19 and FY20 and noted that the additions were due to the operations of NSPR (as mentioned by Authority in its analysis in the Consultation Paper no. 10/ 2021-22) and for managing the increase in passenger growth in Terminal 1. The Authority also reviewed the detailed employee strength additions submitted by BIAL as part of its comments to the Consultation Paper no.10/ 2021-22 and noted that the majority of manpower additions were towards Terminal 2. The Authority notes that the passenger traffic has plummeted as a result of the pandemic and is expected to cross pre-covid levels only in FY24. As a result, the manpower additions by BIAL in FY19 and FY20 for managing increased passenger growth in Terminal 1 may not be optimally utilized. In addition, BIAL in its revised submission has proposed to capitalize Terminal 2 only by 31st December 2022, which is expected to operate at its peak capacity only by the end of the third control period. Hence, based on the above, the Authority is of the view that the manpower requirements for the airport can be efficiently met by reduced manpower in comparison to BIAL's submission and accordingly does not see any merit in revision to its approach considered for manpower additions in the Consultation Paper no. 10/ 2021-22.

7.5.5 The Authority examined the concerns highlighted by BIAL regarding the personnel cost/employee analysis done by the Authority as part of the Consultation Paper no. 10/ 2021-22. The Authority submits that it has computed the personal cost/employee based on the audited financial statements of BIAL and the actual employee additions in the second control period. Though the Authority has determined the personnel cost/employee without going into granular details such as departments and grades, the same approach has also been applied to determine the personnel cost, thus ensuring consistency.

7.5.6 The Authority also examined the survey conducted by AON on trends in salary increase in India. The Authority is of the view that the pandemic has had significant impact on the aviation sector with the sector in even deep distress after the second wave of the pandemic. In such a scenario, the salary increase proposed by BIAL may not be rational and realistic.

7.5.7 The Authority also examined the actual data for FY21 relating to personnel expenses and is of the view that the personnel expenses for FY21 are much lower than the FY20 personnel expenses despite addition of employees in FY21 and no retrenchment as per BIAL's submission. As a result, the Authority has decided to make the following adjustments with regards to the projections of personnel expenses for TCP:

- The personnel expenses for FY22 are calculated by considering FY20 personnel cost/employee as base increased with the 8-year (FY12-FY20) CAGR of 5.8% which is then multiplied with the number of employees.
- The Authority decides to consider the allocation ratio of FY21 as the allocation ratio for the Third Control Period.

7.5.8 Based on the above, the personnel cost decided by the Authority for the Third Control Period is as follows:

Table 138: Personnel cost decided by the Authority for the Third Control Period

Operating expenses	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Personnel cost/employee	15.97	14.40	16.90	17.88	18.91	20.01	21.17	95
% increase		-9.87%	5.80%	5.80%	5.80%	5.80%	5.80%	
Number of Employees	1,227	1,247	1,247	1,372	1,372	1,509	1,509	7,008
% increase		1.63%	0.00%	10.00%	0.00%	10.00%	0.00%	
Total Personnel Cost	**195.97**	**179.51**	**210.71**	**245.22**	**259.44**	**301.93**	**319.44**	**1,337**
Aero allocation ratio	88.94%	87.65%	87.65%	87.65%	87.65%	87.65%	87.65%	
Aero personnel cost	**174.29**	**157.35**	**184.70**	**214.95**	**227.41**	**264.66**	**280.00**	**1,172**

Operations & Maintenance Expenses

7.5.9 The Authority noted BIAL's comments relating to Operation & Maintenance expenses. The same can be summarized as below:

- Not considering historical O&M costs as a basis for forecasting future O&M costs may not be correct as BIAL is operating at more than 80% capacity for 3 years in the Third Control Period.
- Non consideration of the results of the study on efficient O&M costs for forecasting future costs.
- Considering FY21 as base for forecasting O&M costs for the existing assets for the future years may not be the right approach.

- Rationale for considering different percentages of gross block for different years post commissioning which is not seen for other Indian airports.
- Expenses other than maintenance expenses of assets are incurred for airport operations such as housekeeping, vehicle running cost etc. and certain one-time expenses such as building waterproofing, trumpet flyover repairs etc. which have not been considered separately by BIAL in its submission.
- Inflationary increase for O&M costs may be relooked at by the Authority.
- Sustaining capex are capital related costs and cannot be used for operational reasons
- Allocation ratio for FY21 may be considered as the allocation ratio for O&M costs for the Third Control Period.

7.5.10 The Authority examined BIAL's analysis of capacity utilization of the terminal in the Third Control Period and is of the view that the demand had outpaced the terminal capacity for BIAL in FY18 only when the passenger traffic was at 26.91 mppa viz a viz the terminal capacity of 26.5 mppa. Similar trend was observed in the subsequent years with the passenger traffic reaching 32.36 mppa in FY20 before the pandemic struck in FY21. Considering that the capacity utilization of the terminal was around 102%, 126% and 122% for FY18, FY19 and FY20, there will accordingly be a corresponding increase in O&M costs as the asset is operating much beyond its design capacity. However, based on the capacity utilization for the Third Control Period, the Authority observed that the terminal and its corresponding supporting assets (Runway, Apron etc.) are operating even below the design capacity which will result in reduced O&M costs compared to historical trends and hence, considering historical O&M costs percentages of the gross block as a basis to forecast future O&M costs may not be the correct approach as requested by BIAL in its submission. The Authority will true-up the O&M costs for the Third Control Period based on actuals in the next control period.

7.5.11 The Authority appreciates BIAL's efforts and commitment in ensuring efficiency in its O&M cost. However, as mentioned in the above paras, the second control period and the third control period are vastly different in various aspects in terms of doubling of infrastructure capacity at the airport and significantly reduced traffic projections owing to the pandemic. As a result, using the results of efficient O&M as the basis to project future costs may not be correct in Authority's view. The Authority has taken note of BIAL's comments stating that FY20 should be considered as base year for forecasting operating expenditure for the Third Control Period. The Authority has considered FY20 as base year for forecasting operating expenditure for the Third Control Period.

7.5.12 The Authority noted BIAL's comments on the concerns regarding percentages of gross block proposed by the Authority to calculate the O&M cost. The Authority noted that BIAL in its business plan submitted to the Authority for the Third Control Period had themselves considered 0% as the R&M cost for the capitalization year since the assets were proposed to be capitalized at the end of the year by BIAL. The Authority, accordingly, based on BIAL's submission had considered 0% as the cost for the year of capitalization of the assets. For the percentages thereafter, the Authority has given its view in the above paras and has noted that since the assets will be underutilized for major part of the Third Control Period, accordingly, the Authority sees no reason to revise its proposal given in the Consultation Paper.

7.5.13 The Authority also notes BIAL's comments on the other expenses which have not been considered by BIAL separately in its submission. The Authority is of the view that though these expenses are mandatory in nature, they have never been submitted separately but considered as a part of the O&M

expenses only. On certain one-time expense proposed by BIAL, the Authority is of the view that these expenses shall be recovered by BIAL as part of the true up based on actuals in the next control period.

7.5.14 For the other comments given by BIAL, the Authority has stated its position as part of the Consultation Paper no. 10/ 2021-22. Based on the above, the Authority has made adjustments in the O&M costs and the revised asset addition for the Third Control Period. Accordingly, the O&M costs decided by the Authority for the Third Control Period are given in the table below which will be trued up based on actuals in the next control period.

Table 139: O&M cost decided by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Total O&M running cost - Infra	87.59	96.45	130.56	145.49	163.05	**623.15**
Total O&M costs - ICT	30.01	31.48	56.26	59.02	61.91	**238.67**
Total other O&M costs	13.68*	14.84	16.05	17.33	18.67	**80.57**
Total O&M costs	**131.28**	**142.77**	**202.88**	**221.84**	**243.63**	**942.39**
Allocation Ratio - Other O&M costs	90.38%	90.57%	89.03%	88.88%	88.72%	
Total aero O&M costs	**118.65**	**129.30**	**180.63**	**197.17**	**216.15**	**841.89**

* cost reduction measures proposed by BIAL have been deducted from other O&M costs

Lease Rent

7.5.15 The Authority has taken a note of the BIAL's comments regarding revision of lease rental by Government of Karnataka. The Authority examined the Government Order submitted by BIAL dated 16th October 2020 and noted that:

- The concession period has been extended for a further 30 years effective 24th May 2038.
- The annual increment of lease rental has been fixed at 6% per annum in the extended concession period which becomes operational with effect from 24th May 2038.
- The site cost has been increased from INR 211.78 cr. to INR 302.15 cr. by including cost towards interest paid on HUDCO loans and additional compensation paid to landowners effective 24th May 2022.

7.5.16 Accordingly, the Authority based on the government order has decided to revise the lease rentals (as per the revised site cost) after making adjustments of the area given to BACL. Therefore, the revised lease rentals for the Third Control Period are given in the table below:

Table 140: Lease rentals decided by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Lease Rentals	15.11	21.26	22.87	23.56	24.26	**107.06**
Revised allocation ratio	99.98%	99.31%	98.75%	97.56%	96.18%	
Aeronautical lease rentals	**15.10**	**21.11**	**22.58**	**22.98**	**23.34**	**105.12**

Utility expenses

7.5.17 The Authority has reviewed the submissions made by BIAL relating to Utility expenses. The Authority notes that it has considered reasonable assumptions in estimating the projections and detailed the same in the Consultation Paper no. 10/ 2021-22. However, the Authority notes that there has been delay in capitalization of Terminal 2 which was not factored at the time of the Consultation Paper no. 10/ 2021-

22. Accordingly, the Authority has revised the utility expenses based on the delay in capitalization of assets. The Authority has also revised the utility recoveries based on the submissions made by BIAL.

7.5.18 Based on the above, the net power cost decided by the Authority for the Third Control Period is given in the table below:

Table 141: Net power cost decided by the Authority for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Contract demand (kVA)	15000	33000	45000	45000	45000	183000
Consumption (mn kWh)	77	95	125	125	125	546.73
Contract demand charges (INR per KVA per annum)	2880	2880	2880	2880	2880	14400
% increase		0.0%	0.0%	0.0%	0.0%	
Power unit tariff (INR per kWh)	6.70	7.03	7.38	7.74	8.12	36.96
% increase		4.90%	4.90%	4.90%	4.90%	
Contract demand cost (INR cr.)	4.32	9.50	12.96	12.96	12.96	52.70
Power consumption cost (INR cr.)	51.79	66.71	92.10	96.62	101.35	408.57
Total power cost (INR cr.)	**56.11**	**76.21**	**105.06**	**109.58**	**114.31**	**461.27**
Recovery %	51%	49%	49%	49%	50%	
Net power cost (INR cr.)	**28.49**	**37.36**	**51.58**	**54.10**	**56.76**	**228.28**

7.5.19 Based on the above changes, the net water cost decided by the Authority for the Third Control Period is given in the table below:

Table 142: Net water cost decided by the Authority for the Third Control Period

Particulars	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Potable water requirement - Existing (kL per day)	1694	1778	1778	1778	1778	8806
Potable water requirement - Future (kL per day)	0	0	2600	2600	2600	7800
Potable water requirement (kL per day)	**1694**	**1778**	**4378**	**4378**	**4378**	**16606**
Potable water requirement met through RWH	50%	50%	50%	50%	50%	
Potable water requirement - payable by BIAL (kL per day)	**847**	**889**	**2189**	**2189**	**2189**	**8303**
Cost of potable water (INR per kL)	98.21	103.03	108.07	113.37	118.92	**542**
% increase		4.90%	4.90%	4.90%	4.90%	
Potable water cost (INR cr.)	**3.04**	**3.34**	**8.63**	**9.06**	**9.50**	**33.57**
Recovery % - potable water	45.00%	45.00%	45.00%	45.00%	45.00%	
Net potable water cost (INR cr.)	**1.67**	**1.84**	**4.75**	**4.98**	**5.23**	**18.47**
Raw water - consumption (crore kL)	0.04	0.04	0.07	0.07	0.07	**0.29**
Cost of raw water (INR per kL)	26.60	27.90	29.27	30.70	32.21	**146.68**
% increase		4.90%	4.90%	4.90%	4.90%	
Raw water cost (INR cr.)	**0.97**	**1.02**	**2.14**	**2.24**	**2.35**	**8.72**
Net water cost (INR cr.)	**2.64**	**2.86**	**6.89**	**7.22**	**7.58**	**27.18**

7.5.20 Accordingly, the revised aeronautical utility cost for the Third Control Period decided by the Authority is given below:

Table 143: Aeronautical utility cost decided by the Authority for the Third Control Period

Particulars	2022	2023	2024	2025	2026	Total
Net power cost	28.49	37.36	51.58	54.10	56.76	**228.28**
Net water cost	2.64	2.86	6.89	7.22	7.58	**27.18**
Less: Aero utility recoveries	2.48	2.48	2.73	2.86	3.00	**13.54**
Aeronautical utility cost	**28.65**	**37.73**	**55.74**	**58.47**	**61.33**	**241.92**

Insurance

7.5.21 The Authority noted BIAL's comments relating to increase in insurance premiums on account of Covid-19 impact. The Authority noted that the pandemic has impacted the aviation sector and the Authority has accordingly factored the same in its proposal for insurance in the Consultation Paper no. 10/ 2021-22 for the Third Control Period. However, the Authority has revised the insurance cost for the Third Control Period based on the revision in asset addition and the gross block ratio. Based on the above, the insurance cost decided by the Authority for the Third Control Period is given below:

Table 144: Insurance cost decided by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Insurance Cost	**5.11**	**5.82**	**10.85**	**10.98**	**11.16**	**43.91**
Allocation Ratio	91.99%	87.81%	87.79%	87.78%	87.84%	
Aero insurance cost	**4.70**	**5.11**	**9.52**	**9.64**	**9.80**	**38.77**

Rates and Taxes

7.5.22 The Authority has taken note of BIAL's submission in which BIAL has stated that the rates and taxes estimate submitted by BIAL relates to only the costs incurred by BIAL and does not include costs proposed to be incurred by BACL.

7.5.23 However, the Authority noted from BIAL's submission that the rates and taxes include property tax paid by BIAL for the terminal building. Since, the terminal building is used for providing both aero and non-aero services, hence the Authority is of the view that the rates and taxes needs to be considered as common and bifurcated based on the terminal area ratio.

7.5.24 The Authority also decides to shift the 40% growth in rates and taxes from FY22 to FY23 due to the delay in terminal building capitalization to 31st December 2022. Accordingly, the Rates and Taxes decided by the Authority for the Third Control Period are given below:

Table 145: Rates and Taxes decided by the Authority for the Third Control Period

Operating expenses (INR cr.)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Total Rates and Taxes as per Authority	**8.29**	**8.70**	**9.12**	**13.22**	**13.87**	**14.55**	**59.45**
Inflation (%)		4.90%	4.90%	4.90%	4.90%	4.90%	
% growth due to increase in area (%)		0.00%	0.00%	40.00%	0.00%	0.00%	
Revised allocation ratio (%)		86.85%	86.85%	86.85%	86.85%	86.85%	

Operating expenses (INR cr.)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Aeronautical Rates and Taxes as per Authority		**7.55**	**7.92**	**11.48**	**12.04**	**12.63**	**51.63**

Marketing & Advertisement

7.5.25 The Authority has reviewed the submissions made by BIAL relating to Marketing and Advertisement expenses. The Authority based on the revised traffic projections has revised the aeronautical collection cost for the Third Control Period. The Authority also decides to undertake the following changes in its proposal given as part of the Consultation Paper no. 10/ 2021-22 with regards to sales and marketing cost:

- Revise the sales and marketing cost for FY22 by considering the actual sales and marketing cost for FY21 increased with 10% (similar to the proposal given in the Consultation Paper no. 10/ 2021-22).
- The Authority also decides to consider the allocation ratio of FY21 as the allocation ratio for the Third Control Period.
- The Authority also decides to shift the one-time sales and marketing expense related to T2 from FY22 to FY23 based on the delay in capitalization of Terminal 2.

7.5.26 Based on the above, the sales and marketing expenses decided by the Authority for the Third Control Period is given below:

Table 146: Sales and marketing expenses decided by the Authority for the Third Control Period

Operating expenses	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Sales and marketing cost - Normal increase	7.46	8.21	9.03	9.93	10.92	12.01	50.10
% change		10%	10%	10%	10%	10%	
Sales and marketing cost - One time expense			5.00				5.00
Total sales and marketing cost	**7.46**	**8.21**	**14.03**	**9.93**	**10.92**	**12.01**	**55.10**
Aeronautical ratio	84.10%	84.10%	84.10%	84.10%	84.10%	84.10%	
Aeronautical sales and marketing cost - Revised	**6.27**	**6.90**	**11.80**	**8.35**	**9.19**	**10.10**	**46.34**

7.5.27 Accordingly, the marketing and advertisement expenses decided by the Authority for the Third Control Period are given in the table below:

Table 147: Marketing and Advertisement expenses decided by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical collection cost	3.33	6.84	8.03	9.34	10.84	38.39
Aeronautical sales and marketing cost	6.90	11.80	8.35	9.19	10.10	46.34
Aeronautical marketing and advertisement cost	**10.23**	**18.64**	**16.38**	**18.53**	**20.95**	**84.73**

Corporate Social Responsibility (CSR)

7.5.28 The Authority based on the revisions in other building blocks has revised the aeronautical CSR cost. Accordingly, the revised aeronautical CSR decided by the Authority for the third control period is given in the table below:

Table 148: Aeronautical CSR decided by the Authority for the Third Control Period

Particulars	2019	2020	2021	2022	2023	2024	2025	2026	Total (FY22-FY26)
Aero revenues	960	829	350	444	1,113	1,620	2,204	2,360	7,740
30% of non-aero revenues	0	0	0	0	0	0	0	0	0
Aero operational expense	-370	-430	-377	-411	-505	-615	-699	-748	-2,978
EBITDA	590	399	-27	32	609	1,005	1,505	1,612	4,762
Aero Depreciation	-278	-199	-270	-289	-432	-573	-565	-568	-2,428
Interest expenses	-94	-120	-176	-214	-250	-639	-636	-623	-2,363
Aero PBT	**218**	**80**	**-473**	**-471**	**-73**	**-207**	**303**	**420**	**-28**
Average Aero PBT (last 3 financial years)				**-58**	**-288**	**-339**	**-250**	**7**	**-928**
Aeronautical CSR expenses (2% of average PBT)				**0.00**	**0.00**	**0.00**	**0.00**	**0.15**	**0.15**

General Administration Cost

7.5.29 The Authority has taken note of BIAL's comments on General Admin Cost. The Authority is of the view that considering the present scenario where the pandemic has significantly impacted the sector, it is imperative for the airport operators to rationalize their costs and plan them in an efficient manner. The Authority based on the analysis of stakeholder comments has decided to undertake the following changes to general admin costs for the Third Control Period:

- The Consultancy & Legal, Travel costs and Office costs are projected for the Third Control Period by keeping FY21 actual cost as base duly increased by inflation.

7.5.30 Based on the above, the general admin expenses decided by the Authority for the Third Control Period is given below:

Table 149: General admin costs decided by the Authority for the Third Control Period

Operating expenses	FY2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Consultancy and Legal	17.91	18.79	19.71	20.67	21.69	22.75	103.61
% increase		4.90%	4.90%	4.90%	4.90%	4.90%	
Travel Costs	6.24	6.55	6.87	7.20	7.56	7.93	36.10
% increase		4.90%	4.90%	4.90%	4.90%	4.90%	
Office Costs	1.32	1.38	1.80	1.89	1.98	2.08	9.13
% increase		4.90%	30.00%	4.90%	4.90%	4.90%	
Total general admin cost	**25.47**	**26.72**	**28.37**	**29.77**	**31.22**	**32.75**	**148.84**
Allocation Ratio	52.29%	90.00%	90.00%	90.00%	90.00%	90.00%	
Aeronautical general admin cost	**13.32**	**24.05**	**25.54**	**26.79**	**28.10**	**29.48**	**133.95**

Concession Fee

7.5.31 The Authority has noted comments from BIAL on Concession Fee. The Authority is of the view that the treatment of concession fee is done as per its guidelines and tariff determination philosophy. However, the Authority has revised the concession fee based on the revised revenue estimates and collection cost which will be trued up based on actuals in the next control period. The aeronautical concession fee for the Third Control Period decided by the Authority is given below:

Table 150: Aeronautical concession fee decided by the Authority for the Third Control Period

Revenues	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Aviation Revenues	293.03	910.45	1,390.13	1,932.16	2,054.91	6,580.68
Aviation Concession Revenues	150.54	202.85	229.63	271.71	304.77	1,159.49
Less: Collection cost	3.33	6.84	8.03	9.34	10.84	38.39
Total revenues	**440.24**	**1,106.45**	**1,611.73**	**2,194.53**	**2,348.83**	**7,701.78**
Percentage	4.00%	4.00%	4.00%	4.00%	4.00%	
Aeronautical Concession Fees	**17.61**	**44.26**	**64.47**	**87.78**	**93.95**	**308.07**

ORAT

7.5.32 The Authority has noted comments from BIAL on ORAT. The Authority decides to consider the ORAT expenses as part of the capital asset additions instead of the operational purposes as per the Chapter 5 on Regulatory Asset Base and Depreciation for the Third Control Period.

Response to FIH Mauritius, Siemens and APAO's comments on Operating Expenses

7.5.33 The Authority examined the comments from FIH Mauritius, Siemens and APAO on the operating expenses proposed by the Authority for BIAL for the Third Control Period. The Authority noted that these stakeholders have raised concerns regarding the assumptions of O&M costs for new asset addition and non-usage of study on efficient O&M to forecast O&M expenses for BIAL.

7.5.34 The Authority's response to BIAL's comments in Para 7.5.10, 7.5.11, 7.5.12 and 7.5.13 addresses the comments made by FIH Mauritius, Siemens and APAO with respect to assumptions of O&M cost and non-usage of study on efficient O&M to forecast future expenses for BIAL.

Response to IATA's comments on Operating Expenses

7.5.35 The Authority examined the comments from IATA on Operating expenses. The Authority has given its response to these comments below:

- The Authority understands that the operating costs must be adjusted in view of the current situation of pandemic. Accordingly, the Authority based on its analysis had undertaken changes to BIAL's submission for the true up of the second control period and forecast of the third control period to ensure efficiency in operating costs.
- The Authority noted comments from IATA on personnel expenses. The Authority noted that BIAL had taken measures towards the headcount and personnel cost such as giving no increments for FY20, freeze on all new hires for FY21 etc. Further, the Authority has taken appropriate revisions in headcount proposed by BIAL taking into account the current pandemic.
- For O&M cost and utilities, the Authority has undertaken detailed analysis to arrive at the relevant assumptions and is of the view that there is no reason to change these assumptions.

- The Authority noted comments from IATA on insurance. The Authority is of the view that the riskiness of the aviation sector has increased owing to the current pandemic leading to an expected increase in insurance premiums. The Authority has factored this in as part of its proposal for insurance in the Consultation Paper.
- The Authority has given its comments on the Marketing & Advertisement and CSR expenses as part of its analysis in the true up of operating expenses in the second control period.
- The Authority has noted the comments given by IATA on general admin expenses. The Authority has considered FY21 expenses based on the audited financial statements of BIAL subject to tests of efficiency as part of efficient O&M study. The 30% increase in office costs is planned only for FY23 to account for increase in number of employees as well as for the infrastructure created during the Third Control Period.
- The Authority's response to BIAL's comments in Para 7.5.32 addresses the comments made by IATA on ORAT.
- The Authority has taken a note of IATA's comment on undertaking independent study for the third control period and is of the view that the Authority will decide to undertake the study at the time of the true-up of the next control period.

Response to FIA's comments on Operating Expenses

7.5.36 The Authority's response to IATA's comments in the above paras addresses the comments made by FIA on undertaking independent study.

7.5.37 On FIA's comment regarding rationalization of cost items/no escalation to BIAL, the Authority notes that it has undertaken a detailed analysis of the submission made by BIAL and has accordingly revised the same based on reasonableness.

7.5.38 On FIA's comment regarding exclusion of CSR, the Authority noted that it has included CSR expenses as part of operational expenditure based on the Hon'ble TDSAT judgement dated 16th December 2020 as detailed in Para 1.4.3.

Response to AOC and Blue Dart's comments on Operating Expenses

7.5.39 The Authority noted BIAL's comments given in response to AOC that the concession fee is mandated under the concession agreement and cannot be abolished. The Authority is of the view that BIAL's response to AOC is adequate.

7.5.40 The Authority's response to FIA's comments in Para 7.5.38 addresses the comments made by Blue Dart on CSR.

Summary of Operational expenditure decided by the Authority for the Third Control Period

7.5.41 Based on the above, the allocation ratio decided by the Authority for the Third Control Period is given below:

Table 151: Operational expenditure aeronautical allocation ratio decided by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026
Personnel expenses	87.65%	87.65%	87.65%	87.65%	87.65%
O&M (others)	90.38%	90.57%	89.03%	88.88%	88.72%
Lease Rent	99.98%	99.31%	98.75%	97.56%	96.18%
Utilities	100.00%	100.00%	100.00%	100.00%	100.00%

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026
Insurance	91.99%	87.81%	87.79%	87.78%	87.84%
Rates & taxes (other than IT)	86.85%	86.85%	86.85%	86.85%	86.85%
Collection Cost	100.00%	100.00%	100.00%	100.00%	100.00%
Marketing & Advertising	84.10%	84.10%	84.10%	84.10%	84.10%
General admin costs	90.00%	90.00%	90.00%	90.00%	90.00%

7.5.42 Accordingly, the aeronautical operating expenditure decided by the Authority for the Third Control Period is given below:

Table 152: Aeronautical operating expenditure decided by the Authority for the Third Control Period

Operating expenses	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	Total
Personnel expenses	184.70	214.95	227.41	264.66	280.00	1.171.72
O&M	118.65	129.30	180.63	197.17	216.15	841.89
Lease Rent	15.10	21.11	22.58	22.98	23.34	105.12
Utilities	28.65	37.73	55.74	58.47	61.33	241.92
Insurance	4.70	5.11	9.52	9.64	9.80	38.77
Rates & taxes (other than IT)	7.55	7.92	11.48	12.04	12.63	51.63
Marketing & Advertising	10.23	18.64	16.38	18.53	20.95	84.73
CSR	0.00	0.00	0.00	0.00	0.15	0.15
General admin costs	24.05	25.54	26.79	28.10	29.48	133.95
Total operating expenses	**393.63**	**460.31**	**550.53**	**611.58**	**653.83**	**2,669.89**
Concession fee	17.61	44.26	64.47	87.78	93.95	308.07
ORAT	0.00	0.00	0.00	0.00	0.00	0.00
Total operating expenditure - Aero	**411.24**	**504.57**	**615.00**	**699.36**	**747.78**	**2,977.96**

7.6 Authority's decision regarding operating expenses for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to operating expenses for the Third Control Period:

7.6.1 To consider allocation ratio as set out in Table 151 above for the Third Control Period

7.6.2 To consider aeronautical operating expenditure as set out in Table 152 for the Third Control Period

7.6.3 To true up the operating expenditure for the current control period based on actuals, at the time of determination of tariff for the next control period.

8 NON – AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

8.1 BIAL's submission relating to Non – Aeronautical Revenue (NAR)

8.1.1 BIAL in its submission dated 24th July 2020 to AERA has stated that it follows a concessionaire model for managing commercial activities at the airport. BIAL submitted that it has entered into a Service Provider Right Holder Agreement (SPRH) with service providers wherein BIAL is entitled for agreed percentage of revenue share on gross turnover or Minimum Annual Guarantee (MAG) whichever is higher.

8.1.2 BIAL in its submission has given reference of Article 10 of the Concession Agreement (signed between BIAL and MoCA) read with Schedule 6, regulated charges according to which only Landing, Parking, Housing, PSF and UDF are to be regulated. Further, BIAL has also stated that as per Article 10.3 of the CA, BIAL is free to determine the charges to be imposed in respect of facilities and services provided at the airport or on site other than facilities and services which are regulated.

8.1.3 Accordingly, BIAL has considered the following services as non – aeronautical and considered only Landing, Parking, Housing and UDF to be aeronautical.

- Car park
- Terminal entry / Miscellaneous services
- Retail
- Food and Beverages
- Advertising and Promotions
- Rent and Land Lease
- Lounge Services
- Utility Charges
- Flight Catering
- Cargo, Ground Handling and Fuel Farm
- ICT (including CIC)

8.1.4 BIAL has also mentioned about the impact of covid-19 pandemic on the aviation sector resulting in reduced passenger traffic and impacting passenger sentiments considering safety and social distancing norms while travelling. BIAL has estimated the non-aeronautical revenues for the Third Control Period basis the following:

- "The projections are majorly based on the business plan projections submitted by the concessionaire as per the agreement entered into with BIAL for a tenure ranging between 1 to 15 years."
- "Terminal-2 Phase 1 is proposed to be commissioned by March 2022. Post commissioning, commercial activities at both the terminals will take time to stabilize and generate streamlined revenues. Accordingly, Non-Aero Revenues are expected to stabilize only towards the end of the Third Control Period."
- "Most of the Non-Aeronautical contracts are due for extension. But, considering the current economic scenario, tremendous efforts are needed to encourage commercial operators at Airports

considering a lower passenger footfall and also reduction in per passenger revenues. Hence, this will translate to lower revenue share to BIAL."

- "BIAL has, in FY 2020-21, in order to support the concessionaires affected by COVID-19 has extended reset of Minimum Guarantee and reduced the existing revenue share percentages. The impact of the same is also considered in the projections of Non-Aero Revenues for FY 2020-21 and the initial years in the Third Control Period."

8.1.5 As per BIAL, the non – aeronautical revenues are projected to reach pre – covid levels (FY 2020) by FY 2024, in tandem with passenger traffic of FY 2020 levels being reached in FY 2024.

Passenger Traffic Related Revenue

8.1.6 The basis of projection adopted by BIAL for NAR which is driven by passenger traffic is given in the table below:

Table 153: Basis of projections of NAR driven by passenger traffic as given by BIAL

Revenue stream	Basis of projection as adopted by BIAL
Car park	Revenue from car park is driven by a combination of passenger growth, inflation and penetration over the base year.
Retail	The growth factors for retail are assumed considering the inflation, penetration and proportionate to the increase in passengers
F&B	The growth factors for F&B are assumed considering the inflation, penetration and proportionate to the increase in passengers
Advertising & Promotions	The advertising revenue projections is considered based on the new concession term of longer tenure with the recovery of passenger viewership for attracting the Global brands along with the digital media coverage, together with factoring the inflation.
Lounge revenues	The growth factors for lounge are assumed considering the inflation, penetration and proportionate to the increase in passengers
Non – aviation revenue (Others)	The growth factors for non-aviation revenue (others) are assumed considering the projected growth rate as estimated by BIAL management in line with traffic growth

8.1.7 Based on the above, the non – aeronautical revenue submitted by BIAL as part of its MYTP submission is given in the table below:

Table 154: Non – aeronautical revenue as submitted by BIAL in its MYTP

Particulars (INR cr.)	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Non – Aviation revenues (A)						
Car park	50.48	71.09	95.16	110.66	128.76	456.16
Retail	61.12	127.96	149.77	173.66	201.60	714.11
Food & Beverage	32.42	48.28	62.98	73.24	85.21	302.13
Advertising & Promotions	52.69	75.83	92.52	107.60	125.19	453.83
Rents and Land Leases	51.73	64.30	67.51	74.43	78.15	336.12
Lounge Revenues	15.56	27.16	34.12	39.67	46.16	162.66
Utility Charges	5.55	5.55	5.97	5.96	5.96	28.98
Flight Catering	8.35	8.68	9.03	9.39	9.76	45.20
Non-Aviation Revenues - Others	8.81	10.03	10.97	11.81	12.98	54.60
Misc. Income (Including entry)	0.00	0.00	0.00	0.00	0.00	0.00

Particulars (INR cr.)	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Total non – aviation revenues	**286.70**	**438.87**	**528.03**	**606.41**	**693.77**	**2553.79**
Aviation Concessions (B)						
Cargo	41.23	48.69	53.69	59.67	67.09	270.37
Fuel Farm	5.28	6.73	7.67	8.78	10.06	38.51
Ground Handling	49.87	62.71	68.32	74.87	81.96	337.73
ICT	16.65	17.18	17.73	18.29	18.88	88.73
Common Infrastructure Charge	44.75	60.74	70.59	82.09	95.51	353.69
Total Aviation Concessions	**157.78**	**196.05**	**218.00**	**243.70**	**273.51**	**1089.03**
Total non – aeronautical revenue (A+B)	**444.48**	**634.91**	**746.02**	**850.11**	**967.28**	**3642.81**

8.2 Authority's examination regarding non-aeronautical revenues for Third Control Period

8.2.1 The Authority has evaluated the submissions made by BIAL relating to non – aeronautical revenues.

Cargo, ground handling, fuel, CUTE/ CUSS, common infrastructure charges and aerobridges revenues

8.2.2 The Authority noted that BIAL had considered revenue from cargo, ground handling, fuel, CUTE/ CUSS, common infrastructure charges and aerobridges (aviation concession revenues) as non – aeronautical revenues. The Authority in line with its decision taken in the 2nd control period based on the AERA Act, 2008, AERA guidelines, concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020 proposes to consider revenue from cargo, ground handling, fuel, CUTE/ CUSS, common infrastructure charges and aerobridges as aeronautical revenue for the Third Control Period.

Passenger related non-aeronautical revenues

8.2.3 The Authority noted that the non – aeronautical area is estimated to increase by around 156% with the opening of the new Terminal 2 in FY22. Further, the Authority noted that the car parking capacity will also increase after commissioning of Multi Model Transport Hub (MMTH) in FY22. The non-aero area increase projected with the opening up of the new terminal is given below:

Table 155: NAR area increase due to opening of Terminal 2 based on area statement submitted by BIAL

Non-aero areas	T1	T2	Total	% increase
Lounges	5296	4485	9781	85%
Retail Area	6412	13685	20097	213%
F&B Area	2838	6851	9689	241%
Supporting Facilities (Airline Office, Concessionaires Offices & Other Ticketing Offices, etc.,)	2701	1862	4563	69%
Total	**17247**	**26883**	**44130**	**156%**

8.2.4 However, the Authority noted that BIAL has not considered the increase in the non-aeronautical area and the MMTH while estimating the non-aeronautical revenues for the Third Control Period. The Authority sought clarification from BIAL in this regard.

8.2.5 BIAL in its response had requested the Authority to project the non-aeronautical revenue on a per passenger basis rather than on an increase in area basis considering the factors impacting the non-aeronautical revenue in the Third Control Period including impact of covid-19. BIAL's response is produced below:

"BIAL is on the cusp of large infrastructure development with T2, T1 refurbishment proposed after the commencement of new terminal. Still the onboarding of partners is yet to commence with the Pax recovery path of 4 to 5 years to reach the pre-Covid levels in terms of passenger profile. While there is addition to the Terminal space, these revenues are largely dependent on the growth in passengers and hence, the revenue estimates are made based on the Passenger growth along with inflation irrespective of terminal space increase."

8.2.6 The Authority is of the view that the projections of the non-aeronautical revenues are primarily dependent on the passenger traffic. Higher terminal area and new facilities help the airport operator to capture the revenue when the traffic increases. However, the Authority notes that the passenger traffic are expected to be lower than FY20 for the next couple of years due to the COVID 19 pandemic. Thus, the Authority is of the view that it is reasonable to assume passenger traffic as the primary driver of the non-aeronautical revenues for those years. The Authority notes that the Terminal 2 operations might become relevant driver of the passenger linked non-aeronautical revenues during the end of the Third Control Period once the traffic goes beyond the pre-COVID levels, however, at the current stage it is difficult to ascertain quantitatively the impact on the passenger linked non-aeronautical revenues. In view of the above, the Authority proposes to forecast the passenger linked non-aeronautical revenues on the basis of the per passenger revenues and the revised passenger traffic.

8.2.7 The Authority noted the trend of revenue growth in key heads of non – aeronautical revenue as follows:

Table 156: Non-aeronautical revenue per passenger analysis by Authority for key non–aero revenue heads

Particulars*	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Revenue for key heads (in INR cr.)						
Car park	44.47	63.34	75.40	88.71	90.27	362.20
Retail	88.6	105.32	118.47	143.38	160.91	616.68
F&B	25.18	31.88	41.10	56.96	69.15	224.26
Flight catering	8.26	9.08	9.90	12.67	11.71	51.61
Lounge revenues	14.72	19.91	26.90	33.53	38.77	133.83
Advertising & Promotion	53.32	71.77	77.87	77.64	75.16	355.76
Miscellaneous non-aeronautical revenue	6.43	5.89	7.98	9.85	14.29	44.44
Growth rates (value terms)						
Car park		42%	19.0%	17.7%	1.8%	
Retail		19%	12.5%	21.0%	12.2%	
F&B		27%	28.9%	38.6%	21.4%	
Flight catering		10%	9.0%	28.1%	-7.6%	
Lounge revenues		35%	35.1%	24.6%	15.6%	
Advertising & Promotion		35%	9%	0%	-3%	
Miscellaneous non-aeronautical revenue		-8%	36%	23%	45%	
Average revenue per passenger						
Domestic Passengers	15.6	19.3	23.1	28.8	27.8	
International Passengers	3.4	3.6	3.8	4.5	4.6	
Total passengers	19.0	22.9	26.9	33.3	32.4	

Particulars*	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
Revenue per passenger (INR)						
Car park	23.44	27.68	28.02	26.63	27.90	
Retail	46.70	46.03	44.02	43.05	49.72	
F&B	13.27	13.93	15.27	17.10	21.37	
Flight catering	4.35	3.97	3.68	3.80	3.62	
Lounge revenues	7.76	8.70	10.00	10.07	11.98	
Advertising & Promotion	28.10	31.37	28.94	23.31	23.23	
Miscellaneous non-aeronautical revenue	3.39	2.57	2.97	2.96	4.42	

* historical non-aeronautical revenues of FY21 are not considered for analysis due to the impact of COVID-19

8.2.8 The Authority has also looked at the projections of major sub-heads under non-aeronautical revenue submitted by BIAL. The major heads along with revenue per passenger based on BIAL's projections is given below:

Table 157: Major subheads under NAR and their per passenger analysis based on BIAL's MYTP submission

Particulars	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Car park								
Parking services revenue	26.8	5.9	15.8	21.5	25.0	29.1	33.8	125.2
Parking services revenue / pax (INR/pax)	16.5	14.6	15.4	15.4	15.4	15.4	15.4	76.8
Taxi services revenue	57.9	11.8	32.1	46.0	65.7	76.4	88.9	309.0
Taxi services revenue / pax (INR/pax)	35.8	29.6	31.1	32.9	40.4	40.4	40.4	185.1
Limousine revenue	5.6	1.0	2.6	3.6	4.5	5.2	6.1	22.0
Limousine revenue / pax (INR/pax)	3.5	2.5	2.5	2.6	2.8	2.8	2.8	13.4
Total car park revenue	90.3	18.7	50.5	71.1	95.2	110.7	128.8	456.2
Total car park revenue / pax (INR/pax)	55.8	46.7	49.0	50.8	58.5	58.5	58.5	275.3
Retail Revenue								
Retail - Domestic revenue	27.9	4.6	11.7	17.7	23.1	28.4	35.7	116.5
Retail - Domestic revenue / pax (INR/pax)	20.1	12.4	13.0	14.8	16.4	17.3	18.5	79.9
Retail – International	103.9	8.8	41.2	94.4	108.3	124.3	141.7	509.9
Retail - International revenue / pax (INR/pax)	453.9	299.2	314.1	461.8	484.9	509.1	531.0	2301.0
Retail – Others	5.9	1.0	2.8	5.1	6.6	8.0	10.0	32.4
Retail others revenue / pax (INR/pax)	3.6	2.5	2.7	3.6	4.0	4.2	4.6	19.1
Retail - Forex	23.3	1.2	5.5	10.9	11.9	13.0	14.2	55.3
Retail forex revenue / pax (INR/pax)	101.6	39.6	41.6	53.1	53.1	53.1	53.1	254.1
Total retail revenue	160.9	15.6	61.1	128.0	149.8	173.7	201.6	714.1
Total Retail revenue / pax (INR/pax)	579.2	353.7	371.4	533.4	558.5	583.8	607.2	2654.1
F&B								

Particulars	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
F&B - Domestic	27.6	5.8	14.7	21.8	29.0	33.8	39.3	138.5
F&B - Domestic revenue / pax (INR/pax)	19.9	15.6	16.4	18.2	20.7	20.5	20.3	96.0
F&B - International	6.9	0.6	2.8	5.6	6.4	7.5	8.7	30.9
F&B - International revenue / pax (INR/pax)	30.1	20.0	21.0	27.3	28.7	30.5	32.5	140.0
F&B - Others	34.6	5.5	15.0	20.9	27.6	32.0	37.3	132.8
F&B - others revenue / pax (INR/pax)	21.4	13.8	14.5	15.0	16.9	16.9	16.9	80.3
Total F&B revenue	69.2	11.9	32.4	48.3	63.0	73.2	85.2	302.1
Total F&B revenue / pax (INR/pax)	71.4	49.4	51.8	60.5	66.3	68.0	69.7	316.3
Advertising & Promotion								
Advertising & promotion	75.2	19.9	52.7	75.8	92.5	107.6	125.2	453.8
Advertising & promotion revenue / pax (INR/pax)	23.2	24.9	25.6	27.1	28.4	28.4	28.4	138.0
Lounge Revenue								
Lounge - Domestic	23.4	4.1	10.6	15.4	20.6	23.9	27.8	98.2
Lounge - Domestic revenue / pax (INR/pax)	16.9	11.2	11.7	12.9	14.6	14.5	14.4	68.1
Lounge - International	15.2	1.0	4.8	11.4	13.1	15.2	17.7	62.2
Lounge - International revenue / pax (INR/pax)	66.4	34.6	36.3	55.9	58.7	62.4	66.4	279.6
Day Hotel	0.1	0.1	0.2	0.4	0.5	0.6	0.6	2.3
Day hotel revenue / pax (INR/pax)	0.1	0.2	0.2	0.3	0.3	0.3	0.3	1.4
Total lounge revenue	38.8	5.3	15.6	27.2	34.1	39.7	46.2	162.7
Total lounge revenue / pax (INR/pax)	83.4	46.0	48.3	69.0	73.6	77.2	81.1	349.1

8.2.9 The Authority's analysis of major heads under NAR driven by passenger traffic is given below.

Car park

8.2.10 The Authority sought clarifications from BIAL for the basis of projections of car park. BIAL's response is given below:

"The values are in line with the pax growth based on the base year. In the initial 3 to 4 years the growth rate is high proportionate to the pax growth. However, while lot of Airport commuters depend on public transport like BMTC, with the increase in last mile connectivity & Opening of SWAR (South west Access Road) this is likely to change where next to airport premises the parking is offered at minimal prices and passengers are also being picked from Arrivals directly."

8.2.11 The Authority noted BIAL submissions above on car park revenues, the opening of south west access road as well parking being offered to passengers at minimal prices.

8.2.12 The Authority analyzed the revenue heads on a per passenger basis and proposes the following to forecast the car park revenues for the Third Control Period:

- BIAL had projected the parking service revenue/pax to remain constant at FY22 levels during the Third Control Period. BIAL had projected nil increase in FY22, FY25 and FY26 for the limousine revenue/ pax. The Authority proposes to consider a nominal increase of 5% per year in parking service revenue/ pax and limousine revenue/ pax for the Third Control Period.
- BIAL had projected the taxi service revenue/pax to have no increase for FY25 and FY26. The Authority proposes to consider a nominal increase of 5% per year in taxi service revenue/ pax in FY25 and FY26.

8.2.13 The Authority proposes to compute the car park revenues based on the above revenue per pax and the revised passenger traffic for the Third Control Period.

Retail revenue

8.2.14 The Authority noted that the retail business of BIAL includes domestic, international, other revenues.

8.2.15 The Authority sought clarifications from BIAL for the basis of projections of retail revenue. BIAL's response is given below:

"As majority of the agreements are expired, these have been extended temporarily and considering the Post-Covid sentiments like travel/tourism/Hospitality recovery, longer tenure options for capex investment to make the business viable, the growth factors assumed are considering the inflation and proportionate to the increase in pax"

8.2.16 The Authority analyzed the revenue heads on a per passenger basis and proposes the following to forecast the retail revenues for the Third Control Period:

- BIAL had projected the retail domestic revenue to grow at a slower rate compared to the growth observed in the Second Control Period. The Authority proposes to increase the domestic retail revenue per departing domestic pax by 16% per year from FY23 onwards so that the domestic retail revenue per departing domestic pax will reach the pre-COVID levels of FY20 in FY25.
- The Authority notes the international retail revenue per departing international pax as per BIAL's projections will reach pre-COVID levels by FY23 which seems reasonable. The Authority proposes to consider the international retail revenue per departing international pax as per BIAL's submission.
- BIAL had projected the retail forex revenue per departing international pax to remain constant for the period FY23 – FY26. The Authority proposes to increase the forex revenue per departing international pax by nominal growth of 5% per year from FY23 to FY26.

8.2.17 The Authority proposes to compute the retail revenues based on the above revenue per pax and the revised passenger traffic for the Third Control Period.

Food & Beverage (F&B)

8.2.18 The Authority noted that the F&B business of BIAL is classified under three categories i.e. domestic, international and other revenues.

8.2.19 The Authority sought clarifications from BIAL for the basis of projections of F&B revenue. BIAL's response is given below:

"As majority of the agreements are expired, they have been extended temporarily and considering the Post-Covid sentiments like travel/tourism/Hospitality recovery, longer tenure options for capex investment to make the business viable the growth factors assumed are considering the inflation and proportionate to the increase in pax"

8.2.20 The Authority analyzed the revenue heads on a per passenger basis and proposes the following to forecast the F&B revenues for the Third Control Period:

- BIAL had projected a degrowth in F&B domestic revenue/ departing pax for FY25 and FY26. The Authority proposes to consider a nominal growth of 5% per year for FY25 and FY26.
- BIAL had projected the F&B international revenue/departing pax to grow slower in FY24 compared to domestic F&B revenue/ departing pax. The Authority proposes to consider the growth of international F&B revenue/ departing pax similar to the growth in domestic F&B revenue/ departing pax from FY24 to FY26.
- BIAL had not considered the inflation growth rate of 5% in FY23, FY25 and FY26 in the F&B others revenue/ departing pax. The Authority proposes to consider the nominal growth rate of 5% in FY23, FY25 and FY26 on the F&B Others Revenue/ departing pax.

8.2.21 The Authority proposes to compute the F&B revenues based on the above revenue per pax and the revised passenger traffic for the Third Control Period.

Advertising & Promotions

8.2.22 The Authority sought clarifications from BIAL for the basis of projections of advertising and promotion revenue. BIAL's response is given below:

"The advertising revenue projections are considered based on the new concession term of longer tenure with the recovery of passenger viewership for attracting the Global brands along with the digital media coverage, together with factoring the inflation."

8.2.23 BIAL had projected the advertising & promotion revenue/departing pax to remain constant for FY25 and FY26. The Authority proposes to consider the nominal growth rate of 5% in advertising & promotion revenue/departing pax in FY25 and FY26.

8.2.24 The Authority proposes to compute the advertising and promotions revenues based on the above revenue per pax and the revised passenger traffic for the Third Control Period.

Lounge Revenue

8.2.25 The Authority noted that the lounge revenue of BIAL is classified under three categories i.e. domestic, international and day hotel.

8.2.26 The Authority sought clarifications from BIAL for the basis of projections of lounge revenue. BIAL's response is given below:

"Considering the Post-Covid sentiments like travel/tourism/Hospitality recovery, longer tenure options for capex investment to make the business viable the growth factors for revenue projections are assumed proportionate to the pax while factoring inflation."

8.2.27 The Authority analyzed the revenue heads on a per passenger basis and proposes the following to forecast the lounge revenues for the Third Control Period:

- BIAL had projected a degrowth in lounge domestic revenue/departing pax for FY25 and FY26. The Authority proposes to increase the lounge domestic revenue/ departing pax of FY25 and FY26 by the growth rate of FY24 such that lounge domestic revenue/ departing pax reaches pre-COVID levels of FY20 by FY25.
- BIAL has projected the lounge international revenue/departing pax to grow slower than the lounge domestic revenue/departing pax. The Authority proposes to consider the same growth rate for both lounge international revenue/ departing pax and lounge domestic revenue/ departing pax such that lounge international revenue/ departing pax reaches pre-COVID levels of FY20 by FY25.

8.2.28 The Authority proposes to compute the lounge revenues based on the above revenue per pax and the revised passenger traffic for the Third Control Period.

8.2.29 Based on the above, the revenue/passenger for various NAR heads driven by passenger traffic is given in the table below:

Table 158: Revenue/pax considered by the Authority for various pax driven NAR heads

Particulars	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Car park							
Parking services revenue / pax (INR/pax)	16.53	14.62	15.36	16.12	16.93	17.78	18.67
Taxi services revenue / pax (INR/pax)	35.79	29.61	31.09	32.87	40.39	42.41	44.53
Limousine revenue / pax (INR/pax)	3.47	2.50	2.63	2.76	2.90	3.04	3.19
Retail Revenue							
Retail - Domestic revenue / pax (INR/pax)	20.08	12.36	12.97	15.09	17.55	20.41	23.73
Retail - International revenue / pax (INR/pax)	453.88	299.18	314.14	461.81	484.90	509.14	531.04
Retail others revenue / pax (INR/pax)	3.61	2.54	2.67	3.63	4.03	4.22	4.55
Retail forex revenue / pax (INR/pax)	101.61	39.60	41.58	53.14	55.79	58.58	61.51
F&B							
F&B - Domestic revenue / pax (INR/pax)	19.87	15.58	16.36	18.20	20.68	21.71	22.80
F&B - International revenue / pax (INR/pax)	30.12	19.95	20.95	27.33	31.16	32.71	34.35
F&B - others revenue / pax (INR/pax)	21.41	13.81	14.50	15.71	17.79	18.67	19.61
Advertising & Promotion							
Advertising & promotion revenue / pax (INR/pax)	23.23	24.93	25.55	27.09	28.44	29.86	31.36
Lounge Revenue							
Lounge - Domestic revenue / pax (INR/pax)	16.87	11.17	11.72	12.88	14.64	16.65	18.93
Lounge - International revenue / pax (INR/pax)	66.40	34.57	36.29	55.85	63.67	72.59	82.75
Day hotel revenue / pax (INR/pax)	0.09	0.24	0.25	0.27	0.29	0.30	0.32

8.2.30 The Authority's analysis of major heads under NAR other than those driven by passenger traffic is given below.

Rent and Land lease

8.2.31 The Authority noted the submissions of BIAL relating to rent and land lease revenue. The Authority observed that BIAL had considered revenues from aeronautical concessionaires as part of rent and land lease revenues. The Authority in line with its decision taken in the 2[nd] control period proposes to consider rent and land lease revenue from aeronautical concessionaires as aeronautical revenue and deduct the same from the rent and land lease revenue submitted by BIAL. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

8.2.32 The Authority sought clarifications from BIAL for the basis of projections of rent and land lease revenue. BIAL's response is given below:

"1. Rate increase of 5% considered as per rental agreements. (For the first 2 years 2021-22 and 2022-23 rate increase is considered to factor for certain contracts that have begun in earlier years)

2. Due to COVID-19, capacity utilization of Offices, Airline Buildings and PTB Storage has been negatively impacted. The reduced utilizations have been considered for FY21 and thereafter.

3. Increase in Rental space is due to T2 Phase 1 and Airline Buildings expected to be commissioned in FY23 and FY 25."

8.2.33 The Authority, in line with its decision in the First Control Period order for BIAL, proposes to consider the revenues from cargo village as non-aeronautical revenues.

8.2.34 The Authority has proposed notional lease rent for the office space leased to AAI for the Second Control Period as per para 3.9.13 and 3.9.14. Similarly, the Authority proposes to consider a notional lease rental for the office space leased to AAI for the Third Control Period.

8.2.35 The Authority also requested BIAL to share the land lease and rental space at BIAL till FY26. Below is the data shared by BIAL:

Table 159: Area breakup of land lease and rental space at BIAL

Particulars (sq. m.)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Office Building	3648	3648	4097	4097	4375	4375
Airline building	5997	5926	10670	10670	12251	12251
Storage space & canteen	2427	2427	2614	2614	2707	2994
Land leases	13719	13310	13310	13310	13310	13310
Cargo village	8380	8686	8686	8686	8686	8686

8.2.36 Based on the above, the lease rent calculated by the Authority along with the year-on-year growth rate is given in the table below:

Table 160: Lease rent calculated by the Authority along with the year-on-year growth rate

Particulars (INR per sq. m. per annum)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Airside/Landside	11516	11915	14043	14745	15765	16242
% increase		**3%**	**18%**	**5%**	**7%**	**3%**
Office	21422	22493	23886	25080	26485	27809
% increase		**5.00%**	**6.19%**	**5.00%**	**5.60%**	**5.00%**
Land lease	4350.8	4615.2	4845.9	5088.2	5342.6	5609.8
% increase		**6.07%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**
Cargo Village	1567.5	1622.5	1679.3	1738.1	1798.9	1861.9
% increase		**3.51%**	**3.50%**	**3.50%**	**3.50%**	**3.50%**

8.2.37 Based on above, the revised rent and land lease computed by the Authority is given below:

Table 161: Rent and land lease computed by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Rent and land lease	25.71	36.35	38.14	43.84	46.01	**190.06**
AAI office space - Notional lease rental	14.50	15.23	15.99	16.79	17.63	**80.13**
Total rent and land leases	**40.21**	**51.57**	**54.13**	**60.63**	**63.64**	**270.18**

Flight Catering

8.2.38 The Authority noted the submissions of BIAL relating to revenue from flight catering. The Authority observed the percentage change in revenue projections by BIAL as given in the table below:

Table 162: Revenue projections submitted by BIAL relating to flight catering

Particulars	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22 - FY26)
Flight catering	11.71	5.56	8.35	8.68	9.03	9.39	9.76	**45.21**
% change in revenue projections	-7.6%	-52.5%	50.0%	4.0%	4.0%	4.0%	4.0%	

8.2.39 The Authority noted that BIAL had projected a slower growth rate for flight catering in the Third Control Period as compared to a CAGR growth of 9% for the period FY17 – FY20.

8.2.40 As per the projections submitted by BIAL, the revenue from flight catering is not expected to reach pre-covid levels (FY20) during the Third Control Period. The Authority proposes to revise the flight catering revenues to reach pre-covid levels in FY24 i.e. one year after the recovery of ATM traffic and revise the revenues accordingly.

8.2.41 The flight catering revenues considered by the Authority for the Third Control Period is given in the table below:

Table 163: Flight catering revenue considered by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Flight catering	8.35	9.08	11.71	12.74	13.87	55.75

Utility Charges

8.2.42 The Authority noted the utility recovery charges submitted by BIAL. The Authority based on the decision taken in the 2nd control period proposes to consider only the utility revenue from non-aeronautical concessionaires as non – aeronautical revenue. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

8.2.43 Accordingly, the utility revenue proposed by the Authority for the Third Control Period is given below:

Table 164: Utility revenue proposed by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Utility charges	1.91	3.42	3.59	3.77	3.95	**16.65**

Miscellaneous non-aeronautical revenues (non-aviation revenues (others) as per BIAL)

8.2.44 The Authority noted the miscellaneous non-aeronautical revenues submitted by BIAL. The Authority sought clarifications from BIAL on the details of miscellaneous non-aeronautical revenues as well as the basis for projections. The response given by BIAL is produced below:

"Revenue from Non-Aviation Others comprises of all minor heads of Non-Aviation Revenues other than those identified and listed individually. The main components of "Non-Aviation Revenue Others" includes Reception Desk, Annual passes, fines/ penalties, Oil Spillage, Smoking Lounge, Meet and Assist Revenues, E-POS etc.

The estimates are made considering projected growth rate as estimated by Management, broadly considering the traffic growth."

8.2.45 The Authority noted that BIAL had projected a slower growth rate for miscellaneous non-aeronautical revenues (existing) in the Third Control Period as compared to a CAGR growth of 34% for the period FY17 – FY20. The Authority proposes to revise the miscellaneous non-aeronautical revenues (existing) such that it reaches the pre-COVID levels by FY25.

8.2.46 BIAL in its submission dated 12 April 2021 provided the details of additional revenues streams in the miscellaneous non-aeronautical revenues for the Third Control Period. These included the rentals from the petrol pump and MRO facility. The Authority has included these rentals as part of the miscellaneous non-aeronautical revenues (new).

8.2.47 The miscellaneous non-aeronautical revenues considered by the Authority for the Third Control Period is given below:

Table 165: Miscellaneous non-aeronautical revenues considered by the Authority for the Third Control Period

Particulars	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total (FY22-FY26)
Miscellaneous non-aeronautical revenues	14.29	7.77	22.89	25.32	27.62	30.20	33.05	**139.08**
% change in revenue projections	45%	-46%	194.7%	10.64%	9.07%	9.32%	9.44%	

Real Estate

8.2.48 The Authority noted that BIAL had not considered real estate revenue as part of non – aeronautical revenue. As per the decision taken by the Authority in the Second Control Period order and based on the AERA Act, 2008, AERA guidelines, concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020, the Authority proposes to treat income from real estate as part of non – aeronautical revenues.

8.2.49 The Authority has calculated the real estate revenue basis the following:

- BIAL has entered into an agreement with BAHL from 1 April 2019. As per the agreement between BAHL and BIAL, annual lease rent of INR 2.48 cr. with an escalation of 10% every 3 years is payable by BAHL. Accordingly, it is proposed to consider the lease rent from BAHL based on the agreement signed between BAHL and BIAL as non-aeronautical revenue.
- The Authority had noted that BIAL has formed a subsidiary Bengaluru Airport City Limited (BACL) in January 2020 to carry out real estate activities. BIAL had 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.
- Revenue from fuel outlet, helipad and others is considered as non-aeronautical revenue.

8.2.50 Accordingly, the real estate revenue considered by the Authority for the Third Control Period is as follows:

Table 166: Real estate revenue considered by the Authority

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Real Estate Revenue	3.30	13.36	21.47	39.32	62.02	**139.46**

Interest Income

8.2.51 In the Second Control Period order, the Authority had decided to consider revenue from interest income as non-aeronautical revenue. Accordingly, the Authority proposes to consider the interest income as non-aeronautical revenue for the Third Control Period. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

Table 167: Interest income considered by the Authority

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Interest income	23.81	11.02	1.04	7.38	21.00	**64.25**

Non-aeronautical revenue considered by the Authority for the Third Control Period

8.2.52 The NAR considered by the Authority for the Third Control Period is given below:

Table 168: NAR considered by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Car park revenue	52.12	88.22	119.84	146.55	179.31	586.04
Retail Revenue	61.61	134.04	162.70	194.03	231.94	784.32
F&B Revenue	33.38	59.67	78.96	96.38	117.71	386.08
Lounge Revenue	15.94	31.18	40.94	53.30	69.46	210.83
Advertising & promotion	54.27	92.36	113.22	138.45	169.40	567.69
Rent and land lease	40.21	51.57	54.13	60.63	63.64	270.18
Flight catering	8.35	9.08	11.71	12.74	13.87	55.75
Miscellaneous non-aeronautical revenues	22.89	25.32	27.62	30.20	33.05	139.08
Utility charges	1.91	3.42	3.59	3.77	3.95	16.65
Real estate	3.30	13.36	21.47	39.32	62.02	139.46
Interest income	23.81	11.02	1.04	7.38	21.00	64.25
Total NAR	**317.78**	**519.25**	**635.21**	**782.76**	**965.35**	**3220.35**

8.3 Stakeholder comments regarding non-aeronautical revenues 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. 10/ 2021-22 with respect to non-aeronautical revenues for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on non-aeronautical revenues for the Third Control Period

8.3.2 The comments from BIAL with regards to the non-aeronautical revenues are given below:

- *"The Authority understands the impact COVID has had on the wider aviation sector. In the context of Non aeronautical revenues, COVID impact is expected to be much greater on account of the following:*
- *Third Control period is a period for BIAL where:*
  - *Covid-19 pandemic has shaken the foundation of the euphoric traffic growth estimates and has re-set the Industry's growth by 13 years. The levels of traffic witnessed in FY 21 are those that were seen in India 13 years ago.*
  - *In the immediate short term and medium term, profile of travelers is expected to be very different from the profile and mix of the passengers before Covid-19 scenario. The long term passenger profile is also expected to evolve differently than those observed in the past.*

- *Change in Business dynamics and the shrinking of disposable incomes pose a threat to even the assured base level revenue per passenger estimates considered earlier.*
- *BIAL's earlier passenger traffic profile was that of Corporate travellers from IT/BPO, Business travellers and professionals with higher disposable income, resulting in higher commercial revenues. With the Pandemic necessitating virtual meetings, the travel of passengers from this segment will take longer time to return and will accordingly impact the commercial revenues.*
- *Passenger sentiments have undergone a sea change and there is very little predictability and trend available to project the passenger behaviour and spend estimates in the future.*
- *Non-Aeronautical revenues are more influenced by International traffic. However, with uncertainty on International traffic, commercial revenues and spend per passenger are estimated to be severely impacted.*
- *Concessionaires at BIAL are required to incur Capital Expenditure to create multiple Infrastructure facilities. Hence, they are expected to negotiate for lower revenues / revenue share to be provided to BIAL unlike the past period.*
- *Until there is a critical mass of passenger traffic, Brands are not enthused to spend on Advertising and this severely impacts BIAL's estimate of Advertisement Revenues.*

- *Estimate of Non-Aeronautical revenues submitted by BIAL as part of MYTP submissions were made a year ago and did not factor the following key changes.*
  - *There was an expectation of immediate resumption of International flights, which have not begun for over a year now and there is no clear visibility on the same, as yet.*
  - *Second wave of Covid-19 pandemic and the possible Third Wave of Pandemic has further affected the already severely impacted traffic and Non-Aero assumptions as above.*
  - *Delayed availability of vaccine has also impacted passenger travel and sentiments of spend in the airport while travelling.*
- *Despite the Industry situation and the challenges mentioned above, in line with the most optimistic traffic projections considered in Section 5, BIAL proposes to submit the revised Non-Aeronautical Revenues, considering the Income Per Pax (IPP) to be largely aligned to the estimates proposed by the Authority.*
- *Hence, BIAL requests AERA to take cognizance of this and consider BIAL's revised submissions as below.*

	Revenue Per Passenger Proposed by Authority						Revenue Per Passenger Considered by BIAL				
Particulars	**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**		**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**
Parking	15.4	16.1	16.9	17.8	18.7		15.4	16.1	16.9	17.8	18.7
Taxi service	31.1	32.9	40.4	42.4	44.5		31.1	32.9	40.4	42.4	44.5
Limousine	2.6	2.8	2.9	3.0	3.2		2.6	2.8	2.9	3.0	3.2
Retail - Domestic	13.0	15.1	17.6	20.4	23.7		13.0	15.1	17.6	20.4	23.7
Retail - Int	314.1	461.8	484.9	509.1	531.0		314.1	461.8	484.9	509.1	531.0

	Revenue Per Passenger Proposed by Authority						Revenue Per Passenger Considered by BIAL				
Particulars	FY 22	FY 23	FY 24	FY 25	FY 26		FY 22	FY 23	FY 24	FY 25	FY 26
Retail - Others	2.7	3.6	4.0	4.2	4.6		2.7	3.6	4.0	4.2	4.6
Retail - Forex	41.6	53.1	55.8	58.6	61.5		41.6	53.1	55.8	58.6	61.5
F&B - Domestic	16.4	18.2	20.7	21.7	22.8		16.4	18.2	20.7	21.7	22.8
F&B - Int	21.0	27.3	31.2	32.7	34.4		21.0	27.3	31.2	32.7	34.4
F&B - Others	14.5	15.7	17.8	18.7	19.6		14.5	15.7	17.8	18.7	19.6
Advertising	25.6	27.1	28.4	29.9	31.4		25.6	27.1	28.4	29.9	31.4
Lounge - Domestic	11.7	12.9	14.6	16.7	18.9		11.7	12.9	14.6	16.7	18.9
Lounge - Int	36.3	55.9	63.7	72.6	82.8		36.3	55.9	63.7	72.6	82.8
Lounge - Day hotel	0.3	0.3	0.3	0.3	0.3		0.3	0.3	0.3	0.3	0.3

- *Revenue estimates considering the above assumptions are summarized as below*

	Revised Revenue Projection (Cr,)							
Particulars	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Total
Parking	26.7	8.0	11.7	25.1	31.0	37.8	46.1	151.7
Taxi service	57.9	16.2	23.6	51.3	73.9	90.1	110.0	348.9
Limousine	5.6	1.4	2.0	4.3	5.3	6.5	7.9	26.0
Retail - Domestic	27.9	6.5	9.3	21.0	28.5	38.8	52.8	150.3
Retail - Int	103.9	6.9	14.1	78.5	99.4	114.6	130.1	436.7
Retail - Others	5.8	1.4	2.0	5.7	7.4	9.0	11.2	35.3
Retail - Forex	23.3	0.9	1.9	9.0	11.4	13.2	15.1	50.6
F&B - Domestic	27.6	8.1	11.7	25.3	33.6	41.2	50.7	162.6
F&B - Int	6.9	0.5	0.9	4.6	6.4	7.4	8.4	27.8
F&B - Others	34.6	7.5	11.0	24.5	32.6	39.7	48.4	156.2
Advertising	75.2	27.2	38.8	84.5	104.1	126.9	154.9	509.3
Lounge - Domestic	23.4	5.8	8.4	17.9	23.8	31.6	42.1	123.8
Lounge - Int	15.2	0.8	1.6	9.5	13.1	16.3	20.3	60.8
Lounge - Day hotel	0.1	0.1	0.2	0.4	0.5	0.6	0.8	2.6
Total	**434.3**	**91.3**	**137.3**	**361.7**	**470.9**	**573.6**	**698.9**	**2242.5**

	Authority's Proposal						BIAL's Revised Proposal					
Particulars	FY 22	FY 23	FY 24	FY 25	FY 26	Total	FY 22	FY 23	FY 24	FY 25	FY 26	Total

	Authority's Proposal						BIAL's Revised Proposal					
Particulars	**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**	**Total**	**FY 22**	**FY 23**	**FY 24**	**FY 25**	**FY 26**	**Total**
Car park	52.1	88.2	119.8	146.6	179.3	586.0	37.3	80.7	110.2	134.4	164.0	526.6
Retail	61.6	134.0	162.7	194.0	231.9	784.3	27.3	114.2	146.7	175.5	209.2	672.9
Food & Beverage	33.4	59.7	79.0	96.4	117.7	386.1	23.7	54.5	72.5	88.3	107.6	346.5
Advertising & Promotions	54.3	92.4	113.2	138.5	169.4	567.7	38.8	84.5	104.1	126.9	154.9	509.3
Lounge Revenues	15.9	31.2	40.9	53.3	69.5	210.8	10.2	27.8	37.4	48.6	63.2	187.2
Total Revenue (Cr)	**217.3**	**405.5**	**515.7**	**628.7**	**767.8**	**2,535.0**	**137.3**	**361.7**	**470.9**	**573.6**	**698.9**	**2,242.5**
Revenue Per Pax	**205**	**238**	**259**	**271**	**284**	**259**	**181**	**232**	**257**	**270**	**283**	**256**

Interest Income

- *BIAL does not agree with the interpretation that Interest Income should be part of Non-Aeronautical Income.*
- *Even assuming that AERA were to consider Interest Income as Non-Aeronautical Revenues, in the uncertain times of Covid-19 pandemic when there are huge uncertainties over the Traffic estimates and considering the need to have adequate cash flows, BIAL requests that AERA may reckon the interest income only at the time of true up of the Revenues of the third control period during the fourth control period as has been done by the Authority in case of other Airports.*

Notional Lease Rental from AAI

- *AERA has considered a notional lease rental from AAI.*
- *BIAL has submitted its explanations and justifications on why this should not be considered in Para 4.17. BIAL requests the Authority to accordingly exclude the same from the estimation of Non-Aeronautical Revenues.*

Summary

BIAL requests the Authority to

- *Take cognizance of the Ground realties and challenges faced by BIAL in managing the various streams of Non-Aeronautical Revenues.*
- *Accord a just and fair treatment and estimate projected revenues realistically.*
- *Consider BIAL's current re-estimated Non-Aeronautical projections which have been estimated afresh in light of ongoing business circumstances and the passenger traffic forecasts proposed by BIAL.*
- *Not consider Notional Revenue for place leased to AAI.*

- *As the Terminal-2 commissioning is proposed to be shifted to FY 23, we request the Authority to accordingly consider the changes to Lease Rental Revenues also.*
- *Consider Interest Income only at the time of True up during Fourth control period.*

Other stakeholder comments on non-aeronautical revenues for the Third Control Period

8.3.3 FIH Mauritius Investments Ltd. commented on non-aeronautical revenue as follows:

- *"Authority has assumed an optimistic growth rate for Non-aeronautical revenues for BIAL. The assumed growth rates are much higher than the rates adopted in the recent DIAL and MIAL tariff orders. Because of drastic fall in traffic, non-aeronautical income of airport operators has been severely impacted and this has affected the profitability of the operators.*

  The recovery period and growth thereafter of non-aeronautical revenues appear unrealistic, as the passenger profile, travel habits and behaviour are poised to undergo significant changes post Covid 19.

  We therefore request Authority to apply the principles followed in DIAL and MIAL tariff orders regarding recovery of Non-aeronautical revenues to pre-Covid levels."

8.3.4 Siemens commented on non-aeronautical revenue as follows:

- *"Authority has projected the return to Pre-Covid levels by FY2023. This is in contradiction to the traffic assumption made by AERA, wherein it is mentioned that international traffic will return to pre-Covid levels only in FY2024.*

  International Traffic contributes substantially to the non-aeronautical revenues and given the uncertainties regarding resumption and recovery of the same, the assumption made by AERA regarding non-aeronautical revenues appear misplaced and not realistic.

  We therefore request AERA to moderate the Non aeronautical projections and adopt principles used in DIAL & MIAL 3rd control period tariff orders regarding recovery of Non-aeronautical revenues to pre-Covid levels."

8.3.5 MIAL commented as follows:

- *"The Non-aeronautical revenues assumed by the Authority are very high and need to be re-worked in light of bleak passenger traffic scenario due to COVID-19 pandemic.*

  The Authority is kindly requested to consider the above points raised by us while determining the tariff for the Kempegowda International Airport, Bengaluru."

8.3.6 APAO commented as follows:

- *"We have observed that the Authority has assumed an over optimistic growth rate for Non-aeronautical revenues, & the growth rates are much higher than the rates adopted in the recent DIAL & MIAL tariff orders.*

  On account of drastic fall in traffic, non-aeronautical income of airport operators has been severely impacted and this has affected the profitability of the operators.

  Authority has projected the return to Pre-Covid levels by FY 2023. The Authority, in DIAL and MIAL 3rd control period tariff orders, had considered a return to pre-Covid levels in FY 2024 only. These 2 airports have substantial international traffic when compared to BIAL.

  International Traffic contributes substantially to the non-aeronautical revenues and in the absence of recovery of the same, the assumption made by AERA in regard to non- aeronautical revenues appear misplaced and not realistic.

DIAL & MIAL orders were issued before 2nd wave of Covid hit the country & it is hard to understand as to how BIAL can recover faster than DIAL & MIAL. Moreover, scheduled international flights are yet to commence and considering the uncertainty regarding international traffic recovery, we are unable to understand the logic behind AERA's projections. In fact, BIAL's international traffic as a percentage is much lower as compared to DIAL & MIAL.

We therefore request Authority to apply the principles followed in DIAL and MIAL tariff orders regarding recovery of Non-aeronautical revenues to pre-Covid levels."

8.3.7 IATA commented on non-aeronautical revenue as follows:

- *"8.3.1 To consider non-aeronautical revenue as set out in Table 130 above for the Third Control Period*

  - Cargo, ground handling, fuel, CUTE/ CUSS, common infrastructure charges and aerobridges revenues

  As previously indicated, we agree that such income should be treated as aeronautical

  - Car Parking

  We agree with the nominal increase in car parking as well as aligning it to the amended pax traffic. AERA may also wish to consider that the FY23 car park revenue /pax should be at least the same as that achieved in FY 20 (unless it can be demonstrated that there is a shift in transport modality away from car)

  - Retail revenue

  We agree with including assumptions for increases. We would propose that the retail domestic revenue to reach FY20 levels in FY23 since it is expected that domestic traffic will reach this level on this year.

  Also, with the opening of a new terminal, there is an opportunity for economies of scope and increase the service offering, which should translate into a higher revenue per passenger (i.e. on top of inflation adjustments). Generally, there is an elasticity bigger than 1. AERA may wish to consider this for its order.

  - F&B

  We agree that adjustments are needed to the forecasts provided by BLR. Since domestic traffic is expected to be back by FY23 (as per AERA forecast), F&B domestic revenue should at be the same as that of FY20 (plus inflation). We request AERA to consider this further adjustment.

  - Advertising and promotions

  We wonder whether the income from advertising should be significantly higher due to the opening of a new Terminal (since there will be a significant amount of space that could be used for advertising, and this will not be driven by passenger numbers). We would appreciate for AERA to give further thought on this aspect and decide whether there should be a significant increase in this regard from the opening of T2.

  - Lounge

  Similar to previous comments, we would like to request AERA to consider increase domestic lounge revenue to match FY20 by FY23 since this is the year AERA predicts Domestic traffic will be back to FY20 levels.

  - Rent and Land Lease

We agree with the assumptions for land leases. We also agree to assume a notional income from the AAI building. The only comment we would like to raise, and as raised in the section regarding the true up of the Second Control period, is whether such notional lease should be considered as aeronautical, since AAI provides an essential aeronautical service. We would appreciate for AERA to consider this for the order.

- Flight catering

Since flight catering is an essential aeronautical service, we would appreciate AERA to consider reallocating this income as aeronautical revenue (similar to that of Cargo, Ground handling, etc).

- Utility revenues

We agree with AERA's approach in relation to utility revenues

- Miscellaneous & Real Estate

We agree with AERA's proposals.

- Interest income

In the section relating to the true up of the Second Control Period we commented on whether such income should be treated as aeronautical. In any case, it should at least be considered as non-aeronautical revenue.

- *8.3.2 To consider notional lease rental for AAI office space as non-aeronautical revenues in the Third Control Period as per Table 122*

  We agree with assuming a notional lease. What we would like for AERA to consider is whether such lease should be considered as aeronautical (since AAI provides essential aeronautical services).

- *8.3.3 To treat real estate revenue as non-aeronautical revenues as stated in Table 128 above.*

  We agree with the proposals as these are in line with the TDSAT ruling.

- *8.3.4 To treat interest income as non-aeronautical revenues as stated in Table 129 above.*

  As previously mentioned, consideration should be given as to whether this should be considered as aeronautical. But in any case, it should be at least considered non-aeronautical.

- *8.3.5 To true up non-aeronautical revenues for the current control period, at the time of determination of tariff for the next control period.*

  We agree with the proposal"

8.3.8 FIA commented as follows:

- *"FIA submits AERA to conduct an independent study on the Non-Aeronautical Revenues, in accordance with AERA Act.*

  Without prejudice to the above, FIA submits that:

  1.Increase in non-aeronautical revenue is a function of passenger traffic growth, inflationary increase and real increase/escalations in contract rates. AERA to ensure no adjustments are proposed to non-aeronautical revenue which is not dependent on traffic but are derived from agreements with concessionaires; and

  2.'Royalty' is in the nature of market access fee, charged (by any name or description) by the services providers under various headings.

These charges are passed on to the airlines by the service providers. The rate of royalty at BIAL is upto approx. 30%. It may be pertinent to note that market access fee by any name or description is not practiced in most of the global economies, including European Union, Australia etc. In view of the above, we urge AERA to abolish such royalty which may be included in any of the cost items - aeronautical and non -aeronautical."

8.4 BIAL's response to stakeholder comments regarding non-aeronautical revenues for the Third Control Period

8.4.1 On IATA's comments regarding non-aeronautical revenue, BIAL has submitted as follows:

- *"On the above issue, BIAL believes that its submissions made to AERA / TDSAT, and its legal positions are as per the provisions of Contracts entered into with Sovereign governments, tenable in law and BIAL reiterates the same. BIAL has exercised its rights to appeal against the said TDSAT order and AERA's decision is subject to outcome of the legal proceedings.*

  For brevity, BIAL is not reiterating its earlier positions and contentions contained in its submissions to various consultation papers, memoranda of appeal, written submissions and requests that the same be read as a part of this submission. BIAL respectfully states that all its submissions in this response are without prejudice to whatever BIAL has contended earlier."

- *"BIAL has explained the current context with reference to Non-Aeronautical Revenues as part of its submissions in response to the Consultation Paper. Despite the aggressive estimates adopted by the Authority, BIAL has tries its best to align its revised projections on a similar basis and submitted its re-estimated Non-Aeronautical revenues based on the traffic estimates submitted by BIAL. BIAL requests the Authority to review and consider the same as part of its estimate in the MYTO.*

  On certain other principles such as Interest Income, Notional revenues etc. BIAL has submitted its views and submissions as part of the response to the Consultation Paper. BIAL requests the Authority to review the same."

8.4.2 On FIA's comments regarding non-aeronautical revenue, BIAL has submitted as follows:

- *"In so far as Fuel Farm operations are concerned, there is no "royalty" or concession fee or revenue share payable by the ISP to BIAL.*

  For Cargo, Ground Handling and Into Plane services. revenues accruing to BIAL are based on agreements with these concessionaires. AERA determines the tariff for these service providers and all expenses are approved by AERA based on existing principles. Hence, BIAL has no role to play in the same.

  We are not able to understand FIA's comment on revenue share or concession fee from Non- aero concessionaires. If the same were to be removed, then the cross subsidization would be only to the extent of lease rentals received for the space let out by BIAL."

8.5 Authority's examination after reviewing stakeholder comments on non-aeronautical revenues for the Third Control Period

8.5.1 The Authority has carefully reviewed the comments received from BIAL and other stakeholders on non-aeronautical revenue. The Authority has addressed these comments in the below sections.

Response to BIAL's comments on Non-aeronautical revenue

8.5.2 The Authority noted the comments from BIAL on non-aeronautical revenue. The Authority understands that Covid had already impacted the aviation sector significantly and the second wave has further aggravated it. The Authority also noted from BIAL's comment on the changing passenger profile in which virtual meetings have replaced in-person meetings leading to reduced travel from the high paying corporate travelers. The Authority has also taken note of the other comments made by BIAL on the slow resumption of international traffic, delayed availability of vaccines, reduced interest from brands in advertisement etc. Taking cognizance of the above reasons, the Authority similar to the approach followed in the Consultation Paper has bifurcated its response into passenger related non-aeronautical revenues and other non-aeronautical revenues.

Passenger related non-aeronautical revenues

8.5.3 The Authority notes that BIAL in its comments has submitted the revised revenue per passengers estimates for passenger related non-aeronautical revenues. The Authority examined the estimates submitted by BIAL and is of the view that these estimates are in line with the estimates proposed by the Authority as part of the Consultation Paper no. 10/ 2021-22. The Authority also notes that BIAL has calculated the revised revenue projection for passenger related revenue based on its own traffic estimates submitted as part of its response to the Consultation Paper no. 10/2021 – 22. The Authority decides to revise the passenger related non-aeronautical revenues based on traffic forecast decided by the Authority for the Third Control Period in Chapter 4.

Interest Income

8.5.4 The Authority has taken note of BIAL's comment to not forecast the interest income for the Third Control Period given the uncertainties due to the pandemic and true-up the interest income on actuals at the time of tariff determination of the next control period. The Authority does not agree with BIAL on the interest income. The Authority decides to consider the projections of the interest income for the Third Control Period and true-up the same based on actuals.

Lease rental from AAI

8.5.5 The Authority noted BIAL's comments requesting the Authority to not consider notional lease rental from AAI. The Authority based on its decisions in the true-up of the non-aeronautical revenues of the Second Control Period decides to consider notional lease rental from AAI for the Third Control Period also.

8.5.6 The Authority also noted BIAL's comment stating that with Terminal 2 commissioning postponed to FY23, the Authority should accordingly make adjustments to the lease rental revenues also. The Authority decides to consider the lease rentals projected by it in the Consultation Paper no. 10/ 2021-22 and true-up the lease rentals for the Third Control Period based on actuals at the time of tariff determination for the next control period.

Real estate development

8.5.7 However, the Authority based on the submissions made by BIAL has removed the real estate revenues of the fuel outlet for the Third Control Period as it has been replaced with other contract.

8.5.8 The land lease agreement of BIAL and the state support agreement provide that the land provided (at concessional rates) by the State government to BIAL for development and commercial viability of the airport for benefit of the public in general. However, by not developing the real estate and bringing more non-aeronautical revenues for cross-subsidization, BIAL is not fulfilling that mandate. The Authority would urge the State Government of Karnataka to direct BIAL to take action in this regard. The Authority may decide to take notional income from real estate development for cross-subsidization in future tariff orders if no efforts are made in this regard.

Response to FIH, Siemens, APAO and MIAL's comments on Non-aeronautical revenue

8.5.9 The Authority has examined the comments from FIH Mauritius, Siemens, APAO and MIAL on the non-aeronautical revenue proposed by the Authority for the Third Control Period. The Authority noted that these stakeholders have raised concerns regarding the growth rates proposed by the Authority in case of BIAL stating that these were optimistic and higher than the rates adopted for DIAL and MIAL. The Authority is of the view that it has considered reasonable assumptions (BIAL's revenue/passenger estimates are in line with the Authority's proposal) in estimating the projections based on its detailed analysis and considered additional factors such as passenger traffic, area increase due to the opening of Terminal 2, recovery in business sentiment etc. In addition, the Authority noted that significant increase in infrastructure in case of BIAL is not applicable for either DIAL or MIAL and hence, the assumptions are bound to differ.

Response to IATA's comments on Non-aeronautical revenue

8.5.10 The Authority has taken note of the comments given by IATA on non-aeronautical revenues. The Authority has given its response to these comments below:

- The Authority also noted IATA's comments on domestic retail, F&B, car park and lounge revenue stating that the same should reach FY20 levels in FY23 similar to the trend seen for domestic traffic and to consider reasonable assumptions for advertising and promotions. The Authority is of the view that the pandemic has impacted the customer buying behavior and the passengers may prefer minimum contact travel journey and accordingly limit their retail/F&B purchase due to the fear of contracting the virus. However, with the uncertainty around the future waves/vaccine penetration, it may not be possible to predict a faster recovery and hence the Authority has opted for a balanced view.
- On IATA's comment to consider notional lease rent and flight catering as aeronautical revenues, the Authority is of the view that the same are non-aeronautical in nature and the Authority has accordingly considered their treatment in case of BIAL for the Third Control Period.

Response to FIA's comments on Non-aeronautical revenue

8.5.11 The Authority has noted FIA's comment on the request for conducting an independent study on non-aeronautical revenues. A detailed analysis has been carried out by the Authority and the uncertainties associated with traffic and non-aeronautical revenue have been factored in as a result of the pandemic in the projections, and hence, the Authority is of the view than an independent study is not required.

8.5.12 The Authority has also taken note of FIA's comments on royalty being charged at BIAL. The Authority noted BIAL's comments in response to FIA and is of the view that the charges for ISPs are determined by the Authority in accordance with its guidelines and any revenue accruing/royalty paid to BIAL is evaluated and factored in while determining the aeronautical tariffs for the service provider.

Non-aeronautical revenue decided by the Authority for the Third Control Period

8.5.13 The Authority based on the comments given by BIAL and the stakeholders and based on the material presented above has revised the non-aeronautical revenue for the Third Control Period and the same is given in the table below:

Table 169: Non-aeronautical revenues decided by the Authority for the Third Control Period

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Car Park revenue	37.40	80.63	110.04	134.44	163.97	526.48
Retail Revenue	27.69	113.63	145.36	175.51	209.49	671.69
F&B Revenue	23.73	54.37	72.42	88.36	107.58	346.47
Lounge Revenue	10.25	27.74	37.22	48.64	63.23	187.08
Advertising & promotion	38.94	84.41	103.96	127.01	154.91	509.23
Rent and land lease	38.88	50.29	52.78	59.27	62.14	263.37

Particulars	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Flight catering	8.35	9.08	11.71	12.74	13.87	55.75
Miscellaneous non-aeronautical revenues	22.89	25.32	27.62	30.20	33.05	139.08
Utility charges	3.07	3.07	3.37	3.54	3.71	16.76
Real estate	4.17	12.82	20.90	38.73	61.40	138.03
Interest income	20.84	12.77	3.51	5.38	19.40	61.91
Total NAR	**236.21**	**474.15**	**588.89**	**723.84**	**892.75**	**2915.84**

8.6 Authority's decisions regarding non-aeronautical revenues for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to non-aeronautical revenues for the Third Control Period:

8.6.1 To consider non-aeronautical revenue as set out in Table 169 above for the Third Control Period

8.6.2 To treat real estate revenue as non-aeronautical revenues.

8.6.3 To treat interest income as non-aeronautical revenues.

8.6.4 To true up non-aeronautical revenues for the current control period, at the time of determination of tariff for the next control period.

9 TAXATION FOR THE THIRD CONTROL PERIOD

9.1 BIAL's submission regarding taxation for the Third Control Period

9.1.1 BIAL submitted that as per Direction No. 5/2011-12 details that the actual tax payments projected for tariff computations will be allowed as a reimbursement in arriving at the Aggregate Revenue Requirement.

9.1.2 BIAL had computed the projected income tax payments based on the prevailing Income Tax laws and rules considering the MAT provisions and Section 80IA of Income tax act. BIAL is eligible for Income Tax holiday for a continuous 10-year period, starting FY 2012-13, in the first 15 years since AOD.

9.1.3 BIAL submitted that it has computed aeronautical tax considering 30% non-aero revenues as part of aeronautical P&L in line with the proposal detailed in Consultation Paper of DIAL.

9.1.4 Aeronautical tax submitted by BIAL for the Third Control Period is given in the table below:

Table 170: Aeronautical tax submitted by BIAL for the Third Control Period

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Taxation for TCP	334.61	383.79	515.66	775.64	1,552.29	**3,561.99**

9.2 Authority's examination regarding taxation for the Third Control Period

9.2.1 The Authority noted that Minimum Alternate Tax (MAT) was the minimum tax payable by BIAL on its book profits. The Authority also noted that MAT paid could be carried forward and be adjusted against the normal tax payable by the entity on the tax computed on profits from the year after the tax holiday period.

9.2.2 The Authority noted that BIAL has considered the 30% of non-aeronautical revenues to compute the aeronautical tax. The fact that a part of non-aeronautical revenues is used for cross-subsidization as per the hybrid till mechanism does not change the nature of such revenues to aeronautical. Cross-subsidization as per hybrid till mechanism is done in order to reduce tariff pressure on passengers and to incentivize the airport operator to make effective investments in non-aeronautical revenue generating sources.

9.2.3 The consideration of 30% non-aeronautical revenues 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 revenues as part of revenue from aeronautical services.

9.2.4 Therefore, the Authority is of the view that:

a) 30% non-aeronautical revenues should not be treated as a subsidy for the airport operator as the airport operator has already earned it from non-aeronautical services and is meant as a cross subsidy to the airport user.

b) Consideration of 30% non-aeronautical revenues as part of revenues from aeronautical services would result in undeserved enrichment to the airport operator effectively reducing the cross-subsidy benefit to the airport user from the present 30% of non-aeronautical revenues.

c) Further, this issue has been decided by the Authority and the details may be seen in Chapter 8 of DIAL Tariff Order No. 57/2020-21 dated 30 December 2020 for the Third Control Period.

9.2.5 The Authority, in line with its decision for other airports, proposes to not consider 30% of non-aeronautical revenues while computing aeronautical taxation for the Third Control Period.

9.2.6 As per the Second Control Period order, the Authority proposes to allow the estimated aeronautical MAT as passthrough in the Third Control Period. The Authority proposes to apply the effective tax rate, computed based on estimated total MAT of BIAL and the aggregate Profit Before Tax (PBT), on the aeronautical PBT for the respective years.

9.2.7 The Authority had made changes to the aeronautical taxation of BIAL based on the changes to the other building blocks proposed in the earlier chapter.

9.2.8 Based on the above, the Authority proposes the following aeronautical tax estimates for the Third Control Period:

Table 171: Aeronautical tax estimate proposed by the Authority for the Third Control Period

Particulars (In INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical PBT	**-136.94**	**-132.10**	**179.94**	**567.06**	**1,058.79**	**1,536.76**
Effective tax rate	0.00%	0.00%	16.71%	17.22%	17.33%	
Aero tax	**0.00**	**0.00**	**30.07**	**97.63**	**183.46**	**311.17**

9.2.9 The Authority proposes to true-up the aeronautical tax estimates based on actual tax outflow at the end of the current control period.

9.3 Stakeholder comments regarding taxation for the Third Control Period

9.3.1 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. 10/ 2021-22 with respect to taxation for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on taxation for the Third Control Period

9.3.2 The comments from BIAL with regards to the taxation are given below:

- *"BIAL requests the Authority to re-compute tax based on changes to all building blocks at the applicable MAT rate.*

  BIAL will submit further comments if any, on reconciliation of the model."

Other stakeholder comments on taxation for the Third Control Period

9.3.3 IATA commented on taxation as follows:

- *"9.3.1 To consider tax outflow estimate as set out in Table 132 for the Third Control Period.*

  We agree with the methodology used to derive the tax allowances. In particular with the decision on not including the 30% contribution, for the reasons clearly stated in paragraphs 9.2.2 to 9.2.5, as well as being consistent with our previous submissions on the subject.

- *9.3.2 To true-up the aeronautical tax estimates based on actual tax outflow at the end of the current control period*

  We agree with the proposal".

9.4 BIAL's response to stakeholder comments regarding taxation for the Third Control Period

9.4.1 On IATA's comments regarding taxation, BIAL has requested the Authority to consider its response submitted as part of its response to Consultation Paper.

9.5 Authority's examination after reviewing stakeholder comments on taxation for the Third Control Period

9.5.1 Based on the revision in the other building blocks, the Authority has decided the following aeronautical tax estimates for the Third Control Period:

Table 172: Aeronautical tax estimate decided by the Authority for the Third Control Period

Particulars (In INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Aeronautical PBT	**-470.67**	**-73.49**	**-207.13**	**303.08**	**420.03**	**-28.17**
Effective tax rate	0.00%	0.00%	0.00%	17.45%	17.51%	
Aero tax#	**0.00**	**0.00**	**0.00**	**52.88**	**73.55**	**126.44**

#Minimum Alternate Tax (MAT) forecasted for BIAL

9.6 Authority's decisions regarding taxation for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to taxation for the Third Control Period:

9.6.1 To consider tax outflow estimate as set out in Table 172 for the Third Control Period.

9.6.2 To true-up the aeronautical tax estimates based on actual tax outflow at the end of the current control period

10 WORKING CAPITAL INTEREST FOR THE THIRD CONTROL PERIOD

10.1 BIAL's submissions regarding working capital interest for the Third Control Period

10.1.1 Working capital requirement is considered by BIAL and the cost of funds is estimated at 11% per annum:

Table 173: Working capital interest/ lender fee submitted by BIAL for the Third Control Period

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Working capital requirement	50	50	50	50	50	**250**
Interest on working capital borrowings	6.53	7.57	7.58	7.57	7.57	**36.82**

10.2 Authority's examination regarding working capital interest for the Third Control Period

10.2.1 The Authority notes that BIAL has projected working capital interest at 11% for the Third Control Period together with lender / engineer fee for the loans taken.

10.2.2 The Authority proposes to compute working capital interest at 8.85% for the Third Control Period. Accordingly, the recomputed fee/ working capital is as detailed below:

Table 174: Working capital interest/ lender fee proposed by the Authority for the Third Control Period

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Lenders' engg. Fees, Trustee and other fees	1.03	2.07	2.07	2.07	2.07	9.30
Interest on working capital borrowings	4.03	4.03	4.04	4.03	4.03	20.14
Total	**5.06**	**6.09**	**6.10**	**6.09**	**6.09**	**29.44**

10.2.3 The Authority notes that the actual working capital facility availed, and the interest rates could vary considering the cash flow of the entity. The Authority hence proposes to true up the actual working capital borrowing and interest at the end of current control period, based on actuals.

10.3 Stakeholder comments regarding working capital interest 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. 10/ 2021-22 with respect to working capital interest for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on working capital interest for the Third Control Period

10.3.2 The comments from BIAL with regards to the working capital interest are given below:

- *"BIAL notes Authority's analysis and requests that the same be trued up based on actuals at the end of the control period."*

Other stakeholder comments on working capital interest for the Third Control Period

10.3.3 IATA commented on working capital interest as follows:

- *"10.3.1 To consider working capital interest / fee as detailed in Table 134 for the Third Control Period./ 10.3.2 To true up the working capital interest/ fee projections based on actuals, at the end of the control period, in computation of tariff for the next control period.*

  If Aera is considering a Working Capital interest as aeronautical, then it should also consider interest income as aeronautical."

10.3.4 FIA commented as follows:

- *"AERA to clarify whether any detailed assessment on working capital facility interest has been conducted to allow an interest of INR 29.44 crores on account of working capital interest.*

The above is required in relation to Para 5.4.3 of the AERA Guidelines which states that 'the Authority shall review and assess the levels of projected working capital requirements and shall consider cost of working capital loans as deemed appropriate'.

FIA submits that an allowance of working capital interest would result in an artificial increase in the total operating expenditure and thereby have an adverse impact of increasing the tariff. Accordingly, AERA is requested to undertake a detailed assessment for allowing such interest."

10.4 BIAL's response to stakeholder comments regarding working capital interest for the Third Control Period

10.4.1 On IATA's comments regarding working capital interest, BIAL has submitted as follows:

- *"BIAL submits that there is no link between the Working Capital Interest and the Interest income.*

  BIAL has submitted its response to the Consultation Paper and requests the Authority to consider the same."

10.4.2 On FIA's comments regarding working capital interest, BIAL has submitted as follows:

- *"Working Capital estimates have been submitted by BIAL as part of the Business Plan and MYTP submissions. BIAL has requested the same to be trued up based on actuals at the end of the Control Period."*

10.5 Authority's examination after reviewing stakeholder comments on working capital interest for the Third Control Period

10.5.1 The Authority has noted the comments from BIAL, IATA and FIA on the Working Capital interest. The Authority's response to these comments are given below:

- The Authority noted IATA's comment stating that if working capital interest is treated as aeronautical, then interest income should also be treated as aeronautical. The Authority noted that it has considered working capital interest as common expense and hence, does not see any merits in IATA's comments.

- The Authority has taken note of FIA's comment requesting if a detailed assessment has been undertaken for working capital interest. Though the Authority has undertaken a detailed examination of the working capital needs of BIAL, it is of the view that the working capital loan draw down are dependent on the funding needs of the airport and hence, difficult to forecast. Therefore, the Authority decides to true-up the working capital interest/ fee projections on actuals at the end of the control period. Further, the Authority has noted from the audited financials of FY21 that BIAL has availed INR 50 cr. working capital loan in line with Authority's projections.

10.5.2 The Authority has decided to compute interest on working capital borrowings at 8.1% for the Third Control Period as per the clarifications submitted by BIAL. The Authority has decided the working capital interest/ lender fee for the Third Control Period as follows:

Table 175: Working capital interest/ lender fee decided by the Authority for the Third Control Period

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Lenders' engg. Fees, Trustee and other fees	0.87	1.75	1.75	1.75	1.75	7.86
Interest on working capital borrowings	3.69	3.69	3.70	3.69	3.69	18.44
Total	**4.56**	**5.43**	**5.44**	**5.43**	**5.43**	**26.30**

10.6 Authority's decisions regarding working capital interest for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to working capital interest for the Third Control Period:

10.6.1 To consider working capital interest / fee as detailed in Table 175 for the Third Control Period.

10.6.2 To true up the working capital interest/ fee projections based on actuals, at the end of the control period, in computation of tariff for the next control period.

11 INFLATION FOR THE THIRD CONTROL PERIOD

11.1 BIAL's submissions regarding inflation for the Third Control Period

11.1.1 BIAL submitted that the WPI and CPI projections are based on a review of reports issued by the Reserve Bank of India (RBI).

11.1.2 The results of the 63rd round of Survey of Professional Forecasters on Macroeconomic Indicators as submitted by BIAL are given below:

Table 176: CPI inflation considered by BIAL's in its MYTP submission

	CPI combined (General)			
	Mean	**Median**	**Max**	**Min**
Q4: 2019-20	6.5	6.7	6.9	4.8
Q1: 2020-21	5.2	5.3	6.2	4.0
Q2: 2020-21	4.8	4.8	5.7	3.8
Q3: 2020-21	3.7	3.6	5.9	2.4
Q4: 2020-21	3.4	3.2	6.4	2.3

Table 177: WPI inflation considered by BIAL's in its MYTP submission

	WPI combined (General)			
	Mean	**Median**	**Max**	**Min**
Q4: 2019-20	2.3	2.4	2.8	1.6
Q1: 2020-21	1.6	1.8	3.0	-1.3
Q2: 2020-21	2.4	2.5	3.2	0.0
Q3: 2020-21	2.3	2.5	3.5	-0.2
Q4: 2020-21	2.3	2.2	4.6	0.8

11.2 Authority's examination regarding inflation for the Third Control Period

11.2.1 The Authority has examined the submission made by BIAL on inflation to be considered during Third Control Period.

11.2.2 The Authority has noted that BIAL has considered mean WPI and CPI from the RBI's 63rd round of survey as the inflation for Third Control Period. The Authority, however, proposes to consider the recent inflation forecast by RBI as per its 69th round of survey professional forecasters on macroeconomic indicators, as the same would be consistent with the recent macroeconomic developments.

11.2.3 Based on the recent inflation forecast by RBI, the Authority proposes to consider inflation of 4.9%, i.e. the mean WPI inflation forecast for FY 2021-22 given in Annex 2 of the RBI's survey for the Third Control Period.

11.3 Stakeholder comments regarding inflation for the Third Control Period

11.3.1 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. 10/ 2021-22 with respect to inflation for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on inflation for the Third Control Period

11.3.2 BIAL submitted that it concurs with the Authority's estimates.

Other stakeholder comments on inflation for the Third Control Period

11.3.3 IATA in its submission offered no major comments regarding the Authority's proposal.

11.4 BIAL's response to stakeholder comments regarding inflation for the Third Control Period

11.4.1 BIAL in its submission offered no major comments in response to the stakeholder's comments.

11.5 Authority's examination after reviewing stakeholder comments on inflation for the Third Control Period

11.5.1 The Authority has noticed that there are no stakeholder comments regarding inflation proposed for the Third Control Period. Hence, the Authority has decided to consider the inflation rate of 4.9% which is based on the mean WPI inflation forecast for FY 2021-22 given in the 69th round of survey professional forecasters on macroeconomic indicators of RBI.

11.6 Authority's decisions regarding inflation for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to inflation for the Third Control Period:

11.6.1 The Authority decides to consider the inflation of 4.9% for the Third Control Period based on the mean WPI inflation forecast for FY 2021-22 given in the 69th round of survey professional forecasters on macroeconomic indicators of RBI.

12 QUALITY OF SERVICE FOR THE THIRD CONTROL PERIOD

12.1 BIAL's submission regarding Quality of Service

12.1.1 BIAL submitted that it has undertaken every possible step to achieve the appropriate quality of services offered, as mentioned in the concession agreement.

12.1.2 BIAL submitted that it has been felicitated with numerous awards from various leading organizations all around the globe. Some of the prestigious awards received by BIAL as per the submission of BIAL is given below:

a) The ASQ (Airport Service Quality) Awards of ACI (Airports Council International) recognizes airports around the world based on a survey of passenger satisfaction.

b) The ASQ awards celebrate the achievements of airports in delivering the best customer experience and they represent the highest possible accolade for Airport Operators around the world.

c) In March 2019, BIAL has been awarded as the first airport in the world to clinch ACI's coveted ASQ Awards for both arrivals and departures.

d) KIA has won the First-ever ASQ award for Arrivals, a category open to airports across the worlds, that was introduced in 2018.

e) KIA also won the award for best airport by size/region in the 25-40 MPPA category in the Asia-Pacific zone.

f) SKYTRAX Awards – SKYTRAX is a UK-based consultancy firm which runs an airport and airlines review and ranking site. The KIA has been felicitated with SKYTRAX's award for Best regional airport in India and central Asia, in May 2020, for the 3rd time in 4 years at the 2020 World Airport Awards. These awards are based on the World Airport Survey questionnaires completed by over 100 nationalities of airport customers during the 6-month survey period. The survey evaluated the customer experience across airport service and product key performance indicators – from check-ins, arrivals, transfers, shopping, security and immigration through to departure at the gate.

12.1.3 BIAL submitted that it has also received the following awards during Second Control Period,

a) 2017

- Favourite Airport for holidays by HolidayIQ
- CII Customer Obsession Award customer engagement service in large business organization
- Best Cargo Airport – West & South and best Airport Cargo Marketing Team – West & South, India Cargo Awards

b) 2018

- Emerging Cargo Airport of the Year for India at the STAT Trade Times International Awards for Excellence in Air cargo.
- Second best Airport in the world in 15-25 MPPA category – ACI ASQ Awards.
- Best Cargo Airport 2018 – India Cargo Awards

c) 2019

- Best Airport - ASSOCHAM Awards on Civil Aviation & Cargo.
- Most Sustainable Airport – International Airport Review Awards.

d) 2020

- Best Greenfield Airport, Cargo – India Cargo Awards 2020.
- Fastest growing Cargo Airport of the year – Region India at Air Cargo India.

12.2 Authority's examination regarding Quality of Service

12.2.1 The Authority has examined BIAL's submission of the quality of service.

12.2.2 The Authority had, in MYTO for First Control Period noted the provisions of the Concession Agreement with respect to performance standards (particularly Article 9 and Schedule 9 Part 2 thereof). The Authority noted that these standards were based on IATA Global Airport Monitor service standards. The provisions of the Concession Agreement also indicate the consequences of not coming upto the prescribed level of performance standards. Therefore, the Authority felt that the scheme of performance standards as indicated in the Concession Agreement would be reasonable for this purpose.

12.2.3 Hence, the Authority decided as follows in the MYTO of First Control Period:
"The Authority decides that BIAL shall ensure that service quality conforms to the performance standards as indicated in the Concession Agreement."

12.2.4 Concession Agreement of BIAL states as follows:
"...9.2 Monitoring of Performance Standards

9.2.1 Throughout the term of this Agreement the Airport's performance shall be monitored by passenger surveys in accordance with this Article 9. The criteria used to measure the Airport's performance shall be the IATA Global Airport Monitor service standards set out in Schedule 9, Part 2 or such criteria as may be mutually agreed upon from time to time (the Standards).

9.2.2 BIAL shall participate in IATA surveys and shall ensure that a survey is conducted each year in accordance with IATA's requirements to determine the Airport's performance. The first such survey shall be conducted during the third (3rd) year after Airport Opening.

9.2.3 If three (3) consecutive surveys show that the Airport is consistently rated in respect of the service standards under BIAL's direct control, as lower than IATA rating of three and a half (3.5) (in the current IATA scale of 1 to 5), BIAL will produce an action plan in order to improve the Airport's performance which must be implemented within one (1) year..."

12.2.5 The Authority sought from BIAL the quarterly ASQ ratings for the Second Control Period. BIAL in its response submitted the below ASQ ratings:

Table 178: ASQ rating of BIAL in Second Control Period

Year (Calendar year)	Quarter	Departure ASQ rating	Arrival ASQ rating
2016	Q2	4.84	**
2016	Q3	4.88	**
2016	Q4	4.81	**
2017	Q1	4.77	**
2017	Q2	4.83	**
2017	Q3	4.82	**
2017	Q4	4.88	**
2018	Q1	4.89	**
2018	Q2	4.90	4.67

Year (Calendar year)	Quarter	Departure ASQ rating	Arrival ASQ rating
2018	Q3	4.89	4.79
2018	Q4	4.91	4.54
2019	Q1	4.92	4.74
2019	Q2	4.91	4.90
2019	Q3	4.92	4.93
2019	Q4	4.91	4.92
2020	Q1	4.93	4.93
2020	Q2	4.97	*
2020	Q3	4.94	4.92

Note – ** BLR started participation in Arrival survey from Q2 2018 (CY); * BLR did not participate in the Q2 2020 survey due to COVID-19

12.2.6 The Authority understands that BIAL has achieved ASQ ratings of above 4 throughout the Second Control Period. Hence, the Authority is of the view that BIAL is meeting the required performance standards and there is no need for any penal provisions to be applied on BIAL.

12.2.7 Similarly, for the Third Control Period, the Authority proposes that BIAL shall ensure that service quality at Kempegowda International Airport, Bengaluru conforms to the performance standards as indicated in the Concession Agreement. Hon'ble TDSAT judgement dated 16th December 2020 has also upheld the stand of the Authority.

12.3 Stakeholder comments regarding Quality of Service for the Third Control Period

12.3.1 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. 10/ 2021-22 with respect to Quality of Service for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on Quality of Service for the Third Control Period

12.3.2 The comments from BIAL with regards to Quality of Service are given below:

- *"BIAL notes Authority's analysis and will ensure compliance to Service Quality standards as set forth in the Concession Agreements."*

Other stakeholder comments on Quality of Service for the Third Control Period

12.3.3 IATA commented on Quality of Service as follows:

- *"IATA has highlighted in our past submissions on the need for improvements to the existing framework that is predominantly driven by ACI's ASQ standard, which is qualitative and perception based while completely overlooking quantitative, objective measurement of BIAL's actual performance and the customer (airline Users) – supplier relationship.*

  IATA provides best practice industry guidance regarding Airport Service Level Agreements broadly used across best practice airports, and we strongly encourage adoption of our policy in users and consumers interests. This will also assist AERA in conducting a more objective assessment of the service level performance of the airport operator."

12.4 BIAL's response to stakeholder comments regarding Quality of Service for the Third Control Period

12.4.1 On IATA's comments regarding Quality of Service, BIAL has submitted as follows:

- *"Concession agreement governs the requirements of quality of service and this needs to be complied by BIAL.*

ASQ Surveys are the Airport Council International's ('ACI') comprehensive initiative to improve the quality of service experienced by passengers with participation of over 321 airports in more than 50 countries. These surveys seek to measure passengers' overall satisfaction with an airport by ranking its performance against other airports in terms of various aspects of an airport's services. The survey is circulated to departing and arriving passengers and asks them to complete it based on their experience at the airport.

The Concession Agreement mandates the maintenance of a minimum rating of 3.5 on a scale of 5. BIAL has been consistently scoring over 4.5, ensuring the quality standards/ service levels are maintained.

Further, the Authority has considered that BIAL shall ensure that service quality at KIAB conforms to the performance standards as indicated in the Concession Agreement.

IATA's comments travel beyond the jurisdiction of the Authority."

12.5 Authority's examination after reviewing stakeholder comments on Quality of Service for the Third Control Period

12.5.1 The Authority has noted the comments made by IATA and BIAL's response to these comments on Quality of Service for the Third Control Period. The Authority has taken note of IATA's comment stating the need to improve the existing framework which is majorly based on ACI's ASQ standard. In this regard, the Authority is of the view that the service quality at Bangalore airport is governed by the concession agreement which mandates maintaining levels of 3.5 and above on a scale of 5. The Authority has evaluated the recent performance of BIAL and has seen BIAL maintaining its service quality levels above 4.5 as detailed in Table 178. Thus, the Authority is of the view that BIAL has maintained its service quality over the years and has decided not to consider any adjustments in the aeronautical tariff with regards to Quality of Service.

12.6 Authority's decisions regarding Quality of Service for the Third Control Period

Based on the material before it and based on its analysis, Authority has decided the following with regards to Quality of Service for the Third Control Period:

12.6.1 The Authority decides that BIAL shall ensure that service quality at Kempegowda International Airport conforms to the performance standards as indicated in the Concession Agreement over the Third Control Period.

12.6.2 The Authority decides not to levy any penalties / rebates against BIAL for the Second Control Period.

13 AGGREGATE REVENUE REQUIREMENT FOR THE THIRD CONTROL PERIOD

13.1 BIAL's submission regarding Aggregate Revenue Requirement for Third Control Period

13.1.1 The total Aggregate Revenue Requirement (ARR) submitted by BIAL for the Third Control Period as part of its MYTP submission based on the various building blocks is given in the table below:

Table 179: Aggregate Revenue Requirement (ARR) submitted by BIAL as part of its MYTP submission for the Third Control Period

Particulars (In INR crore)	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Average RAB	8380.85	11225.98	10794.70	10455.73	10937.98	
FRoR	16.51%	16.51%	16.51%	16.51%	16.51%	
Return on RAB	1383.53	1853.21	1782.01	1726.05	1805.67	
Depreciation	505.59	660.19	665.20	671.56	704.33	3206.87
Opex	573.41	824.73	910.96	1,096.55	1,332.47	4738.12
Working capital interest	6.53	7.57	7.58	7.57	7.57	36.81
Tax	334.61	383.79	515.66	775.64	1,552.29	3561.98
Concession Fees	111.26	147.46	152.40	167.60	213.01	791.73
Less: Non - aero revenues	(133.34)	(190.47)	(223.81)	(255.03)	(290.18)	-1092.84
Aggregate Revenue Requirement	2781.59	3686.46	3810.00	4189.94	5325.15	19793.13
Add: Over/Under recovery in previous control period	4545.29					
Total requirement as per BIAL	**7326.88**	**3686.46**	**3810.00**	**4189.94**	**5325.15**	**24338.43**

13.1.2 Accordingly, the yield computed per passenger (YPP) by BIAL at the beginning of the Third Control Period is INR 1,546.55.

13.2 Authority's examination regarding Aggregate Revenue Requirement for Third Control Period

13.2.1 The Authority's analysis on individual building blocks of ARR are detailed in the above sections of this Consultation Paper.

13.2.2 Based on the individual analysis detailed above, the recomputed ARR for the Third Control Period is given in the table below:

Table 180: Recomputed Aggregate Revenue Requirement (ARR) proposed by the Authority for the Third Control Period

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Average RAB (A) (refer *Table 93*)	7,114.47	10,088.88	9,847.97	9,490.84	9,178.54	
FRoR (B) (refer *Table 108*)	11.59%	11.59%	11.59%	11.59%	11.59%	
Return on RAB (C = A*B)	824.85	1,169.71	1,141.77	1,100.37	1,064.16	
Depreciation (D) (refer *Table 92*)	390.78	541.86	555.35	548.86	550.05	2,586.90
Operating Expenditure (E) (refer *Table 137)*	456.13	529.83	567.19	635.25	687.58	2,875.98
Working Capital Interest (F) (refer *Table 174*)	5.06	6.09	6.10	6.09	6.09	29.44
Tax (G) (refer *Table 171*)	0.00	0.00	30.07	97.63	183.46	311.17
Gross ARR (H = C+D+E+F+G)	**1,676.82**	**2,247.49**	**2,300.49**	**2,388.20**	**2,491.35**	**11,104.34**
Less: Non – Aero Revenue (I) (refer *Table 168*)	-95.33	-155.78	-190.56	-234.83	-289.60	-966.10

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Add: Concession Fee (J) (refer *Table 132*)	37.84	63.72	78.07	95.40	116.63	391.66
Add: Under recovery of pre-control period as on 31 March 2022 (K) (refer *Table 5*)	179.73					
Less: Over recovery of Second Control Period as on 31 March 2022 (L) (refer *Table 56*)	-1,030.21					
ARR (M = H-I+J+K+L)	**768.85**	**2,155.43**	**2,187.99**	**2,248.77**	**2,318.38**	**9,679.42**
PV factor	**1.00**	**0.90**	**0.80**	**0.72**	**0.64**	
PV of ARR as on 31 March 2022	**768.85**	**1,931.50**	**1,756.97**	**1,618.16**	**1,494.93**	**7,570.40**

13.2.3 The YPP at the beginning of the Third Control Period computed by the Authority is INR 447.53.

13.2.4 The Authority noted that BIAL has not submitted the Annual Tariff Plan for the years in the Third Control Period. BIAL has stated as follows:

"Variable Tariff Plan proposed by BIAL will be submitted later as part of the Annual Tariff Proposal after the ARR is determined."

13.2.5 The Authority notes that, it is necessary to have the individual year wise tariff card laying down the different aeronautical charges and the workings for the aeronautical revenues, in order to have a constructive stakeholder discussion and hence BIAL is directed to submit the detailed Annual Tariff proposals in line with the ARR and Yield arrived at by the Authority within 7 days of issue of the Consultation Paper.

13.3 <u>Stakeholder comments regarding ARR and aeronautical tariffs for the Third Control Period</u>

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. 10/ 2021-22 with respect to ARR and aeronautical tariffs for the Third Control Period. The comments by stakeholders are presented below:

BIAL's comments on ARR for the Third Control Period

13.3.2 The comments from BIAL with regards to the ARR are given below:

- *"BIAL requests the Authority to re-estimate the ARR based on BIAL's submissions on various building blocks and Authority's analysis on the same.*
- *BIAL requests that all Building blocks as applicable be trued up at the end of the Third Control Period based on actuals.*
- *BIAL will submit the audited Financial statements for the year ended March 2021 and requests the Authority to consider the same at the time of MYTO.*
- *Authority has listed the break-up of estimated revenues for Aviation Concessions and Aviation Revenues as part of the Consultation Paper in Table 109. BIAL has sought for the details of the estimate from AERA which AERA has provided. From the details provided by the Authority BIAL is not clear on how certain revenue values have been considered by AERA. BIAL will submit its responses on the same on reconciliation of the model.*

- *On the manner of application of the Discounting Rate, BIAL notes that the Authority has changed its methodology vis-a-vis the previous control periods. BIAL requests the Authority to change the same in line with the past methodology followed.*

BIAL's comments on aeronautical tariffs for the Third Control Period

13.3.3 The comments from BIAL with regards to the aeronautical tariffs are given below:

- *BIAL has, as part of the Annual Tariff Plan submission submitted the rate card proposed by it considering its Traffic estimate of 175 Mn Passengers in the Third Control Period. These traffic estimates are based on a high case scenario, while the estimation based on assumptions used in HIAL Consultation Paper would result in a traffic of around 165 Mn only. This is identical to the realistic scenario submitted by BIAL in the MYTP document. BIAL requests the Authority to consider traffic on the most optimistic basis submitted by BIAL and approve the ATP submitted on the same basis.*
- *BIAL has also submitted a Variable Tariff Proposal along with the ATP with BIAL requests the Authority to approve as this will go a long way in increasing the potential traffic for Bangalore which will benefit all the stakeholders. Certain minor amendments have been made to the VTP submitted by BIAL as part of the ATP, as enclosed in Annexure 12. BIAL requests the Authority to consider and approve the same.*
- *BIAL requests the Authority to accord a fair treatment in determination of tariff and conduct a limited mid-term review of the tariff at the end of FY 23, given the turbulent times and the uncertainties surrounding the recovery of the Aviation sector.*
- *BIAL requests the Authority to share the Financial model to complete the reconciliation exercise so that the objective of having the same model at both ends is accomplished. Hence our responses to the Consultation Paper are subject to any further findings that may arise on completion of reconciliation exercise of both the models. BIAL requests the Authority to give effect to any changes/ findings that may arise out of the above reconciliation, in the MYTO to be issued."*

13.3.4 BIAL also submitted that the rentals from IOSPL will start accruing only from October 2021.

Other stakeholder comments on ARR for the Third Control Period

13.3.5 Government of Karnataka requested for a mid-term review and commented as follows:

- *"AERA may consider mandating a mid-term review of the traffic projections, revenues and ARR as given the unfolding circumstances, projections may not hold."*

13.3.6 IATA commented on ARR as follows:

- *"13.3.1 To consider Aggregate Revenue Requirement (ARR) as detailed in Table 139 above as the eligible ARR for the Third Control Period for BIAL*

  We appreciate the effort made by the Authority to scrutinize Bangalore airport's proposals. We believe that a substantial improvement has been achieved compared to those proposals. However, we are still being faced with significant increases, and after thoroughly analysing the Authority's proposals in the Consultation Paper, we have laid out in this response a number of areas in which we believe the Authority should go even further. We urge the authority to take the comments in account before it makes its final decision on the ARR.

  One additional item to consider is whether AERA could consider the possibility of moving back to a Single till approach. This would not only reflect the mechanism that airports would adopt if they were in a competitive environment but would also help alleviate the pressures on charges currently *faced. We would welcome to have further discussions with the Authority about such potential change.*

13.3.7 FIA commented on the methodology of tariff determination and ARR as follows:

- *FIA submits that in the Consultation Paper, it is stated that the AERA shall determine tariffs for using the 30/40% Shared Till model including for true ups as applicable. It is to be noted that FIA from time to time has advocated the application of a Single Till model across the airports in India. FIA submits that AERA should adopt Single Till basis across all Control Periods, including by way of true up, in view of the following legal framework:*

  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.

  Further, 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 airfares on account of lower airport charges, the volume of passengers is bound to increase leading to more footfall 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.

- *(i) Overall Tariff/ARR*

  AERA is requested to review the suggestions/comments on the regulatory building blocks as mentioned under Annex – B, which is likely to reduce the ARR (including shortfall) of BIAL. This will further ensure the lowering of tariffs including UDF, which will be beneficial to passengers and airlines.

  (ii) FIA submits that the Hon'ble TDSAT Order dated 16 December, 2020 stated as follows: '100...However, there is substance in this grievance and AERA will do well to ensure that if delay is caused by the Airport operator, its consequences should not fall upon the users. Tariff orders should be prepared well in time so that the burden of recovery is spread over the entire period for which the order is passed...'

  In view of the above, AERA is requested to ensure that airlines/passengers are not burdened in view of the apparent shrinkage in the period of recovery of the aeronautical tariff from passengers/airlines, as the AERA Tariff Order for BIAL's Third Control Period will now be issued after the commencement of the Control Period i.e. 1 April, 2021.

Other stakeholder comments on aeronautical tariffs for the Third Control Period

13.3.8 IATA commented on aeronautical tariffs as follows:

- *13.3.2 To direct BIAL to submit the Annual Tariff Proposals within 7 days from issue of this Consultation Paper which will be reviewed and put up for stakeholder consultations.*

  We received the Annual tariff proposals (that would be in line with the Authority's calculated ARR). In addition to the concerning substantial increases, we also note that there is still different treatment to airlines (since equivalent aircraft would be paying differential charges on whether they are domestic or international). This appears to be contrary to the TDSAAT decision (as summarised by the Authority in paragraph 1.4.3 v). While during the pandemic times it wouldn't be advisable to carry our structural changes, it is important that AERA should at least lay out a plan on how such discrimination could be phased out after the pandemic."

13.3.9 AOC submitted on aeronautical tariffs as follows:

- *"The difference in charges between domestic operators and international needs to be balanced again as charges for international airlines is many times higher for the same services that both enjoy. The steep increases in landing & parking and UDF costs for international operators in the current proposal is an example of this disparity.*
- *It is also imperative that landing & Parking charges be calculated on actual take- off weight (ATOW) rather than the current maximum take-off weight (MTOW). This would eliminate deficiencies and bring about a transparent metered or pay per use standard.*
- *The current discounts that are offered to airlines to help tide over the pandemic also needs to be appreciated and not accrued to the airport lest they be withdrawn and never offered again.*
- *The AOC's position is that we need a moratorium on all increases for at least two more years after which a review can be undertaken and charges increased if justified, additionally we would like an environment where non aeronautical revenue is pursued vigorously and airline operators enjoy the subsidy that this would eventually create."*

13.3.10 Air India submitted that UDF rates for domestic and international passengers are an increase of 106% and 36% respectively which are significantly higher than the present rate. A higher jump in UDF will have a direct effect on the air fare and discourage air travel. As a result, Air India has requested in its submission that the revision of tariff shall be postponed till signs of recovery in Indian aviation sector is observed.

13.3.11 Blue Dart requested AERA to consider maintaining status quo for landing, parking and other aeronautical charges for the next 2 years and conduct a mid-term review once the situation normalizes.

13.3.12 SpiceJet in the stakeholder meeting submitted that any increase in tariff at this stage may lead to postponement of travel by prospective travelers or lead to a change of mode to other transport facility.

13.3.13 Air Vistara in the stakeholder meeting requested AERA to not consider any tariff increase for BIAL for the third control period.

13.3.14 Air Asia in the stakeholder meeting requested AERA to postpone the tariff proposal submitted by BIAL for the third control period.

13.3.15 DACAAI in the stakeholder meeting requested AERA to either reduce the cargo charges or keep it at same level for the third control period.

13.3.16 FFFAI in its submission has given the following comments:

- FFFAI suggested that BIAL should adopt a practical approach and look for confidence boosting measures like offering incentives to the air travel industry.

- FFFAI suggested that any revision of cargo charges by BIAL for the next two years may result in drastic reduction of air travel and EXIM cargo business.
- FFFAI suggested that BIAL should ensure that the terminal operators do not charge demurrages for shipments held by customs or due to their own technical issues.
- FFFAI suggested that BIAL should enhance the existing airline operations by increasing EXIM cargo operating flights and include new cargo operating flights with additional destinations.

13.4 BIAL's response to stakeholder comments regarding ARR and aeronautical tariffs for the Third Control Period

13.4.1 On FIA's comment regarding till for tariff determination, BIAL submitted as follows:

- *"TDSAT has clearly stated in its 16th Dec 2020 order that the plea of FIA for single Till approach cannot be accepted. Hence the issue of Till is a settled matter and FIA is requested not to continue to raise this in this forum. Also National Civil Aviation Policy has suggested Hybrid Till mechanism based on which Order 14/ 206-17 was issued by the Authority."*

13.4.2 On IATA's comments regarding aeronautical tariffs, BIAL has submitted as follows:

- *"The context referred to in TDSAT order related to considering one Airline as a Home carrier vis a vis other airline. No such concept that has been proposed in the ATP and VTP by BIAL for the third control period.*
- *BIAL submits that there are no discriminatory charges being applied between Indian and foreign airlines.*
- *All airlines within the same category are charged according to the same principles based on established global guidelines.*
- *The charges are based on type of operations (domestic or international). In the ATP submission for the third control period, BIAL has made efforts to gradually reduce the gap in landing charges between domestic and international operations from 2x to 1.2x by the year FY 2023. Also, International UDF rates are kept at 3 times the domestic rates for the years FY 2022, FY 2023, and FY 2024."*

13.4.3 On AOC's comments regarding aeronautical tariffs, BIAL has submitted as follows:

- *"BIAL submits that there are no discriminatory charges being applied between Domestic and foreign airline operators.*
- *All airlines within the same category are charged according to the same principles based on established global guidelines.*
- *The charges are based on type of operations (domestic or international). In the ATP submission for the third control period, BIAL has made efforts to gradually reduce the gap in landing charges between domestic and international operations from 2x to 1.2x by the year FY 2023. Also, International UDF rates are kept at 3 times the domestic rates for the years FY 2022, FY 2023, and FY 2024 to help International traffic to rebound post Covid-19.*
- *BIAL has proposed the rates in the Annual Tariff plan, considering the need to balance the interest of all stakeholders.*
- *Calculation of landing and parking charges based on MTOW is a globally accepted norm and in line with ICAO recommendations."*

13.4.4 On Air India's comments regarding aeronautical tariffs, BIAL has submitted as follows:

- *"BIAL is cognizant of the current situation and despite the challenging environment, BIAL has tried to strike a balance by keeping tariffs lower during FY 2021-22 and FY 2022-23 and increase the charges in a progressive manner, in the latter half of the 3rd Control Period. The landing charges proposed in the ATP submissions clearly show that the landing charges until FY 2022 are being kept lower than the previous high of Rs. 331 per MT for Domestic landing which was prevalent in the year FY 16.*
- *Further, given the uncertainty surrounding recovery of aviation sector, we have requested AERA to conduct a limited midterm review of the tariff proposal and enable us to amend/revise the annual tariff proposals (without undergoing a detailed tariff submission), thereby ensuring a win-win scenario.*
- *BIAL has explained, in detail in its submissions, the need and justification for revision in rates"*

13.4.5 On Blue Dart's comments regarding aeronautical tariffs, BIAL has submitted as follows:

- *"BIAL is cognizant of the current situation and despite the challenging environment, BIAL has tried to strike a balance by keeping tariffs lower during FY 2021-22 and FY 2022-23 and increase the charges in a progressive manner, in the latter half of the 3rd Control Period. Further given the uncertainty surrounding recovery of aviation sector, we have requested AERA to conduct a limited midterm review of the tariff proposal and enable us to amend/revise the annual tariff proposals (without undergoing a detailed tariff submission), thereby ensuring a win-win scenario.*
- *Landing charges proposed cross the earlier charges applicable during March 2016 only in FY 2023. Rates of FY 2023 are lower than the inflationary increase in rates from the March 2016 rates.*
- *As explained in Para 1 On the current context at BIAL, BIAL is implementing a large scale expansion project and the increased rates are necessary for BIAL to meet and honour its financial obligations and the Operating expenditure.*
- *The status quo on the tariffs has been extended till 30th Sep 2021 and the revised charges need to be given effect from 1st Oct 2021. Keeping the current situation in mind, BIAL has proposed a very modest increase for the next 6 months.*
- *It is noteworthy to specify herein that BIAL had, as part of response to the Consultation Paper issued for the second control period, proposed an equalised levy over a longer period, in anticipation of increase in charges due to large scale expansion being commissioned. AERA had not accepted the said comment. This situation as only further amplified by the reduced traffic levels due to Covid-19 pandemic.*
- *Having noted the above, BIAL has also requested for a limited midterm review in charges should the traffic situation be very different from the final approved levels."*

13.4.6 On FFFAI's comments regarding aeronautical tariffs, BIAL has submitted that the following:

Aeronautical charges

- BIAL has submitted that it has stated the need and justification for revision in rates as part of its submissions.

Incentives and benefits to Air Travel and Cargo

- *"On the air-cargo side, below are the list of initiatives BIAL has undertaken to create an efficient operating environment to support the community and grow the cargo business:*

- *To make KIAB Airport a 'Smart Airport – digitalized and seamlessly connected', BIAL has introduced Air Cargo Community System (ACS), to further streamline air logistics. This digital platform has enabled seamless collaboration between all stakeholders in the supply chain to deliver superior and efficient cargo operations at KIAB Airport.*
- *To facilitate the cargo truck management, BIAL has developed India's first on-airport, dedicated truck management facility. This facility is equipped with various features like parking, fueling, cafeteria, medical, rest areas, etc.*
- *In order to provide a dedicated handling facility for express courier shipments as per industry needs, the country's first dedicated Express Courier Terminal was inaugurated on 12th Mar '21 at KIAB.*
- *To ensure the smooth inflow of perishables in the pandemic environment, BIAL has regularly engaged with all stakeholders including Government of India agencies to streamline handing processes; this helped KIA process the highest number of exports of perishables among Indian Airports till Feb 2021, i.e., 42,406 MT which is 31% share of India's export of perishable cargo via air (source: APEDA website).*
- *To promote additional flights to KIAB, BIAL has proposed Variable Tariff Plan in the submission for the 3rd Control Period intending to:*

  Enhance Domestic & International cargo connectivity (by route and frequency)

  Encourage New Domestic & International cargo airlines / flights into KIAB
- *We would like to assure the trade partners that the services provided at KIAB have remained competitive in nature and BIAL has taken and will take measures to boost trade and connectivity from KIAB.*
- *BIAL is cognizant of the current situation and despite the challenging environment, BIAL has tried to strike a balance by keeping tariffs lower during FY 2021-22 and FY 2022-23 and increase the charges in a progressive manner, in the latter half of the 3rd Control Period. Further given the uncertainty surrounding recovery of aviation sector, we have requested AERA to conduct a limited mid-term review of the tariff proposal and enable us to amend/revise the annual tariff proposals (without undergoing a detailed tariff submission), thereby ensuring a win-win scenario.*

Terminal Operators and EXIM Cargo

- *"At KIAB, all customers have a choice of two cargo terminals namely Air India SATS and Menzies Aviation Bobba (B'lore) and both are common-use cargo terminals.*
- *Having two terminals has ensured that they are competitive, and the airlines have a choice for their operations.*
- *All the airlines operating at KIAB are using common-use infrastructure, for their general cargo operations. The charges by the cargo terminal operators are subject to AERA tariff determination and governed by guidelines / directions from Ministry of Civil Aviation/ AERA.*
- *Further, the contract between the cargo terminal operators and the airlines are bilateral agreements which are mutually agreed by them based on services needed, SLAs and other factors and BIAL does not play a role in those bi-lateral agreements.*

- *The design capacity at KIAB for cargo for the end of financial year FY 20/21 was enhanced from 570,000 MT pa to 715,000 MT pa.*
- *Further based on stakeholder consultation we intend to follow through on following development in 3rd Control period to ensure medium-term capacity and cargo handling efficiencies are maintained.*
    - *Development of a new domestic cargo terminal,*
    - *Refurbishment of the existing cargo terminals for capacity enhancement*
    - *Expansion of cold-chain facility*
- *BIAL through the proposed Variable Tariff Plan in the submission for the 3rd Control Period intends to:*
    - *Enhance Domestic & International cargo connectivity (by route and frequency)*
    - *Encourage New Domestic & International cargo airlines / flights into KIAB.*
- *It is imperative that such positive plans to increase trade connectivity be approved by the Regulator."*

13.5 Authority's examination after reviewing stakeholder comments on ARR and aeronautical tariffs for the Third Control Period

13.5.1 The Authority noted BIAL's comment related to the application of the discounting rate to determine the present value of ARR. The Authority clarifies that it had computed the ARR at the end of the financial years. Accordingly, the over-recovery computed for the first control period was computed as of 31st March 2016 which had to be carried forward by one year to calculate its present value as of 31st March 2017 (1st year of the second control period). The approach adopted by the Authority is logical and reasonable and therefore, the Authority decides to consider the same in the final tariff order.

13.5.2 The Authority has taken note of BIAL and Government of Karnataka request to consider a limited mid-term review of the tariff at the end of FY23. 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 at large. Consequentially, the Authority had 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 the Authority, 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 required 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.

13.5.3 The Authority has noted BIAL's submission on the proposal of lease rentals from IOSPL. The Authority notes that the existing agreement with IOSPL does not have the provision of revised rentals, therefore, the Authority decides to not consider the proposed rentals from IOSPL in the aeronautical revenues.

13.5.4 The Authority has taken note of the comments given by BIAL and IATA as well as BIAL's response to IATA's comments regarding ARR for the Third Control Period. The Authority reviewed the comments made by IATA stating that tariff determination might be done on a single till basis. The Authority noted that the 30% hybrid till for BIAL is based on the directives received from MoCA and based on the National Civil Aviation Policy 2016. Hence, the Authority sees no reason to move back to single till for tariff determination.

13.5.5 The Authority also noted IATA's comments mentioning concerns around different treatment to airlines in terms of equivalent aircrafts paying different charges on domestic and international routes. The Authority examined the ATP and VTP submitted by BIAL and is of the view that the classification of domestic and international flights cannot be termed as discriminatory. The Authority is of the view that the observations put forward in the Hon'ble TDSAT judgment is in a different context and the same is being mis-interpreted by IATA. The Authority notes that it may not be practical to equalize the charges for domestic and international services.

13.5.6 The Authority has taken note of the comments from FIA on the till to be adopted for tariff determination. The Authority's response to FIA in Para 2.4.8 addresses the comments given by FIA on the till. On FIA's comments regarding the timely release of the order, the Authority states that the process of tariff determination was initiated as per the Authority's guidelines. However, the Authority had to take due consideration of the multiple waves of the pandemic and accordingly factored the same into its projections for the airport operator.

13.5.7 The Authority's response to IATA in the above para addresses the concerns of AOC related to difference between domestic and international operators. On AOC's comment related to calculating the landing and parking charges based on ATOW rather than MTOW, the Authority is of the view that the calculation of landing and parking charges on MTOW is a standard norm followed not just in India but globally and hence, the Authority sees no reason to revise the same. Regarding AOC's comment on the promotion of non-aeronautical revenues, the Authority is of the view that the National Civil Aviation Policy 2016 has laid down a framework for promotion of non-aeronautical activities in the form of shared till mechanism which incentivizes the airport operator for investment in the non-aeronautical business.

13.5.8 The Authority has also taken note of comments given by AOC, Air India, Blue Dart, SpiceJet, Air Vistara, Air Asia, DACAAI and FFFAI to maintain status quo for aeronautical charges in the short term or during the entire control period. The Authority has finalized the tariffs for BIAL based on its analysis and ensuring that an optimum balance is achieved for all the stakeholders. The Authority has also taken note of the other comments put forward by FFFAI to BIAL on the incentives to the air travel industry, challenges faced with cargo terminal operators as well as the need to enhance airline operations to expand cargo business at BIAL. The Authority has noted that the response of BIAL to FFFAI's comments is adequate.

13.5.9 Based on the above, the aeronautical revenue decided by the Authority for the Third Control Period is given in the table below:

Table 181: Aeronautical revenue decided by the Authority for the Third Control Period

Particulars (In INR Cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
User Development Fee (A)	151.28	615.61	905.51	1230.49	1308.19	**4211.09**
Landing Charges (B)	135.68	281.23	463.29	666.89	696.27	**2243.37**
Parking Charges (C)	6.07	13.60	21.33	34.78	50.44	**126.22**
Sub-total of revenues (D = A+B+C)	**293.03**	**910.45**	**1390.13**	**1932.16**	**2054.91**	**6580.68**
Cargo (E1)	46.94	51.76	57.09	63.47	71.40	**290.66**
Fuel Farm/ITP (E2)	4.07	7.44	8.54	9.78	10.96	**40.78**
Ground Handling (E3)	21.09	45.57	53.73	59.70	65.22	**245.32**
ICT (E4)	16.65	17.18	17.73	18.29	18.88	**88.73**
Common Infrastructure Charge (E5)	34.25	51.85	62.03	88.35	104.67	**341.15**
Lease rentals from aero services/CGF (E6)	27.54	29.06	30.51	32.11	33.63	**152.85**
Total Aviation Concessions (F = E1+E2+E3+E4+E5+E6)	**150.54**	**202.85**	**229.63**	**271.71**	**304.77**	**1159.49**
Total aeronautical revenues (G=D+F)	**443.57**	**1113.29**	**1619.76**	**2203.87**	**2359.68**	**7740.17**

13.5.10 The Authority has examined the Variable Tariff Plan (VTP) submitted by BIAL and notes that the purpose of introducing VTP is to bring additional flight and generate additional revenue, which will help to reduce aeronautical charges in long run. Accordingly, the Authority agrees to accept the Variable Tariff Plan submitted by BIAL except Airline Partnership Programme, which the Authority feels is not as per ICAO Guidance on non-discrimination. Further, BIAL is also directed to ensure the principles of non-discrimination of ICAO are not violated.

13.5.11 The Authority has agreed with Variable Tariff Plan (VTP) submitted by BIAL except relating to VTP (Airline Partnership Programme) as it does not meet the non-discrimination guidance clause of ICAO.

13.5.12 The Authority also directs BIAL to keep a separate record of accounts for incentives granted, revenue generated and the expenditure incurred in this regard during the Third Control Period for the information of all stakeholders and the Authority so as to take a considered view for determination of aeronautical tariff for next control period.

13.5.13 Based on the changes undertaken by the Authority in the above sections, the ARR decided by the Authority for the Third Control Period is given in the table below:

Table 182: Recomputed Aggregate Revenue Requirement (ARR) decided by the Authority for the Third Control Period

Particulars (INR cr.)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Average RAB (A) (refer *Table 102*)	4,768.61	7,849.78	10,383.66	10,006.68	9,694.08	
FRoR (B) (refer *Table 108*)	11.59%	11.59%	11.59%	11.59%	11.59%	
Return on RAB (C = A*B)	552.87	910.10	1,203.88	1,160.17	1,123.93	4,950.96
Depreciation (D) (refer *Table 101*)	288.61	432.29	573.15	565.07	568.44	2,427.57
Operating Expenditure (E) (refer *Table 152)*	393.63	460.31	550.53	611.58	653.83	2,669.89
Working Capital Interest (F) (refer *Table 175*)	4.56	5.43	5.44	5.43	5.43	26.30
Tax (G) (refer *Table 172*)	0.00	0.00	0.00	52.88	73.55	126.44
Gross ARR (H = C+D+E+F+G)	**1,239.67**	**1,808.14**	**2,333.01**	**2,395.14**	**2,425.19**	**10,201.15**

Particulars (INR cr.)	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**Total**
Less: Non – Aero Revenue (I) (refer *Table 169*)	-70.86	-142.25	-176.67	-217.15	-267.82	-874.75
Add: Concession Fee (J) (refer *Table 150*)	17.61	44.26	64.47	87.78	93.95	308.07
Add: Under recovery of pre-control period as on 31 March 2022 (K) (refer *Table 5*)	179.76					
Less: Over recovery of Second Control Period as on 31 March 2022 (L) (refer *Table 57*)	-974.14					
ARR (M = H-I+J+K+L)	**392.04**	**1,710.15**	**2,220.81**	**2,265.77**	**2,251.32**	**8,840.09**
PV factor (N)	**1.00**	**0.90**	**0.80**	**0.72**	**0.64**	
PV of ARR as on 31 March 2022 (O = M*N)	**392.04**	**1,532.48**	**1,783.32**	**1,630.40**	**1,451.69**	**6,789.92**
Projected aeronautical revenues (P)	**443.57**	**1,113.29**	**1,619.76**	**2,203.87**	**2,359.68**	**7,740.17**
PV of aero revenues as on 31 March 2022 (Q=P*N)	**443.57**	**997.63**	**1,300.68**	**1,585.85**	**1,521.56**	**5,849.29**
Shortfall (-)/ Over-recovery (+) as on 31 March 2022 (R = Q-O)	**51.53**	**-534.85**	**-482.64**	**-44.54**	**69.87**	**-940.63**

13.5.14 The Authority noted that the BIAL will have a shortfall of INR 940.63 cr. as on 31 March 2022. The Authority decides to carry forward the shortfall in the next control period.

13.6 Authority's decisions regarding ARR for Third Control Period

Based on the material before it and based on its analysis, the Authority has decided the following with regards to ARR for the Third Control Period:

13.6.1 To consider Aggregate Revenue Requirement (ARR) as detailed in Table 182 above as the eligible ARR for the Third Control Period for BIAL

13.6.2 The Authority decided to consider the Variable Tariff Plan (VTP) for the Third Control Period with the exception of the Airline Partnership Programme, as it does not meet the non-discrimination guidance clause of ICAO.

13.6.3 To carry forward the shortfall of INR 940.63 cr. as on 31 March 2022 to the next control period.

13.6.4 The Authority directs BIAL to ensure the principles of non-discrimination of ICAO are not violated

13.6.5 The Authority directs BIAL to keep a separate record of accounts for incentives granted, revenue generated and the expenditure incurred in this regard during the third control period for the information of all stakeholders and AERA so as to take a considered view for determination of aeronautical tariff for next control period.

14 NOTE ON KEY ISSUES ARISING FROM UNPRECEDENTED COVID-19 IMPACT

14.1 Background

14.1.1 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 1st 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 pandemic, the total passenger traffic for the Third Control Period for BIAL is estimated to be 175 million. Assuming there was no pandemic and normal growth had taken place on the growth trajectory witnessed from FY 2013-14 to FY 2019-20, the passenger traffic during the Third Control Period would have been estimated to be around 309 million. Capacity expansion was planned by Airport Operator based on this pre-COVID normal traffic growth with an investment of around Rs. 8000 Cr. mainly between FY 2020-21 to FY 2023-24.

14.1.2 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.

14.1.3 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.

14.2 No increase of Tariff in FY 2022

14.2.1 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.

14.2.2 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.

14.2.3 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.

14.3 Recovery of certain portion of ARR in Fourth Control Period

14.3.1 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.

14.3.2 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 (in case no tariff hike is effected in the present control period) 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.

14.3.3 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.

14.4 Reduction in tariffs in the final year of Third Control Period (FY 2026)

14.4.1 The Authority has decided to increase the tariff in the Third Control Period 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 (have largely agreed with Airport Operator's projections) and financial 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.

15 SUMMARY OF AUTHORITY'S DECISIONS

The below mentioned summary provides the Authority's decisions relating to relevant chapters regarding the tariff determination for the Third Control Period as reproduced below:

Chapter 2 Review of Pre-Control Period

Based on the material before and its analysis, the Authority has decided the following with regards to the pre-control period:

2.5.1 To consider the pre-control period from airport opening date (24 May 2008) till the start of the First Control Period (31 March 2011)

2.5.2 To undertake the changes proposed in Table 4 while computing the under/ over-recovery of the pre-control period.

2.5.3 To carry forward the under/ over-recovery amount computed in Table 5 for the pre-control period to the 3rd control period.

Chapter 3 True-up for the Second Control Period

Based on the material before and its analysis, the Authority has decided the following with regards to the true-up for the Second Control Period:

3.13.1 To consider the aeronautical RAB as per Table 18 for true-up of the Second Control Period

3.13.2 To consider depreciation as per Table 31 for true-up of the Second Control Period.

3.13.3 To consider WACC as per Table 26 for true-up of the Second Control Period

3.13.4 To consider aeronautical operating expenditure as per Table 40 for true-up of the Second Control Period

3.13.5 To consider aeronautical taxation as per Table 44 for true-up of the Second Control Period

3.13.6 To consider non-aeronautical revenues as per Table 49 for true-up of the Second Control Period

3.13.7 To consider aeronautical revenues as per Table 52 for true-up of the Second Control Period

3.13.8 To consider the adjustment to the First Control Period true-up as per Table 53 for true-up of the Second Control Period

3.13.9 To carry forward the over-recovery amount of 2nd control period of INR 974.14 cr. as on 31 March 2022 (excluding pre-control period shortfall) as per Table 57 to the Third Control Period

Chapter 4 Traffic Projections for Third Control Period

Based on the material before it and based on its analysis, the Authority has decided the following with regards to traffic projections for the Third Control Period:

4.6.1 To consider the passenger traffic, ATM traffic and cargo traffic as per Table 66 respectively which shall be trued up based on actuals.

4.6.2 To consider the share of transit passengers as per Table 67 for the Third Control Period.

Chapter 5 Regulatory Asset Base (RAB) and Depreciation for the Third Control Period

Based on the material before it and based on its analysis, the Authority has decided the following with regards to regulated asset base and depreciation for the Third Control Period:

5.6.1 To reduce (adjustment) 1% of the project cost from the ARR in case any particular capital project is not completed/ capitalized as per the capitalization schedule as per the approval in tariff order including Terminal 2 (Refer Para 5.5.6).

5.6.2 To include the pre-operative expenses of INR 62.39 cr. for the deferred projects of the Second Control Period in the RAB of Third Control Period such that the total pre-operative expenses for the Second Control Period projects is capped at INR 156 cr. To true-up the pre-operative expenses for the capital expenditure projects deferred from the Second Control Period to the Third Control Period after the projects are commissioned based on the review of the actual cost incurred and its reasonableness.

5.6.3 To consider the pre-operative expenses as 2% of the total project cost of Group B projects for the Third Control Period. However, this is subject to true-up on review of the total pre-operative expenses and its apportionment over all the eligible work. (Refer Para 5.5.36)

5.6.4 To consider the contingency cost as 3% of the Third Control Period project cost (Refer Para 5.2.73).

5.6.5 To consider the total asset addition and aeronautical asset addition given in Table 99 and Table 100 respectively for the Third Control Period

5.6.6 To true-up the total asset addition, asset allocation and the aeronautical asset addition for the Third Control Period based on the actual asset addition undertaken in the next control period and subject to its reasonableness.

5.6.7 To consider the aeronautical depreciation given in Table 101 for the Third Control Period

5.6.8 To consider the aeronautical RAB given in Table 102 for the Third Control Period.

Chapter 6 Weighted Average Cost of Capital (WACC) for the Third Control Period

Based on the materials before it and based on its analysis, the Authority has decided the following with regards to WACC for the Third Control Period:

6.6.1 To consider the cost of equity at 15.05% as per the outcome of the independent study.

6.6.2 To consider the notional debt to equity (gearing) ratio of 48%:52% as suggested by the independent study

6.6.3 To consider 7.85% as cost of debt for the Third Control Period.

6.6.4 To true-up the cost of debt of BIAL for the Third Control Period based on actuals subject to its reasonableness and efficiency.

6.6.5 To consider the WACC of 11.59% for the Third Control Period based on above mentioned cost of equity, cost of debt and considering the notional gearing ratio as suggested by the independent study.

Chapter 7 Operating Expenses for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to operating expenses for the Third Control Period:

7.6.1 To consider allocation ratio as set out in Table 151 above for the Third Control Period

7.6.2 To consider aeronautical operating expenditure as set out in Table 152 for the Third Control Period

7.6.3 To true up the operating expenditure for the current control period based on actuals, at the time of determination of tariff for the next control period.

Chapter 8 Non – aeronautical revenue for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to non-aeronautical revenues for the Third Control Period:

8.6.1 To consider non-aeronautical revenue as set out in Table 169 above for the Third Control Period

8.6.2 To treat real estate revenue as non-aeronautical revenues.

8.6.3 To treat interest income as non-aeronautical revenues.

8.6.4 To true up non-aeronautical revenues for the current control period, at the time of determination of tariff for the next control period.

Chapter 9 Taxation for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to taxation for the Third Control Period:

9.6.1 To consider tax outflow estimate as set out in Table 172 for the Third Control Period.

9.6.2 To true-up the aeronautical tax estimates based on actual tax outflow at the end of the current control period

Chapter 10 Working Capital Interest for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to working capital interest for the Third Control Period:

10.6.1 To consider working capital interest / fee as detailed in Table 175 for the Third Control Period.

10.6.2 To true up the working capital interest/ fee projections based on actuals, at the end of the control period, in computation of tariff for the next control period.

Chapter 11 Inflation for the Third Control Period

Based on the material before it and its analysis, the Authority has decided the following with regards to inflation for the Third Control Period:

11.6.1 The Authority decides to consider the inflation of 4.9% for the Third Control Period based on the mean WPI inflation forecast for FY 2021-22 given in the 69th round of survey professional forecasters on macroeconomic indicators of RBI.

Chapter 12 Quality of Service for the Third Control Period

Based on the material before it and based on its analysis, Authority has decided the following with regards to Quality of Service for the Third Control Period:

12.6.1 The Authority decides that BIAL shall ensure that service quality at Kempegowda International Airport conforms to the performance standards as indicated in the Concession Agreement over the Third Control Period.

12.6.2 The Authority decides not to levy any penalties / rebates against BIAL for the Second Control Period.

Chapter 13 Aggregate Revenue Requirement for the Third Control Period

Based on the material before it and based on its analysis, the Authority has decided the following with regards to ARR for the Third Control Period:

13.6.1 To consider Aggregate Revenue Requirement (ARR) as detailed in Table 182 above as the eligible ARR for the Third Control Period for BIAL

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Airports Economic Regulatory Authority of India

13.6.2 The Authority decided to consider the Variable Tariff Plan (VTP) for the Third Control Period with the exception of the Airline Partnership Programme, as it does not meet the non-discrimination guidance clause of ICAO.

13.6.3 To carry forward the shortfall of INR 940.63 cr. as on 31 March 2022 to the next control period.

13.6.4 The Authority directs BIAL to ensure the principles of non-discrimination of ICAO are not violated

13.6.5 The Authority directs BIAL to keep a separate record of accounts for incentives granted, revenue generated and the expenditure incurred in this regard during the third control period for the information of all stakeholders and AERA so as to take a considered view for determination of aeronautical tariff for next control period.

16 ORDER

16.1.1 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 tariffs to be levied at Kempegowda International Airport, Bengaluru for the Third Control Period (1st April 2021 to 31st March 2026) as seen in Annexure I (1A and 1B) to the Order.

16.1.2 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 I to the Order for the current Control Period.

16.1.3 This tariff order shall be made effective from 1st October 2021.

By the order of and in the name of the Authority

(Col. Manu Sooden)
Secretary, AERA

To,
Shri Hari K Marar
Managing Director & CEO
Bangalore International Airport Limited
Alpha-2, Kempegowda International Airport,
Bengaluru – 560 300, India

Copy to,

1. **Secretary, Ministry of Civil Aviation**
   Rajiv Gandhi Bhawan,
   Safdarjung Airport,
   New Delhi – 110 003

2. **Directorate General of Civil Aviation, for issue of AIC**

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Airports Economic Regulatory Authority of India
सत्यमेव जयते

17 ANNEXURES

17.1 Annexure 1A – Tariff card pertaining to KIA, Bengaluru for Third Control Period as approved by the Authority – Effective from October 01, 2021 to March 31, 2026

17.1.1 **Landing and Parking Charges**

General: -

1) Landing and Parking Charges are payable to Bangalore International Airport Limited.
2) Weight of an aircraft means MTOW in MT (1000kg) as indicated in the certificate of airworthiness.
3) Charges shall be calculated on the basis of nearest MT (i.e. 1000 kg)

a) Landing charges

Applicable rates from 1st October 2021 to 31st March 2022

Weight of Aircraft	International Flight	Other than International Flight
Up to 100 MT	INR 410.00 per MT	INR 207.00 per MT
Above 100 MT	INR 41,000 + INR 552.00 per MT in excess of 100 MT	INR 20,700 + INR 280.00 per MT in excess of 100 MT

Applicable rates from 1st April 2022 to 31st March 2023

Weight of Aircraft	International Flight	Other than International Flight
Up to 100 MT	INR 440.00 per MT	INR 260.00 per MT
Above 100 MT	INR 44,000 + INR 550.00 per MT in excess of 100 MT	INR 26,000 + INR 350.00 per MT in excess of 100 MT

Applicable rates from 1st April 2023 to 31st March 2024

Weight of Aircraft	International Flight	Other than International Flight
Up to 100 MT	INR 660.00 per MT	INR 365.00 per MT
Above 100 MT	INR 66,000 + INR 790.00 per MT in excess of 100 MT	INR 36,500 + INR 490.00 per MT in excess of 100 MT

Applicable rates from 1st April 2024 to 31st March 2025

Weight of Aircraft	International Flight	Other than International Flight
Up to 100 MT	INR 685.00 per MT	INR 510.00 per MT
Above 100 MT	INR 68,500 + INR 820.00 per MT in excess of 100 MT	INR 51,000 + INR 685.00 per MT in excess of 100 MT

Applicable rates from 1st April 2025 to 31st December 2025

Weight of Aircraft	International Flight	Other than International Flight
Up to 100 MT	INR 715.00 per MT	INR 510.00 per MT
Above 100 MT	INR 71,500 + INR 855.00 per MT in excess of 100 MT	INR 51,000 + INR 685.00 per MT in excess of 100 MT

Applicable rates from 1st January 2026 to 31st March 2026

Weight of Aircraft	International Flight	Other than International Flight
Up to 100 MT	INR 500.00 per MT	INR 355.00 per MT
Above 100 MT	INR 50,000 + INR 600.00 per MT in excess of 100 MT	INR 35,500 + INR 480.00 per MT in excess of 100 MT

Note:

1) No landing charges shall be payable in respect of:
    a. Aircrafts with a maximum certified passenger capacity of less than 80 seats, being operated by domestic scheduled operators at the airport and
    b. Helicopters of all types (not applicable to non-scheduled operators)
2) Non-scheduled flights: A minimum fee shall be charged per landing for all types of aircraft flights, helicopter flights including but not limited to domestic landing, international and general aviation landing for the control period as given below:
    a. FY22 and FY23 – INR 5,000/-
    b. FY24, FY25 and FY26 - INR 7,500/-

b) Parking charges

Parking Charges for All aircrafts - Domestic & International (First two hours after free parking period)

Weight of Aircraft	1.10.2021 – 31.03.2022 (FY22)	1.04.2022 – 31.03.2023 (FY23)	1.04.2023 – 31.03.2024 (FY24)	1.04.2024 – 31.03.2025 (FY25)	1.04.2025 – 31.12.2025 (FY26)	1.01.2026 – 31.03.2026 (FY26)
Up to 100 MT	INR 4.00 per hour per MT	INR 6.00 per hour per MT	INR 8.00 per hour per MT	INR 12.00 per hour per MT	INR 17.00 per hour per MT	INR 12.00 per hour per MT
Above 100 MT	INR 400/- + INR 5.00 per MT per hour in excess of 100 MT	INR 600/- + INR 7.00 per MT per hour in excess of 100 MT	INR 800/- + INR 11.00 per MT per hour in excess of 100 MT	INR 1200/- + INR 15.00 per MT per hour in excess of 100 MT	INR 1700/- + INR 21.00 per MT per hour in excess of 100 MT	INR 1200/- + INR 15.00 per MT per hour in excess of 100 MT

Parking Charges* for All aircrafts - Domestic & International (Beyond four hours)

Weight of Aircraft	1.10.2021 – 31.03.2022 (FY22)	1.04.2022 – 31.03.2023 (FY23)	1.04.2023 – 31.03.2024 (FY24)	1.04.2024 – 31.03.2025 (FY25)	1.04.2025 – 31.12.2025 (FY26)	1.01.2026 – 31.03.2026 (FY26)
Up to 100 MT	INR 7.00 per hour per MT	INR 10.00 per hour per MT	INR 14.00 per hour per MT	INR 20.00 per hour per MT	INR 28.00 per hour per MT	INR 20.00 per hour per MT
Above 100 MT	INR 700/- + INR 9.00 per MT per hour in excess of 100 MT	INR 1000/- + INR 13.00 per MT per hour in excess of 100 MT	INR 1400/- + INR 18.00 per MT per hour in excess of 100 MT	INR 2000/- + INR 25.00 per MT per hour in excess of 100 MT	INR 2800/- + INR 35.00 per MT per hour in excess of 100 MT	INR 2000/- + INR 25.00 per MT per hour in excess of 100 MT

*Housing charges categorized as parking charges

1) 2 hours of free parking period is allowed on all stands. Thereafter, parking charges will be applicable.
2) Parking time will be calculated based on ON BLOCK and OFF BLOCK time as recorded at Airport Operations Control Centre (AOCC).

3) For calculating chargeable parking time, part of an hour shall be rounded off to the next hour.
4) Parking charges for unauthorized overstay in case of long-term parking arrangements shall be 3 times the applicable parking charges.

Exemption in Landing and Parking Charges:

1) Military aircraft (Government of India) including para-military forces such as BSF, Coast Guard etc. are also exempted from parking charges.
2) Domestic leg of International routes of Foreign carriers shall be treated as International flights.
3) Domestic legs of international routes of Indian operators to be treated as domestic flights as far as landing charges are concerned, irrespective of the flight numbers assigned to such flights.

17.1.2 **User Development Fee**

Applicable rates from 1st October 2021 to 31st March 2022

Type of Passenger	Proposed Rate
International embarking passenger	INR 839.00 per pax
Domestic embarking passenger	INR 184.00 per pax

Applicable rates from 1st April 2022 to 31st March 2023

Type of Passenger	Proposed Rate
International embarking passenger	INR 1200.00 per pax
Domestic embarking passenger	INR 350.00 per pax

Applicable rates from 1st April 2023 to 31st March 2024

Type of Passenger	Proposed Rate
International embarking passenger	INR 1400.00 per pax
Domestic embarking passenger	INR 450.00 per pax

Applicable rates from 1st April 2024 to 31st March 2025

Type of Passenger	Proposed Rate
International embarking passenger	INR 1500.00 per pax
Domestic embarking passenger	INR 550.00 per pax

Applicable rates from 1st April 2025 to 31st December 2025

Type of Passenger	Proposed Rate
International embarking passenger	INR 1500.00 per pax
Domestic embarking passenger	INR 550.00 per pax

Applicable rates from 1st January 2026 to 31st March 2026

Type of Passenger	Proposed Rate
International embarking passenger	INR 1050.00 per pax
Domestic embarking passenger	INR 385.00 per pax

Note:

a) UDF Collection Charges: If payment is made within 15 days from receipt of invoice, then collection charges per departing passenger shall be paid by BIAL 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 BIAL within the credit period of 15 days or in case of any part payment.

b) For conversion of US$ to INR, the RBI 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.

c) Revised UDF charges will be applicable on tickets issued on or after the implementation of new tariff rate card.

General Conditions: -

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 10.04.2019/30.10.2019) the following categories of persons are exempted from levy and collection of UDF.

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 upto 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 passenger)
7) Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

17.1.3 CUSS/CUTE/BRS Charges*

Applicable rates from 1st October 2021 to 31st March 2026

Charges per departing passenger	USD $1.00

1) * Concessioned to Concessionaire on revenue share model. The charges mentioned above will be collected by Concessionaire from Airlines.
2) CUSS/CUTE/BRS charge shall be applicable to the below departing passengers:
    a. Passengers on scheduled flights
    b. Passengers on non-scheduled, charter flights
3) For scheduled passenger flights, the charges shall be billed and collected by the Concessionaire.
4) For adhoc/non-scheduled passenger flights, the charges shall be billed and collected by Bangalore International Airport Ltd.
5) For conversion of US$ to INR, the RBI 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.

17.1.4 Taxes

1) All the above Airport charges and Fee are subject to taxes, duties and cess at applicable rates.

17.1.5 GENERAL CONDITION:

1) Flights 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.

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17.2 Annexure 1B – Variable Tariff Plan pertaining to KIA, Bengaluru for Third Control Period as approved by the Authority – Effective from October 01, 2021 to March 31, 2026

BIAL has proposed a Variable Tariff Plan (VTP) under major categories given below which are applicable to Scheduled Domestic & International Passenger and Cargo Airlines only.

The definition of various categories is given below:

1) **New Route**

   a. A flight to a new destination that is currently unserved from BLR Airport by any airline in the previous 2 IATA seasons – (Summer'20, Winter'20-21, Summer'21 excluded), including:

   b. Ultra Long-haul (ULH) Destinations>8000 km from BLR and having existing frequencies less than 14 departures/week, and/or;

   c. Long-haul (LH) Destinations between 5,000-8,000 km from BLR and having existing frequencies less than 7 departures/week.

2) **Additional frequency/new airline on an existing long-haul/ultra long-haul route – International**

   a. Existing international long haul/ultra long-haul routes - Routes other than 'New Route' defined above

   b. New Airline/additional frequency on existing route, compared to the operations in previous 2 IATA seasons – (Summer'20, Winter'20-21, Summer'21 excluded), including:

      i. Long-haul / Ultra long-haul Destinations beyond 5,000 kms from BLR, and

      ii. Weekly frequencies: >=14/week for >8000 kms, and/or

      iii. Weekly frequencies: >=7/week for 5000-8000 kms

3) **Aircraft upgauge (International)**

   a. An airline upgrading aircraft type on any of the weekly frequencies to Code E or F with no reduction in overall frequencies per week, compared to the aircraft and frequencies operated in the previous 2 IATA seasons – (Summer'20, Winter'20-21, Summer'21 excluded)

17.2.1 VTP for Scheduled Passenger Flights

1. NEW ROUTES (FOR BLR AIRPORT) - INTERNATIONAL									
Years	Year 1			Year 2			Year 3		
Distance	>8000 km	5000-8000 km	<5000 km	>8000 km	5000-8000 km	<5000 km	>8000 km	5000-8000 km	<5000 km
Landing charges for International passenger flights									
Rate per MTOW (for MTOW<=100)	-	0.00*RR	0.00*RR	-	0.25*RR	0.50*RR	-	-	-
Rate per MTOW (for MTOW>100)	0.00*RR	0.00*RR	0.00*RR	0.25*RR	0.25*RR	0.50*RR	0.25*RR	0.50*RR	0.70*RR

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2. ADDITIONAL FREQUENCY/ NEW AIRLINE ON AN EXISTING LONG-HAUL/ULTRA LONG-HAUL ROUTE - INTERNATIONAL	
	Year 1
	Routes > 5000 km
Landing charges for Intl pax flights	
Rate per MTOW (for MTOW>100)	0.50*RR

3. UP-GAUGING OF FLIGHT TO CODE E OR F – INTERNATIONAL	
	Year 1
Landing charges for Intl pax flights	
Rate per MTOW (for MTOW>100)	0.50*RR

*RR means rack rate

Other general terms and conditions

1) The proposed VTP is applicable to airlines operating scheduled passenger flights and that have signed a formal Airline Operations Agreement (AOA) with BIAL to use the services provided at the Airport.

2) No discount over and above the variable tariff plan shall be applicable.

3) An airline should operate a minimum of 16 weeks of continuous scheduled operations to avail VTP.

4) The payment of landing charges should be done in full without any deductions, as per the invoicing by BIAL. The discount shall be provided in the form of a 'Credit Note' at the end of a respective IATA season of operations.

5) Airlines once enrolled in the incentive schemes will continue benefiting until the expiration of their respective scheme. Airlines already benefiting from a particular scheme cannot switch to the new VTP for same operation. For E.g.: If an Airline XY commences wide operations on a new International Route in Oct 2025, then the VTP applicable as of commencement date shall apply throughout the next 3 years. Any new VTP scheme launched subsequently will not apply to them.

6) BIAL reserves the right to change any term or condition of this VTP, withdraw or replace any of the category, at any time at its absolute discretion, by way of prior notification through a channel as it deems fit.

7) On a new international route, upgauge of aircraft in the first 2 years to Code E or F will be entitled for the 3rd year of incentives. For E.g. If an Airline XY commences operations with a narrow body aircraft on a new international route and upgauges the aircraft type before the end of 2nd year of operations, the airline will be entitled for the 3rd year of incentive as well.

8) The aircraft categorization has been defined as per wingspan (Annex 14 ICAO)

9) The unit of Kilometers refers to air kilometers for calculating the qualifying distance as per great circle path.

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17.2.2 **VTP for Cargo Flights**

Type	New Airline and or New Route		Additional arrival airline frequency
	Year 1	Year 2	Year 1
Landing charges for Domestic & International Flights			
Rate per MTOW (for MTOW<=100)	0*RR	0.25*RR	0.5*RR
Rate per MTOW (for MTOW>100)	0*RR	0.25*RR	0.5*RR

Other applicable points for Cargo flights only

1) RR refers to the rack rate for each individual year in the main tariff plan
2) The VTP is for freighters and passenger to cargo (P2C) converted flights
3) All benefits under New Airline and New Route shall be applicable only to Scheduled Airlines (i.e., they have signed a formal Airline Operations Agreement with BIAL)
4) For purpose of this VTP plan airline frequency means the number of arrival services in a week that an airline may provide
5) Scheduled Flights means flights of an airline that provides air transport service between the two or more places and operated according to a published timetable or with flights so regular or frequent that they constitute a recognisably systematic series, each flight being open to use by members of the public for their air cargo transportation needs.
6) New Airline means a new airline operating into Kempegowda International Airport, Bengaluru with a freighter aircraft
7) New Route means a route that is currently unserved by a freighter aircraft from Kempegowda International Airport, Bengaluru by any airline (unserved by the qualifying airline for the previous 6 months)

17.3 Annexure 3 – Summary of study on allocation of assets between aeronautical and non-aeronautical assets

Background

17.3.1 RAB is the most significant driver for tariff determination as it also has an impact on other building blocks i.e., Fair Rate of Return (FROR), operation costs and depreciation. RAB's impact on tariff determination process is increasing with significant investments being made to expand capacity. Under the shared till approach, segregation of RAB into Aeronautical ('Aero') and Non-aeronautical ('Non-Aero') assets becomes an important determinant of tariff determination.

17.3.2 For this purpose, the Regulatory Asset Base is bifurcated between aeronautical and non-aeronautical assets. Bifurcation of regulatory asset base is dependent on many factors such as the usage of the assets, location of the asset, type of revenues generated from the asset, etc. Due to multiplicity of factors, a detailed analysis of assets in the books of account of BIAL is required to be undertaken to determine the aeronautical Regulatory Asset Base.

17.3.3 The Authority had commissioned a study regarding allocation of assets between aeronautical and non – aeronautical for the Second Control Period.

Classification of Assets

17.3.4 The study based on their analysis, classified the aggregate assets of BIAL under the following categories:

a. **Aeronautical:** Assets which are required for performance of the aeronautical services at the airport. Aeronautical services are as defined under the AERA Act. These assets include runways, taxiways, aprons, ARFF related assets, BHS, ground handling, cargo terminals, approach roads, airside lighting, VIP/ reserved lounges, etc.
b. **Non-aeronautical:** Assets which are required for performance of the non-aeronautical services at the airport. These assets include car parking, lounges, advertisement, retail plaza, commercial real estate development, etc.
c. **Common:** Assets which are not directly attributable to either aeronautical or non-aeronautical services. These assets include the terminal building, air conditioning, furniture, administrative office of airport company, etc.

Principle for segregation of assets

17.3.5 The study reviewed the various asset categories and developed a basis for classification of assets into aeronautical and non – aeronautical activities. The study also determined the appropriate proportion of the Common Assets that may be included as part of Aeronautical activity so in order to determine the Aeronautical asset base. The principles of segregation used by the study are as follows:

Aeronautical Assets

- Assets required for the performance of the aeronautical services at the airport.
- Classification of aeronautical assets are taken as defined in the AERA Act.
- Assets necessary to maintain the service quality of the airport are proposed to be considered as aeronautical except those located in the commercial real estate development.

Non - Aeronautical Assets

- Assets required for the performance of the non - aeronautical activities at the airport. Examples include car parking, advertisement, retail etc.

Common Assets

- Common assets are assets which are not directly attributable to either aeronautical or non-aeronautical services. These assets include the terminal building, air conditioning, furniture, administrative office of airport company, etc.
- Common assets are bifurcated by BIAL between aeronautical and non-aeronautical assets based on the ratio of aeronautical and non-aeronautical area of the terminal building. AERA has adopted the approach to allocate the assets based upon terminal area ratio or gross fixed asset ratio. The study proposes to adopt the approach for bifurcation of common assets based on the terminal area ratio. The ratio of aero to non-aero terminal area is taken as average terminal area ratio of 85.73% in the Second Control Period.

Details of adjustment to RAB

A. Reclassification from aeronautical assets to common assets

Electrical and powerhouse equipment

a. Allocation as per BIAL: Aeronautical
b. Observation: Power supply infrastructure at an airport provides power to air side, roads, terminal building and forecourts. These equipment include the DG sets, UPS, substations, power distribution board, low tension switchboards, high tension cables, etc. Since, these assets serve both the aeronautical assets as well as the common assets, bifurcation based on the usage is required.
c. Revised asset allocation: Accordingly, the assets serving the terminal building, forecourts, airport and not identifiable are proposed to be classified as common assets.
d. Impact on RAB for Second Control Period: Reduction of INR 4.69 cr.

BIAL – App (mobile application) (Thoughtworks project) under Software & program licenses

a. Allocation as per BIAL: Aeronautical
b. Observation: On the query regarding the BIAL – App, BIAL responded that "This is a Customer Oriented Platform-APP exclusively for the Passenger Experience Enhancement - It enable Intimation & Notification of Flight, Boarding information, Wi-Fi connectivity, feedback of airport services etc." It is noted from the mobile application that in addition to providing the flight information, the application also provides the details of the retail, F&B outlets, car parking, etc. Thus, the application provides information of both aeronautical and non-aeronautical services at the airport. Further, BIAL has classified its BIAL Public Portal – www.bengaluruairport.com as a common asset. BIAL App (mobile application) is also assumed to be a similar asset to BIAL public portal.
c. Revised asset allocation: Accordingly, the costs associated with Thoughtworks project for development of mobile app are proposed to be classified from aeronautical to common assets.
d. Impact on RAB for Second Control Period: Reduction of INR 0.59 cr.

Water harvesting assets

a. Allocation as per BIAL: Aeronautical

b. Observation: BIAL has developed water harvesting ponds/ rain sumps to store rain water for use at the airport. It is noted that these rain water sumps serve both aeronautical and non-aeronautical assets.
c. Revised asset allocation: Accordingly, the costs associated with water harvesting ponds/ rain sumps are classified as common assets.
d. Impact on RAB for Second Control Period: Reduction of INR 13.29 cr.

B. Reclassification from aeronautical assets to non-aeronautical assets

Buildings – Landscaping in the commercial real estate development area

a. Allocation as per BIAL: Aeronautical
b. Observation: Landscaping is undertaken by the airport to provide enhanced passenger experience while also meeting the environment sustainability goals of the airport. However, it was noted that landscaping undertaken around the airport hotel has also been considered as aeronautical by BIAL.
c. Revised asset allocation: Since, the assets forming part of the commercial real estate development are considered as non-aeronautical assets, the capital expenditure for landscaping in and around the commercial real estate development is also considered as non-aeronautical.
d. Impact on gross block: Due to change in asset allocation methodology, the reduction in gross block of Buildings – Landscaping in FY20 is INR 0.14 cr.
e. Impact on RAB for Second Control Period: Reduction of INR 0.14 cr.

Car park and advertising related assets under Airport Equipment – Operations related

a. Allocation as per BIAL: Aeronautical
b. Observation: Car park and advertising related assets are non-aeronautical assets as per past orders of AERA. However, these assets have been considered as aeronautical by BIAL.
c. Revised asset allocation: Accordingly, the costs associated with car park and advertising related assets are classified as non-aeronautical assets.
d. Impact on RAB for Second Control Period: Reduction of INR 0.17 cr.

C. Adjustments to proposed asset additions of FY21

Exclusion of enabling works for eastern connectivity tunnel

a. Allocation as per BIAL: Aeronautical
b. Observation: AERA in its Second Control Period for BIAL had excluded the enabling works for eastern connectivity tunnel. Accordingly, these are excluded from the FY21 asset additions.
c. Revised asset allocation: Excluded from the FY21 asset addition.
d. Impact on RAB for Second Control Period: Reduction of INR 86.55 cr.

Express cargo

a. Allocation as per BIAL: Non-Aeronautical
b. Observation: AERA Act, 2008 considers the cargo, ground handling and fuel services as aeronautical services. Accordingly, the express cargo capital expenditure is considered as aeronautical.
c. Revised asset allocation: Considered as aeronautical
d. Impact on RAB for Second Control Period: Increase of INR 88.49 cr.

Revised asset allocation ratio from gross block ratio to terminal area ratio for common assets

a. Allocation as per BIAL: Common
b. Observation: Gross block ratio is a composite ratio and a weighted average of aero, common and non-aero assets. Hence, the gross block ratio should be applied on entire capex addition irrespective of it being aero, common or non-aero instead of BIAL's approach of applying it selectively on common assets. Common assets have been segregated in the asset register based on the average terminal area ratio and therefore, the same ratio (85.73%) is applied on the common assets. Based on the above, bifurcation ratio for FY21 capex of airport offices, ITI project and sustaining capex is revised from 91% to terminal area ratio of 85.73%.
c. Revised asset allocation: Revised bifurcation ratio from 91% to 85.73%.
d. Impact on RAB for Second Control Period: Reduction of INR 15.34 cr.

Adjustment to RAB during Second Control Period

17.3.6 The summary of adjustments to the aggregate assets of BIAL during the Second Control Period is given in the table below:

Table 183: Revised aeronautical asset addition from FY17 to FY20 based on the asset allocation study

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	Total
(A) Total investments in fixed assets during FY17 to FY20 (as per FAR of BIAL)	**226.31**	**170.30**	**161.00**	**2042.42**	**2,600.03**
(B) Aero asset addition to RAB as per BIAL	**213.92**	**135.99**	**132.02**	**2,007.23**	**2,489.16**
(C) Proposed adjustment to RAB of BIAL due to change in segregation logic, for reasons below:					
(C.1) Reclassification from aeronautical to common					
Electrical and Power House Equipment	-3.19	-0.60	-0.70	-0.20	-4.69
BIAL App (mobile application)	-0.27	-0.32	0.00	0.00	-0.59
Water harvesting assets	-0.08	0.00	-0.01	-13.20	-13.29
(C.2) Reclassification from aeronautical to non-aeronautical					
Landscape in real estate area	-0.14	0.00	0.00	0.00	-0.14
Car park related asset	-0.17	0.00	0.00	0.00	-0.17
(D) Total proposed adjustments due to changes in segregation logic to RAB (D = C.1 + C.2)	**-3.84**	**-0.92**	**-0.71**	**-13.40**	**-18.87**
(E) Adjustment to RAB due to change in terminal area ratio*	-9.23*	-0.14	+15.63#	0.15	**+6.45**
(F) Total impact due to proposed changes (F = D + E)	**-13.06**	**-1.06**	**15.00**	**-13.25**	**-12.38**

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	Total
(G) Adjusted aero additions to RAB during Second Control Period as per this study (G = B + F)	**200.86**	**134.93**	**147.02**	**1993.98**	**2,476.78**

Table 184: Revised aeronautical asset addition for FY21

S no	Projects	Revised submission of BIAL – total additions	Allocation as per BIAL	Aero addition to FY21 as per BIAL	Revised allocation as per the study	Revised Aero addition to FY21 as per the study	Difference
1	Site preparation & Earthworks	21.98	100.00%	21.98	100.00%	21.98	0.00
2	Aircraft Rescue & Fire Fighting	8.86	100.00%	8.86	100.00%	8.86	0.00
3	Airport Offices - Phase I	3.89	91.00%	3.54	85.73%	3.33	0.20
4	Existing Runways / Taxiway Improvements - Phase 1b	193.94	100.00%	193.94	100.00%	193.94	0.00
5	Eastern Tunnel - Enabling works	86.55	100.00%	86.55	0.00%	0.00	86.55
6	Express Cargo	88.49	0.00%	0.00	100.00%	88.49	-88.49
7	ITI Project	86.60	91.00%	78.81	85.73%	74.24	4.56
8	Sustaining capex	200.59	91.00%	182.54	85.73%	171.97	10.57
	Total	**690.90**		**576.21**		**562.81**	**13.40**

17.3.7 Based on the above, the total reduction in the aeronautical asset addition on account of these adjustments for the Second Control Period (from FY17 to FY21) is INR 25.78 cr. as given in the table below:

Table 185: Revised aeronautical asset addition from FY17 to FY21 based on the asset allocation study

Particulars (In INR Cr.)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total
Aero asset addition to RAB as per BIAL (A)	**213.92**	**135.99**	**132.02**	**2,007.23**	**576.21**	**3,065.37**
Less: Impact due to proposed changes (B)	-13.06^	-1.06	15.00#	-13.25	-13.40	**-25.78**
Adjusted aero additions to RAB during Second Control Period as per this study (C = A + B)	**200.86**	**134.93**	**147.02**	**1993.98**	**562.81**	**3,039.60**

17.3.8 Based on the above, the year-wise revision in the asset allocation ratio of the Gross Block and the asset additions from FY17 to FY21 has been summarized in the table below:

Particulars*	FY17	FY18	FY19	FY20	FY21#	Total
Opening total gross block as per FAR of BIAL (A)	3714.01	3940.32	4110.62	4271.62	6314.03	22,350.59
Net additions after adjustment for disposals (B)	226.31	170.30	161.00	2042.42	690.90	3,290.93
Closing gross block as per FAR of BIAL (C = A + B)	**3940.32**	**4110.62**	**4271.62**	**6314.03**	**7004.93**	**25,641.51**
Aero Gross Block as submitted by BIAL						
Opening aero gross block (D)	3,363.00	3,576.92	3,712.91	3,844.93	5,852.17	20,349.94
Net aero additions after adjustment for disposals (E)	213.92	135.99	132.02	2,007.23	576.21	3,065.37
Closing aero gross block (F = D + E)	**3,576.92**	**3,712.91**	**3,844.93**	**5,852.17**	**6,428.38**	**23,415.31**
Opening non-aero gross block (H = A - D)	351.00	363.39	397.70	426.68	461.87	2,000.65
Net non-aero additions after adjustment for disposals (I = B - E)	12.39	34.31	28.98	35.18	114.69	225.55
Closing non-aero gross block (J = H + I)	**363.39**	**397.70**	**426.68**	**461.87**	**576.56**	**2,226.20**
Total Gross Block (C=F+J)	**3940.32**	**4110.62**	**4271.62**	**6314.03**	**7004.93**	**25,641.51**
Aero gross block ratio (G)	**90.78%**	**90.32%**	**90.01%**	**92.69%**	**91.77%**	**91.32%**
Reclassification of assets as per this study						
Opening aero gross block^ (K)	3,317.35^	3,518.21	3,653.14	3,800.16	5,794.13	20,082.99
Net aero additions after adjustment for disposals (L)	200.86	134.93	147.02	1,993.98	562.81	3,039.60
Closing aero gross block (M = K + L)	**3,518.21**	**3,653.14**	**3,800.16**	**5,794.13**	**6,356.95**	**23,122.59**
Opening non-aero gross block (O = C - K)	396.66	422.11	457.48	471.46	519.90	2,267.60
Net non-aero additions after adjustment for disposals (P = B - L)	25.46	35.37	13.98	48.44	128.09	251.33
Closing non-aero gross block (Q = O + P)	**422.11**	**457.48**	**471.46**	**519.90**	**647.98**	**2,518.93**

Particulars*	FY17	FY18	FY19	FY20	FY21#	Total
Total Gross Block (C= M+Q)	3940.32	4110.62	4271.62	6314.03	7004.93	25,641.51
Aero gross block ratio (N=M/C)	89.29%	88.87%	88.96%	91.77%	90.75%	90.18%
Net impact on the aero additions (R = L – E)	-13.06	-1.06	15.00	-13.25	-13.40	-25.78
Net impact on aero ratio (S = N – G)	-1.49%	-1.45%	-1.05%	-0.92%	-1.02%	-1.14%

17.3.9 As seen from the above table, the total reduction due to the above adjustments in the aeronautical asset addition from FY17 to FY21 as on 31 March 2021 is INR 25.78 cr. (includes adjustment for revision of terminal area ratio).

17.4 Annexure 4 - Summary of study on efficient Operation and Maintenance costs

Background

17.4.1 Establishing efficient operation and maintenance costs and their reasonableness is essential to the effective execution of tariff determination exercise for aeronautical services. This expenditure has consistently been increasing, driven by investments in expanding, modernizing and improving the efficiency and excellence of the airport by BIAL.

17.4.2 Assessment of Operation and Maintenance cost requires AERA to examine the financial information submitted by the airport operator, and also examine the baseline operating cost levels, cost reduction, efficiency initiatives and benchmarking exercises undertaken by the airport operator etc.

17.4.3 The Authority had commissioned a study to determine aeronautical Operations & Maintenance costs for the Second Control Period.

Principles for segregation of costs

17.4.4 The operations and maintenance costs have been bifurcated into aeronautical, non-aeronautical and common costs based on the provisions of the AERA Act, 2008.

17.4.5 The bifurcation of the personnel cost, operation and maintenance cost, general administration cost, marketing and advertising cost (except collection charges which are considered as aeronautical expense) is undertaken as per below:

a) These major expenses are sub-divided into sub-cost centres.

b) Each sub-cost centre is categorized into aeronautical, non-aeronautical and common and the expenses within that sub-cost centre are also categorized accordingly.

c) These common costs except for marketing and advertisement expenses have been further bifurcated into aeronautical and non-aeronautical costs based on the expense allocation ratio (based on directly attributable expenses within the major cost head).

d) Marketing and advertisement expenses are bifurcated based on 85:15 ratio which is the average for previous years.

e) Sub-cost centres whose allocation is changed from aeronautical to common include quality management, corporate affairs, terminal operations, ops, planning and project co-ordination, innovation lab, landside maintenance – special equipment, utility – water supply, utility – power supply, corporate communication, chief operations officer, customer engagement and service quality and president – airport operations.

17.4.6 The bifurcation of the remaining expenses is undertaken as per below:

a) Concession fee – Since the tariff computation for BIAL is undertaken on hybrid till, the aeronautical concession fee for BIAL is computed as 4% of the aeronautical revenues. The study has considered the CGF revenues as part of the aeronautical revenues for computing the aeronautical concession fee as per the AERA Act, 2008, AERA guidelines, the concession agreement of BIAL and Hon'ble TDSAT judgement dated 16th December 2020.

b) CSR expenses – Computed based on the aeronautical profit before tax for BIAL.

c) Donations and waivers and bad debts – These expenses have been excluded as per AERA's Second Control Period order for BIAL.

d) Land lease rent and rates and taxes – Land usage by BIAL has been primarily for airport with very low utilization under real estate development till FY 2020 and it is forecasted to remain the same in FY 2021. Accordingly, the lease rent and rates and taxes are considered as aeronautical.

e) Utility cost – The utility cost has been adjusted for the utility recoveries from aeronautical concessionaires as per AERA's Second Control Period order for BIAL. The net amount has been considered as aeronautical expenses.

f) Insurance cost – These expenses are bifurcated based on the revised asset ratio.

Details of adjustment to O&M expenses

17.4.7 The study on the basis of the expense classification and principles of segregation adopted, as can be seen in the above paragraphs, has considered re-segregation of Operation and Maintenance expenses to determine aeronautical O&M costs. The study has proposed the following adjustments:

Table 186: Revised segregation logic for O&M costs as per the study for Second Control Period

Operational expenditure*	FY 2017	FY 2018	FY 2019	FY 2020	FY2021
Personnel Expenses	90.44%	91.05%	89.71%	88.94%	88.94%
Operations & Maintenance	83.62%	84.78%	82.66%	84.49%	89.64%
Lease Rent	100.00%	100.00%	100.00%	100.00%	100.00%
Utility (Net)	100.00%	100.00%	100.00%	100.00%	100.00%
Insurance	89.29%	88.87%	88.96%	91.98%	90.93%
Rates & Taxes (other than IT)	100.00%	100.00%	100.00%	100.00%	100.00%
Collection cost	100.00%	100.00%	100.00%	100.00%	100.00%
Marketing and Advertising	89.82%	83.60%	85.17%	84.80%	84.80%
Total General Administration Costs	95.10%	91.27%	63.34%	59.03%	90.00%
Total operational expenditure – Study	**87.14%**	**87.14%**	**79.83%**	**79.62%**	**87.79%**
Total operational expenditure – BIAL	**89.30%**	**89.04%**	**87.51%**	**87.46%**	**90.79%**

Aeronautical O&M costs for the Second Control Period

17.4.8 Based on the above, the aeronautical operating and maintenance cost for BIAL for the Second Control Period is given below:

Table 187: Aeronautical operation and maintenance cost for BIAL for the Second Control Period

Operating expenses adjustments*	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Personnel expenses	107.37	110.43	137.41	174.29	187.78	717.27
O&M	83.03	98.97	96.93	117.09	120.09	516.11

Operating expenses adjustments*	FY 2017	FY 2018	FY 2019	FY 2020	FY2021	Total
Lease Rent	13.01	13.42	13.83	14.24	14.67	69.17
Utility	36.45	41.92	34.86	34.22	23.41	170.86
Insurance	1.57	2.22	1.94	3.25	5.64	14.62
Rates & taxes (other than IT)	8.72	6.55	9.36	8.90	8.29	41.82
Marketing & Advertising	7.90	9.02	12.93	10.77	6.07	46.68
CSR	2.14	4.22	6.98	6.85	5.21	25.41
General admin costs	23.40	27.34	17.28	19.90	24.09	112.02
Total operating expenses – Aero	**283.59**	**314.08**	**331.52**	**389.51**	**395.26**	**1713.96**
Waiver and bad debts	0.00	0.00	0.00	0.00	0.00	0.00
Concession fee	39.63	44.62	38.11	32.85	13.21	168.42
Total operating expenditure – Aero as per the study	**323.22**	**358.70**	**369.63**	**422.36**	**408.47**	**1882.38**
Total Operating expenditure – Aero as per BIAL	**332.05**	**367.33**	**406.02**	**463.89**	**464.20**	**2,033.48**

17.4.9 The airport operator, that is, BIAL had proposed a total operational expenditure of INR 2,290.07 cr., the aeronautical operational expenditure as INR 2,033.48 cr. and the non-aeronautical operational expenditure as INR 256.59 cr. for the Second Control Period.

17.4.10 Based on the study, the total operational expenditure is INR 2,241.31 cr. (based on audited financial statements) and the proposed aeronautical operational expenditure is INR 1,882.38 cr. for the Second Control Period. Thus, resulting in a reduction of INR 151.10 cr. in the aeronautical operational expenditure for the Second Control Period. The opex allocation ratio for the Second Control Period as submitted by BIAL is 88.80% while that considered in the study is 83.99%.

17.5 Annexure 5 - Summary of independent study on determination of cost of equity

Background

17.5.1 The airport infrastructure sector has been undergoing a phased change during the past 15 years. The first Public Private Partnership (PPP) model of airport operations was implemented in Delhi, Mumbai, Bangalore and Hyderabad airports starting in 2004.

17.5.2 While Delhi and Mumbai were brownfield projects, Bangalore and Hyderabad were greenfield in nature. As with any infrastructure project, these projects involved high Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) mobilization. To ensure viability of airport investment, it is standard practice to provide a reasonable return to investors by charging airport users an appropriate tariff.

17.5.3 The Airports Economic Regulatory Authority (AERA) was established in 2008 for fixing aero tariffs and User Development Fee (UDF) at different airports. AERA uses the Capital Asset Pricing Model (CAPM) to determine the Cost of Equity (CoE) and hence the FRoR. The study computes the cost of equity and further the FRoR for Bangalore International Airport Ltd. (BIAL).

Scope of Engagement

17.5.4 The scope of the engagement as stipulated under original terms of reference from the Authority is given below:

- Study of relevant environment, trends in airport capitalization
- Study airport-specific determinants of Cost of Capital with specific focus on Cost of Equity
- Recommendations on Cost of Equity
- Follow-on activities

17.5.5 The objective of the independent study is to provide recommendations on cost of equity including:

- Cost of Equity – Risk-free return, risk premium and beta levels
- Feasibility of adopting a normative approach with regards to the optimum capital structure and debt-equity gearing
- Alternative models for determination of cost of equity

Determination of Cost of Equity

17.5.6 The independent study compared the regulatory authorities of 12 countries and over 25 airports to understand the regulatory framework across the world, and assigned weights to the 25 international airports in 12 countries to estimate their comparability to BIAL based on the following parameters:

a) Revenue Till Structure:

- 1 - Single Till or where information is not available
- 2- Dual Till
- 3- Hybrid Till

b) Ownership Structure:

- 1- 100% Government owned/funded
- 2- Government/private owned/funded, not being Public Private Partnership
- 3- Public Private Partnership funded

c) Operations Scale:

- For each comparable international airport, the independent study computed the ratios of passenger, cargo and aircraft movement of these airports to that of BIAL in each of the years from 2015 to 2017. Later, an equal weighted sum for these airports is computed using average of the ratios under each category (Passenger, cargo and air traffic movements) as per the following equation:

$$OpS_k = \sum_{i=2015}^{i=2017} \left(\frac{1}{3}\right) * R_{Pi} + \left(\frac{1}{3}\right) * R_{Ci} + \left(\frac{1}{3}\right) * R_{Ai}$$

where

- OpS_k = Operations scale for comparable airport k
- i = Year 2015, 2016 and 2017
- R_{Pi} = Ratio of passengers of the comparable airport to that of Bangalore airport
- P_i = No. of passengers for the comparable international airport in year i
- P_B = No. of passengers for BIAL in year i
- R_{Ai} = Ratio of aircraft movements of the comparable airport to that of Bangalore airport
- A_i = No. of aircraft movements for a comparable international airport in year i
- A_B = No. of aircraft movements for BIAL in year i
- R_{Ci} = Ratio of cargo of the comparable airport to that of Bangalore airport
- C_i = Total cargo movement in metric tonne for a comparable international airport in year i
- C_B = Total cargo movement in metric tonne for BIAL in year i

17.5.7 Finally, the proximity score for comparable airport, k, with respect to Bangalore airport is denoted by $PS_{k,B}$ which is the net Euclidean Distance from each of the parameters w.r.t. BIAL given by the following equation:

$$PS_{k,B} = \sqrt{(RT_B - RT_k)^2 + (OS_B - OS_k)^2 + (OpS_B - OpS_k)^2}$$

where

- RT_B = Revenue Till Score of BIAL
- RT_k = Revenue Till Score of comparable airport, k
- OS_B = Ownership structure Score of BIAL
- OS_k = Ownership structure Score of comparable airport, k
- OpS_B = Equal Weighted Operations Scale of BIAL

- OpS_k = Equal Weighted Operations Scale of comparable airport, k

17.5.8 Based on the above, the airports shortlisted for comparative study with BIAL were Sydney, Auckland, MAHB, AoT, Gatwick, Dublin and Changi. The proximity score with BIAL for these airports is given in the table below:

Table 188: Proximity score of shortlisted airports with BIAL

Airport	Revenue Till	Ownership Structure	Operations	Proximity Scores
Bangalore (BIAL)	0.00	0.00	0.00	0.0000
Sydney	1.00	1.00	-2.32	2.7171
Auckland	1.00	1.00	0.62	1.5449
MAHB	2.00	1.00	-9.87	10.1161
AoT	1.00	1.00	-11.83	11.9111
Gatwick	2.00	1.00	-0.94	2.2364
Dublin	2.00	2.00	0.17	2.8333
Changi	0.00	2.00	-8.34	8.5737

17.5.9 The independent study then studied the returns of the airport over the period from 2013 to 2017 and computed the Internal Rate of Return (IRR) for all the airports.

Methodology to compute cost of equity and Fair Rate of Return

17.5.10 The independent study regressed the monthly growth rate in passenger volumes for BIAL on the monthly returns for the Indian stock market.

17.5.11 The passenger growth rate can be viewed as a proxy for the demand driver for BIAL. The stock market return captures the fluctuations in macroeconomic conditions.

17.5.12 The stock returns signify external economic conditions. The independent study analyzed the impact on demand if the external conditions change significantly and found very low regression coefficients (~0.3) thereby establishing that demand for BIAL is relatively inelastic and highly constrained by supply under normal circumstances.

17.5.13 The independent study has used CAPM to determine the Cost of Equity, stating that though it is a theoretical model based on assumptions that do not hold true in the real world, its simple and intuitive appeal have made it the model most used by airport regulators to determine Cost of Equity.

17.5.14 There are three components required for computing the cost of equity using CAPM – risk-free rate (Rf), equity beta and equity risk premium (ERP). Rf and ERP are macro-economic in nature and can be derived from using time series analysis with Rf being considered from public sources and estimates for ERP available from an independent study by Anshuman, Biswas, Jain and Sharma, 2019. Equity beta for an unlisted company like BIAL is more challenging and the methodology used by the independent study is described below:

- Un-lever the betas of the comparable airports.
- Estimate asset betas for BIAL with proximity distance scores as inputs.

- Re-lever asset betas to get equity betas for BIAL with target gearing ratios as inputs.
- Evaluate cost of equity with Rf and ERP as inputs.
- Estimate Fair Rate of Return with cost of equity and cost of debt as inputs.

Phase 1: Unlevering of beta for comparable airports

17.5.15 The Independent Study considered 6 airports from the comparable set of airports as Changi airport did not have an estimate of asset beta in the public domain. Of these airports, Sydney, Auckland, AoT and MAHB are listed airports for which the independent study evaluated equity betas based on market data. The equity betas of these airports are then un-levered to determine the corresponding asset beta of the listed airports. Dublin and Gatwick airports are unlisted but have the estimates for asset betas from their respective regulators. The asset betas for the comparable set of airports can be seen in the table below:

Table 189: Asset betas for comparable airports

Airport	Asset Beta
Sydney	0.4000
Auckland	0.6000
MAHB	0.7693
AoT	0.8582
Gatwick	0.5600
Dublin	0.5500

Phase 2: Estimation of asset beta for BIAL based on proximity score of the comparable airports

17.5.16 Based on the Table above and considering the proximity scores as determined by the independent study, the proximity score weighted average unlevered asset beta for BIAL has been arrived at as 0.5646.

Phase 3: Re-levering of Beta for BIAL using target value of D: E ratio

17.5.17 The independent study recommends using a lower target gearing ratio than the gearing ratio suggested by actual D/E values of BIAL as WACC should reflect a long-term steady gearing ratio rather than the current gearing ratio. WACC should also be determined using market value of D/E ratios as equity tends to increase over time, thereby resulting in lower market D/E ratios than book D/E ratios. The independent study considers this factor to be a significant reason for airports using lower target gearing ratios.

17.5.18 The independent study, to estimate market value of D/E (MDE) ratio for BIAL, has examined the relation between MDE and BDE (Book debt to equity ratio) of infrastructure firms in India. Based on the established empirical relationship between MDE and BDE, the conversion multiplier to determine MDE from BDE has been estimated as 0.459. The independent study then assumed BDE of 2:1, which gave an MDE of 0.918 for a typical infrastructure firm in India. It translated in a target gearing ratio of 47.86% which is reasonably close to the average gearing ratio of the set of comparable international airports.

17.5.19 Thus, the independent study consider an average gearing ratio (D/D+E) of 48% for BIAL to estimate their Cost of Equity and Fair Rate of Return.

17.5.20 Based on this target gearing ratio, the asset beta of BIAL has been re-levered to calculate equity beta whose value is arrived at 0.9296.

Phase 4: Estimation of cost of equity with R_f and ERP as inputs

17.5.21 ERP is an essential input in the implementation of the Capital Asset Pricing Model. It captures the additional return demanded by investors for holding equity shares in contrast to holding risk-free deposits. It reflects the investing population's compensation for taking up equity risk.

17.5.22 To arrive at the cost of equity, Equity Risk Premium (ERP) is derived as the simple average of the three independent study estimates (historical average of ERP over 2000 – 2018 period, based on CDS and bond ratings, forward looking estimate as suggested by Grant Thornton) i.e. 8.06% as this simple average technique helps eliminate the effect of biases implicit in each of the three independent studies.

17.5.23 After computing all the components required, the cost of equity using CAPM has been determined and the variables used to estimate the cost of equity and fair rate of return are summarized in the table below:

Table 190: Calculation of cost of equity

Variables	Gearing based on Target gearing ratio
Asset Beta	0.564689
Gearing ratio (D/E)	0.9231
Weighted Gearing ratio (D/D+E)	48%
Equity Beta	0.9296
Risk free rate	7.56%
Equity risk premium	8.06%
Cost of Equity	**15.05%**

Phase 5: Estimation of Fair Rate of Return / WACC with cost of equity and cost of debt as inputs

17.5.24 To arrive at the fair rate of return, the independent study has computed an estimate of cost of debt.

17.5.25 To estimate the Cost of Debt of comparable debt instruments in India, the study considered a total of 17,665 debt instruments (Debt Instruments, Commercial Papers and Certificate of Deposit) as per NSDL. Of these, 709 are rated 'AA Negative' as per CARE, CRISIL, ICRA, Brick Work Ratings, India Ratings & Research, SME Ratings and Acuite Ratings. BIAL is rated "AA Negative" by CRISIL, as of 17 Jun 2020. The number of debt instruments issued, from 01/01/2018 till 31/12/2020 of the said rating is 264. Of these, 11 were by infrastructure companies.

17.5.26 Based on the above, the illustrative cost of debt arrived at was 10.05%. Using the above, the Fair Rate of Return (FRoR) is computed as 12.65% for BIAL for illustrative purposes.

17.5.27 Thus, the independent study has computed the cost of equity at 15.05% using Capital Asset Pricing Model at a notional D:E ratio of 48:52 and using as benchmark, a comparable set of airports with more than 50% private ownership.

17.6 Annexure 6 – Details of the design, PMC, pre-operative expenses and IDC for the projects proposed to be capitalized in second control period

Table 191: Details of the design, PMC, pre-operative expenses and IDC for the projects proposed to be capitalized in second control period

S no.	Projects (INR cr.)	Capitalized assets in SCP	Design	PMC	Pre-ops	Sub-total	IDC and front end fee	Total
		A	B	C	D	E = A+B+C+D	F	G=E+F
1	New south airfield development works	1,781.7	24.9	25.9	76.5	**1,909.0**	107.1	**2,016.0**
2	Forecourts, roadways and landside development	97.9	2.0	0.2	4.9	**104.9**	9.4	**114.3**
3	Utilities	48.7	0.1	0.0	2.6	**51.4**	0.7	**52.1**
4	Existing Runway, Taxiway improvements	177.0	13.1	0.0	9.6	**199.7**	6.1	**205.8**
	Total	**2,105.3**	**40.1**	**26.0**	**93.6**	**2,264.9**	**123.2**	**2,388.1**

17.7 Annexure 7 – Details of sustaining capex proposed by BIAL in Third Control Period

1. Fresh sustaining capex proposed by BIAL in the Third Control Period

Table 192: Fresh sustaining capex proposed by BIAL in the Third Control Period

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
1	PTB Replacement of Granite Cladding Fasteners	Existing	0.2	-	-	-	-
2	Drainage System Upgradation	Existing	0.2	0.2	0.2	0.2	0.3
3	Sanitary lines and water lines valve replacement and standby water line for T1A and water meters installation	Existing	-	0.4	-	-	0.4
4	Replacement of Civil furniture of LSB	Existing	-	0.3	0.3	0.3	0.3
5	Major works of Road, Parking & Overhauling of Porta cabins	Existing	-	0.6	0.2	0.2	0.4
6	Repairing of Bridges, Underpass	Existing	0.3	0.3	0.5	0.4	0.5
7	Replacement of wornout restroom fixture, false flooring, False ceiling	Existing	-	-	0.8	1.0	1.0
8	Granite Flooring & Cladding T2	T2 Phase 1	-	-	-	0.5	-
9	Road Markings & Signages T2	T2 Phase 1	-	-	-	0.2	0.1
10	Replacement of Furnitures and Civil Fixtures T2	T2 Phase 1	-	-	-	-	0.3
11	Tools	Existing	0.0	0.0	0.0	0.0	0.0
12	Tools	T2 Phase 1	-	0.3	0.2	0.1	-
13	Access Equipment - T1	Existing	-	-	-	0.6	2.6
14	Access Equipment - T2	T2 Phase 1	3.9	-	1.2	-	-
15	Cable	Existing	0.2	-	0.2	-	-
16	Cable	T2 Phase 1	-	0.2	-	0.2	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
17	Panel upgradations/modifi cations	Existing	-	0.1	0.2	-	0.1
18	Switch sockets replacements due to non availability of earlier fixed types	Existing	0.2	-	0.2	-	0.2
19	UPS replacement - T1	Existing	-	-	-	0.6	0.6
20	DCPS - T1	Existing	-	-	-	0.4	-
21	Indoor lighting	Existing	0.4	0.1	-	-	0.1
22	Indoor lighting	T2 Phase 1	-	-	-	0.6	0.6
23	Sliding Doors - T1	Existing	0.2	0.2	-	-	0.1
24	Boom Barriers	Existing	0.1	-	0.1	-	-
25	Lower KVA UPS	Existing	0.1	-	-	0.2	-
26	Monitoring & Automations	Existing	-	-	-	-	0.4
27	MAR & SAR lightings	Existing	-	-	-	0.2	-
28	High Mast UPS	Existing	-	-	-	-	0.2
29	VHT-T1	Existing	5.8	6.0	5.7	0.6	-
30	VHT-T1A	Existing	-	0.5	-	0.5	6.2
31	BHS-T1	Existing	5.6	5.8	-	0.6	-
32	BHS-T1A	Existing	-	-	0.7	-	0.8
33	HVAC T1 Central & Standalone AC System	Existing	3.3	3.5	3.6	1.7	1.8
34	HVAC T1A Central & Standalone AC System	Existing	-	-	-	0.2	0.2
35	FFS-T1	Existing	2.2	-	0.5	-	0.5
36	FFS-T1A	Existing	-	-	-	0.6	-
37	PBB-T1	Existing	-	-	5.4	5.6	5.8
38	PBB-T1A	Existing	-	-	-	0.6	-
39	HVAC (Ph-I)	T2 Phase 1	-	-	-	-	0.6
40	FFS-T2 PHASE-1	T2 Phase 1	-	-	-	-	0.4
41	Toilet Accessories/Dispens ers - T1	Existing	0.1	-	0.1	-	0.1
42	Waste Bins / transportation Trolleys - T1	Existing	0.1	0.2	-	0.2	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
43	Cleaning Equipement (not machinery) - T1	Existing	0.2	-	0.1	-	0.1
44	Other Equipments - T1	Existing	0.2	-	-	-	-
45	Other Equipments - T2	T2 Phase 1	-	0.5	-	-	0.1
46	Cleaning Equipement (not machinery) - T2	T2 Phase 1	0.2	-	0.2	-	0.3
47	Waste Bins / transportation Trolleys - T2	T2 Phase 1	-	-	0.4	-	0.1
48	Toilet Accessories/Dispensers - T2	T2 Phase 1	-	0.3	-	0.1	-
49	Part Replacement of Carpet - T1	T2 Phase 1	-	1.2	-	-	-
50	Façade Anchoring-T1	Existing	0.2	-	-	0.5	-
51	FAS (Alpha-3, Airside Building, VVIP Bldg)	Existing	2.0	-	-	-	-
52	SIEMENS FAS	Existing	2.2	3.5	3.0	-	-
53	Technology Refresh (FAS Server & Clients)	Existing	-	0.2	-	-	-
54	VDGS Server & Clients	Existing	0.2	-	-	-	-
55	VDGS Units & Associated Items	Existing	0.4	0.8	0.8	-	-
56	VDGS- SNI (stand led board to display stand no.) & WGS (wall directional details)	Existing	0.1	-	0.1	-	-
57	ALCS (PLC)	Existing	0.7	-	-	-	-
58	BHS (T1) (PLC)	Existing	1.7	-	-	-	-
59	BHS (T1A) (PLC & SCADA)	Existing	-	-	3.6	-	5.1
60	BHS (T1) (PLC & SCADA) - PC	Existing	-	1.7	-	-	-
61	NEC-PHN (PLC & Application)	Existing	-	1.7	-	-	-
62	PBB (PLC, SCADA & HMI)	Existing	3.3	3.8	-	-	-
63	STP (PLC & SCADA)	Existing	-	-	-	-	0.7

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
64	Drainage	Existing	0.2	0.3	-	-	-
65	Airfield Pavement	Existing	-	9.4	-	0.9	-
66	Airfield Pavement	South Runway	-	-	-	1.5	-
67	Security Wall, Mixing Yard and paver blocks	Existing	0.6	0.6	-	3.1	-
68	New Mixing yard	South Runway	-	-	0.4	-	-
69	LED Fixtures, SFL Ligthing and Cables	Existing	0.0	-	0.3	0.2	0.2
70	Ground power units	Existing	0.1	0.1	0.1	0.1	0.1
71	Perimter lighting	Existing	-	0.2	-	0.2	1.2
72	Airside buildings	Existing	0.4	-	0.2	1.8	0.4
73	Apron highmast lighting	Existing	0.7	-	0.2	-	0.3
74	C&Wd Airfield Services	Existing	-	0.2	0.2	0.1	1.3
75	Replacement of V&E - South Runway	South Runway	-	-	-	0.7	0.2
76	Replacement of V&E - North Runway	Existing	3.7	6.0	53.7	8.7	3.3
77	Potable Water Network	Existing	0.4	-	-	0.9	0.6
78	Potable & Raw water Network	Existing	-	-	4.2	-	-
79	Online water consumption Metering System	Existing	0.5	0.5	-	0.6	-
80	Raw/Rain water Pumping system	Existing	0.4	-	-	-	-
81	Raw Water Network	Existing	-	1.2	-	0.9	0.6
82	Rain Water Harvesting System	Existing	0.5	-	-	0.2	-
83	Sewage Collection Networks	Existing	0.2	-	1.8	-	0.6
84	Filtration/ Treatment system	Existing	0.4	-	-	-	-
85	Tankers & Jettting Machine	Existing	-	0.9	-	-	0.6
86	Underground Storage Sump of 3 ML Capacity for Potable water	Existing	-	0.1	-	-	-
87	Underground Storage Sump of 2	Existing	-	0.1	-	-	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
	ML Capacity for Raw water						
88	Water Treatment Plant	T2 Phase 1	0.3	-	0.4	-	1.9
89	Furniture for office	Existing	-	-	0.2	0.6	0.3
90	Lab equipment's	Existing	-	-	-	0.2	-
91	Lakes	T2 Phase 1	0.3	-	0.4	-	-
92	Enhancement of STP Sludge Drying bed	Existing	0.3	0.3	-	-	0.3
93	Treated water Metering System	Existing	-	-	0.1	-	-
94	Structure repairs	Existing	0.1	-	-	0.2	-
95	STP Refurbishment	Existing	0.4	1.2	-	-	0.4
96	Environmental Monitoring Systems	Existing	-	-	0.4	-	0.3
97	SBR STP	Existing	-	-	0.6	-	-
98	Equipment repairs	Existing	0.1	0.2	0.2	0.2	0.1
99	Diffusers replacement	Existing	-	-	0.4	-	0.1
100	Instrumentation replacement	Existing	-	-	0.4	-	-
101	Filtration system media	Existing	-	-	-	-	1.0
102	Technology up-gradation SBR to MBR	Existing	-	-	-	1.0	-
103	STP civil Structures	Existing	0.3	-	0.6	-	-
104	C-check of DG sets of Terminal 1 (13 Nps)	Existing	-	0.2	-	-	-
105	Servicing of 11 KV Ring Mains Units of Terminal 1 (28 Nos)	Existing	-	-	-	0.1	0.1
106	Overhauling of HVAC/NCP/PHN/NEC/DG Transformers (16Nos)	Existing	-	-	-	0.2	0.3
107	Procurement of 66KV 630 sq. mm copper jointing kits	Existing	0.1	-	-	-	-
108	Procurement of 11KV jointing kits	Existing	0.0	-	-	0.0	-
109	Servicing of Battery chargers (5 nos.) of T1 & T1A	Existing	-	-	-	-	0.1

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
110	Procurement of measuring instruments, safety equipment etc.	Existing	-	0.1	-	-	-
111	Procurement of Relays/breakers/meters of T1, T1A, NSPR, SS3, T2 etc.	Existing	0.1	-	0.1	-	-
112	OFC connectivity to new stations like TS3, TS4 etc.	Existing	0.1	0.1	-	-	-
113	Asset Management System	Existing	13.4	13.9	14.4	-	-
114	mySAP ERP license purchase	Existing	0.6	-	0.6	-	0.6
115	Security weaver SOD license purchase	Existing	0.0	-	0.0	-	0.1
116	SAP warehouse Implementation	Existing	-	0.5	-	-	-
117	S4 HANA Implementation	Existing	-	4.6	-	-	-
118	SAP upgrades & updates	Existing	-	-	-	-	0.2
119	Master data management centralization	Existing	-	-	-	0.4	-
120	SAP-Epalm enhancements	Existing	-	0.2	-	0.3	-
121	System monitoring tool	Existing	-	-	-	-	0.6
122	Godrej 4 Drawer Vertical Filing Cabinate	T2 Phase 1	0.0	-	-	0.0	-
123	Training rooms fully equipped	Existing	3.3	-	-	-	-
124	Cafeteria requirement - p6 canteen	Existing	0.6	-	-	-	-
125	Cafeteria requirement - Food Court @ MLCP along with Alpha 4	T2 Phase 1	-	-	-	0.9	-
126	Cafeteria requirement - T2 Canteen - Cafeteria/Kitchen	T2 Phase 1	0.6	-	-	-	-
127	Cafeteria requirement -	Existing	0.4	0.4	-	-	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
	Equipment and Furniture Refresh						
128	BME Enablng Works	Existing	11.1	-	7.2	-	-
129	Landscaping equipments	T2 Phase 1	2.8	-	-	-	-
130	Vehicle for Terminal Ops	Existing	-	0.1	-	-	-
131	Buggy	Existing	0.2	-	-	-	-
132	Segway for Terminal Ops	Existing	0.1	-	0.2	-	-
133	GR lounge furniture refurbishment	Existing	-	0.3	-	-	-
134	Furnitures for stakeholders	Existing	-	-	0.1	-	0.1
135	Cars for GR movements	Existing	-	0.9	-	-	-
136	Mobile handset	Existing	0.0	-	0.0	-	0.0
137	Automation of Imm process	Existing	1.0	-	-	-	-
138	Trolley 500 for Terminal Ops	Existing	-	-	-	2.5	-
139	Furnitures for Terminal Ops	Existing	-	0.1	-	0.1	-
140	Baggage tub for operations	Existing	-	0.5	-	-	-
141	Q Manager	Existing	-	-	0.1	-	0.2
142	Chairs for stakeholders	Existing	-	0.0	-	-	0.1
143	Baby Stroller	Existing	0.0	-	-	0.0	-
144	Terminal Enhancement Projects	Existing	0.2	-	0.2	-	0.2
145	Signages mastheads & Digital display	Existing	-	0.3	-	0.4	-
146	CAPEX item for regulatory changes and additional process changes	Existing	0.4	0.5	0.5	0.6	0.6
147	QMS	T2 Phase 1	7.7	-	-	-	-
148	Trolleys -Passenger	T2 Phase 1	7.8	-	-	-	-
149	Queue managers	T2 Phase 1	1.9	-	-	-	-
150	Buggy	T2 Phase 1	0.7	-	-	-	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
151	Interactive information kiosks	T2 Phase 1	0.7	-	-	-	-
152	Repacking Stations	T2 Phase 1	0.5	-	-	-	-
153	Stand alone weighing scales	T2 Phase 1	0.0	-	-	-	-
154	Landside road speed governer	T2 Phase 1	0.2	-	-	-	-
155	Baggage Sizers	T2 Phase 1	0.1	-	-	-	-
156	PESC-LAG disposal unit	T2 Phase 1	0.1	-	-	-	-
157	Traffic barricades	T2 Phase 1	0.1	-	-	-	-
158	Queue managers transport unit	T2 Phase 1	0.1	-	-	-	-
159	Mastheads (A3 - CUTE Ops)	T2 Phase 1	0.0	-	-	0.0	-
160	Hot and cold water dispencers for staff	T2 Phase 1	0.0	-	-	-	-
161	Car for terminal operations	T2 Phase 1	-	0.2	-	-	-
162	Cars for GR movements	T2 Phase 1	-	0.9	-	-	-
163	Signage modifications etc.,	T2 Phase 1	-	0.1	-	0.1	-
164	Mobile handset	T2 Phase 1	0.0	-	0.0	-	0.0
165	Terminal enhancement projects	T2 Phase 1	-	-	0.1	0.1	2.6
166	Baby Stroller	T2 Phase 1	-	0.0	-	0.0	-
167	Moveable digital display units for dynamic ops information	T2 Phase 1	-	0.3	-	-	-
168	CAPEX item for regulatory changes and additional process changes	T2 Phase 1	-	0.5	0.5	0.6	0.6
169	Tow vehicles	Existing	-	0.1	-	0.3	-
170	Mobile handset	Existing	0.0	0.0	0.0	0.0	0.1
171	Patrolling vehicle	Existing	-	-	0.1	-	-
172	Metal Barricades	Existing	-	0.2	-	-	0.1
173	Landside Ops Office	Existing	-	-	0.2	-	-
174	Tow vehicles	T2 Phase 1	-	0.1	-	0.2	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
175	Mobile handset	T2 Phase 1	-	0.0	0.0	0.0	0.0
176	Patrolling vehicle	T2 Phase 1	-	-	0.1	-	-
177	Metal Barricades	T2 Phase 1	-	0.2	-	-	0.1
178	TMRS	T2 Phase 1	1.1	-	-	0.6	-
179	Landside Ops Office	Existing	-	-	0.1	-	-
180	Surveillance through CCTV with infra-red/night view and/or cameras/solutions to support surveillance during low visibility for all the stands at AM position	T2 Phase 1	-	2.3	-	-	-
181	AVDGS (Require for 5 stands every FY)	T2 Phase 1	3.3	3.5	3.8	3.9	4.1
182	Stand Id boards 2D & 3D	T2 Phase 1	-	0.3	0.4	0.5	-
183	FM requirement for replacement, both RWY & extended apron	Existing	0.4	-	0.5	-	0.6
184	TAXIBOT related Road network (simulation, trials)	T2 Phase 1	-	1.2	-	-	-
185	CCTV Cameras for stands, Apron etc	T2 Phase 1	-	-	0.6	-	-
186	Mobile phone	Existing	0.0	0.0	-	0.0	-
187	Chairs & furniture's for Apron monitoring unit	T2 Phase 1	-	-	2.4	-	-
188	CAPEX item for regulatory changes and additional process changes	Existing	0.3	0.3	0.4	0.4	0.4
189	AOCC system upgrade/refresh	T2 Phase 1	-	0.1	-	-	-
190	Mobile phone	Existing	-	0.0	-	0.0	-
191	Chairs/Furnitures	Existing	0.0	-	0.0	-	0.1
192	ADSB receivers and analytics	T2 Phase 1	-	0.2	-	-	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
193	Pre Departure sequence and other interface	T2 Phase 1	-	-	2.4	-	-
194	AOCC expansion (Capacity enhancement)	T2 Phase 1	-	5.8	-	-	-
195	New software for productivity	Existing	0.0	-	0.0	-	0.0
196	ROIP	Existing	0.2	-	0.3	-	0.3
197	AOCC system upgrade/refresh	T2 Phase 1	-	0.1	-	-	-
198	Mobile phone	T2 Phase 1	-	0.0	-	0.0	-
199	Chairs/Furnitures	T2 Phase 1	0.0	-	0.0	-	0.1
200	ADSB receivers and analytics	Existing	0.2	-	-	-	-
201	AOCC expansion (Capacity enhancement)	T2 Phase 1	-	5.8	-	-	-
202	New software for productivity	Existing	0.0	-	0.0	-	0.0
203	ROIP	T2 Phase 1	0.2	-	0.3	-	0.4
204	Changing Places	T2 Phase 1	-	1.2	-	-	-
205	Silent room for autistic persons	T2 Phase 1	-	0.1	-	-	-
206	PRM washroom upgradation	T2 Phase 1	-	-	0.1	-	-
207	Sleep Zone	T2 Phase 1	-	0.0	-	-	-
208	Pet Boarding & Pet care facility	Existing	-	-	-	1.2	-
209	Training facility (Room with digital interactive board)	T2 Phase 1	-	-	-	0.1	-
210	Trolley tracking	T2 Phase 1	-	-	0.0	-	-
211	Automated queue management	T2 Phase 1	-	0.0	-	-	0.0
212	Kids Play zone	Existing	-	0.0	-	-	-
213	HHMD	Existing	0.3	-	0.3	-	0.3
214	Upgradation of old BHS including server and AWS	Existing	-	-	9.6	-	-
215	Conventional X-BIS for PESC, departure	Existing	5.6	5.8	6.0	6.2	6.4

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S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
	gates and Airside access gates						
216	ION Scan 500DT/600 DT	Existing	2.2	2.3	2.4	2.5	2.6
217	Perimeter Intrusion Detection System (PIDS)	Existing	14.5	-	-	-	-
218	CCTV Camera	Existing	-	2.3	-	2.5	-
219	Replacement of OLD HMC printer	Existing	-	-	0.0	-	-
220	Chairs for level-2, level-3, Physical check room & PTB pass office	Existing	0.1	-	-	-	-
221	Centralised image storage for all CISF X-ray BIS	Existing		-	-	-	38.5
222	AEP Laminating Machine	Existing	0.0	-	-	0.0	-
223	X-Bis 100/100 T low bed	Existing	-	-	0.6	-	-
224	Replacement of CISF vehicles	Existing	1.7	-	-	-	-
225	Miscellanious requirements for CISF	Existing	1.1	1.2	1.2	1.2	1.9
226	HHMD TI	Existing	0.3	-	0.3	-	0.3
227	Whole body scanner	Existing	2.4	-	-	-	-
228	Barbared wire reinforcement at the Perimeter wall	Existing	0.7	-	0.9	-	1.2
229	Construction of Garage for placing TCV	Existing	-	0.0	-	-	-
230	PVC Cones new/replacement for parking management at Alpha parkings/Search Mirror	Existing	0.0	-	-	0.0	-
231	Portable Cabins	Existing	-	-	0.1	-	-
232	Hazard Simulation Accessories for OHS Training	Existing	-	-	0.1	-	-
233	OHS Safety Management	Existing	-	1.2	-	-	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
	System Online Application						
234	Aviator SMS application Enhancement	Existing	-	-	0.6	-	0.6
235	Addition & Upgradation of Rwy Monitoring System	Existing	-	-	-	-	1.9
236	Remotely Speed Monitoring Solution for T2 Apron & T3 Apron	Existing	-	-	-	0.9	-
237	Installation of TRAFFIC LIGHT AT APRON SERVICE ROAD	Existing	-	-	0.6	-	-
238	Habitat Management equipments 1.Ground Master 2. Brush cutter 3. Six shot launchers 4. Binoculars 5. Bird scaring equipments	Existing	-	-	1.0	-	-
239	Replacement of Four old CFTs	Existing	22.3	23.1	-	-	-
240	Emergency Escape Stairs	South Runway	-	-	12.0	-	-
241	Replacement of Equipment Truck with Light Mast	Existing	2.2	-	-	-	-
242	Hazmat Vehicle	South Runway	-	-	8.4	-	-
243	Aircraft fire training model with pressure fed fuel fire for live fire aircraft accident scenario exposure to fireman	Existing	-	-	-	-	64.2
244	Replacement of Triage equipment	Existing	-	-	-	0.6	-
245	Replacement of BA Compressor	Existing	-	-	-	1.2	-
246	Replacement of rescue & firefighting tools of old runway	Existing	-	-	0.6	-	-

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S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
247	Fire Training Academy	Existing	-	-	-	-	64.2
248	Replacement of BA Sets	Existing	-	0.3	-	-	-
249	Replacement of facemask	Existing	-	-	0.2	-	-
250	Replacement of Industrial Fire Tender	Existing	-	-	-	-	1.3
251	AODB HW- T1 & T2	Existing	-	-	-	-	0.4
252	AODB Infra - HW, SW (OS, DB, Application)	Existing	-	-	-	4.3	-
253	AODB Enhancements/ Changes	Existing	-	1.2	1.2	1.2	1.3
254	AODB Interfaces/ Enhancements	Existing	-	0.3	-	0.4	-
255	AOCC Desktops	Existing	-	-	-	-	0.6
256	CUTE/CUSS/BRS - T1	Existing	55.7	0.2	0.2	0.2	0.3
257	FIDS- T1	Existing	9.6	0.2	0.2	0.2	0.3
258	VIDEOWALLS- T1	Existing	4.5	-	-	-	-
259	FBLB Devices	Existing	0.2	-	-	-	-
260	AODB Integration	T2 Phase 1	0.6	0.6	0.6	0.6	0.6
261	CUTE/CUSS/BRS	T2 Phase 1	-	0.2	0.2	0.2	0.3
262	FIDS	T2 Phase 1	-	0.2	0.2	0.2	0.3
263	Digiyatra Systems	T2 Phase 1	4.2	4.3	4.5	4.6	4.8
264	Intranet	Existing	0.3	0.3	0.4	0.4	0.4
265	Middleware	Existing	-	3.5	-	-	-
266	Business Process Automation /DMS (E-Palm)	Existing	1.1	-	12.0	-	1.3
267	Corporate Performance Management (DICE)	Existing	2.2	-	2.4	-	-
268	SAP -Functional enhnacements	Existing	2.2	2.3	2.4	2.5	2.6
269	Targeted Threat Management (Cyber Deception)	Existing	-	-	-	-	1.5

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
270	New Cyber Security Initiatives	Existing	2.2	2.3	2.4	2.5	2.6
271	Unix	T2 Phase 1	2.2	-	-	-	-
272	Windows	T2 Phase 1	-	0.6	-	0.6	-
273	Virtualisation	T2 Phase 1	0.8	0.6	0.6	0.6	0.6
274	Storage	Existing	0.4	2.3	0.5	0.5	0.5
275	Tape library	Existing	0.4	-	-	-	-
276	Datacenter-Racks,KVM Switches, etc	Existing	0.1	0.1	0.1	0.1	0.1
277	Internet Infra-Firewalls/Routers/Load Balancers	T2 Phase 1	-	2.3	-	-	-
278	Active New Network Expansion/ Refurbishments	Existing	0.3	0.3	0.3	0.3	0.3
279	Active Network WIFI Expansion	Existing	6.7	0.3	0.3	0.3	0.3
280	Passive Network-OFC & Copper	Existing	0.3	0.3	0.3	0.3	0.3
281	Passive Network-OFC & Copper for SCADA	Existing	0.3	-	-	-	-
282	Active Network Refresh	T2 Phase 1	83.5	-	-	-	-
283	Active New Network Expansion/ Refurbishments	T2 Phase 1	0.3	0.3	0.3	0.3	0.3
284	Active Network WIFI Expansion	T2 Phase 1	0.3	0.3	0.3	0.3	0.3
285	Passive Network-OFC & Copper	T2 Phase 1	0.3	0.3	0.3	0.3	0.3
286	Passive Network-OFC & Copper for SCADA	T2 Phase 1	0.1	0.1	0.1	0.1	0.1
287	Passive Network-OFC & Copper	T2 Phase 1	0.3	0.3	0.3	0.3	0.3
288	Passive Network-OFC & Copper for SCADA	T2 Phase 1	0.3	-	-	-	-
289	IP PABX /Telephony Backend	Existing	0.1	0.1	0.1	0.1	0.1
290	Radios- Backend+ End devices	Existing	0.1	0.1	0.1	0.1	0.1
291	Radio IBS	Existing	-	-	3.0	-	-

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
292	Test Equipment and Tools	Existing	0.2	-	0.2	-	0.2
293	Net Master Clock	Existing	0.1	-	-	-	-
294	IVRS	Existing	1.8	0.6	-	-	-
295	IPTV Infrastructure	T2 Phase 1	2.2	-	-	-	-
296	CCTV device Refresh & New	Existing	0.4	0.3	0.3	0.3	0.3
297	CCTV Backend Infra, VMS	Existing	-	2.3	-	-	-
298	CCTV Storage	Existing	0.6	0.6	0.6	0.6	0.6
299	PAS	Existing	-	-	17.9	-	-
300	ACS-New/ Refurbishment/ Replacement	Existing	0.2	0.2	0.2	0.2	0.3
301	Crash alarm	Existing	0.2	-	-	-	-
302	Desktops, Printers, Thin Clients, Projectors	Existing	0.6	0.6	0.6	0.6	0.6
303	Common Pool IT Items	Existing	0.6	0.6	0.6	0.6	0.6
304	CMDB/ Asset Management	Existing	-	11.5	-	-	-
305	IOT	Existing	2.2	2.3	2.4	2.5	5.1
306	Enterprise Asset Management	Existing	40.1	0.3	0.3	0.3	0.3
307	T2- EPC	T2 Phase 1	11.7	12.2	12.6	13.1	13.6
308	NSPR-Non EPC	T2 Phase 1	0.2	0.2	0.2	0.2	0.2
309	Airport Loyalty	Existing	1.7	0.3	0.1	0.1	0.1
310	BLR Care	Existing	2.3	0.6	0.6	0.6	0.1
311	PRM Lounge	Existing	-	1.2	1.2	1.2	0.0
312	Kids Play area	Existing	-	0.6	0.6	0.6	0.1
313	Payment gateway	Existing	0.4	1.2	0.3	0.3	0.0
314	Video analytics - Commercial areas	Existing	0.6	1.7	1.8	0.9	0.1
315	Wi-fi Infra (Land side)	Existing	-	0.6	0.6	0.6	0.0
316	On Demand Content infra	Existing	-	1.2	1.2	-	0.1
317	Land side + Parking	Existing	-	5.8	-	2.5	0.6
318	Advertising (Media relocation)	Existing	5.6	5.8	6.0	3.1	1.6
319	Urban Consolidation Center	Existing	-	-	9.0	-	0.1

S no	Item description (Amount in INR cr.)	Phase	2022	2023	2024	2025	2026
320	Terminal capacity/efficiency enhancement (Utility/Tap up points)	Existing	-	8.1	8.4	3.7	-
321	Gas Pipe line	Existing	-	6.9	6.0	-	-
322	FSTR by BLR	Existing	2.2	1.2	0.6	0.6	0.1
323	Digital experience centre	Existing	-	1.2	0.3	0.3	0.0
324	Others (Misc.)	Existing	1.7	1.9	2.5	2.8	3.2
	GRAND TOTAL		413.9	230.1	282.3	126.4	290.2

2. Sustaining capex proposed by BIAL in FY22 which is carried forward from FY21

Table 193: Sustaining capex proposed by BIAL in FY22 which is carried forward from FY21

S no	Particulars (in INR cr.)	Proposed capitalization in FY21	Proposed capitalization in FY22	Amount
A	Sustaining capex/Minor project items	60.00	84.26	144.26
B	Sustaining capex / Minor Projects	20.00	81.07	101.07
C	Carry forward of sustaining capex of FY 2019-20	20.00	74.22	94.22
	Total (A+B+C)	**100.00**	**239.56**	**339.56**

Table 194: Detailed category-wise break-up of the sustaining capex as proposed by BIAL

S no	Item description	Amount (in INR cr.)
	A. Sustaining capex/Minor project items	
1	220 KV Substation	25.42
2	Airport Master Plan Studies pertaining to Utilities, Drainage, Landscaping and other landside projects	21.60
3	Master Plan updation - 2018-19	9.86
4	Digi yatra contractual charges towards Project management	8.14
5	Capex towards Digital Transformation support as per Accenture contract	5.62
6	Capex towards Digital Master Plan Charges	5.01
7	Tech refresh and replacement of Existing cameras	3.21
8	Retail Plaza	3.05
9	SITC OF ENHANCEMENT IN BPH POTABLE WATER	3.03
10	ITC of CCR 25/30 KVA	2.89
11	Data Platform Phase 1	2.70
12	Capex towards SITC of Boentra software for airport capacity planning	2.27
13	AGL PRIMARY CABLE 1CX 6 SQ.MM	2.18
14	Chiller Plant Optimiser in T1A	2.02
15	Cargo Village Structure & Road Work	1.71
16	Engagement Center Tool/Software	1.65
17	P5 Parking	1.59
18	VDGS SAFEDOCK TYPE 2-24	1.45
19	Temporary office construction	1.41

S no	Item description	Amount (in INR cr.)
20	Implementation Cost for 1500 License	1.31
21	South West Connectivity	1.17
22	Kerf cutting and sec cable laying	1.05
23	MAR Resurfacing & road furniture work	1.03
24	Installation and Commissioning (FIDS, Display systems, Street lights, Air curtain and various other installations)	0.93
25	Consultancy services for safety assessme	0.89
26	Isolating transfmr200W-50HzRST200-6-6-5E	0.77
27	Installation,Testing &Commissioning (CCTVs, Break glass unit, Strobe cum hooter, Egress switch bell push)	0.75
28	Traffic Projection for 22 yrs	0.65
29	MTP 3150 PORTABLE RADIO	0.64
30	Installation & Commissioning (Mobile self service kiosks, MOTOROLA VHF HANDHELD XirP8668, MOTOROLA VHF DESKTOP W/PS XirM3668, MOTOROLA VHF REPEATER, etc	0.61
31	Construction of Pipe Culvert	0.60
32	TRIAGE AND RESCUE EQUIPMENTS ARFF	0.59
33	8" SHALLOW BASE - AGL FITTINGS	0.57
34	Professional Services towards Installation of Extreme Network switches	0.56
35	Migration from IBM BPM 7.5 to 8.6	0.55
36	QUAD-Store Sense Cost for 21 devices	0.49
37	MACH SMART LANE POC	0.47
38	ATRS Digi Yatra Electrical work	0.46
39	RE demand revalidation & strategy study	0.45
40	TCS - ICT requirements	0.44
41	BOSCH CAMERA LICENSES FOR VMS	0.44
42	ARCSIGHT DATA PLATFORM 5GB DAY ADD ON	0.42
43	Levelling using Back-hoe and roller	0.39
44	Design, Engineering consultancy: Alpha 4	0.38
45	CAPA Consultancy services for traffic estimates	0.38
46	ISOLATING TRANSFORMER 65 W	0.38
47	S-wave (essentials)	0.38
48	GPRS Equipment	0.37
49	Upgrading of V&E workshop	0.36
50	COLD SEALANT 600ML PACK	0.35
51	Consultancy Services for DYCIMP	0.35
52	Arrival Experience	0.33
53	Consultancy Services (KITCO) for Preparation of Detailed Design for Construction of taxiway, taxi lane connecting to Engine Run-up bay	0.32
54	SharePoint Tech Refresh	0.31
55	Installation,Commissioning & Testing of CCTVs	0.29
56	Aeronautical survey for NSPR	0.29
57	TI Network refresh - One time Implementation Charges	0.29
58	DESIGN & BUILT - EXPN. OF INNOVATION LAB	0.27
59	Construction of ARFF Hose Drying Room	0.26
60	Concert Arena_Temp & Permanent phase 2	0.25

S no	Item description	Amount (in INR cr.)
61	48 Core OS2 Fiber Optic cable	0.25
62	UPGRADE ADVANTAGE AURA R7 CS 3YR PREPD	0.25
63	Bullet proof ballistic shield	0.24
64	BlueDart bldg ACP Sheet Works as per BOQ	0.24
65	INTERIOR WORK AT BLUEDART	0.24
66	CMC Reused & new sply eqpt w accs 3 Yrs	0.23
67	PUSH PIT CPLER FOR 63MM DIA PIPE	0.22
68	DESIGN & INSTL. OF FAS - BLUEDART BLDG	0.20
69	Consultancy Service: MSWM - Consultancy services for establishing in-house solid waste Management	0.20
70	Sustainable water solutions	0.20
71	Installation Charges for single split Ca	0.20
72	Transit Lounge	0.19
73	6AWG COPPER WIRE	0.19
74	3 & 4 * hotel Fin Analysis & RFP assist	0.19
75	Registration Charges for vehicles	0.19
76	BS Face plate 2 Port, white	0.19
77	Provide parking bays	0.19
78	Glass Partition at PESC (3mt height)	0.19
79	Additional Work at Cargo Village	0.18
80	Innovation Lab Redesign	0.18
81	Insurance D Max S-Cab HR	0.18
82	ILBS server room modification	0.17
83	Renewal of AEC Revit licenses	0.17
84	Data Centre Feasibility Study	0.17
85	Installation & Commissioing - Display units, FIDS, PIM module (SBB-PD32BV2 media Player)	0.16
86	IOT - POC for Smart Energy	0.16
87	Noise and Vibration study	0.16
88	Modification at Parking P5 in KIAB	0.15
89	PULL PIT FOR 5 CIRCUITS	0.15
90	Simulation Model for T1	0.15
91	Various small items	11.89
	Sub-total (A)	**144.26**
	B. Sustaining capex / Minor Projects - Open PR/PO	
1	T1 Refresh - Project CISCO	22.31
2	Construction of a taxiway and engine run-up bay	17.04
3	Boarding Gate area renovation	6.09
4	New AODB	3.27
5	Accenture Contract / Digital initiatives	3.05
6	Backend Infra-Radio Communication devices	2.51
7	Replacement of old Desktops	2.26
8	SITC of Redundancy Potable water network	2.24
9	Runway Sweeper machine	1.43

S no	Item description	Amount (in INR cr.)
10	Vehicles - Mobile QRT Bullet proof vehicles	1.04
11	Video analysis and artificial intelligen	0.96
12	3rd GSE Building site developement	0.94
13	100x100T with dual view XBIS	0.90
14	MLAT and related works	0.89
15	ITP- building refurbishment	0.85
16	Explosive Trace Detector ETD	0.83
17	Tool Vans	1.30
18	Trolley Tracking System (RFID)	0.76
19	Skylift-1no	0.76
20	End User Devices-Enterprise - CCTV Units	0.72
21	Replacement OOG machine with dual view	0.71
22	SAR slope beautification	0.66
23	Relocation & New media due to main acces	0.64
24	CISF Furnishing and Allied Infra for Bac	0.63
25	Enterprise Architecture &API management	0.61
26	CCTV Storage for Surveillance Footage	0.56
27	Flight Information Display Systems & Con	0.55
28	CISF requirements Miscellenous	0.54
29	End User Devices-IP Phones Tech Refres	0.52
30	E-Learning Customization	0.50
31	Independent Fire Proximity Suit	0.50
32	Enhanced IT Security Operation Center	0.49
33	Roof Light Replacement - Phase 4	0.48
34	Replacement of Two 'Follow Me' Vehicles	0.48
35	High Capacity X-Ray machine	0.47
36	E&M Vehicles commonality	0.46
37	End User Devices-CCTV Units	0.44
38	Backend Infra to Support Addl 2000 cameras	0.44
39	Modification of Exisiting Safety office	0.43
40	Registration Kiosk Canopy	0.40
41	Heavy Duty Hard Surface Cleaner for Oil	0.39
42	Arrival Gates 1112 & 13 Auto Sliding do	0.39
43	E-POS for Land side & Quad	0.35
44	ORACLE Active Data Guard	0.34
45	Bullet proof jacket and accessories	0.33
46	Individual face mask for NSPR	0.31
47	Fence around GSE parking areas	0.29
48	Breathing Apparatus Set qty 20 for NSP	0.28
49	Expansion of the Restroom Facilities at Airside	0.28
50	CAPEX item for regulatory changes	0.27
51	Column Light replacement - Phase 2	0.26
52	Additional works for BRAVO 1 second Floor	0.26
53	Vehicle for DSA Duties	0.25
54	Inspection Vehicles-1no	0.24

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S no	Item description	Amount (in INR cr.)
55	AEOC Redesign Expansion Upgrade & Tech	0.22
56	Energy Conservation projects	0.20
57	Water supply to SWM facility	0.20
58	Replacement of existing FO cables & join	0.20
59	Electrical Equipments & Testers NSPR	0.20
60	Passive Network - Fiber/Coper Cabling	0.20
61	Startup engagement towards IOT - POC for Smart Energy	0.19
62	Pop up Retail Plaza Relocation works	0.19
63	Additional works for Queue measurement system	0.18
64	Lift and carry mobile Crane with 15 ton	0.18
65	Maintenance & work shop tool requirement	0.17
66	Gym equipment for ARFF personnel at NSPR	0.16
67	SITC of QRS system for LV panels	0.16
68	SITC of CCR 7.5 KVA	0.16
69	Various small items	13.57
	Sub total (B)	**101.07**
	C. C/F Sustaining capex of FY 2019-20	
1	Taxiway and other works associated with Engine Run-up Bay	8.61
2	Runway Sweeper -2nos.	6.93
3	Wayfinding Consultancy for BIAL	6.50
4	Explosive Trace Detectors (ETD) - 05 no's	3.04
5	Connectivity to sub-urban railway station	3.00
6	New airport parking design (Consultancy for Parking new airport layout) New airport parking design (Re-design and building of parking attendant cabins for different parkings)	2.50
7	COVID 19 related capex requirements	2.00
8	Compliance Mobile airfield light measuring system Guidance signage boards photometric measurement unit Approach lights/PAPI/elevated AGL system photometric measurement units	2.00
9	Building of toilet blocks, dining area & utilities	1.92
10	SITC of additional CAAQMS station for Second runway	1.92
11	Enhanced Digital Platform	1.91
12	Intergrated canopy at Catering gate and Airside gate adjacent to Airport clinic with complete set of security check equipments - 3 DFMDs @ 35 Lacs each; Rs.30 Lacs for X ray machine; Rs.20 L for allied infrastructure; Building & Canopy Rs.70 Lacs; Under vehicle scanner Rs.63 Lacs; High platform for secy. check Rs.10 Lacs; ETD - Rs.25 Lacs)	1.85
13	ATR (Automatic Tag Reader) for T1 BHS departure lines A,B&C	1.80
14	Technology Refreshment/Up gradation - CISF Video wall	1.60
15	Self powered high rise access equipment 35m high -1no.	1.50
16	Replacement of Ambulances	1.30
17	Airport Digital Twin and visual way finding solution	1.28
18	Procurement of Hydraulic Bollards for 03 gates	1.25

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S no	Item description	Amount (in INR cr.)
19	T1 Re-imagination	2.16
20	Increase the size of the Lounge lift LBM 10,Consultancy for feasibility study	1.12
21	Road Lazer & Line lazer - Painting Equipment -1no.	1.00
22	Endpoint Detection and Response (EDR) Solution	1.00
23	Replacement of old FIDS in Check-in Counters & Boarding gates and replacement of old Kerb side Cluster FIDS Videowall	1.00
24	CCTV VMS Channel Licenses to Support for additiona	0.87
25	Construction of Airside Toilets/Restrooms	0.82
26	IOT platform initiatives 4 use cases (Energy, Water, HVAC, weather)	0.80
27	SITC of Redundancy Potable water network from BPH to MPH	0.76
28	Automated queue management system	0.75
29	Biometric Access Control System - Phase-3	0.75
30	Maintenance & work shop tool requirements AGL inset fitting maintenance tool kit Digital torque wrench AGLshallow base/ Bolt repair kit IN pavement pressure test assembly 6.6 A power supply 200 VA CCR Secondary connector crimping tool Torque management system - MALMS AGL MALMS cleaner Primary connector crimping tool Frangible coupling wrench Mobile vehicle mounted lux meter- storage and mapping.	0.74
31	SelfConnection Platform transfer passenger traffic	0.70
32	Workshop Equipments for AMB Building	0.69
33	Under Vehicle Scanners and associated works for the installation at four airside entry gates	0.68
34	Replacement of OOG X-ray machine with a dual view image X-ray model (180180-2IS)	0.65
35	Independent Fire Proximity Suit	0.62
36	Consultancy and related costs for obtaining Business blue print report for setting up the BIAL Aviation Academy	0.60
37	Setup HA (High Availability) and migrate to latest support versions for enterprise MS SQL databases	0.60
38	Replacement of old FIDS in Check-in Counters & Boarding gates and replacement of old Kerb side Cluster FIDS Videowall	0.60
39	outdoor seating in QUAD	0.58
40	Refurbishment of PRM washrooms	0.57
41	Replacement of existing Precession Air Conditioner (PAC) at G-04 (Server room) and B-110 (Mobile Equipment room)	0.54
42	Urban Consolidation center Consultancy and Study	0.50
43	Quad Refurbishment	0.50
44	E&M Vehicles (commonality)	0.49
45	Additional works for Remote car Parking	0.47
46	Airside GSE Workshop area	0.46

S no	Item description	Amount (in INR cr.)
47	Design, development, supply and installation of flowering bio wall mock up a at Terminal 1 and its evaluation - Mock up -1	0.45
48	Redundancy Server for Parking & Upgradtion of Server	0.45
49	Purchase of SAP ERP Licenses	0.45
50	Integrated Traffic Lights on all service road	0.45
51	Techno-refresh of Automated Emergency Alert System	0.45
52	WIFI or Bluetooth enabled mobile display system 15 no's (portable display systems)	0.44
53	EV Fast Charging Points for Passenger Parking	0.40
54	IND AS / IFRS Reporting Tool Consolidation Tool	0.40
55	Data centre Protection - Server Security	0.40
56	Privilege Identity / Access Management	0.40
57	HSA (Heimann Single Analyst) along with assosiated works	0.40
58	Installation of Remote Speed Gun Additional cameras	0.40
59	Digital Signages Directory At Airpor Taxi Boarding	0.38
60	Electrical 5 KV Megger, Insulation tester - 1KV, Digital Multimeter, AC clamp meter, Thermal scanner, Crimping tool- up to 400 SQ.mm, Hand held Lux meter- storage & mapping, Four terminal Earth Resistance & Soil Resistivity Tester, Earth resistance clamp tester, Battery Impedence Test Equipment, Cable Fault Locating equipment, Hand held power quality analyzer, Potable Generator, Covered container with racks, De-watering pump	0.36
61	Sub-urban railway station	0.36
62	Boom Barriers for Parking Entry and Exit	0.35
63	Bobcat compact loader with attchments	0.35
64	Replacement of 04 BDDS equipment	0.34
65	New images and upgradation of existing CBT (Computer Based Training)	0.33
66	laying of Paver Block at Quad Area Tensile Roof Ca	0.32
67	Digital Store way finders @ Domestic/Int SHA & Kerb side	0.32
68	LED Screens at all Boarding Points and Terminal (Arrival Hall)	0.32
69	Refurbishment of support infrastructure at STP	0.30
70	LCV truck with 3.5 tonn carrying capacity-2no.	0.30
71	Landscape Irrigation Systems and Main Hydrant line for the Open area, proposed for keeping the transplanted trees and shrubs.	0.29
72	Space Designer - Commercial Development T2	0.25
73	BLR Airport App Deveopment & Maintainance	0.25
74	Provide power source and water supply to Isolation Hospital / DRS Facility for AAI	0.25
75	Procurement of 9 KL & 6 KL Tankers, for Potable & Raw water supply	0.25
76	Water quality analysers at BPH for Potable & Raw water System	0.25
77	Biometric Access Control System - Phase-3	0.24
78	Smart Washroom - Providing real time data of washroom utilization to passengers outside washroom	0.24
79	3rd GSE Building site 1. ICT Implementation 19.2 lacs 2. Demolition+Shifting of Airside Wall 35.1 lac	0.24

S no	Item description	Amount (in INR cr.)
	3. HT Power 32.4lacs 4. Water - Raw+Potable 55000 5. Sewage	
80	BIRD WATCH TOWER FOR SOUTH RUNWAY	0.23
81	Additional fund for signage standees	0.23
82	Devices for Performance Marketing	0.23
83	Power BI Premium Plan 1	0.21
84	ICT requirements - Harware & other ICT requirments ICT requirements - Software requirements	0.20
85	Purchase of CPMI and TMRS RF measuring tool	0.20
86	Engaging 3rd party testing agency for the e-Palm	0.20
87	Enhanced Digital Platform	0.20
88	Additional kennel at existing dog kennel complex	0.20
89	Office space for outsourced Security	0.20
90	Ladies Change over room at Fire Station North	0.20
91	Fence around GSE parking areas	0.19
92	Additional amount for procuring 02 X-Ray machines	0.19
93	CCTV Surveillance Storage for various CCTV porject	0.19
94	Covered truck -1no.	0.19
95	FSS integration to centralized location	0.18
96	Explosive Trace Detectors (ETD)	0.17
97	Collection well refurbishment - MS grating, hand rail and ladders	0.17
98	Technology Refresh of RoIP Touch Panel PC Monitor	0.16
99	Crusher cum compactor for SRA articles	0.15
100	Enhanced Digital Platform	0.15
101	10 Automated External Defribillators for the Terminal and Ancillary Buildings	0.15
102	Tow vehicle	0.15
103	Various small items	6.60
	Sub-total (C)	**94.22**

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18 APPENDICES

Appendix I – References for pre-control period computation

I.A. BIAL's letter to MoCA for UDF at INR 675 and INR 955 for domestic and international passengers

BIAL

12th November, 2007 / sw

The Secretary
Ministry of Civil Aviation
Government of India
Rajiv Gandhi Bhavan
Safdarjung Airport
New Delhi 110 003

Kind Attention: **Mr. Ashok Chawla, I.A.S.**

Sub: Bangalore International Airport / Aeronautical Tariffs at Airport Opening
Ref: Our letter dated 9th October 2007 / Our Meeting on 24th October 2007

Dear Sir

As informed to you earlier vide our letter dated 24th September 2007, the new Bangalore International Airport is scheduled to open for full commercial operations on 30th March, 2008. Subsequently, in our letter dated 9th October, we had further informed you on the aeronautical tariffs to be charged once the new airport gets operational. You had thereafter, in our meeting dated 24th October at your office, requested us to outline the basic cost calculations underlying the indicative tariffs to be charged. We are happy to provide you the same with this letter.

Legal Framework

Clause 10.2 of the Concession Agreement signed between the Ministry of Civil Aviation (MoCA) and Bangalore International Airport Limited (BIAL) defines the set up and approval procedure applicable for Airport Charges at the future airport. The Ministry has further clarified vide its letter No. AV. 20015/003/2003-AAI dated 21st July 2004, that indicative charges can be levied by BIAL from the airport opening date till the Regulated Charges have been approved by the Regulator or the MoCA, as the case may be. It was also confirmed in the same letter that it has taken note of the proposed tariffs of Users' Development Fee submitted to the lenders (Rs. 675 per departing domestic passenger and Rs. 955 per departing international passenger).

Indicative Charges versus Approval Process through Regulator

We understand that the AERA bill has been introduced in the Lok Sabha and the formation of the Independent Regulatory Authority (IRA) is planned to be initiated within the next 6 months. As soon as the IRA is in place and the final audited project cost is available, we will submit the regulated charges for the airport including detailed calculations to the IRA for approval. From airport opening till the regulator has approved the final tariffs, BIAL intends to charge indicative tariffs as per Item C below. Any shortfall or surplus during the time when these indicative charges are levied will also form part of the final tariff calculation as reviewed by IRA.

BIAL

Justification of Proposed Tariffs

A. Passenger and Cargo Traffic Growth Forecast

The existing HAL Airport reported 8.12 million passengers in the Financial Year 2006/07. We assume a strong growth in the next five years, though developments in other countries have shown that strong growth periods were always followed by stagnant years as well. Nevertheless, we have assumed to reach 10.5 Mio. passengers by the end of the Financial Year 2007/08, and strong growth figures over the first 5 years of operation as follows:

	Year-1	Year-2	Year-3	Year-4	Year-5
	2008-09	2009-10	2010-11	2011-12	2012-13
Domestic (Mio.)	10.9	12.7	14.2	15.6	17.2
International (Mio.)	2.3	2.9	3.3	3.8	4.2
Total	13.3	15.6	17.5	19.5	21.4

The growth in cargo is assumed as follows:

	Year-1	Year-2	Year-3	Year-4	Year-5
	2008-09	2009-10	2010-11	2011-12	2012-13
Cargo ('000 MT)	236.3	314.4	381.2	450.3	508.4

B. Project Cost and Capital Expenditure

The following table shows the total project cost of BIAL for the first phase, including the immediate project extensions in the amount of 540 Crores as approved by the board and shareholders of BIAL.

Total Project Costs till Airport Opening	INR Mio
Capital Investments	22'219
Non-capitalized pre-operational costs	937
Financing costs	1'547
Total Project costs	**24'703**

It may be noted that the project cost at the time of definition of the UDF in 2004 stood only at 1'100 Crores and has since considerably increased.

The capital investments have to be split between aviation and non-aviation segments. The bifurcation is based on (a) assets directly attributable to aviation and non-aviation segments and (b) common assets for which allocation has been made based on estimated proportionate usage.

It has to be noted that according to the BIAL business philosophy, non-aviation investments are done wherever possible through selected service providers, and therefore the above mentioned project cost of Rs. 22'219 Mio. does not include investments for cargo warehouses, fuel infrastructure incl. hydrant system, retail units and restaurants, lounges, flight kitchens, airport hotel, etc. The following table shows the split between aviation and non-aviation investments:

Aviation versus Non-Aviation Investments	INR Mio	% to total
Aviation	17'396	78.3%
Non-Aviation	4'823	21.7%
Total Capital Investments	**22'219**	

Depreciation has been computed on straight line method according to Indian GAAP based on the following average depreciation rates:

Civil:	5%
Electrical:	10%
Equipments & Vehicles:	20%

For the purposes of return on capital employed (ROCE), a reasonable rate of return of 16% has been adopted on the net aviation capital invested. To arrive at the net capital investment of each year, the original capital expenditure has been reduced by applicable depreciation. Additional investments to provide the capacity required as per the traffic forecast have been anticipated and considered over the next 5 years and result in the following net capital investments over the next 5 years:

In INR Mio.	Year-1 2008-09	Year-2 2009-10	Year-3 2010-11	Year-4 2011-12	Year-5 2012-13
Capital Investments					
Opening Block	**22'219**	**25'325**	**25'190**	**25'029**	**23'662**
+ : Additional Investments	5'216	2'345	2'488	1'436	335
- : Depreciation	-2'109	-2'480	-2'649	-2'802	-2'842
Net Capital employed	**25'325**	**25'190**	**25'029**	**23'662**	**21'155**
Aviation related capital investments (78%)	19'828	19'722	19'596	18'526	16'563
Reasonable Return on Aviation Capital Employed @ 16%	3'173	3'156	3'135	2'964	2'650

Please also note that as per above projections, BIAL assumes to make considerable further investments of above 1000 Crores for capacity increases in the next few years in addition to the project extensions already approved.

C. *Profit & Loss Statement for Aviation Segment / Justification for User Development Fee (UDF)*

BIAL is entitled to adjust the existing AAI tariffs by inflation since 2001, which would result in an adjustment by 1st of April 2008 of approximately 38%. We however respect your request to leave the current aeronautical tariffs (Landing, Parking and Housing as well as PSF tariffs) from the airport opening till final regulatory charges have been fixed at the same rates as charged by AAI today. From year 2 onwards, the following adjustments have been considered in the following table:

PSF and Parking Charges: Adjustment by applicable inflation index on 1st of April 2009 and fees remain then constant till end of 2012/13

Landing Charges: Increase by 20% (domestic flights) and 30% (international flights) on 1st of April 2009 and fees then remain constant till end of 2012/13.

The profit and loss statement by the company without UDF for the aviation segment looks as follows:

Aviation - Revenues & Costs (without UDF)	2008-09	2009-10	2010-11	2011-12	2012-13
PSF	464	795	895	993	1'093
Landing	862	1'244	1'398	1'520	1'720
Parking	19	32	35	39	42
Total Aviation Revenue without UDF (A)	**1'345**	**2'071**	**2'329**	**2'552**	**2'854**
Operating costs					
Personnel costs	464	539	522	737	870
Maintenance, Energy & Insurance	1'044	1'121	1'348	1'395	1'492
Sales & General Administration incl. Concession Fee	1'159	1'349	1'475	1'625	1'799
Total operating costs	**2'667**	**3'009**	**3'345**	**3'756**	**4'161**
Depreciation	1'651	1'942	2'074	2'194	2'225
Total costs	**4'318**	**4'950**	**5'419**	**5'950**	**6'386**
Reasonable ROCE (16%)	3'173	3'156	3'135	2'964	2'650
Total costs including reasonable return (B)	**7'490**	**8'106**	**8'555**	**8'914**	**9'036**
Net Deficit to be recovered through UDF (B-A)	**(6'145)**	**(6'035)**	**(6'226)**	**(6'362)**	**(6'182)**

It can be seen that the projected revenues from present aeronautical charges without UDF are grossly inadequate to recover the costs for providing airport infrastructure and facilities to passengers at the new airport at international standards. The introduction of the User Development Fee from airport opening onwards as defined in the Concession Agreement is crucial for the financial feasibility of the project. It may also be noted that the Union Budget of 2004/2005 by the Finance Ministry specifically approved charging of UDF by BIAL.

We propose to levy a UDF tariff of Rs. 675 per departing domestic passenger and Rs. 955 per departing international passenger from airport opening, with discounts for transfer passengers which use the infrastructure only to a limited extent. The following table shows the resulting UDF revenues over the first 5 years of operation:

	User Development Fee (INR per departing pax)	Revenue (INR Mio.)				
		Year-1	*Year-2*	*Year-3*	*Year-4*	*Year-5*
		2008-09	2009-10	2010-11	2011-12	2012-13
Domestic	675.0	3'340	3'826	4'236	4'571	5'028
Domestic Transfer	150.0	78	101	125	157	173
International	955.0	1'074	1'329	1'528	1'757	1'933
International Transfer	200.0	7	12	13	15	17
Total UDF Revenues		4'499	5'268	5'902	6'500	7'150

It is seen that there is a cumulative net deficit in the aviation segment even after considering planned UDF tariffs, though we anticipate the cumulative deficit to narrow down over a longer time frame and there is room for reducing the UDF after the first five years of operation if the traffic growth is as dynamic as it has been assumed.

While it is true that the current traffic levels at Bangalore are substantially higher than initially anticipated, investment in infrastructure as well the provided capacity of the airport have also been substantially increased by a total additional investment of Rs.1070 crores. In spite of these substantial additional investments (increasing for example the number of aircraft stands from initially 13 to 72), the proposed UDF is still within the limits as agreed with the MoCA when executing the Concession Agreement, and BIAL does not request any increase of the UDF, as it usually happens in the international context when capacity is increased.

D. Non-Aviation Revenues

Non-aviation income comprises of revenues from commercial activities (advertising, retail, food & beverages, parking, etc.) and real estate leases and rentals. Table 3 below gives an overview of planned non-aviation revenues and expenses.

Non Aviation Revenue & Costs	*Year-1* 2008-09	*Year-2* 2009-10	*Year-3* 2010-11	*Year-4* 2011-12	*Year-5* 2012-13
Total Non Aviation Revenue	1'173	1'721	2'094	2'419	2'967
Operating costs					
Personnel costs	95	110	107	150	178
Maintenance, Energy & Insurance	244	263	332	341	365
Sales & General Administration	180	222	251	285	330
Total operating costs	518	595	690	776	873
EBITDA	655	1'126	1'404	1'643	2'095
EBITDA%	*56%*	*65%*	*67%*	*68%*	*71%*

As can be seen, the non-aviation revenues will constantly grow over the time period, but cannot compensate any net deficit of the aviation segment in the short term, nor does the Concession Agreement between BIAL and MoCA foresee any such cross-subsidy of the aviation segment through non-aviation revenues. Nevertheless, with the shortfalls outlined above, the non-aviation revenue will very much compensate the net deficit of the aviation segment in the following years.

It has to be noted that BIAL has so far concentrated on providing aeronautical infrastructure and for this reason the non-aviation revenues will be rather small for the first few years. With the increasing non-aviation revenues, the UDF is also likely to be reduced after the first 5 years.

E. Conclusion

With above information, we have given you full transparency on the main cost and revenue elements of BIAL.

We respect your concern that airport charges should be levied in a sensitive way by the new public private partnerships and therefore agree to

- keep landing, parking and PSF charges at the existing levels in the first year of operation;
- increase them thereafter less than required to compensate inflation;
- levy UDF charges less than necessary to cover all aviation related costs with aviation revenues;
- use non-aviation revenues to compensate in the short term deficits of the aviation segment.

We kindly ask you for your understanding that new greenfield airports at international standards can only be funded with reasonable passenger charges. The proposed User Development Fees are still low in the international context. Future expansion of the airport infrastructure can only happen if the business plan of BIAL is based on solid grounds. Also, we kindly ask you to appreciate that BIAL will use more than 90% of its land for pure aviation infrastructure and less than 10% of its land for commercial real estate. We believe that our main focus must be the development of a professional aviation platform, and the same is only possible with reasonable aeronautical tariffs.

We therefore intend to levy the indicative User Development Fee (as agreed between the parties in the above referred correspondence underlying the concession agreement) at Rs. 675 per departing domestic passenger and Rs. 955 per departing international passenger from airport opening till final approval of the tariffs by the IRA.

We hereby request you to acknowledge receipt of this letter in token of having noted the contents herein.

Thanking you,

Yours truly
for BANGALORE INTERNATIONAL AIRPORT LIMITED

Albert Brunner
Chief Executive Officer

Cc:
- Mr. K.N. Shrivastava, Joint Secretary, Ministry of Civil Aviation
- Ms. Anna Roy, Executive Director, Ministry of Civil Aviation

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India
सत्यमेव जयते

I.B. <u>MoCA's grant of ad-hoc UDF of INR 1070 and INR 260 for International and domestic passengers and details of information awaited from BIAL</u>

F. No. AV.20015/ 003/2003-AAI
Government of India
Ministry of Civil Aviation
AD Section

'B'-Block, Rajiv Gandhi Bhavan,
Safdarjung Airport, New Delhi
Dated 03.04.2008.

To,
Mr. Albert Bruner,
Chief Executive Officer,
Bangalore International Airport Limited,
118, Gayathri Lakefront, Outer Ring Road,
Hebbal, Bangalore-560024

Sub: User Development Fee at the Bangalore International Airport.

Sir,

I am directed to refer to your letter dated March 28, 2008 regarding the levy of User Development Fee (UDF) from the date of airport opening at Bangalore International Airport.

2. Your proposal to levy a UDF @ Rs.1070/-, inclusive of all taxes on international departing passengers w. e .f. the airport opening date on an 'ad-hoc' basis has been approved. As regards the other regulated charges, viz. Landing and Parking Fee and Passenger Service Fee, it should be at the existing rates to all aircrafts and all passengers as applicable at other airports.

3. Once the final audited accounts have been submitted by Bangalore International Airport Limited (BIAL) to the Govt. of India, a final decision will be taken on fixation of UDF charges both for domestic and international departing passengers. The ad-hoc UDF would remain in force till the earlier of the following:

(a) final audited figures submitted by BIAL,
(b) guidelines for determination of UDF finalized by Ministry of Civil Aviation (MoCA), or
(c) 3 months from airport opening date.

4. The tariff would be finalized thereafter as per the guidelines of MoCA and the Concession Agreement.

Received by .... On: 10/4/08
To: A.B.
cc: S.N. PM
For action
For discussion
For feedback
For Info
For Record

Yours faithfully,

(Vijay Singh)
Under Secretary to the Government of India
Tele-24640217

F. No. AV.20036/007/2008-AD
Government of India
Ministry of Civil Aviation
****

Rajiv Gandhi Bhawan,
New Delhi-110003.

Dated: 9th January, 2009

To

Mr. Albert Brunner,
Chief Operating Officer,
Bangalore International Airport Ltd.
Outer Ring Road, Hebbal,
Bangalore 560024

Subject: **Levy of User Development Fee – reg.**

Sir,

I am directed to refer to your reference BIAL/LGL/arr/236 dated 18.11.2008 on the subject noted above and to say that in terms of the Article 10.2.1 of the Concession Agreement, the regulated charges should be consistent with the ICAO policies. Further, as per the Article 10.2.2, prior to airport opening BIAL shall seek approval from this Ministry for the regulated charges, which shall be based on the final audited project cost. This Ministry shall *subject to the proposed regulated charges being in compliance with the principles set out in Article 10.2.1*, grant its approval thereto within a period of 60 days of the date of the application being submitted by BIAL. Therefore, a plain reading of the both the Articles, viz., Article 10.2.1 and Article 10.2.2 brings out the two main compliance parameters for grant of approval for levy of UDF viz.,

(i) the airport charges are to be based on final audited project cost;

(ii) the levy of airport charges should be consistent with and in compliance of ICAO policies.

The ICAO policies on charges for airport and air navigation services are set out in Doc 9082. A plain reading of Doc 9082 makes it evident that UDF computation should allow pass through of "reasonable cost" and should ensure "safeguarding the interest of the airport users". It is, therefore, imperative for this Ministry to ensure that before any approval for collecting UDF is granted to BIAL a proper diligence of information is undertaken to determine that the proposed charges are consistent with and in compliance of the ICAO policies. Further, it needs to be observed that Article 10.2.2 clearly makes the grant of approval, within a period of 60 days, subject to the proposed charges being in compliance with the principles set out in Article 10.2.1, i.e., the ICAO policies.

2. Based on the above understanding this Ministry had sought clarifications/information/documents for conducting diligence. The table below provides the list of information required and the status of submission thereof from your end.

S. No.	Documents Required	BIAL
1	Final audited project cost certificate	Available
2	Quarterly Audited Financial Statements (In the absence of audited, provisional may be submitted)	Awaited
3	Certified Statement of classification of assets in Aeronautical, Non Aeronautical and common assets	Awaited
4	Approved Business Plan	Awaited

5	Certification from Statutory Auditors that Transparent competitive bidding process has been carried out	Awaited (Minutes of Board meeting have been provided as of now)
6	Certificate of independent engineer certifying commissioning of assets	Available
7	Concession agreement	Available
8	Declaration by the airports company as to the grants received	Available
9	Loan Sanction Letters	Available
10	Interest reset letters if reset already done	Awaited
11	Details of working capital arrangement	Awaited
12	Certificate from the statutory auditors providing details of pre-bid expenses incurred	Available
13	Certification by the company providing details of government grants received	Available
14	Copies of agreements between the airport company and its service providers	Awaited
15	Detailed computation (along with assumptions) of the revenue projection (split in to aeronautical and non -aeronautical) for the projected period	Awaited

3. As you would observe, it is the delay in furnishing of requisite information by BIAL which has prevented the Government of India from making a determination that the charges proposed by BIAL are consistent with and in compliance of the ICAO policies and thereby taking a view in the matter. As such, there has been no default on the part of the Government of India.

4. In view of the position stated above, I am directed to request you to provide the complete information, at the earliest, so as to enable the Government to conclude the diligence process and take a final view in respect of the proposals submitted by BIAL. The Ministry of Civil Aviation looks forward to cooperation and compliance on part of BIAL so that the project and the larger interests of the user public do not suffer.

5. In the meantime, BIAL is permitted to levy a UDF @ Rs. 260/- per departing domestic passenger, with effect from 16.01.2009, on an 'ad-hoc' basis. This levy shall be inclusive of all applicable taxes. Further, BIAL may please finalize their expansion plan within a period of three months.

6. This issues with the approval of Minister of State for Civil Aviation (Independent Charge).

Yours faithfully,

(Sandeep Prakash)
Director
Tel No.24616025

I.C. BIAL's letter to MoCA asking for revision in domestic UDF to INR 375

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Bengaluru
INTERNATIONAL
AIRPORT

January 23, 2009

Mr. M. Madhavan Nambiar
Secretary to the Government of India
Ministry of Civil Aviation
Rajiv Gandhi Bhawan
Safdarjung Airport
New Delhi 110 003

Sub: Ad-hoc Domestic UDF for BIAL

Dear Sir,

We make reference to your letter dated 9th January, 2009 in which you approved an ad-hoc Domestic UDF of Rs. 260/- per departing passenger. As per the aforementioned letter, we have started collecting this fee effective 16th January, 2009 and the whole procedure is going on well without any inconvenience to the passengers.

We take note that the Ministry has, for the time being approved an ad-hoc domestic UDF. However, even for an ad-hoc UDF, we had expected a significantly higher amount. This expectation can be explained by three facts:

1. BIAL has to resume immediately the process for the next expansion. An ad-hoc UDF of Rs. 260/- does not allow any expenditures of this kind.
2. The present traffic volume is much lower than anticipated (6.2 mio instead of 8.3 mio <u>domestic</u> passengers from Airport Opening Date (AOD) till 31st March, 2009).
3. The delay in the UDF approval has resulted in significant losses for BIAL during the last seven months since AOD.

Based on these facts, we consider an interim ad-hoc UDF amount of Rs. 375/- as reasonable and justifiable, pending final approval by the Ministry / Regulator.

We therefore kindly request you to reconsider this. We will formally answer to the questions raised by you in your letter dated 9th January, 2009 in the next few days.

Thanking you,

Yours faithfully,
for BANGALORE INTERNATIONAL AIRPORT LIMITED

Albert Brunner
Chief Executive Officer

C C: Mr. Stoeckl-Pukall, Embassy of Germany, Delhi
Mr. D. Freihofer, Embassy of Switzerland, Delhi

Registered Office: 118 Gayathri Lakefront, Outer Ring Road, Hebbal, Bangalore 560 024 India

विनियामक प्राधिकरण
Airports Economic Regulatory Authority

I.D. BIAL's letter to MoCA asking for revision in domestic UDF to INR 375 at par with Hyderabad airport

Bangalore International Airport Limited
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Bengaluru INTERNATIONAL AIRPORT

BIAL/MoCA/UDF

February 18, 2009

Secretary to the Government of India
Ministry of Civil Aviation
Rajiv Gandhi Bhawan
Safdarjung Airport
New Delhi 110 003

Kind Attention: Mr. Sandeep Prakash, IAS, Director

Sub: Domestic User Development Fee (UDF) at BIA

Sir,

Reference is invited to the Ministry letter No. AV.20036/007/2008-AD dated 9th January, 2009 approving levy of domestic UDF of Rs. 260/- *inclusive of taxes* on ad-hoc basis with effect from 16th January, 2009.

We request you to kindly approve the domestic adhoc UDF *exclusive of taxes* in order that BIAL realises the full amount of Rs. 260/- per departing domestic passenger. It becomes therefore necessary to revise the UDF payable to Rs. 300/- inclusive of taxes. This rounded off amount of Rs. 300/- is suggested to facilitate convenient transaction by passengers.

Notwithstanding the above, we reiterate our request for a revision in the domestic adhoc UDF to atleast Rs. 375/- per departing passenger (on par with that of Hyderabad International Airport Limited) pending a final decision on the quantum.

We will be grateful to you for an early action.

Thanking you,

Yours faithfully,
for BANGALORE INTERNATIONAL AIRPORT LIMITED

Marcel Hungerbuehler
Chief Executive Officer

Registered Office : 118 Gayathri Lakefront, Outer Ring Road, Hebbal, Bangalore 560 024 India

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India
सत्यमेव जयते

I.E. MoCA's letter to AERA to consider the request from BIAL

(1)

82/secy/09
7/x/09

F. No. AV.20036/014/2009-AD
Government of India
Ministry of Civil Aviation
AD Section
****

Safdarjung Airport, New Delhi,
Dated 06.10.2009.

To,
Shri Sandeep Prakash,
Secretary,
Airports Economic Regulatory Authority of India,
Safdarjung Airport,
New Delhi.

Sub: Determination of UDF by AERA- pending cases to be transferred to AERA.

Sir,

I am directed to refer to d.o. letter No. AERA/20011/DIAL-DF/2009 dated 10.09.2009 from Chairman, AERA on the above-mentioned subject and to forward herewith a set of the relevant extracts of files and correspondence (photocopies) of the proposals received from M/s BIAL and HIAL pertaining to determination of UDF at Bangalore International Airport, Devenahalli and Rajiv Gandhi International Airport, Shamshabad for further necessary action, as desired. The relevant agreements executed in this regard are available on this Ministry's web-site.

Yours faithfully,

(Oma Nand)
Under Secretary to the Government of India.
Tele-24640214.

Encl:
- (i) Relevant extract of notings of files and correspondences relating to determination of BIAL's UDF.
- (ii) Relevant extract of notings of files and correspondences relating to determination of HIAL's UDF.
- (iii) M/s CRISIL's report (in original) received from AAI.
- (iv) Independent Engineers' report in respect of M/s BIAL (in original).

I.F. BIAL's letter to AERA in response to Authority's follow-ups

PAGE 01/01

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Bengaluru INTERNATIONAL AIRPORT

Secy/10
7/1/10
1-AERA-10
28.1.10

BIAL/CEO/UDF

January 22, 2010

Mr. Sandeep Prakash
Secretary
Airports Economic Regulatory Authority of India
Room No. 354
Rajiv Gandhi Bhavan
New Delhi 110 003

DD-II

Sub: User Development Fee

Dear Sir,

This is with reference to the application of BIAL for an increase in UDF. As you may be aware GVK has taken over the Management of BIAL w.e.f. 19th January, 2010. Whereas there is definitely a need for increase in UDF, BIAL would like to understand in detail the parameters for sanction of UDF in the process of being finalized by AERA. Once the parameters are understood, BIAL will submit the appropriate information at the earliest possible.

Thanking you for your support,

Yours sincerely,
for BANGALORE INTERNATIONAL AIRPORT LIMITED

Marcel Hungerbuehler
Chief Executive Officer

I.G. Reference of UDF in the Concession Agreement

Schedule 6
Regulated Charges

Pursuant to the principles set out in Article 10.2 of this Agreement, BIAL shall be entitled to levy and recover from airline operators, passengers and other users and in respect of both domestic and international aircraft and passenger movements, at rates consistent with ICAO Policies, the following Regulated Charges:

(i) Landing, Housing and Parking charges (Domestic and International):

The charges to be adopted by BIAL at the time of airport opening will be the higher of:

(a) The AAI tariff effective 2001 duly increased with inflation index, as set out hereunder, upto the airport opening date **Or**

(b) The then prevailing tariff at the other AAI airports

(ii) Passenger Service Fee (Domestic and International):

The charges to be adopted by BIAL at the time of airport opening will be the higher of:

a) The AAI tariff effective 2001 duly increased with inflation index, as set out hereunder, upto the airport opening date **Or**

b) The then prevailing Passenger Service Fee at the other AAI airports

The Passenger Service Fee chargeable by BIAL, as given above, is inclusive of the cost of Security Expenditure on Central Industrial Security Force (CISF). This component of cost towards Security Expenditure on CISF shall be revised upwards by BIAL as and when directed by GOI.

(iii) User Development Fee (UDF) (Domestic and International):

BIAL will be allowed to levy UDF, w.e.f Airport Opening Date, duly increased in the subsequent years with inflation index as set out hereunder, from embarking domestic and international passengers, for the provision of passenger amenities, services and facilities and the UDF will be used for the development, management, maintenance, operation and expansion of the facilities at the Airport.

The Regulated Charges set out in Schedule 6 shall be the indicative charges at the Airport. Prior to Airport Opening BIAL shall seek approval from the Ministry of Civil Aviation for the Regulated Charges, which shall be based on the final audited project cost.

Note: (a) Charges will be calculated on the basis of nearest MT (i.e. 1000 kgs)

(b) The minimum fee for per single landing will be INR 1000.0

(c) Peak hour surcharge on International landing between 2301 hrs (IST) to 2400 hrs (IST) will be 5%

(d) If US $ rates are to be charged the following rule for conversion, US$ into INR the rate as on the 1st day of the month for 1st fortnight billing period and rates as on 16th of the month for the 2nd fortnightly billing period, will be applicable.

(e) All Tariffs are net for BIAL. Any taxes such as Service tax, if applicable, will be over and above the tariff proposed.

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I.H. Changes proposed to BIAL's submission in Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till

- Changes proposed to BIAL's submission as given in Table 8 of Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till is detailed below:

Table 195: Changes proposed to BIAL's submission as given in Table 8 of CP14

Particulars	Claim by BIAL	Observations by Authority
Cost of Debt	Claimed as Interest cost / average loan balance	The Authority notes that these are based on the audited details of the Interest Cost and Debt balances and hence considered as such.
Cost of Equity	24.4%	The cost of equity proposed to be considered for BIAL for the control period is proposed to be allowed for the pre-control period also. Refer Para 13 below on Cost of Equity wherein the Cost of Equity at 16% is proposed.
Fair Rate of Return	Equity considered for the purpose of Gearing has been computed considering Equity excluding losses in case of Accumulated P&L having Debit balance and including P&L balance in case of Accumulated P&L being in credit.	There have been cumulative losses during the first 2 years, as can be seen from the audited Financial statements. Hence the Authority proposes to accept the methodology submitted by BIAL.
Regulatory Asset base considered for return	Average RAB as per books has been considered except for 1st year of operations where the closing RAB has been considered proportionate to the number of days in Operation of the airport (312 days of 365 days)	In view the Airport Operations commencing on 23rd May 2008, the Operator did not have a significant Opening Asset Base as of 1st April 2008, with which the average asset base (as prescribed in Direction 5) could be considered. Hence Authority proposes to consider the submission made by BIAL. The Authority has considered Foreign Exchanges loss / gain values capitalized to the asset values, and appropriately adjusted the RAB on this account.
Depreciation	Considered as per books	The Authority proposes to consider the proposal submitted by BIAL.
Operating Expenditure	As per audited financials, excluding: Forex gains/ losses Including Bad debts	Bad Debts Provisions are not proposed to be included as part of the Operating Expenditure for computation of shortfall.
Income Tax	Total tax payment (both charged off to P&L and carried as credit in books) has been considered for claim	Submission is proposed to be considered.
Revenue from Operations	As per financials	The Authority noted that, while considering the Aeronautical Income and Non-Aeronautical Income, BIAL has not considered Interest Income which forms part of the "Other Income" in financials. The Interest

Particulars	Claim by BIAL	Observations by Authority
		Income earned is proposed to be included as part of Non-Aeronautical revenue and adjusted from the ARR, in computation of the shortfall. The Authority notes that BIAL has submitted certificate from a Chartered Accountant detailing the Interest received on the Security Deposit received for a hotel project. The Authority proposes to consider the Interest Income, excluding the Interest earned on hotel deposits as part of the Non-Aeronautical Revenues.
Opening P&L Shortfall	Opening accumulated losses as of 1st April 2008 – Rs. 53.3 Crores has been claimed as Shortfall in 2008-09	The Authority proposes to compute WACC considering the full value of Equity invested (without reducing the Accumulated losses). Hence, the Authority proposes not to allow accumulated losses as of Airport opening date (i.e. Rs. 53.3 Crores) to be added to the shortfall computations.
Calculation of Concession Fee and OMSA Fee on the Pre-control shortfall	Reimbursement of OMSA Fee at 2% and Concession Fee at 4% as the same is payable on any revenue earned by BIAL.	Authority has examined the issue of the OMSA fee payable to M/s Unique in Para 17.67.3 below. The Authority has allowed OMSA Fee at 1.29% as was paid by BIAL to M/s Unique (though in the agreement the OMSA Fee has a ceiling of 2%). It proposes to allow the Concession Fee of 4% as per the Concession Agreement.

- The shortfall claim considered by Authority in Consultation Paper no. 14/ 2013-14 dated 26th June 2013 (CP14) for determination of aeronautical tariffs of BIAL for the First Control Period under single till is given in table below:

Table 196: Shortfall claim considered by the Authority

Particulars	FY 2009	FY 2010	FY 2011	Total
Fair rate of return on RAB	132.62	164.27	161.39	458.28
Depreciation	113.46	134.40	135.31	383.17
Opex	146.26	163.60	176.10	485.96
Income Tax	0.86	8.78	29.61	39.25
Aggregate Revenue Requirement	393.20	471.06	502.40	1366.66
Less: Revenue from operations (Aero revenue, non – aero revenue and interest income)	(315.41)	(474.01)	(559.91)	(1349.33)
Net shortfall	77.79	(2.96)	(57.51)	17.32
Add: Calculation of concession fee and OMSA fee on the pre-control period shortfall	4.34	(0.17)	(3.21)	4.17
Total claim	**82.13**	**(3.12)**	**(60.72)**	**18.29**
Compounding factor	1.18	1.09	1.00	
Compounded value	**97.30**	**(3.41)**	**(60.72)**	**33.17**

I.I. Shortfall claim considered by the Authority in Consultation Paper no. 22/ 2013-14 dated 24th January 2014 which was an addendum to CP14 (CP22) under shared till

a) The shortfall claim considered by the Authority after making necessary changes based on EIL report is given below:

Table 197: Shortfall claim considered by the Authority in CP22

Particulars	FY 2009	FY 2010	FY 2011	Total
Fair rate of return on RAB	127.15	160.54	157.74	445.43
Depreciation	109.27	129.51	130.41	369.19
Opex	146.28	163.64	176.08	486
Income Tax	0.86	8.70	29.62	39.18
Aggregate Revenue Requirement	383.56	462.38	493.85	1339.79
Less: Revenue from operations (Aero revenue, non – aero revenue and interest income)	(315.41)	(474.22)	(559.88)	-1349.51
Net shortfall	68.15	(11.83)	(66.02)	-9.7
Add: Calculation of concession fee and OMSA fee on the pre-control period shortfall	3.81	(0.66)	(3.69)	-0.54
Total claim	**71.95**	**(12.49)**	**(69.71)**	**-10.25**
Compounding factor	1.18	1.09	1.00	
Compounded value	**85.24**	**(13.65)**	**(69.71)**	**1.88**

I.J. Stakeholder responses and extracts from AERA Act

a) The authority also noted the response from various stakeholders on the Pre-control period losses. Some of the responses are mentioned below:

British Airways *– "...on the issue of pre-control period losses, AERA should not have retrospective jurisdiction over the period prior to its formation in September 2009, as there was already a regulator during that period (the Ministry).* ***AERA should therefore exclude the period up to September 2009 when assessing pre-control period losses...****"*

IATA *– "AERA was established by the Indian Government through notification no GSR 317 (E) dated 12 May 2009. Prior to the establishment of AERA, the Ministry of Civil Aviation was the de facto economic regulator. IATA is of the strong view that legally, the Authority does not have jurisdiction over the period prior to its establishment and especially since there was a separate entity performing the regulator's role at that time i.e. the Ministry.* ***Therefore, in assessing the pre-control period claim, the period between 24 May 2008 (the airport opening) and May 2009 (the establishment of AERA) should be excluded.*** *This principle should be observed notwithstanding the magnitude of the pre-control period claim. Therefore, the Authority's proposed pre-control losses of Rs33.17 Crore should be re-computed..."*

b) In addition to the above comments from stakeholders, the Authority also noted from the AERA act that "The AERA Act came into being on 1st January 2009 when the GoI notified AERA Act. The powers of determination of charges of aeronautical services as well as UDF, etc. were conferred to the Authority by the GoI on 1st September 2009 when Chapter 3 of the AERA Act was notified."

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I.K. Changes proposed by Authority in Second Control Period and recomputed ARR

a) The Authority made the following changes to BIAL's submission in the Second Control Period:

- Consider the expenses allocation ratio considered by the Authority for the First Control Period for pre-control period also.
- Consider the asset allocation ratio considered by the Authority for the First Control Period for pre-control period also.
- The Authority noted that BIAL had considered pre–Airport opening Date opening day losses as part of first year operating expenditure. This was proposed to be disallowed by the Authority.
- Consider return on equity at 16% against 21.48% considered by BIAL
- Gearing ratio error and rate multiple corrected
- Consider CGF as aeronautical revenues
- Utility recovery which was considered by BIAL as Non-Aero Income adjusted with Opex
- Interest income considered fully, without excluding interest from cash received from Hotel as Deposit
- Rental income considered for Land given on lease to Airport Hotel
- Rental revenues received from Concessionaires rendering Aeronautical Services considered as Aeronautical Income
- Adjustment to RAB as per EIL report

b) The over recovery computed and proposed to be deducted from the ARR for the Second Control Period of BIAL as per Table 5 of Second Control Period order is given below:

Table 198: Recomputed pre-control period ARR and (Under) / Over recovery by AERA in Second Control Period order under 40% shared till

Particulars	FY 2009	FY 2010	FY 2011	Total
Average RAB for calculating ARR	1,565.26	1,516.85	1,413.96	
Fair Rate of Return	8.33%	9.16%	9.80%	
Return on Assets	111.47	138.91	138.60	
WC interest	0.00	1.18	0.73	1.91
Depreciation	97.20	116.05	116.27	329.52
Opex	123.08	132.05	136.22	391.35
Estimated IT reimbursement	0.00	3.17	12.08	15.25
Total gross ARR	331.75	391.35	403.90	1,127.00
Less: 40% of non – aero revenues	(33.33)	(38.72)	(52.28)	-124.33
Add: Concession fee on regulated charges	9.64	15.54	17.63	42.81
Net ARR	**308.06**	**368.18**	**369.25**	**1,045.49**
Actual revenues	**241.04**	**388.46**	**440.70**	**1,070.20**
Over/ (Under Recovery)	-67.03	20.28	71.45	24.70
Over/ (Under Recovery) from September 2009		11.83	71.45	83.28

Particulars	FY 2009	FY 2010	FY 2011	Total
Over/ (Under Recovery) indexed till 1st April 2016				141.55

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I.L. Stakeholder's comments in Second Control Period and Authority's response

a) Some relevant comments given by various stakeholders on Authority's analysis of pre-control period shortfall is given below:

- APAO: "...We would like to draw the Authority's attention to the Hon'ble TDSAT Order wherein the Tribunal has rejected a technical plea contending that the regulator had no jurisdiction to determine tariffs for a period prior to the notification of its powers in September 2009. The tribunal upheld that there is no express or implied embargo prohibiting the Authority from regulating prior to notification of its powers for tariff determination. In fact, the Hon'ble TDSAT order has clarified that any tariff determination exercise left unfinished by the Central government could be finished by AERA once it was legally constituted. In addition, Para 67 of the Hon'ble TDSAT Order clearly slates that the Central Government was fully aware of the tariff determination exercise by the Authority in the case of DIAL for the period as it has issued communications relating to tariff fixation without any objections. In such a scenario, the Tribunal observed that it would be futile to direct the Central Government to go through the formality of fixing tariffs when it cannot complete the exercise in a meaningful and proper manner so as to avoid retrospect impact and delay. Finally, it was also mentioned that Section 13 of the AERA Act "gives sufficient latitude in selecting an appropriate beginning of the first regulator term of 5 years subject to rules of transparency and fairness. This clearly dismisses the argument of the authority not having jurisdiction over the period prior to notification of its powers."
- HIAL: "...Also, the appellate tribunal Hon'ble TDSAT in a recent case of Delhi International Airport Limited (DIAL) had dealt with similar issue and ordered the following: "Once AERA was legally constituted from September 2009, the unfinished exercise could have been finished only by AERA. Clearly, the central government has the authority to consult independent expert body for the period between 01.04.2009 and 01.09.2009 when AERA came into existence. The exercise by AERA for that period has been within the knowledge of central government which has issued communications relating to tariff formulation. In absence of any objection from any quarters including central government, it would be futile to direct the Central Government to go through the formality of fixing the tariffs for the 5 months between April'2009 and August'2009 when Central Government cannot exercise in a meaningful and proper manner so as to avoid retrospectively any delay." The above order clearly states that AERA has stepped into MoCA role as far as tariff determination is concerned and any unfinished work of MoCA has to be completed by AERA..."
- IATA: "...For the First Control Period AERA used a 40% shared till but was clear that the true up mechanism would be made on a Single till basis. However, it is now proposing to change such decision and to adopt a true up on the basis of a 40% shared till on the basis of "expansion needs". AERA should not change its decision solely on the basis of capital expenditure needs as that would spare shareholders from the responsibility to provide adequate capital to finance investments. Moreover, it would constitute prefunding, and on top, the capex will be included in the RAB and the company would be remunerated for it..."
- Siemens: "...In case of major airports in India, including BIAL as mandated by law, aeronautical tariffs are to be regulated and an airport operator cannot suo moto adjust / increase its tariffs even to recover any losses. In these circumstances, non – consideration

of such losses incurred by the authority would lead to BIAL bearing these losses – which is against the basic principles of economic regulation regime in the country..."

- BIAL's response to AERA's treatment basis the EIL report: "...BIAL would like to highlight that while the authority has not considered performance of the airport for the pre-control period before September 2009, the Authority has disallowed costs incurred eve prior to September 2009, based on EIL report (disallowance from opening RAB as of 24th May 2008 by INR 69.45 cr.)..."
- BIAL also mentioned that "...the CA of BIAL provides for tariff determination either by the Ministry of by the Independent Regulatory Authority (IRA) as the case may be. Initially, the ministry determined the ad – hoc tariffs where final tariffs were to be determined during a subsequent period. The authority is proposing to consider tariffs from September 2009 rather than inception of the airport leaving the tariff determination incomplete for the period from inception of airport to September 2009..."
- BIAL's submission on over – recovery: "...BIAL requests the Authority not to reduce purported over recovery until such time that the Hon'ble TDSAT decides on the issue..."

b) The Authority's analysis on the various stakeholder comments as well as on the submissions of BIAL is given below:

"The Authority notes that BIAL and the stakeholders supporting its claim for pre-control period losses have placed a good deal of emphasis on the Hon'ble TDSAT order on the fixation of control period for DIAL. In the case of DIAL, the choice of the control period was the main issue. The State Support Agreement of DIAL stipulated that the tariff determination should commence from the fourth year of operations by DIAL and therefore the Authority decided to fix the control period from 1st April 2009 more as a matter of convenience since the financial accounting period starts from 1st April and it would have been cumbersome and time consuming to separate the accounts from 1st September. The Authority is of the view that the Hon'ble TDSAT has upheld this practical stand taken by the Authority in its order relating to first control period order for DIAL. The Hon'ble Tribunal had noted that prior to the formation of AERA if MoCA had started the process of tariff determination it could not have finalised it within the short period available and therefore the unfinished work would have to be rightly entrusted to AERA which was by then in place. This should not be used as the ground for retrospective tariff determination for a period prior to the control period fixed by AERA and a period prior to formation of AERA. Process of going beyond the determined control period could result in never ending claims from other airports viz. AAI airports etc."

"The Authority also notes BIAL's request to alternatively not determine Pre-control period shortfall / over-recovery till the Appellate Tribunal decides on the appeal filed by BIAL. The Authority had in its Consultation Paper proposed to deduct the over recovery for the period from 1st September 2009 mainly on the ground that the approach and methodology should be consistent in the case of HIAL & BIAL. BIAL had approached the Authority to mitigate its losses during the pre-control period. Normally, the Authority should confine the process of tariff determination only to the control period. In case any Airport Operator claims hardship by way of losses, the Authority might consider it, from the date of its formation. And if there is no hardship, the right approach would be to ignore the transaction prior to the control period and limit itself to the tariff determination for the control period only as decided in the tariff order for the first control period. Besides, the Authority notes that this matter is sub-judice and

the authority would take a suitable view in accordance with the orders of the Appellate tribunal in this matter.