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

Order No. 38/2021-22

सत्यमेव जयते

AIRPORTS ECONOMIC REGULATORY AUTHORITY OF INDIA

IN THE MATTER OF

DETERMINATION OF AERONAUTICAL TARIFF FOR CHENNAI INTERNATIONAL AIRPORT, CHENNAI (MAA) FOR THE THIRD CONTROL PERIOD

(01.04.2021 – 31.03.2026)

DATE OF ISSUE: 04th February 2022

AERA BUILDING

ADMINISTRATIVE COMPLEX

SAFDARJUNG AIRPORT

NEW DELHI 110003

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List of Abbreviations

Abbreviations	Full forms
AA/ES	Administrative Approval and Expenditure Sanction
AAI	Airports Authority of India
AAICLAS	Airports Authority of India Cargo Logistics and Allied Services
AERA	Airports Economic Regulatory Authority of India
AOCC	Airports Operations Control Centre
ARR	Aggregate Revenue Requirement
AS	Airport Services
ASQ	Airport Service Quality
ASRS	Aviation Safety Reporting System
ATC	Air Traffic Control
ATM	Air Traffic Movement
ATRS	Automatic Tray Retrieval System
AUCC	Airport User Consultative Committee
BIAL	Bangalore International Airport Limited
CAGR	Compounded Annual Growth Rate
CBR	California Bearing Ratio
CFT	Crash Fire Tender
CGF	Cargo Groundhandling Fuel
CHQ	Corporate Head Quarter
CP	Consultation Paper
CPI	Consumer Price Index
CSR	Corporate Social Responsibility
CUTE	Common User Terminal Equipment
CWIP	Capital Work In Progress
DARK	Disabled Aircraft Retrieval Kit
DFMD	Door Frame Metal Detector
DGCA	Directorate General of Civil Aviation
DIAL	Delhi International Airport Limited
EHCR	Employee Headcount Ratio
EMI	Equated Monthly Instalment
EQTR	Employee Quarter Ratio
ETD	Explosive Trace Device
FA	Financing Allowance
FCP	First Control Period
FRoR	Fair Rate of Return
FTC	Fuel Throughput Charge
GST	Grand Southern Trunk
HHMD	Hand-Held Metal Detector
HVAC	Heating Ventilation and Air Conditioner
ICAO	International Civil Aviation Organisation
IDC	Interest During Construction
IIT	Indian Institute of Technology
IT	Information Technology

Abbreviations	Full forms
IT Act	Income Tax Act
MEP	Mechanical, Electrical and Plumbing
MIAL	Mumbai International Airport limited
MLCP	Multi-level Car Park
MPPA	Million Passengers Per Annum
MRO	Maintenance, Repair and Overhaul
MYTP	Multi Year Tariff Proposal
NCAP	National Civil Aviation Policy
NITB	New Integrated Terminal Building
ORAT	Operational Readiness and Airport Transfer
PAX	Passengers
PBT	Profit Before Tax
PIDS	Perimeter Intrusion Detection System
PSF	Passenger Security Fee
RAB	Regulatory Asset Base
R&M	Repair & Maintenance
RBI	Reserve Bank of India
RET	Rapid Exit Taxiways
RGB LED	Red Green Blue Light Emitting Diode
RHQ	Regional Head Quarters
SBDS	Self Baggage Drop Systems
SBI	State Bank of India
SCO	Shop-cum-office
SCP	Second Control Period
SITC	Supply, Installation, Testing and Commissioning
STP	Sewage Treatment Plant
SUV	Sports Utility Vehicle
T-1	Terminal 1
T-2	Terminal 2
T-3	Terminal 3
T-4	Terminal 4
TB	Terminal Building
TBLR	Terminal Building Ratio
TCP	Third Control Period
TDSAT	Telecom Disputes Settlement and Appellate Tribunal
UDF	User Development Fee
UNESCO	United Nations Educational, Scientific and Cultural Organization
VEHR	Vehicle Ratio
WDV	Written-down Value
WPI	Wholesale Price Index
XBIS	X-ray Baggage Inspection System
Units of Measurement	
Mn	Million
Rs	Rupees
Cr	Crore

Abbreviations	Full forms
FY	Financial Year
sq.m.	Square metre
p.a.	per annum
YoY	Year on Year

1. BRIEF ON CHENNAI INTERNATIONAL AIRPORT

1.1. Introduction

1.1.1. Chennai International Airport (earlier known as Madras International Airport) is one of the oldest civilian airports commissioned in India. It is located in Chennai, the capital city of the state of Tamil Nadu. Chennai is a hub for the automobile industry, and also has a significant presence of sectors such as IT, hardware manufacturing and healthcare. Apart from being a business hub, Chennai is also well known for tourism. Chennai International Airport is the nearest airport to Mahabalipuram, a UNESCO world heritage site. It also connects tourist destinations and pilgrimages such as Rameswaram, Tirupati, Kanchipuram, Tiruvannamalai, Vellore and Pondicherry attracting both domestic and international passengers.

1.1.2. Chennai International Airport is owned and operated by the Airports Authority of India (AAI), a *Miniratna* Category-1 Public Sector Enterprise. AAI was constituted by an Act of Parliament and was established in 1995 through the merger of erstwhile National Airports Authority and International Airports Authority of India. The merged entity—AAI was entrusted with the responsibility of creating, upgrading, maintaining and managing civil aviation infrastructure in India, both on ground and in air space.

1.1.3. The functions of AAI, as per its website (as accessed on 18th January 2022), are as follows:

i. Design, Development, Operation and Maintenance of international and domestic airports and civil enclaves.
ii. Control and Management of the Indian airspace extending beyond the territorial limits of the country, as accepted by ICAO.
iii. Construction, Modification and Management of passenger terminals.
iv. Development and Management of cargo terminals at international and domestic airports.
v. Provision of passenger facilities and information system at the passenger terminals at airports.
vi. Expansion and strengthening of operation area, viz. Runways, Aprons, Taxiway etc.
vii. Provision of visual aids.
viii. Provision of Communication and Navigation aids, viz. ILS, DVOR, DME, Radar etc.

1.1.4. The existing infrastructure and technical details of Chennai International Airport are as given below:

Table 1: Infrastructure and Technical details of Chennai International Airport

Technical Details of Chennai International Airport	
Particulars	**Details**
Total Airport Area	1317.33 acres
Runway Orientation and length	Main Runway: Orientation : 07/25 Dimension : 3658 m X 45 m Suitable for : B-747 type of aircraft Secondary Runway: Orientation : 12/30 Dimension : 3120 m X 45 m Suitable for : A321 type of aircraft
No. of Apron Bays	86 nos..

Technical Details of Chennai International Airport	
Aerodrome Category	4F
Navigational Aids	DVOR/DME, ASR, MSSR, ILS,
Operational Hours	24-H

1.1.5. The terminal building details of Chennai International Airport are tabulated below:

Table 2: Terminal Building details of Chennai International Airport

Particulars	T-1	T-2(Demolished)	T-3	T-4
Terminal Building Area	72,614 sq.m	-	42,300 sq.m	60,528 sq.m
Immigration Counters	-	-	34(A)	24(D)
Customs Counters	-	-	8(A)	1(D)
Security Counters	12	-	-	12(D)
Departure Conveyor	2	-	-	2
Arrival Conveyor	4	-	6	-
Peak hour passenger capacity	3300	-	2150	2300
No. of Check-in counters (CUTE)	60	-	-	56
Total Area of Car Parking	30,000 sq. m. (maximum capacity of 1,266 cars)			

1.1.6. Chennai International Airport is one of the busiest airports in India with an annual footfall of over 22.27 million passengers in FY 2019-20. In FY 2020-21 the total footfall fell to 5.49 million, due to Covid-19 impact.

1.1.7. The traffic at Chennai International Airport in FY 2020-21 is 5.49 million passengers per annum (MPPA). Moreover, the design handling capacity at Chennai International Airport is 17 MPPA. Since the traffic and design handling capacity is more than 3.5 MPPA, it is considered to be a major airport as defined in Section 2 (i) of the AERA (Amendment) Act 2019. Accordingly, the tariff determination of aeronautical services at Chennai International Airport is undertaken by AERA. The traffic handled by Chennai International Airport in the Second Control Period is given below:

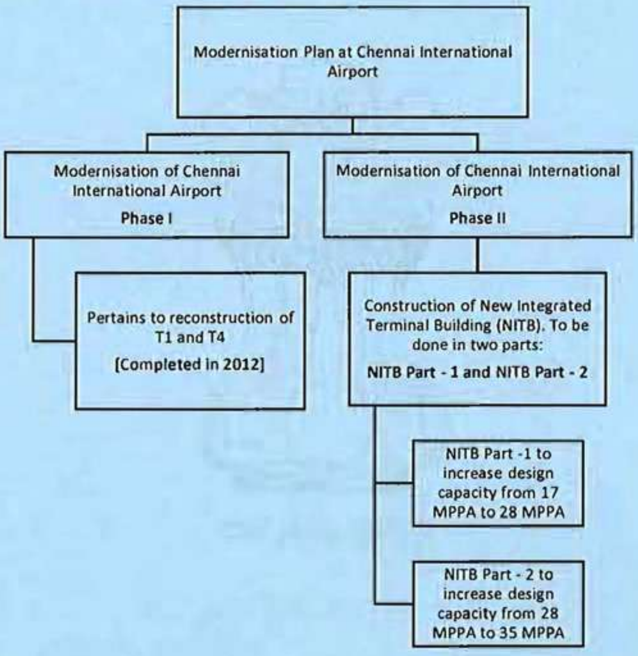
Table 3:Passenger and ATM traffic at Chennai International Airport during Second Control Period

FY ending March 31	2017	2018	2019	2020	2021
Passenger Traffic (Mn)					
Domestic	13.15	14.84	16.60	16.47	4.90
International	5.21	5.52	5.94	5.80	0.59
Total	18.36	20.36	22.54	22.27	5.49
Air Traffic Movement ('000s)					
Domestic	111.33	117.29	138.92	130.21	52.77
International	36.44	37.83	39.16	37.77	11.82
Total	147.77	155.12	178.08	167.98	64.59

1.1.8. Chennai International Airport is being modernised in two phases. Modernisation of Chennai International Airport Phase – I was completed in 2012 wherein the current T-1 and T-4 were constructed. Modernisation of Chennai International Airport Phase - II, which will enhance PAX handling capacity from 17 MPPA to 35 MPPA when completed, is currently being implemented. It involves demolition and reconstruction of old domestic terminal, old international terminal, re-construction of airside corridor for seamless integration, construction of satellite terminal building, development of integrated common user cargo complex, etc. Modernisation of Chennai International

Airport Phase - II is split into construction of New Integrated Terminal Building (NITB) Part 1 and New Integrated Terminal Building (NITB) Part 2. As per the MYTP submission, AAI has completed three quarters of the construction planned in modernisation of Chennai International Airport Phase - II (NITB Part 1), and it was scheduled to be capitalised in FY 2021-22. This will enhance the capacity of the airport to 28 MPPA. The work for Phase – II NITB Part 2 will commence after modernisation of Chennai International Airport Phase - II NITB Part 1 is put into operation. Modernisation of Chennai International Airport Phase – II NITB Part 2 is proposed to be completed in FY 2023-24, further enhancing the capacity of the airport to 35 MPPA.

Figure 1: Modernisation Plan at Chennai International Airport



2. MULTI-YEAR TARIFF PROPOSAL SUBMISSION BY AAI FOR CHENNAI INTERNATIONAL AIRPORT

2.1. Introduction

2.1.1. AERA, was established by the Government of India vide notification No. GSR 317(E) dated 12th May 2009. The legislature has provided policy guidance to the Authority regarding determination of tariff for aeronautical services under the provisions of the AERA Act, 2008. 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, 2008, 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. The Concession offered by the Central Government in any agreement or memorandum of understanding or otherwise; and
   vii. Any other factor which may be relevant for the purposes of this Act.

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

c) To determine the amount of the passenger service fee levied under Rule 88 of the Aircraft Rules, 1937 made under the 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 authorised by it in this behalf;

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

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

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

2.1.3. AERA Act, 2008 defined aeronautical services in three broad categories, whereby it is required to determine tariff, as given below:

   i. Aeronautical services provided by the airport operators;
   ii. Cargo, Ground Handling and Fuel Supply Services; and
   iii. Air Navigation Services.

Tariff determination for Air Navigation Services is carried by the Ministry of Civil Aviation (MoCA) across all airports to maintain uniformity.

2.1.4. AERA has, after extensive stakeholder consultation, finalised its approach to the economic regulation of services categorised in para 2.1.3 above. Accordingly, AERA has issued Detailed

Guidelines laying down information requirements, periodicity, and procedure for tariff determination. The details of Orders and Guidelines issued in this respect include the following:

i. Order No. 13 dated 12.01.2011 ("Regulatory philosophy and approach in Economic Regulation of Airport Operators") and Direction No. 5 dated 28.02.2011("Terms and conditions for determination of tariff for Airport Operators"); and
ii. Order No. 05 dated 02.08.2010 ("Regulatory philosophy and approach in Economic Regulation of the services provided for Cargo facility, Ground Handling and Supply of Fuel to aircrafts"); Order No. 12 dated 10.01.2011 and Direction No. 4 dated 10.01.2011 ("Terms and conditions for determination of tariff for services provided for Cargo facility, Ground Handling and Supply of Fuel to aircrafts").
iii. Order No. 07/2016-17 dated 13.06.2016 ("Normative Approach to Building Blocks in Economic Regulation of Major Airports").
iv. Order No. 14/2016-17dated 23.01.2017 ("Aligning certain aspects of AERA's regulatory approach with the provisions of the National Civil Aviation Policy – 2016").
v. Order No. 20/2016-17 dated 31.03.2017 ("Allowing concession to RCS flights under Regional Connectivity Scheme (RCS)").
vi. Order No. 35/2017-18 dated 12.01.2018 and Amendment No. 01 to Order No. 35/2017-18 dated 09.04.2018 ("In the matter of determination of useful life of Airport assets").
vii. Order No. 42/2018-19 dated 05.03.2019 ("Determination of FRoR to be provided on the cost of land incurred by various Airport Operators in India").

2.1.5. Chennai International Airport is a major airport under the provisions of the AERA Act 2008 and the subsequent AERA (Amendment) Act 2019 that revised the annual passenger handling threshold definition of major airports from 1.5 million to 3.5 million. Pursuant to the AERA Act 2008, the Authority issued guidelines for the purpose of determination of aeronautical tariffs at major airports. Chennai International Airport had submitted its Multi Year Tariff Proposal (MYTP) for the First Control Period from FY 2011-12 to FY 2015-16 and Second Control Period from FY 2016-17 to FY 2020-21. The Authority issued Order No. 38/2012-13 dated 4th February 2013 for the First Control Period and Order No. 03/2018-19 dated 16th April 2018 for the Second Control Period.

2.1.6. As per proviso to clause 3.1 of the Airport Guidelines, Airport Operator(s) are required to submit to the Authority for its consideration, an MYTP for the respective Control Periods within the due date as specified by the Authority. AAI has submitted the MYTP for the Third Control Period from FY 2021-22 to FY 2025-26. The MYTP is available on AERA website along with the Consultation Paper.

2.1.7. The Authority had appointed an independent consultant, M/s Ernst and Young LLP (EY LLP) to assess the MYTP submitted by the airport operator of Chennai International Airport (MAA), Chennai. Accordingly, M/s EY LLP has assisted the Authority in examining the MYTP of the airport operator, 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 given to it is consistent with the Authority's methodology, approach, etc.

2.1.8. AAI provides Air Navigation Services (ANS) in addition to landing, parking and other Aeronautical services at Chennai International Airport. AAI's tariff proposal does not consider revenues, expenditure, and assets on account of ANS. This Order discusses the determination of tariffs for Aeronautical services at the airport excluding ANS.

2.1.9. AAI has also submitted that all cargo operations have been transferred to AAI Cargo Logistics and Allied Services (AAICLAS), its wholly owned 100% subsidiary. AAI's tariff proposal for Chennai International Airport does not include expenditure and assets related to cargo operations. However, AAI has considered a revenue share of 30% from AAICLAS as part of the aeronautical revenues as per AAI's internal agreement with AAICLAS.

2.1.10. The Authority had examined and addressed the points raised by AAI in their MYTP in respective sections of the Consultation Paper No. 16/2021-22 dated 07th September 2021 and had provided its considered proposals on each building block. The Authority had also commissioned an independent study on operations and maintenance expenses at Chennai International Airport The recommendations of this study were used in the Consultation Paper.

2.1.11. Following the issuance of the Consultation Paper, the Authority had invited a meeting of stakeholders for consultation on 21st September 2021. The 'minutes' of the meeting are available on the AERA website. The Authority also invited formal comments from all stakeholders on the issues and the proposals presented in its Consultation Paper No. 16/2021-22. The Authority appreciates the responses it has received from the various stakeholders and has considered their inputs while preparing this Tariff Order.

2.1.12. The following stakeholders provided their comments on the Consultation Paper No. 16/2021-22:

- Airports Authority of India (AAI)
- International Air Transport Association (IATA)
- IndiGo
- SpiceJet
- Airline Operators Committee (AOC), Chennai
- Blue Dart Aviation

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

Table 4: Chapter-wise stakeholder comments on the proposals of the Authority

Regulatory building block	Stakeholders who have provided comments (other than AAI)
True-up of Second Control Period	AOC, Chennai; IATA; IndiGo
Traffic for the Third Control Period	IATA; IndiGo
Regulatory Asset Base and Depreciation for the Third Control Period	IATA; IndiGo; SpiceJet
Fair Rate of Return on the Third Control Period	IndiGo; SpiceJet
Return on Land for the Third Control Period	-
Operating and Maintenance Expenses for the Third Control Period	IATA; IndiGo; SpiceJet; Blue Dart Aviation
Non-Aeronautical Revenue for the Third Control Period	IATA; IndiGo; SpiceJet
Taxation for the Third Control Period	-
Inflation for the Third Control Period	-
Quality of Service for the Third Control Period	AOC, Chennai; IATA
Aggregate Revenue Requirement for the Third Control Period	SpiceJet
Aeronautical Revenue	AOC, Chennai; IATA; IndiGo; SpiceJet; Blue Dart Aviation

2.1.14. All the written comments submitted by the stakeholders are also available on the AERA website (Public Notice No. 30/2021-22).

2.1.15. In the Consultation paper No. 16/2021-22, the Authority had considered the actual figures for FY 2016-17 to FY 2019-20 and projections for FY 2020-21 as the audited financial statements for FY 2020-21 were not available during the finalisation of the paper. During the consultation process, AAI had submitted the audited financials for FY 2020-21. The same have been incorporated in the Order. AAI had shared several items of information during the consultation process, based on protracted follow-ups by the Authority from time to time. This information was considered wherever appropriate in the computations of various building blocks and the resultant true-up of the Second Control Period was updated. The Authority has considered these revised and final figures in this Tariff Order.

2.2. Construct of the Tariff Order

2.2.1. The Tariff Order is structured under various chapters with the third chapter explaining the framework applied for determining tariffs at Chennai International Airport. The fourth chapter lists out AAI's submissions regarding true-up of the Second Control Period pertaining to various issues followed by a recap of Authority's decisions regarding the various building blocks for the Second Control Period as per the Tariff Order for the Second Control Period. This is followed by Authority's analysis on the specific issues regarding true up of the Second Control Period as part of the tariff determination for the Third Control Period as already mentioned in the Consultation Paper. The same is followed by comments from various stakeholders along with counter comments from the airport operator and followed by Authority's Analysis and Final Decision on the subject matter. This chapter also discusses the assessment and the outcomes of the independent studies conducted by the Authority regarding O&M expenses. The detailed report can be found on the AERA website.

2.2.2. Chapters 5 - 13 bring out AAI's submissions regarding various building blocks pertaining to the Third Control Period including projected Traffic, RAB and Depreciation, Fair Rate of Return, Return on Land, Operating Expenses, Non-Aeronautical Revenue projections, Taxes, Inflation and Quality of Service along with Authority's analysis regarding the same at the consultation stage. These are followed by comments from various stakeholders along with counter comments and responses from AAI and followed by Authority's Analysis and Final Decision on the subject matter. As mentioned earlier, the Authority had conducted a study on O&M expenses. The summary of this report is given under Annexure IV to this Tariff Order. Further, the detailed report is given in Appendix III.

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

2.2.4. Chapter 15 presents the Aeronautical Revenue and views of the Authority on the same. Chapter 16 summarises Authority's decisions on all the matters relating to the tariff computations and Chapter 17 is the final Tariff Order issued by the Authority for the Third Control Period of Chennai International Airport.

3. FRAMEWORK FOR DETERMINATION OF TARIFF FOR CHENNAI INTERNATIONAL AIRPORT

3.1. Tariff determination methodology

3.1.1. The methodology adopted by the Authority to determine Aggregate Revenue Requirement (ARR) is based on AERA Act, 2008 and AERA (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28th February 2011.

3.1.2. As per the guidelines, the Authority adopted the hybrid-till approach (as per AERA vide Order No. 14/2016-17 dated 12th January 2017) for tariff determination at Chennai International Airport for the Second Control Period. Under this approach, only 30% of the non-aeronautical revenue is considered for cross-subsidising aeronautical charges. The Authority has considered the same methodology in the true-up of the Second Control Period and for tariff determination in the Third Control Period.

3.1.3. The ARR under hybrid till shall be determined as expressed below:

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

$$ARR_t = (FRoR \times RAB_t) + D_t + O_t + T_t - 30\%\ of\ NAR_t$$

Where:

- t is the Tariff Year in the Control Period;
- ARR_t is the Aggregate Revenue Requirement for year t;
- $FRoR$ is the Fair Rate of Return for the control period;
- RAB_t is the Regulatory Asset Base for the year t;
- D_t is the Depreciation corresponding to the RAB for the year t;
- O_t is the Operation and Maintenance (O&M) Expenditure for the year 't', which includes all expenditures incurred by the Airport Operator(s) including expenditure incurred on statutory operating costs and other mandate operating costs;
- T_t is the corporate tax for the year t paid by the airport operator on the aeronautical profits; and
- NAR_t is revenue from services other than aeronautical services for the year t

3.1.4. Based on the ARR, a yield per passenger is calculated as per formula given below:

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

Where:

- $PV(ARR_t)$ is the present value of ARR for all tariff years in the Control Period. All cash flows are assumed to occur at the end of the year. The Authority has considered discounting cash flows, one year from the start of the Control Period.
- (VE_t) is the passenger traffic in tariff year t

3.2. Control Period

3.2.1. As per AERA guidelines issued on 28th February 2011, 'Control Period' refers to a period of five tariff years during which the Multi Year Tariff Order (MYTO) and tariff(s) as determined by the Authority pursuant to such order shall subsist. The Second Control Period commenced from 01st April 2016 and the Third Control Period from 01st April 2021 for a five-year period.

4. TRUE UP FOR THE SECOND CONTROL PERIOD

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

4.1.1. True Up for the Second Control Period is calculated as the difference between:

- Permissible aeronautical revenue receivable calculated based on the actual traffic and financials; and
- Actual aeronautical revenue received by AAI for the Second Control Period.

4.1.2. AAI has, in its MYTP, given its proposal for true-up under the following building blocks:

a) Regulatory Asset Base
b) Fair Rate of Return
c) Aeronautical Depreciation
d) Operational and Maintenance Expenses
e) Non-aeronautical Revenue
f) Aeronautical Taxes

4.1.3. The Authority has examined the issues in detail and covered the analysis as follows:

a. Record AAI's submission regarding different regulatory building blocks for true-up of the Second Control Period.
b. Recap the Authority's decisions regarding regulatory building blocks in the tariff order of the Second Control Period.
c. Provide the Authority's examination and proposals regarding the true-up calculation of each regulatory building block for the Second Control Period as per the Consultation Paper.
d. Detail the stakeholder comments on different regulatory building blocks during the consultation stage, and AAI's response to stakeholder comments.
e. Provide the Authority's examination and decisions after reviewing stakeholder comments and AAI's responses regarding different regulatory building blocks.

4.1.4. The Authority's analysis of true-up for the Second Control Period, building block-wise has been discussed in detail in the following sections:

4.2. True-up of Traffic for the Second Control Period

AAI's submissions regarding the Traffic Projections for the Second Control Period

4.2.1. AAI has submitted the actual traffic for the Second Control Period which is tabulated below:

Table 5: Traffic submitted by AAI for true up of Second Control Period

FY ending March 31	2017	2018	2019	2020	2021
Passenger Traffic (Mn)					
Domestic	13.15	14.84	16.60	16.47	4.35
International	5.21	5.52	5.94	5.80	0.38
Total	**18.36**	**20.36**	**22.54**	**22.27**	**4.74**
Air Traffic Movement ('000s)					
Domestic	111.33	117.29	138.92	130.21	49.50
International	36.44	37.83	39.16	37.77	10.80
Total	**147.77**	**155.12**	**178.08**	**167.98**	**60.30**

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

4.2.2. The Authority had proposed to consider 10-year CAGR of FY 2005-06 to FY 2015-16 as growth forecasts for international passenger and ATM traffic; and consider the growth rates provided by AAI for domestic passenger and ATM traffic.

4.2.3. Further, the Authority had proposed to true-up traffic as per actual growth achieved during the Second Control Period at the time of tariff determination of the Third Control Period.

4.2.4. The traffic projections considered by the Authority at the time of tariff determination for the Second Control Period are given in the table below:

Table 6: Traffic considered by the Authority as per Tariff Order for the Second Control Period

FY ending March 31	2017	2018	2019	2020	2021
Passenger Traffic (Mn)					
Domestic	13.15	14.63	16.09	17.70	19.47
International	5.21	5.41	5.76	6.13	6.53
Total	**18.36**	**20.03**	**21.85**	**23.33**	**25.99**
Air Traffic Movement ('000s)					
Domestic	111.33	114.35	122.36	130.92	140.85
International	36.44	36.93	38.88	40.93	43.08
Total	**147.77**	**151.28**	**161.23**	**171.85**	**183.17**

Authority's examination of Traffic Projections for the Second Control Period as a part of the Consultation Paper

4.2.5. The Authority had noted that the traffic projections for FY 2020-21 were estimated by AAI at the time of submitting the MYTP. The Authority had proposed to consider the actual FY 2020-21 traffic volumes as obtained from the AAI website. A summary of the same is provided below.

Table 7: Actual traffic volumes for FY 2020-21 as considered by the Authority

FY ending 31 March	Formula	2021
Domestic passengers (In Millions)		
As per AAI estimates	A	4.35
As per actuals	B	4.90
Difference	A-B	(0.55)
Difference (%)	(1-B/A) *100	(12.66)
International Passengers (In Millions)		
As per AAI estimates	C	0.38
As per actuals	D	0.59
Difference	C-D	(0.21)
Difference (%)	(1-D/C) *100	(54.46)
ATM Domestic (in '000s)		
As per AAI estimates	G	49.50
As per actuals	H	52.77
Difference	G-H	(3.27)
Difference (%)	(1-H/G) *100	(6.61)
ATM International (in '000s)		
As per AAI estimates	E	10.80

FY ending 31 March	Formula	2021
As per actuals	F	11.82
Difference	E-F	(1.02)
Difference (%)	(1-F/E) *100	(9.42)

4.2.6. In addition to the above change proposed, the Authority had noted that the submitted traffic volumes were in line with the actual traffic volumes at Chennai International Airport from FY 2016-17 to FY 2019-20. However, due to the effects of the pandemic, traffic volumes were less than what was approved for FY 2020-21 in the tariff order of the Second Control Period. The Authority had proposed to consider domestic passenger traffic of 4.90 million and international passenger traffic of 0.59 million for FY 2020-21 as shown in Table 8.

Table 8: Traffic volumes proposed to be considered for true up of the Second Control Period by the Authority

FY ending March 31	2017	2018	2019	2020	2021
Passenger Traffic (Mn)					
Domestic	13.15	14.84	16.60	16.47	4.90
International	5.21	5.52	5.94	5.80	0.59
Total	**18.36**	**20.36**	**22.54**	**22.27**	**5.49**
Air Traffic Movement ('000s)					
Domestic	111.33	117.29	138.92	130.21	52.77
International	36.44	37.83	39.16	37.77	11.82
Total	**147.77**	**155.12**	**178.08**	**167.98**	**64.59**

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

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

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

4.2.8. It is noted that no stakeholder comments were received regarding true-up of traffic for the Second Control Period. In this regard, the Authority has decided to consider the traffic based on actuals for true-up of the Second Control Period, consistent with the proposal made in this regard in Consultation Paper No. 16/2021-22. The traffic considered by the Authority for the true-up of the Second Control Period is given in Table 8.

4.3. True-up of Regulatory Asset Base

<u>AAI's submissions regarding true up of Regulatory Asset Base (RAB) for the Second Control Period</u>

4.3.1. Opening RAB as submitted by AAI for the Second Control Period is given in the table below. It may be noted that the opening RAB for FY 2016-17 includes cargo assets as per the decision taken by Authority in the Second Control Period tariff order.

Table 9: Opening RAB submitted by AAI for true up of Second Control Period

Particulars (Rs. Cr.)	Value as on 01.04.2016
Runways, Taxiways, Aprons	492.37
Terminal/Other Buildings	1,001.31
Electrical Installations	360.09

Particulars (Rs. Cr.)	Value as on 01.04.2016
Others including - Roads, Bridges, Culverts; Cargo Building; Residential Building; Boundary walls; Plant and machinery; etc.	294.90
Total	**2,148.67**

4.3.2. AAI has submitted that the total capital additions for the Second Control Period, from FY 2016-17 to FY2020-21, amounts to Rs. 510.42 Cr., of which capital expenditure for FY 2020-21 was estimated. Year wise capital additions is given in the table below:

Table 10: Aeronautical Asset Addition submitted by AAI for true up of Second Control Period

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Additions to Aeronautical Assets	69.71	60.30	179.19	186.31	14.89	**510.41**

4.3.3. Considering the above asset additions, the average RAB for the Second Control Period as submitted by AAI is given below:

Table 11: RAB submitted by AAI for true up of Second Control Period

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Opening Aeronautical RAB (A)	2,148.67	1,958.65	1,883.01	1,903.40	1,927.18	-
Aeronautical Assets Capitalised during the year (B)	69.71	60.31	179.19	186.31	14.89	**510.41**
Disposals/Transfers (C)	(1.45)	(1.13)	(9.74)	(5.46)	-	**(17.78)**
Depreciation (D)	(142.42)	(134.82)	(149.06)	(157.07)	(162.18)	**(745.55)**
Closing Aeronautical RAB (A+B+C+D) [E]	2,074.51	1,883.01	1,903.40	1,927.18	1,779.90	-
Average RAB [(A+E)/2] [F]	2,111.59	1,920.83	1,893.20	1,915.29	1,853.54	-
Adjustment for Closing Cargo RAB due to formation of AAICLAS [G]	115.87					
Adjusted Closing RAB for FY 2016-17 after excluding Cargo RAB [H] = [E-G]	1,958.65					

Decisions taken by the Authority regarding Regulatory Asset Base as per Tariff Order for the Second Control Period

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

- *"6.a. The Authority decides to consider proposed project cost of Rs 1,434.2 crores which includes the first Phase of construction of Terminal Building and accordingly to reckon the amount of Rs. 1,434.2 crores as addition for total assets during the 2nd control period."*
- *"6.b. The Authority directs AAI to undertake user stakeholder consultation process for major capital expenditure items as per the Guidelines."*
- *"6.c. The Authority decides to true-up the Opening RAB of the next control period depending on the capital expenditure incurred and date of capitalisation of underlying assets in a given year."*
- *"6.d. The Authority decides to undertake a study to determine the allowable capital expenditure for the second phase of the Terminal Building prior to commencement of Phase 2."*

- *"6.e. The Authority decides to undertake a study by technical experts to estimate the reasonable capital expenditure for construction of terminal building, construction 'N' taxitrack (balance portion) connecting Runway 07-25, construction 'R' taxitrack left out portion connecting Runway 12-30, RET-1 and RET25_1 vis-a-vis normative benchmarks and make appropriate adjustments while determining tariffs for third control period."*

4.3.5. Aeronautical RAB considered by the Authority for tariff determination in the Second Control Period is given in the table below:

Table 12: RAB considered by the Authority as per Tariff Order for the Second Control Period

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Opening Aeronautical RAB (A)	2,061.5	1,864.4	1,852.3	1781.0	1850.1	-
Aeronautical Assets Capitalised during the year (B)	55.2	120.1	19.9	215.9	1023.2	**1,434.2**
Disposals/Transfers (C)	-	-	-	-	-	-
Depreciation (D)	138.1	132.2	142.8	146.7	182.9	**742.7**
Addition of T-4 assets from 01.10.2018 (half yearly) adjusted for half yearly depreciation (E)	-	-	25.8	-	-	**25.8**
Closing Aeronautical RAB (A+B-C-D+E) (F)	1,978.6	1,852.3	1,755.1	1,850.1	2,690.4	-
Average RAB (G) = (A+F)/2	**2,020.1**	**1,858.3**	**1,803.7**	**1,815.6**	**2,270.3**	-
Adjustment to Closing RAB of FY 2016-17 due to Cargo RAB (H)	114.3					
Adjusted Closing RAB for FY 2016-17 excluding Cargo RAB (I) = (F – H)	1,864.4					
Adjustment to Closing RAB of FY 2018-19 due to inclusion of T-4 assets from 01.10.2018 (other half) adjusted for depreciation (J)			25.8			
Adjusted Closing RAB for FY 2018-19 including T-4 assets from 01.10.2018 (other half) adjusted for depreciation (K) = (F + J)	1,864.4		1,781.0			

<u>Authority's examination of the Regulatory Asset Base for the Second Control Period as a part of the Consultation Paper</u>

<u>Opening RAB for FY 2016-17</u>

4.3.6. The Authority had noted that the opening RAB reported by AAI is higher than the approved RAB as computed in the Second Control Period Order. Upon examination, the Authority had noted a discrepancy amounting to Rs. 87.17 Cr. between the approved and submitted RAB. Pertaining to this, the Authority had noted that AAI had included financing allowance amounting to Rs. 87.17 Cr. attributed to the First Control Period (FCP) in the opening RAB of FY 2016-17, thereby leading to a higher opening RAB. The Authority had proposed that this be deducted from AAI's Opening RAB for the Second Control Period since the provision for financing allowance was not proposed by AAI in the First Control Period and, as a result, not approved by the Authority.

4.3.7. The Authority had also noted that a separate provision for financing allowance for the First Control Period amounting to Rs. 89.54 Cr. is included in the true up calculation for the Second Control Period as submitted by AAI. The Authority believed that this expense is misattributed in the MYTP submission of the Third Control Period. Thus, the Authority had proposed to exclude the same.

Table 13: Opening RAB proposed to be considered for true up of the Second Control Period by the Authority as part of the CP

Particulars (Rs. Cr.)	Value as on 01.04.2016
Runways, Taxiways, Aprons	477.72
Terminal/Other Buildings	928.81
Electrical Installations	360.09
Others including - Roads, Bridges, Culverts; Cargo Building; Residential Building; Boundary walls; Plant and machinery; etc.	294.90
Total	**2,061.53**

Aeronautical Capital Additions

4.3.8. The Authority had analysed the aeronautical capital additions submitted by AAI for the true-up of the Second Control Period. For the purpose of this analysis, the Authority had grouped the approved and actual capital additions in the following sections:

I. Capital Additions approved in the Second Control Period Order and commissioned in the Second Control Period
II. Capital Additions approved in the Second Control Period Order but deferred to the Third Control Period
III. Capital Additions approved in the Second Control Period Order but dropped
IV. Capital additions incurred in the Second Control Period but not approved in the Second Control Period Order
V. Capital additions completed in the First Control Period but put to use in the Second Control Period

4.3.9. In the subsequent paragraphs, the Authority had discussed the groups listed above in the same sequence. After the group-wise detailing, the Authority had also provided a reconciliation of the approved capital additions in the Second Control Period Order (which amounts to Rs. 1,434.17 Cr.) and the actual capital additions in the Second Control Period (amounting to Rs. 510.42 Cr.).

I. Aeronautical capital additions approved in the Second Control Period Order and commissioned in the Second Control Period

4.3.10. The Authority had noted that, out of the aeronautical capital additions of Rs. 1,434.17 Cr. approved in the Second Control Period, AAI commissioned capital additions with an approved cost of Rs. 243.73 Cr. only for which AAI spent Rs. 183.13 Cr. thereby saving Rs. 60.60 Cr. (details provided in Annexure (II) A). The capital additions that were approved and commissioned in the Second Control Period comprised largely of non-terminal building capital additions.

4.3.11. The cost saving of Rs. 60.60 Cr. largely accounted for a reduction in scope of work of the connectivity of city-side to the metro rail and provision of walkators at Chennai International Airport. Upon inquiry, AAI had explained that the scope of work was reduced due to two reasons – (a) air-conditioning was dropped due to height constraints above the walkators; and (b) the proposal to build 4 escalators and 4 travellators was dropped due to design modifications and other constraints. The reduction in scope of this work resulted in a saving of Rs. 47.23 Cr.

4.3.12. The Authority had noted that other savings/cost over-runs were due to the tendering processes for capital works in the Second Control Period. The following table summarises the capital additions that were approved in the Second Control Period Order and actually capitalised.

Table 14: Aeronautical Capital Additions approved and commissioned in the Second Control Period proposed to be considered for true up of the Second Control Period by the Authority

Particulars	Sanctioned Amount (1)	Incurred Amount (2)	Saving [(1) – (2)]
Capital Additions	243.73	183.13	60.60

4.3.13. The Authority had not proposed any changes to the capital additions that were approved and commissioned in the Second Control Period.

II. Aeronautical capital additions approved in the Second Control Period Order but deferred to the Third Control Period

4.3.14. The Authority had examined the capital additions postponed to the Third Control Period. A large part of the postponed amount was attributed to the modernization of Chennai International Airport, Phase II (NITB Part – 1), and included capital additions pertaining to pavement works, storm water drainage, etc. A list of these projects worth Rs. 1,110.06 Cr had been provided in Annexure II (B). The Authority was of the view that most of the capital works that were postponed to the Third Control Period were due to the disruption caused by Covid-19. Since these circumstances have been unusual, the Authority had considered to analyse them in the chapter on capital expenditure for the Third Control Period (refer Chapter 6).

III. Aeronautical capital additions approved in the Second Control Period Order but dropped

4.3.15. The Authority had noted that AAI had dropped Rs. 72.60 Cr. worth of capital additions that were approved in the Second Control Period. The details of these works are provided in Annexure II (C).

4.3.16. A large part of the capital works that were dropped pertain to the ground based solar power-plant (amounting to Rs. 46.25 Cr). Upon inquiry, AAI had explained that the solar energy was being sought from an open-access system at the airport. The construction of a solar power plant had to be dropped due to land constraints at the Chennai Airport.

IV. Aeronautical capital additions incurred in the Second Control Period but not approved in the Second Control Period Order

4.3.17. The Authority had noted that AAI had capitalised Rs. 268.08 Cr. worth of assets that were not approved in the Second Control Period Order. A list of the same is given in Annexure II (D) and also in the following table.

Table 15: Capital additions incurred in the Second Control Period but not approved in the Second Control Period Order

Particulars (in Rs. Cr.)	Amount
Terminal 1 - SITC INLINE XBIS	27.18
Terminal 4 - SITC INLINE XBIS	27.18
Supply of BHS	16.05

Particulars (in Rs. Cr.)	Amount
BHS-conversion of Arrival to Departure in T4	12.43
Passenger Baggage Trolleys	15.64
Engineering Office	8.99
Three Seater Chairs	8.79
Supply of Threat Containment Vessel	8.69
Vanderland XBIS Machine	7.50
Rubber Removal Machine	5.28
Other Works (below 5 Cr.)	130.35
Total	**268.08**

4.3.18. The Authority had analysed the AAI proposal and noted that most of these works were security related capital works and were incurred to adhere to the BCAS guidelines released during the Second Control Period (hence, could not be envisaged when the Second Control Period Order was issued). However, there were certain non-security related works that were proposed to be disallowed by the Authority. They are provided in the table below:

Table 16: Capital additions proposed to be disallowed for true up of the Second Control Period by the Authority

S. No.	Particulars	Amount (in Rs. Cr.)	Reason
1	VANDERLAND (INLINE XBIS transferred from Srinagar)	7.50	AAI had submitted that the scanning machine had been transferred from Srinagar to Chennai since Srinagar Airport required more advance machines, due to the hypersensitive nature of the airport. Due to lack of sufficient information, both in the MYTP as well as upon site visit by AERA's consultant, the Authority proposes to disallow the same.
2	Provision of Cold Storage System at Chennai International Airport	2.75	AAI submitted that this capital work pertained to cargo additions in FY18. Since AAICLAS became a separate entity FY18 onwards, the same is proposed to be disallowed in the tariff determination of Chennai International Airport.
3	RFID Toll Booths – Misc. Works	2.63	This work completely pertains to the non-aeronautical portion and is therefore proposed to be disallowed.
4	Total of disallowed works (1 + 2 + 3)	12.88	-

4.3.19. Further, the Authority had proposed to apply the terminal building ratio as approved in the Second Control Period Order on common capital additions (as discussed in Para 4.3.29). Consequently, the capital additions allocated to aeronautical were further reduced by Rs. 0.15 Cr.

4.3.20. Based on the above analysis, the Authority had proposed to capitalise Rs. 255.05 Cr. (Rs. 268.08 Cr. minus (Rs. 12.88 Cr. and Rs. 0.15 Cr.)).

V. Aeronautical capital additions completed in the First Control Period but put to use in the Second Control Period

4.3.21. The Authority had also noted that Rs. 51.64 Cr. worth of assets that were completed in the First Control Period but were capitalised in the Second Control Period when they were put to use in T-4 of Chennai International Airport. This provision was made by the Authority in Para 5.49 of the Second Control Period Order. A detailed list of the same is provided in Annexure II (E).

4.3.22. The Authority had proposed to consider the capital addition of Rs. 51.64 Cr. in the true-up calculation of the Second Control Period.

Financing Allowance for the Second Control Period

4.3.23. The Authority considered 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. Further, the airport operator is given a fair rate of return on equity when the capital assets are capitalised.

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

Cargo Assets for the Second Control Period

4.3.25. The Authority had noted that the RAB for the Second Control Period includes cargo assets for FY 2016-17, as cargo activities from FY 2017-18 were booked under AAI Cargo Logistics and Allied Services (AAICLAS). The decision to include cargo assets from 01st April 2016 to 31st March 2017 was as per para 7.11. of the Second Control Period Order.

4.3.26. The Authority had noted that the approved amount for cargo assets as per the Second Control Period Order is Rs. 4.29 Cr., and that AAI had capitalised cargo assets amounting Rs. 4.19 Cr. only.

Capital Additions Later Classified as O&M Expenses

4.3.27. The Authority had noted that AAI had considered capital works amounting to Rs. 3.50 Cr. as repairs and maintenance expenses under O&M expenses.

Allocation of Assets in the Second Control Period

4.3.28. The Authority had noted that allocation ratios between aeronautical and non-aeronautical assets have been used for common assets:

Table 17: Comparison of Allocation ratios as approved by the Authority and as submitted by AAI

S No.	Allocation Ratio	Approved by Authority in SCP Order (excl. Cargo)	As per AAI (in %)				
			2017	2018	2019	2020	2021
1	TBLR	92.50	92.47	92.59	94.47	94.34	94.35
2	EHCR	97.87	98.18	98.18	98.18	98.18	97.77
3	EQTR	88.14	99.73	99.73	99.73	99.73	99.55
4	VEHR	98.19	97.30	97.30	97.30	97.30	97.30

4.3.29. The Authority notes that the Terminal Building Ratio (TBLR) as per the MYTP submission is changing on an annual basis. Since Chennai International Airport has not witnessed capitalization/added new areas in the terminal buildings, the TBLR ratio is unlikely to undergo any changes. Thus, the Authority proposes to use the approved TBLR and Employee Quarter Ratio (EQTR) allocation ratios to segregate the value of common assets.

<u>The total aeronautical capital additions proposed to be considered by the Authority for true-up of the Second Control Period</u>

4.3.30. Based on the above analysis, the Authority had proposed to allow the following aeronautical capital additions for the true-up of the Second Control Period:

Table 18: Summary of aeronautical capital additions proposed to be considered for true-up of the Second Control Period by the Authority

Ref.	Particulars (in Rs. Cr.)	Approved by the Authority in the SCP Order	Actual Capitalisation by AAI in SCP	Capitalisation proposed to be considered by the Authority for true-up in SCP
I	Approved and commissioned in SCP			
I	Connectivity to Metro Rail	85.57	38.34	38.34
	Augmentation of AC system	12.00	8.31	8.31
	Angular Taxi Track F1	11.09	11.09	11.09
	Ceremonial lounge	10.00	7.56	7.56
	Augmentation of power supply system	13.00	6.27	6.27
	Augmentation of BHS	9.00	21.31	21.31
	SITC of 15MWp Solar PV Plant	7.86	8.50	8.50
	Energy Conservation	7.00	3.93	3.85
	Re-construction of Taxiway "H" (Phase-I)	7.00	4.11	4.11
	Re-construction of T/w "H" (Phase-II)	5.00		
	Other works (below Rs. 5 Cr.)	76.21	73.71	73.41
	Sub-total (A)	243.73	183.13	182.75
II	Approved in SCP but deferred to TCP			
II	NITB Part 1 - Civil	485.63	-	-
	NITB Part 1 - Electrical	485.63	-	-
	Straightening of B-Taxiway	62.06	-	-
	Construction of 'R' Taxi track	30.75	-	-
	Other works (below Rs. 30 Cr.)	46.01	-	-
	Sub-total (B)	1110.06	-	-

Ref.	Particulars (in Rs. Cr.)	Approved by the Authority in the SCP Order	Actual Capitalisation by AAI in SCP	Capitalisation proposed to be considered by the Authority for true-up in SCP
III	**Approved in SCP but dropped**			
III	Ground Based Solar Power Plant	46.25	-	-
	Training facility cum fall back system	7.00	-	-
	Re-Construction of domestic & intl bays	5.00	-	-
	Const. of CISF Barracks	4.00	-	-
	Re-const.'D' Taxitrack	3.00	-	-
	APHO building	3.00	-	-
	Other works (below 3 Cr.)	4.35	-	-
	Sub-total (C)	72.60	-	-
IV	**Not approved in SCP but capitalised**			
IV	Terminal 1 - SITC INLINE XBIS	-	27.18	27.18
	Terminal 4 - SITC INLINE XBIS	-	27.18	27.18
	Supply of BHS	-	16.05	16.05
	BHS-conversion of Arrival to Departure in T4	-	12.43	12.43
	Passenger Baggage Trolleys	-	15.64	15.64
	Engineering Office	-	8.99	8.99
	Three Seater Chairs	-	8.79	8.79
	Supply of Threat Containment Vessel	-	8.69	8.69
	Vanderland XBIS Machine	-	7.50	-
	Rubber Removal Machine	-	5.28	5.28
	Other Works (below 5 Cr.)	-	130.35	124.81
	Sub-total (D)	-	268.08	255.05
V	**Completed in First Control Period and put to use in SCP (Para 5.49 of SCP Order)**			
V	Const of Anna Terminal Building-Civil	-	38.43	38.43
	Consultancy services for mega project	-	4.89	4.89
	Anna Terminal Building - Electrical work	-	2.57	2.57
	Other Works (below Rs. 2.5 Cr.)	-	5.75	5.75
	Sub-total (E)	-	51.64	51.64
	Other Items			
	Financing Allowance (F)	-	3.37	-
	Cargo assets (G)	4.29	4.19	4.19
	Capital Expenditure later classified as R&M (H)	3.50	-	-
	Grand Total (A to H)	**1,434.18**	**510.41**	**493.64**

4.3.31. The aeronautical capital additions considered after incorporating the above changes are as follows:

Table 19: Aeronautical capital addition proposed to be considered for true up of the Second Control Period by the Authority

FY Ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Runways, Taxiways, Aprons	12.69	0.01	-	4.11	-	**16.81**
Roads, Bridges & culvert	0.41	0.58	1.66	-	-	**2.65**
Terminal/Other Buildings	13.26	8.41	51.05	19.86	-	**92.58**
Building - Residential	1.71	1.07	-	-	-	**2.78**
Security Fencing	[illegible]	2.58	0.50	0.73	-	**3.81**

FY Ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Computer, IT Hardware & Access.	0.73	0.65	0.84	2.01	1.10	**5.32**
Computer Software	0.01	-	0.10	0.27	-	**0.39**
Plant and Machinery	3.93	6.96	37.09	27.69	13.57	**89.24**
Tools & Equipment	7.01	2.79	19.10	18.64	-	**47.53**
Office Furniture & Fixtures	3.60	5.17	4.68	10.71	0.11	**24.28**
Other Vehicles	0.90	1.35	1.03	0.88	-	**4.17**
Electrical Installations	15.86	10.49	59.36	31.45	-	**117.16**
Office Equipment	0.37	0.09	0.37	1.13	0.12	**2.08**
X-Ray Baggage	1.42	4.71	0.40	65.74	-	**72.28**
CFT	-	12.56	-	-	-	**12.56**
Total	**61.92**	**57.41**	**176.20**	**183.22**	**14.89**	**493.64**

4.3.32. The RAB for the Second Control Period as recalculated by Authority is as shown in the table below:

Table 20: RAB proposed to be considered for true up of the Second Control Period by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Opening Aeronautical RAB (A) (Table 13)	2,061.53	1,867.12	1,792.01	1,813.07	1,837.55	-
Aeronautical Assets Capitalised during the year (B) (Table 19)	61.92	57.41	176.20	183.22	14.89	**493.64**
Disposals/Transfers (C) (Table 11)	(1.45)	(1.13)	(9.74)	(5.46)	-	**(17.77)**
Depreciation (D) (Table 31)	(139.02)	(131.40)	(145.40)	(153.28)	(158.39)	**(727.49)**
Closing Aeronautical RAB (A+B+C+D) (E)	1,982.99	1,792.01	1,813.07	1,837.55	1,694.05	-
Average RAB [F] [(A+E)/2]	2,022.26	1,829.57	1,802.54	1,825.31	1,765.80	-
Adjustment for Closing Cargo RAB due to formation of AAICLAS [G]	115.87					-
Adjusted Closing RAB for FY 2016-17 after excluding Cargo RAB [H] = [E-G]	1,867.12					-

Stakeholder comments on true-up of Regulatory Asset Base for the Second Control Period

4.3.33. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to the true-up of Regulatory Asset Base for the Second Control Period. The comments by the stakeholders are presented below:

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

4.3.34. AAI commented as follows on the Disallowance of VANDERLAND (INLINE XBIS transferred from Srinagar) from RAB of SCP – Rs 7.50 crores:

"AERA's Contentions

- *AAI had submitted that the scanning machine had been transferred from Srinagar to Chennai since Srinagar Airport required more advance machines due to the hypersensitive nature of* *the airport. Due to lack of sufficient information, both in the MYTP as well as upon site visit by AERA's consultant, AERA proposes to disallow the same. (Sl No. 1 in Table 15 of CP)*

AAI's Submission

- *The Vanderland Inline XBIS machine was received by CIA from Srinagar airport in FY 16-17. It was in use till FY 19-20 and then subsequently transferred to Tirupati airport in FY 19-20. Thus, this machine was not physically available in Chennai at the time of site visit.*
- *It may be noted that this transfer was considered as a deletion in the MYTP submission in FY 2019-20. We request AERA to refer to row 27 of sheet "deletions" in the financial model submitted along with the MYTP for the same.*
- *Thus, disallowance of this asset by AERA without giving similar reversal in deletions has led to double deduction i.e while addition to asset was removed, the deletion of the asset continued to be considered.*
- *It may also be noted that these facts were provided to the AERA in the replies to their queries during consultation.*

AAI's Request

- *Considering the above facts, AAI requests AERA to remove the disallowance of Rs 7.50 crores made in FY 2016-17. It has already been considered as a deletion during the year of transfer of the asset in MYTP submission in FY 2019-20."*

4.3.35. AAI's comment regarding not allowing financing allowance is as follows:

"AERA's Contentions

- *3.3.6. AERA notes that the opening RAB reported by AAI is higher than the approved RAB as computed in the Second Control Period Order. Upon examination, AERA noted a discrepancy amounting to Rs. 87.17 Cr. between the approved and submitted RAB. Pertaining to this, AERA has noted that AAI has included financing allowance amounting to Rs. 87.17 Cr. attributed to the First Control Period (FCP) in the opening RAB of FY 2016-17, thereby leading to a higher opening RAB. AERA proposes that this be deducted from AAI's Opening RAB for the Second Control Period since the provision for financing allowance was not proposed by AAI in the First Control Period and, as a result, not approved by AERA.*
- *3.3.7. AERA has also noted that a separate provision for financing allowance for the First Control Period amounting to Rs. 89.54 Cr. is included in the true up calculation for the Second Control Period as submitted by AAI. AERA believes that this expense is misattributed in the MYTP submission of the Third Control Period. Thus, AERA proposes to exclude the same.*
- *3.3.23. AERA 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. Further, the airport operator is given a fair rate of return on equity when the capital assets are capitalised.*
- *3.3.24. Further, AERA notes that in case of greenfield developments, the airport operator would have to wait for a considerable length of time before getting the return on the large capital outlay incurred by it as these projects take longer durations to commission and operationalise. It was with this consideration that AERA had earlier provided financing allowance in initial stages to such airports. AERA notes that Chennai International Airport is a brownfield airport*

and has lower construction and traffic risk for new construction at the airport. It may also be noted that financing allowance has never been provided in the case of other airports such as DIAL, MIAL and KIAL. Thus, the locked-up equity in the CWIP assets henceforth cannot be given the assured return of cost of debt.

AAI's Submission

- *Direction 5 of AERA (which entails the methodology of aeronautical tariff determination) allows Airport operators to be eligible for Financing Allowance as a return on the value invested in construction phase of an asset including the Equity portion, before the Asset is put to use.*

- *The concept of Financing Allowance, its computation and how the Work in Progress Asset includes the Financing Allowance is provided in Paragraph 5.2.7 of the Direction No.05-2010-11. Extract of the same is provided 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:

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

  Where:
  Rd is the cost of debt determined by AERA according to Clause 5.1.4.
  SC are capital receipts of the nature of contribution from stakeholders (including capital grants and subsidies) pertaining to the capital expenditure incurred in Tariff year t.
  CA are Commissioned Assets which pertain to the accumulated value of the WIPA attributable to all assets that have been put into effective operation during Tariff Year t.

- *AERA has further provided an Illustration on Page 28 detailing 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	-	833	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 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, from the above clauses it is clear that the Financing Allowance is computed on the Work in Progress balance based on Capital Expenditure incurred which is funded by Equity/Internal accruals and is capitalized as part of Commissioned assets for RAB Computation. In the case of AAI, financing allowance is computed on the equity portion and IDC is computed on the debt portion of the capital spend.*

- *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.*

- *The regulatory principles laid down by AERA 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. Following are the examples and extracts of inclusion of financing allowance in RAB by AERA:*

  - ***CIAL TCP Order**: Vide para 4.4.52 of CIAL order for third control period, for true up of SCP, AERA noted that, in the tariff order for the SCP, it was decided that FA would be trued up based on the final capex. In its MYTP submission, CIAL had proposed an addition of Rs. 11.9 crores in FY 2021 only as Financing Allowance for true up of SCP. Accordingly, AERA recomputed FA based on actual WIP capitalized and allowed for inclusion in the Order.*

  - ***BIAL TCP Order**: Vide para 3.3.78 of BIAL Order for the third control period, AERA has agreed to allow the financing allowance for the second control period.*

  - *Financing allowance was approved and given by AERA in the First and Second Control period for BIAL and in second control period order of CIAL.*

  - ***MIAL and DIAL**: It is further to be noted that MIAL and DIAL are governed by tariff determination principles set forth in SSA and OMDA. SSA and OMDA do not contain the concept of financing allowance. Hence, AAI submits that these 2 airports are not comparable with AAI airports.*

- *Further, AERA has stated in para 3.3.7 of CP as follows – "The Authority has also noted that a separate provision for financing allowance for the First Control Period amounting to Rs. 89.54 Cr. is included in the true up calculation for the Second Control Period as submitted by AAI. The Authority believes that this expense is misattributed in the MYTP submission of the Third Control Period. Thus, the Authority proposes to exclude the same". However, AAI submits that this amount of Rs. 89.54 crores represents the present value of cumulative depreciation and return on RAB impact of financing allowance for FCP. Computation of the same was provided in sheet name – FA FCP in the MYTP model*

AAI's Request

- *The AERA Act requires AERA 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.*

- *Financing allowance computation is fully in compliance with Direction 5, affirmed by Authority in its various Orders in the past.*

- *Based on the above submissions, AAI submits that non-consideration of Financing allowance is not in line with AERA's own guidelines. Further, allowing Financing allowance for private airports and not for AAI airports vitiates the principle of laying a level playing field for all airports – public or private in India and AAI airports would unjustly be denied of revenues that they are entitled to.*

- *AAI therefore requests AERA to consider the financing allowance of Rs. 87.17 crores computed for FCP additions, Rs. 89.54 crores which represents the present value of cumulative depreciation and return on RAB impact of financing allowance for FCP and Rs. 3.37 crores computed for SCP. Further, AAI requests AERA to also consider these additions by way of financing allowance for depreciation computation and return on RAB accordingly."*

4.3.36. AAI's comment regarding capital additions for the Second Control Period is as follows:

"AERA's Contentions

- *AERA allowed the following capital additions for the second control period:*

Table 18: Aeronautical capital addition proposed to be considered for true up of the Second Control Period by the Authority

FY Ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Runways, Taxiways, Aprons	12.69	0.01	-	4.11	-	16.81
Roads, Bridges & culvert	0.41	0.58	1.66	-	-	2.65
Terminal/Other Buildings	13.26	8.41	51.05	19.86	-	92.58
Building - Residential	1.71	1.07	-	-	-	2.78
Security Fencing	-	2.58	0.50	0.73	-	3.81
Computer, IT Hardware & Access.	0.73	0.65	0.84	2.01	1.10	5.32
Computer Software	0.01	-	0.10	0.27	-	0.39
Plant and Machinery	3.93	6.96	37.09	27.69	13.57	89.24
Tools & Equipment	7.01	2.79	19.10	18.64	-	47.53
Office Furniture & Fixtures	3.60	5.17	4.68	10.71	0.11	24.28
Other Vehicles	0.90	1.35	1.03	0.88	-	4.17
Electrical Installations	15.86	10.49	59.36	31.45	-	117.16
Office Equipment	0.37	0.09	0.37	1.13	0.12	2.08
X-Ray Baggage	1.42	4.71	0.40	65.74	-	72.28
CFT	-	12.56	-	-	-	12.56
Total	**61.92**	**57.41**	**176.20**	**183.22**	**14.89**	**493.64**

AAI's Submission

- *It was noted that for security fencing, AAI had submitted the following additions for second control period:*

Rs in crores

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Security Fencing	-	2.58	0.50	0.77	-	3.85
Plant and Machinery	3.93	9.71	40.00	27.69	13.57	94.90

- *AAI notes that the decrease in the plant and machinery addition for FY 17-18 was on account of disallowance of cold storage asset which is pertaining to cargo operations. However, it was observed that in the CP, though AERA had not mentioned about change in the ratio/disallowances in the above heads, there was a change in the amounts in the head of security fencing for FY 2019-20 and in plant and machinery for FY 2018-19. Reasons for the same is not available in the CP.*

AAI's Request

- *AAI requests AERA to consider the figures as given in MYTP for the above heads as there are no changes proposed by AERA."*

Other stakeholders' comments on true-up of RAB for the Second Control Period

4.3.37. AOC's comments regarding capital additions and capital expenditure at Chennai International Airport in the Second Control Period are as follows:

- *"T4 arrival is still unused by AAI for any passenger activity. Same was converted to departure but due to shortage of manpower from CISF/ Immigration the cost spent towards the upgradation has been put to waste.*

- *Table-14 of the consultation paper has a expense shown by AAI towards BHS expenses incurred for T4 conversion which in reference to point 1 is still not utilised for any passenger activity*

- *Table-14 also shows modifications to BHS but there has been no significant changes done from 2013 ever since commissioning, except an upgrade of the XBIS machines which is covered as a capital expenditure.*

- *Table-14 has an expense shown on engineering office which I understand as line maintenance building. But there is no justification for the cost incurred as no significant changes seen*

- *Table-14 refers to cost incurred on CUTE equipment but we have not seen any changes in the hard ware except service and repair of hard ware. No significant additions or new equipment, except partial replacement when required.*

- *Table-14 refers to Electrical installations. No explanation on areas covered and value addition to operations*

- *Annex III under 17.3 refers to Augmentation of BHS and provision of tag readers. currently domestic and international BHS are non-tag readable and no facility for BSM*

- *Annex III under 17.3 highlights reconstruction of TWY H Phase 1 & 2, however we did not see any complete reconstruction only minor modifications*

- *Table 124- TWY B straightening work is not 100% complete yet*

- *Table 128- under 17.4 Resurfacing of secondary runway 12/30, construction of cargo bays, PBB and VDGS systems and level of activity for the Ph-2 of NITB Part-1 need close scrutiny. Also secondary runway 12/30 still has obstruction which has defied use of Code-E for many years now, since the expansion of the runway."*

4.3.38. IATA's comments regarding true-up of RAB of Chennai International Airport are as follows:

- ***"Para 3.3.6 and 3.3.7 of Consultation Paper No. 16/2020-21***
  - *IATA supports AERA's proposal to exclude the financing allowance attributed by AAI to RAB of First Control Period amounting to Rs. 87.17 crores and Second Control Period amount to Rs. 89.54 crores.*
- ***Table 15 of Consultation Paper No. 16/2020-21***
  - *IATA compliments AERA for its scrutiny. The assessment has been very methodical, and IATA supports the decision on shifting the capitalization of new integrated terminal building Part 2, to the next control period.*

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

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

4.3.40. Regarding AOC, Chennai's comment (as stated in Para 4.3.37), AAI has responded as follows:

- ***"Regarding T4 and BHS utilization:***

  - *AAI submits that initially there was a resentment from Immigration authorities to commence operations in T4 arrival due to manpower issues. However, this issue was resolved after due persuasion. It was agreed by M/s. Lufthansa to start flight operations from T4 arrival. However, due to COVID-19 pandemic, the international flight operations were stopped and thus, T4 arrival could not be utilized. However, AAI is confident that once the pandemic is over and the traffic improves, operations would continue in T4 arrival also.*

- ***Regarding upgradation of BHS:***

  AAI submits the following:
  - *BCAS requirements for BHS with ILBS system were complied with at both terminal (T1&T4)with TSA certification.*
  - *Improvement of ILBS at Chennai airport at both terminal (T1&T4)*
    - *ILBS is upgraded with timing of checking from 25 sec to 90sec.*
    - *ILBS is also upgraded with ATR (auto tag reader) at both terminals (T1 & T4)*
    - *ILBS level 3 check stations are shifted to mezzanine floor along with level 2 check stations*
    - *ILBS level 4 check is at basement as it was positioned earlier.*

  - *Provision of additional conveyors*
    - *Provision of 20 nos of new additional conveyors for proposed new check-in counters*
    - *Each 05 nos in eastern wing and western wing of both international and domestic departure and associated modifications.*
    - *Making the existing PLCS installed at BHS control panels compatible for serial communication with 22 bytes telegram data structure for interfacing with the existing X-BIS*

  - *Modifications to level -2a, level - 2b screening in mezzanine*

    - *Modifications in the existing conveyor line - 1 to 4 of both international departure and domestic departure conveyor*
    - *Providing necessary new conveyor and ss table & ss roller table for flow of rejected baggage of level - 2 for level -3 check*
    - *Re-load level – 3 cleared baggage to main clear conveyor*
    - *Separation of combined plc zone into independent zone of all lines.*

  - *Conversion of arrival into departure (T4 ground floor)*

    - *Supply of weighable conveyor fixed electronic weighing scales /dispatch/flat/take- away conveyors along with drive units for 22 nos. of new check -in counters*
    - *Supply of 90-degree Power curve with drive unit fixed with SS side cover and MS side cover as per OEM 's standards and specifications for replacement & modification in the existing arrival transportation conveyor.*
    - *Supply of electrical panel suitable for above new conveyors complete with necessary accessories as per OEM's standard specifications and features.*
    - *Modification of existing conveyor with supporting lugs and side guard.*
    - *Software development, site development and modification of low-level control to integrate the new conveyor system with existing systems.*

- *Augmentation of effective length of arrival carousel at domestic terminal(T1) o the effective length of arrival carousel along with additional feeder conveyor and additional new drive units & e-stop at domestic terminal (T1) were enhanced as below:*
  - *Carousel 1 – 30.0 mtr. –54%*
  - *Carousel 2 – 18.0 mtr. - 32%*
  - *Carousel 3 – 18.0 mtr. - 32%*
  - *Carousel 4 – 18.0 mtr. - 32%*
  - *Overall length = 84 mtr – overall 37.5 % increase in capacity*

- ***Regarding Engineering Office:***

  - *AAI submits that only by shifting the existing Engineering office from T3 building, the construction of Part-1 of NITB with planned facilities could be taken up to match the AOC requirements projected during various stakeholder meetings. Hence, AAI submits that the shifting was necessary.*

- ***Regarding CUTE Equipment:***

  - *AAI submits the following asset additions with respect to CUTE equipment:*
    - *AAI has provided new hardware at two counters in International (T4) Departure and 11 counters in T4 arrival and also at 4 boarding gates at T4.*
    - *In Domestic Departure (T1), 12 counters were provided with new hardware.*

- ***Regarding Electrical Installations:***

  - *AAI submits that the Electrical Installations at all Substations were augmented in order to meet additional load and providing uninterrupted power supply to Passenger facilities.*

- ***Regarding BHS and provision of tag readers:***

  - *In Domestic Departure (T1), 12 counters were provided with new hardware. ILBS is also upgraded with ATR (AUTO TAG READER) at both terminals (T1 & T4) in line with BCAS requirement with TSA certification and being put into operation too.*

- ***Regarding Taxiway H (Phase 1 &2):***

  - *Complete reconstruction of H taxi is being taken up. Phase I work is completed and Phase II is in progress.*

- ***Regarding Taxiway B straightening work:***

  - *The work has been completed on 18th August 2021.*

- ***Regarding resurfacing of secondary runway 12/30:***

  - *Resurfacing of secondary runway 12/30 and cargo apron bays is in progress. Last Aeronautical Survey for identifying obstacles at Chennai Airport was carried out in April 2019. Around 470 obstacles were identified. Out of this, 120 obstacles were removed and*

Notices were issued to 234 owners which is being followed up continuously through Obstacle Control Committee.

- *We have taken up with AAI CHQ for conducting aeronautical survey once again to understand the current status of obstacles in the approach of Runway 12/30.*

- ***Regarding NITB Project:***

  - *Tariff determination has been carried out by AERA as per Direction 05 where the various building blocks applicable for a period of 5 years is projected. Based on the projected figures (operating expenses, capital expenditure etc), the total revenue requirement is determined. This revenue is recovered from passengers and airlines depending on the traffic estimates. The traffic estimates have been made considering the pandemic scenario, timing of opening of the terminals etc. Hence, AAI submits that the tariff determination process considers the criteria of change in traffic, terminal opening, capital investment etc. and the same are inbuilt in the process."*

4.3.41. With regards to IATA's comments regarding true-up of RAB in the Second Control Period, AAI has reiterated its comment regarding not allowing financing allowance as a response (as stated in Para 4.3.35).

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

4.3.42. The Authority has taken note of AAI's comment regarding Vanderland XBIS. The Authority notes that AAI has not deleted Vanderland XBIS from the RAB in the Second Control Period in its MYTP submission.

4.3.43. The Authority also notes that Vanderland XBIS was capitalised in the books of Srinagar Airport at Rs. 7.50 Cr. in FY 2008-09. However, in the MYTP submission for Chennai International Airport, it is incorrectly shown to be capitalised in FY 2016-17 at the gross value of Rs. 7.50 Cr. instead of the net value of Rs. 3.50 Cr. (considering a depreciation of 6.67% p.a.). The Authority further notes that this was not deleted from the RAB in FY 2019-20, when it was shifted to Tirupati.

4.3.44. Therefore, the Authority decides to include Vanderland XBIS in the capital additions of FY 2016-17 at a net value of Rs. 3.50 Cr. and delete the same from the RAB in FY 2019-20 at Rs. 2.00 Cr.

Financing Allowance

4.3.45. The Authority has carefully examined the comments of AAI and IATA and also the response of AAI on financing allowance. Accordingly, the Authority notes the following:

4.3.46. Providing return on capital expenditure from the very beginning of construction will significantly lower the risks for an airport operator and may require revisiting the return on equity allowed to airport operators. Further, this will disincentivise the airport operator from ensuring a timely completion of projects and delivery of services to airport users. Therefore, the Authority is of the view that a return should be provided only when the assets are made available to the airport users except in the case of certain costs like IDC that will have to be incurred in case debt is used for funding of projects.

4.3.47. Developments at greenfield airports inherently take longer durations to commission and operationalise. Thus, airport operators would have to wait for a considerable duration before getting returns on large capital projects. Keeping this in view, the Authority had earlier provisioned for financing allowance in initial stages to such airports. It may be further noted that the Authority has never provided financing allowance in the case of brownfield airports. Further, financing allowance for greenfield airports of BIAL, HIAL, and CIAL was allowed only for the initial stages of their development, after which such allowance was permitted only on the debt portion of the proposed capital expenditure. The Authority also notes that Chennai International Airport being one of the oldest airports in India, would not be eligible for such an allowance on the equity portion of newly funded capital projects.

4.3.48. Financing Allowance is a notional allowance and would be different from the actual investment incurred by the Airport Operator which would include the interest during construction among other things. Therefore, the provision of Financing Allowance on the entire capital work in progress would lead to a difference between the projected capitalisation and actual cost incurred, especially when the Airport Operator funds the projects through a mix of equity and debt.

4.3.49. AERA Guidelines, 2011 do not specifically state that financing allowance is to be provided on both equity and debt portion of the capital expenditure. On the other hand, it does give the Authority the mandate to consider any relevant factors for exclusion or inclusion of assets.

4.3.50. In view of the above, the Authority is of the view that there is no reason to deviate from the proposal made by it regarding Financing Allowance in Consultation Paper No. 16/2021-22 and has decided to provide Financing Allowance only on the debt portion of project funds.

4.3.51. The Authority notes AAI's comment regarding the change in the amounts in the head of security fencing for FY 2019-20 and in plant and machinery for FY 2018-19. The Authority draws reference to Paras 4.3.23 and 4.3.24, wherein the Authority has proposed to not allow financing allowance. The Authority notes that the difference highlighted by AAI in security fencing and plant and machinery is on account of the financing allowance. This has also been provided in Table 18.

4.3.52. Therefore, the Authority sees no merit in AAI's contention and decides to true-up RAB as per Table 19.

4.3.53. Further, it may also be noted that the Authority mentioned the changes regarding allocation ratio in Para 4.3.19.

4.3.54. The Authority has noted the comments raised by AOC and the counter comments submitted by AAI. The Authority's views regarding the matters raised by AOC are as follows:

4.3.55. **Regarding usage of T4 arrival and BHS Utilisation/ Upgradation**: The Authority notes that despite an agreement with M/s Lufthansa, T4 could not be utilised for passenger facilitation. Both, AAI and AOC have submitted that T4 could not be put to use due to lack of manpower from the Immigration authorities. However, AAI further submitted that this issue was resolved eventually. The Authority notes that T4 was operational and ready to be put-to-use in FY 2018-19. Due, to an unforeseen halt in the international operations, it is understandable that the design handling capacity of T4 of 4 MPPA may not have been used up to its full capacity.

4.3.56. Moreover, the Authority notes that the upgradation of BHS with an ILBS system was a BCAS requirement and is crucial to maintain security, especially in airports that handle significant traffic volumes like Chennai International Airport.

4.3.57. Along these lines, the Authority decides to consider expenditure for BHS upgradation as per its proposal in Para 4.3.30.

4.3.58. **Shifting of Engineering Office**: The Authority notes that the engineering office currently houses the project/engineering team and was shifted from Terminal 3 in order to facilitate the construction of NITB. During the consultation process, it was also noted that the cost pertaining to the capital work was spent on the interior works at the office which would be utilised to oversee the ongoing construction of the NITB and subsequently as an office for the engineering department.

4.3.59. Since these facilities are a requirement for the airport staff to function properly and facilitate passenger/aircraft movement, the Authority decides to include the same in the true-up of Second Control Period.

4.3.60. **Regarding CUTE equipment and electrical installation at Chennai International Airport**: The Authority has taken note of AOC and AAI's comments regarding the installations at Chennai International Airport. The Authority notes that the supporting furniture for CUTE equipment is a requirement for operational efficiency of the airport. Therefore, the Authority decides that such capital expenditure must be considered in the tariff determination process.

4.3.61. Further, the Authority also notes that the new LED lighting and other equipment would translate into lower energy expenses at the airport, thereby benefitting the users in the long term and that it is in line with the objective of making airports more energy efficient and environmentally friendly. Along these lines, the Authority decides that such expenses at the airport should be allowed.

4.3.62. **Regarding Straightening of B Taxiway and Reconstruction of Taxiway H**: The Authority notes that Table 149 pertains to capital works that were deferred to the Third Control Period. Accordingly, the Authority decides to capitalise the aforementioned assets in the Third Control Period.

4.3.63. Moreover, the Authority notes that pavement works are important for operational efficiency of the airport wherever justified, provided that they are within the normative cost limits established by the Authority in Order No. 07/2016-17 dated 06th June 2016.

4.3.64. **Regarding Resurfacing of Secondary Runway 12/30**: The Authority has taken note of the comments of AOC and AAI. The Authority expects AAI to re-conduct the aeronautical survey as mentioned in their counter-comments and based on the report, take further necessary action.

AAI's submission of actual capital additions for FY 2020-21

4.3.65. As stated earlier, the Authority had sought the actual capital additions at Chennai International Airport, Chennai from AAI during the consultation process. The same was submitted to the Authority vide AAI's mail "In the matter of Determination of Tariff of Chennai Airport for 3rd Control Period (01.04.2021 to 31.03.2026) and True-up of 2nd Control Period (01.04.2016 to 31.03.2021) – Updation of Actuals for the F.Y. 2020-21- Reg." dated 24.12.2021.

4.3.66. AAI submitted actual capital additions for FY 2020-21 of Rs. 61.27 Cr. against the estimated capital additions of Rs. 14.89 Cr. (refer Table 10). Further, AAI submitted that a considerable portion of the capital additions have been undertaken to fulfil the security and/or operational requirements at Chennai International Airport, Chennai.

Table 21: Actual capital additions for FY 2020-21 as submitted by AAI

Particulars (in Rs. Cr.)	Capital additions estimated in the MYTP (A)	Actual capital additions for FY 2020-21 (B)	Deviation (B) – (A)
Capital additions for FY 2020-21	14.89	61.27	46.38

Authority's examination of the actual capital additions for FY 2020-21

4.3.67. The Authority has analysed the actual capital additions for FY 2020-21 as submitted by AAI. The Authority notes an increase of Rs. 46.40 Cr. in the submitted capital additions of FY 2020-21 from Rs. 14.89 Cr. to Rs. 61.27 Cr. This is attributable to adjustments in new capital additions, cost deviation in the capital additions projected in the MYTP submission, and capital additions not projected in the MYTP, but completed in FY 2020-21. The Authority notes that most of the capital additions completed in FY 2020-21 are related to security. A comprehensive breakdown of the same is provided in the following table:

Table 22: Capital additions for FY 2020-21 as submitted by AAI

Particulars	Amount (in Rs. Cr.)
Capital additions estimated for FY 2020-21 as part of the Consultation Paper (A)	**14.89**
Additional capital additions submitted by AAI for FY 2020-21	
Automatic Tray Return System With DVHB	12.44
SITC of active components in terminal building	7.83
Modification of existing perimeter lighting (BCAS)	5.18
3 Nos. Arrival Carousals Conveyor (Including 3 Sets)	3.51
500 Nos Three-seater Chairs to Chennai Airport	2.93
DSITC of Philips LED fittings at T1 & T4	2.43
SITC of server / storage, provision of wireless LAN	2.22
Extension of existing bus lounge at T4	1.85
C/O Extension of fire watch tower at old fire station	1.30
Passenger Baggage Trolleys with breaks	0.81
55" signage type HD LED Monitor-(FIDS)	0.77
Extension of bus lounge at T4 - HVAC works	0.64
Replacement of equipment at sub-station (remote bay & colony)	0.59
Three-seater chairs at Chennai Airport	0.49
Beautification & interior designs with paintings	0.42
Purchase of PC - Model HP 400 G4 AIO i7AIO	0.32
Provision of canopy for VIP Shamiana near operational Gate No.6	0.27
2 Nos. De-watering pumps (near B Taxi culvert)	0.24
32" signage type HD LED Monitor-(FIDS)	0.23
CUTE & CUSS scanner, at Chennai Airport	0.23
BIM 360 design with cloud storage licence	0.22
Procurement of MS office	0.21
Other capex (below Rs. 0.2 Cr.)	1.70
Sub-total (B)	**47.61**
Cost deviation in capital additions projected in MYTP	
Dual view-registered baggage XBIS (DV RB XBIS)	0.12
Venus Chairs - without Tilting chairs (TB)	(0.01)

Particulars	Amount (in Rs. Cr.)
Subtotal (C)	**0.12**
Capital additions projected in MYTP but not incurred	
SITC of Active Components in Terminal Buildings.	0.27
Procurement of AEC Collection and BIM 360 for CAD and BIM Workspace at Chennai Airport.	0.49
SITC of Server/Storage, Provisin of Wireless LAN Connectivity and CCTV Surveillance at Operational Offices, Chennai Airport.	0.11
Procurement of AEC Collection and BIM 360 for CAD and BIM Workspace at Chennai Airport.	0.09
Supply & Installation of 2 Numbers of PAC ODU and Dismantling, Shifting & Reinstallation of 4 numbers ODU Uints and Supply & installation of Earth pits at Chennai Airport.	0.14
Sub-total (D)	**1.10**
Capital additions submitted by AAI for FY 2020-21 (based on actuals) (A + B - C - D)	**61.27**

4.3.68. A revised computation of reconciliation of capital additions in the Second Control Period is provided in the table as follows:

Table 23: Summary of capital additions for true-up for the Second Control Period decided by the Authority

Ref.	Particulars (in Rs. Cr.)	Approved by the Authority in the SCP Order	Actual Capitalisation by AAI in SCP	Capitalisation proposed to be considered by the Authority for true-up in SCP
I	**Approved and commissioned in SCP**			
I	Connectivity to Metro Rail	85.57	38.34	38.34
	Augmentation of AC system	12	8.31	8.31
	Angular Taxi Track F1	11.09	11.09	11.09
	Ceremonial lounge	10	7.56	7.56
	Augmentation of power supply system	13	6.27	6.27
	Augmentation of BHS	9	21.31	21.31
	SITC of 15MWp Solar PV Plant	7.86	8.5	8.5
	Energy Conservation	7	3.93	3.85
	Re-construction of Taxiway "H" (Phase-I)	7	4.11	4.11
	Re-construction of T/w "H" (Phase-II)	5		
	Other works (below Rs. 5 Cr.)	76.21	73.71	73.41
	Sub-total (A)	243.73	183.13	182.75
II	**Approved in SCP but deferred to TCP**			
II	NITB Part 1 - Civil	485.63	-	-
	NITB Part 1 - Electrical	485.63	-	-
	Straightening of B-Taxiway	62.06	-	-
	Construction of 'R' Taxi track	30.75	-	-
	Other works (below Rs. 30 Cr.)	46.01	-	-
	Sub-total (B)	1,110.06	-	-
III	**Approved in SCP but dropped**			
III	Ground Based Solar Power Plant	46.25	-	-
	Training facility cum fall back system	7	-	-

Ref.	Particulars (in Rs. Cr.)	Approved by the Authority in the SCP Order	Actual Capitalisation by AAI in SCP	Capitalisation proposed to be considered by the Authority for true-up in SCP
	Re-Construction of domestic & intl bays	5	-	-
	Const. of CISF Barracks	4	-	-
	Re-const.'D' Taxitrack	3	-	-
	APHO building	3	-	-
	Other works (below 3 Cr.)	4.35	-	-
	Sub-total (C)	72.6	-	-
IV	**Not approved in SCP but capitalised**			
IV	Terminal 1 - SITC INLINE XBIS	-	27.18	27.18
	Terminal 4 - SITC INLINE XBIS	-	27.18	27.18
	Supply of BHS	-	16.05	16.05
	BHS-conversion of Arrival to Departure in T4	-	12.43	12.43
	Passenger Baggage Trolleys	-	15.64	15.64
	Automatic Tray Return System		9.56	9.56
	Engineering Office	-	8.99	8.99
	Three Seater Chairs	-	8.79	8.79
	Supply of Threat Containment Vessel	-	8.69	8.69
	SITC of active components at terminal buildings		7.83	7.83
	Vanderland XBIS Machine	-	7.5	3.5
	Rubber Removal Machine	-	5.28	5.28
	Modification of existing perimeter lighting (BCAS)		5.18	5.18
	Other Works (below 5 Cr.)	-	154.18	148.10
	Sub-total (D)	-	314.48	304.40
V	**Completed in First Control Period and put to use in SCP (Para 5.49 of SCP Order)**			
V	Const of Anna Terminal Building-Civil	-	38.43	38.43
	Consultancy services for mega project	-	4.89	4.89
	Anna Terminal Building - Electrical work	-	2.57	2.57
	Other Works (below Rs. 2.5 Cr.)	-	5.75	5.75
	Sub-total (E)	-	51.64	51.64
	Other Items			
	Financing Allowance (F)	-	3.37	-
	Cargo assets (G)	4.29	4.19	4.19
	Capital Expenditure later classified as R&M (H)	3.5	-	-
	Grand Total (A to H)	**1,434.18**	**556.81**	**542.98**

Note: The difference between capitalisation by AAI as per Table 18 (Rs. 510.41 Cr.) and actual capitalisation of Rs. 556.81 Cr. shown above, is Rs. 46.40 Cr. This is attributable to the revised capital additions in FY 2020-21 as detailed in Para 4.3.67.

4.3.69. The Authority notes that a majority of the actual capital additions for FY 2020-21 submitted by AAI are either incurred due to BCAS guidelines or in order to maintain the operational efficiency of the airport. However, the Authority notes that AAI has not applied appropriate allocation ratios to the common assets. While the Authority decides to consider the capital additions proposed by AAI, it also decides to apply the appropriate allocation ratios (as detailed in Para 4.3.29). The resultant capital addition for FY 2020-21 considered by the Authority for the FY 2020-21 is Rs. 60.72 Cr. After considering all the analysis presented above, the RAB considered for true-up of the Second Control Period by the Authority is as follows:

Table 24: RAB for true up of the Second Control Period decided by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Opening Aeronautical RAB (A) (Table 13)	2,061.53	1,870.39	1,795.04	1,815.87	1,840.12	
Aeronautical Assets Capitalised during the year (B) (Table 19 for FY 2016-17 to FY 2019-20 & Para 4.3.68 for FY 2020-21)	65.42	57.41	176.20	183.22	60.72	**542.98**
Disposals/Transfers (C) (Table 11)	1.45	1.13	9.74	5.46	-	**17.77**
Depreciation (D) (Table 32)	139.25	131.63	145.63	153.51	160.57	**730.59**
Closing Aeronautical RAB (A+B+C+D) (E)	1,986.25	1,795.04	1,815.87	1,840.12	1,740.28	
Average RAB [F] [(A+E)/2]	2,023.89	1,832.72	1,805.46	1,828.00	1,790.20	
Adjustment for Closing Cargo RAB due to formation of AAICLAS [G]	115.87					-
Adjusted Closing RAB for FY 2016-17 after excluding Cargo RAB [H] = [E-G]	1,870.39					-

4.4. True-up of Aeronautical Depreciation

AAI's submission of Aeronautical Depreciation for the Second Control Period

4.4.1. AAI has submitted that depreciation has been calculated based on AERA approved rates in the tariff order of the Second Control Period till FY 2017-18. From FY 2018-19 onwards, AAI has computed depreciation based on the rates prescribed by Authority vide Order No. 35/2017-18 dated 12.01.2018, in the matter of determination of useful life of Airports Assets. The useful lives considered by AAI in FY 2016-17 and FY 2017-18 are summarized in the following table:

Table 25: Useful life considered by AAI for FY17 and FY18

S.N.	Asset Class	Useful life in years
1	Runways, Taxiways, Aprons	30
2	Roads, Bridges & culvert	30
3	Terminal/Other Buildings	30
4	Building - Residential	30
5	Security Fencing	3
6	Computer, IT Hardware & Access.	6
7	Computer Software	5
8	Plant and Machinery	15
9	Tools & Equipment	15
10	Other Vehicles	8
11	Electrical Installations	10
12	Office Equipment	5
13	Furniture & Fixtures	10
14	X-Ray Baggage	15

S.N.	Asset Class	Useful life in years
15	CFT	15

4.4.2. AAI has considered the following useful lives from FY 2018-19 onwards:

Table 26: Useful life considered by AAI from FY 2018-19 onwards

S.N.	Asset Class	Useful life in years as per AAI	Useful life in years as per Order No. 35/2017-18
1	Runways, Taxiways, Aprons	30	30
2	Roads, Bridges & culvert	10	5/10
3	Terminal/Other Buildings	30	30/60
4	Building - Residential	30	30/60
5	Security Fencing	10	5/10
6	Computer, IT Hardware & Access.	3	3
7	Computer Software	5	6
8	Plant and Machinery	15	15
9	Tools & Equipment	15	15
10	Other Vehicles	8	8
11	Electrical Installations	10	10
12	Office Equipment	5	5
13	Furniture & Fixtures	7	7
14	X-Ray Baggage	15	15
15	CFT	15	15

4.4.3. The following table summarises the aeronautical depreciation submitted by AAI for the Second Control Period:

Table 27: Aeronautical depreciation submitted by AAI for true up of Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Runways, Taxiways, Aprons	19.75	19.87	19.67	19.71	19.81	**98.81**
Roads, Bridges & culvert	1.97	1.95	5.43	5.46	5.41	**20.22**
Terminal/Other Buildings	40.29	38.74	40.01	41.44	41.52	**202.01**
Cargo Building	2.11	-	-	-	-	**2.11**
Building - Residential	0.12	0.16	0.2	0.2	0.2	**0.88**
Security Fencing	-	0.13	0.3	0.38	0.38	**1.19**
Boundary Wall	1	0.99	2.98	2.98	2.98	**10.94**
Computer, IT Hardware & Access.	1.33	1.31	1.71	1.11	0.96	**6.41**
Computer Software	0.39	0.02	0.02	0.06	0.08	**0.56**
Plant and Machinery	10.86	11.32	13.38	15.03	16.27	**66.86**
Tools & Equipment	0.86	0.97	2.43	3.28	3.68	**11.22**
Other Vehicles	0.25	0.29	0.44	0.53	0.58	**2.1**
Electrical Installations	58.09	54.2	55.77	57.79	57.73	**283.59**
Office Equipment	0.05	0.08	0.11	0.32	0.4	**0.97**
Furniture & Fixtures	1.37	1.57	3.05	3.80	5.16	**14.95**
X-Ray Baggage	2.48	1.07	1.23	3.07	5.13	**12.98**
CFT	1.5	2.14	2.33	1.91	1.88	**9.77**
Total	**142.42**	**134.81**	**149.06**	**157.07**	**162.17**	**745.55**

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

4.4.4. During the preparation of the Second Control Period tariff order, the Authority had noted that the depreciation policy of AAI, as approved by its Board, was not in accordance with that of other major private airports.

4.4.5. Furthermore, the Authority had noted that certain depreciation policies of AAI were not in line with the Companies Act 2013. Although the Authority believed that implementing the depreciation rates under the Companies Act 2013 was appropriate, it also mentioned that there was no specific provision for certain asset classes like apron, taxiway and runway in the Companies Act 2013 or 1956 or in the Income Tax Act 1961.

4.4.6. In order to address the above concern, the Authority had released Order No. 35/2017-18 on the applicable depreciation rates to be enforced from 01.04.2018. Categories of assets which were not provided for in the Companies Act were added in the aforementioned order. The table below provides the depreciation rates considered by the Authority for the period FY 2014-15 onwards, up to FY 2017-18:

Table 28: Depreciation Rates as considered by the Authority from FY 2014-15 to FY 2017-18

No.	Asset Class	Rate as per Authority (%)
1	Land	0.00
2	Runways, Taxiways and Aprons	3.33
3	Roads, Bridges and Culver	3.33
4	Terminal/Other Buildings	3.33
5	Cargo Building	3.33
6	Temporary Buildings	33.33
7	Building – Residential	3.33
8	Security Fencing	33.33
9	Boundary Wall (operational)	3.33
10	Other Buildings – Unclassified	3.33
11	Computer, IT Hardware and Access.	16.67
12	Computer Software	20.00
13	Plant and Machinery	6.67
14	Tools and Equipment	6.67
15	Office Furniture and Fixtures	10.00
16	Other Vehicles	12.50
17	Electrical Installations	10.00
18	Office Equipment	20.00
19	Furniture and Fixtures	10.00
20	X-Ray Baggage	6.67
21	CFT	6.67
22	Boundary Wall (Residential)	3.33

4.4.7. The depreciation rates considered by the Authority from FY 2018-19 onwards is given in the table below:

Table 29: Depreciation Rates considered by the Authority from FY2018-19 onwards

No.	Asset Class	Rate as per Authority (in %)
1	Terminal Building (including VIP Terminal, Bus Terminal, Haj Terminal)	3.33
2	Building in operational area	3.33
3	Utility Building	3.33
4	Cargo Complex	3.33
5	Residential Building	3.33
6	Main access roads, Roads in operational area, boundary wall, security fencing	10.00
7	Baggage handling/Escalators/Elevators/Travellite/HVAC equipment/Cargo ASRS/ETV Equipment	6.67
8	X Ray machine, RT Set, DFMD, HHMD, Security Equipment	6.67
9	Office Equipment	20.00
10	Furniture and Fixtures – other than trolleys	14.29
11	Furniture and Fixtures –trolleys	33.33
12	Cargo equipment, Dollies, PPT	6.67
13	Computers – End user devices	33.33
14	Computers – servers and networks	16.67
15	CUTE Equipment	16.67
16	Electrical installation and equipment – Electrical fittings, including Runway lightning system Gen-set/Power equipment	10.00
17	Flight information system, AOCC equipment	10.00
18	Light motor vehicles and heavy motor vehicles	12.50
19	Crash fire tenders/Other fire equipment including pumps, sprinklers	6.67
20	Intangible assets – computer software	20.00
21	Runway/Taxiway/Apron	3.33
22	Hangar	3.33

4.4.8. Considering the rates as applicable in the tables above, the year wise depreciation approved by the Authority in the tariff order of the Second Control Period is as follows:

Table 30: Year wise depreciation as approved by the Authority as per the tariff order of the Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Depreciation as per Authority	138.1	132.2	142.8	146.7	182.9	**742.7**

<u>Authority's examination of Aeronautical Depreciation for the Second Control Period as part of the Consultation Paper</u>

4.4.9. The Authority had proposed to consider the rates approved by it in the Second Control Period tariff order for FY 2016-17 and FY 2017-18. For FY 2018-19 onwards, the rates prescribed in Order No. 35/2017-18 dated 12.10.2018 have been considered. Further, the Authority had noted that the depreciation rates in the submission have been calculated separately for the opening block of assets and for additions during the Second Control Period.

4.4.10. The Authority had recalculated the depreciation values based on the classification of common assets as approved in the Second Control Period tariff order. After considering the approved EQTR and TBLR ratios for the Second Control Period, the Authority had noted that there has been an adjustment in average RAB to the extent of Rs. 1.84 Cr.

4.4.11. Depreciation associated with 'Computer – servers and networks' has also been adjusted from 20% in the MYTP submission to 16.67%, to ensure that these assets are depreciated within the useful life of the assets as determined by the Authority as per the tariff order of the Second Control Period.

4.4.12. The Authority had also proposed to deduct the financing allowance for the First Control Period from the opening RAB of FY2016-17 from "Runways, taxiways, and apron" and "Terminal/other buildings". The Authority had proposed to recalculate the depreciation for the Second Control Period after considering the deduction of financing allowance for the First Control Period.

4.4.13. Having considered the abovementioned points, the Authority had recalculated depreciation for the Second Control Period as follows:

Table 31: Aeronautical depreciation proposed to be considered for true up of Second Control Period by the Authority

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Runways, Taxiways, Aprons	19.26	19.40	19.21	19.27	19.38	**96.53**
Roads, Bridges & culvert	1.97	1.95	5.43	5.46	5.41	**20.22**
Terminal/Other Buildings	37.88	36.41	37.75	39.22	39.35	**190.61**
Cargo Building	2.11	-	-	-	-	**2.11**
Building - Residential	0.12	0.15	0.19	0.19	0.19	**0.83**
Security Fencing	-	0.13	0.30	0.38	0.38	**1.19**
Boundary Wall	1.00	0.99	2.98	2.98	2.98	**10.94**
Computer, IT Hardware & Access.	1.33	1.31	1.71	1.11	0.96	**6.41**
Computer Software	0.39	0.02	0.02	0.05	0.06	**0.54**
Plant and Machinery	10.86	11.22	12.95	14.56	15.80	**65.38**
Tools & Equipment	0.85	0.97	2.42	3.27	3.68	**11.20**
Other Vehicles	0.25	0.29	0.44	0.53	0.58	**2.10**
Electrical Installations	58.09	54.20	55.77	57.79	57.72	**283.57**
Office Equipment	0.05	0.08	0.11	0.32	0.40	**0.97**
Furniture & Fixtures	1.37	1.57	3.05	3.68	4.99	**14.66**
X-Ray Baggage	1.98	0.57	0.73	2.57	4.63	**10.48**
CFT	1.50	2.14	2.33	1.91	1.88	**9.77**
Total	**139.02**	**131.40**	**145.40**	**153.28**	**158.39**	**727.49**

<u>Stakeholder comments on true-up of Depreciation for the Second Control Period</u>

4.4.14. There were no stakeholder comments with respect to true-up of depreciation for the Second Control Period.

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

4.4.15. No stakeholder comments were received regarding depreciation for the Second Control Period. It may be noted that the decisions taken by the Authority with regards to true-up of RAB for the Second Control Period will have implications on the depreciation of the Second Control Period as well. Accordingly, the Authority has incorporated the relevant changes to RAB of the Second Control Period and has recalculated the depreciation to be Rs 730.59 Cr. The Authority decides to consider true-up of depreciation for the Second Control Period as given below:

Table 32: Aeronautical depreciation for true up of Second Control Period decided by the Authority

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Runways, Taxiways, Aprons	19.26	19.40	19.21	19.27	19.38	**96.53**
Roads, Bridges & culvert	1.97	1.95	5.43	5.46	5.41	**20.22**
Terminal/Other Buildings	36.69	35.44	36.87	38.34	38.54	**185.89**
Cargo Building	2.11	-	-	-	-	**2.11**
Building - Residential	0.12	0.15	0.19	0.19	0.19	**0.83**
Security Fencing	-	0.13	0.30	0.38	0.38	**1.19**
Boundary wall (operational)	1.00	0.99	2.98	2.98	2.98	**10.94**
Other Buildings - Unclassified	1.18	0.97	0.88	0.88	0.87	**4.77**
Computer, IT Hardware & Access.	1.33	1.31	1.71	1.11	1.04	**6.49**
Computer Software	0.39	0.02	0.02	0.05	0.15	**0.63**
Plant and Machinery	10.86	11.22	12.95	14.56	16.66	**66.25**
Tools & Equipments	0.85	0.97	2.42	3.27	3.75	**11.27**
Office Furniture & Fixtures	0.15	0.42	1.47	2.10	3.45	**7.61**
Other Vehicles	0.25	0.29	0.44	0.53	0.59	**2.11**
Electrical Installations	58.09	54.20	55.77	57.79	58.23	**284.07**
Office Equipments	0.05	0.08	0.11	0.32	0.40	**0.97**
Furniture & Fixtures	1.22	1.14	1.58	1.58	1.79	**7.32**
X-Ray Baggage	2.22	0.80	0.96	2.80	4.87	**11.65**
CFT	1.50	2.14	2.33	1.91	1.89	**9.77**
Total	**139.25**	**131.63**	**145.63**	**153.51**	**160.57**	**730.59**

4.5. True-up of the Fair Rate of Return

AAI's submissions regarding the True up of the Fair Rate of Return (FRoR) for the Second Control Period

4.5.1. AAI has made the following submission with regard to the FRoR:

- Cost of equity is considered to be 14.00%.
- Cost of debt is considered to be 6.21%.

4.5.2. Based on the above, AAI has considered FRoR to be 14%, as submitted in the following table:

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

FY ending March 31 (in %)	2017	2018	2019	2020	2021
Cost of Equity	14.00	14.00	14.00	14.00	14.00
Cost of Debt	-	-	-	-	6.21
Means of Finance Proportion					
Equity Proportion	100.00	100.00	100.00	100.00	90.83
Debt Proportion	0.00	0.00	0.00	0.00	9.17

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

4.5.3. The relevant decisions taken by the Authority while determining the tariff for the Second Control Period are as stated below:

- *"9.a. The Authority decides to consider the FRoR at 14% for CIA for the 1st and 2nd control period.*
- *9.b. The Authority will undertake a study to determine FRoR for major AAI airport given the low debt structure for AAI as a whole."*

Authority's examination of FRoR for the Second Control Period as part of the Consultation Paper

4.5.4. The Authority had noted that there was a change in the debt-equity composition of Chennai International Airport in FY 2020-21. As per AAI's submission, the cost of debt considered at Chennai International Airport is 6.21%, based on the term loan facility of Rs. 2100 Cr. that AAI had taken from M/s. Axis Bank. Thus, after considering a cost of equity of 14%, the Authority had recalculated the FRoR for the Second Control Period to be 13.92%.

4.5.5. The revised FRoR by the Authority as considered for the true-up calculation is as follows:

Table 34: FRoR proposed to be considered for true up of the Second Control Period by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021
Debt [A]	-	-	-	-	100.63
Equity [B]	2,121.98	1,923.25	1,958.31	1,990.67	1,852.28
Debt + Equity [C = A + B]	2,121.98	1,923.25	1,958.31	1,990.67	1,952.91
Cost of Debt [D]	6.21%	6.21%	6.21%	6.21%	6.21%
Cost of Equity [E]	14.00%	14.00%	14.00%	14.00%	14.00%
Individual Year Gearing	0.00%	0.00%	0.00%	0.00%	5.15%
Weighted Average Gearing	1.01%				
Weighted Average Cost of Debt	0.06%				
Weighted Average Cost of Equity	13.86%				
FRoR	13.92%				

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

4.5.6. During the stakeholders' consultation process, the Authority has received comments/views from stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to true-up of FRoR for the Second Control Period. The comments are as follows:

AAI's comments regarding true-up of FRoR for the Second Control Period

4.5.7. AAI's comment regarding considering a cost of equity of 14% is as follows:

"AERA's Contentions

- *AERA notes that there is a change in the debt-equity composition of Chennai International Airport in FY 2020-21. As per AAI's submission, the cost of debt considered at Chennai International Airport is 6.21%, based on the term loan facility of Rs. 2100 Cr. that AAI had taken from M/s. Axis Bank. Thus, after considering a cost of equity of 14%, AERA recalculates the FRoR for the Second Control Period to be 13.92%. (Para 3.5.4 of CP)*

AAI's Submissions

- *AAI submits that as per the Second Control Period Order – decision no. 9.b, AERA had decided to carry out an independent study of the FRoR for major AAI airports. However, it was noted that the results of such study was not mentioned in the CP.*

- *It was also noted by AAI that AERA had referred to the workings carried out in the Orders of MIAL and DIAL and had recomputed the Cost of Equity for Chennai airport. However, it is submitted that the comparable airport set used for MIAL and DIAL along with the proximity score computations may not hold good for AAI airports. Proximity scores were computed based on three criteria - Revenue till, Ownership structure and Operations. The scores assigned for each of the airports in the comparable set would be very different if re-applied and recomputed for AAI airports. Extract of the proximity score computation is provided below:*

The proximity scores of these airports with CSMIA are as follows:

Airport	Revenue till	Ownership structure	Operations	Proximity scores
Mumbai	0.00	0.00	0.00	0.0000
Sydney	1.00	1.00	0.41	1.4726
Melbourne	1.00	1.00	1.09	1.7851
Gatwick	2.00	1.00	0.99	2.4474
Auckland	1.00	1.00	2.05	2.4935
Amsterdam	1.00	1.00	-2.28	2.6796
Johannesburg	2.00	1.00	1.50	2.6920
Changi	0.00	2.00	-2.14	2.9319
Dublin	2.00	2.00	1.56	3.2295
Heathrow	2.00	1.00	-2.47	3.3295
MAHB	2.00	1.00	-3.40	4.0670
Incheon	2.00	2.00	-2.93	4.0721
AoT	1.00	1.00	-4.15	4.3822

Scoring mechanism for proximity scores:

Revenue till structure:

- *1 – 'single till' or where information is not available*
- *2 – 'dual till'*
- *3 – Hybrid Till*

Ownership structure:

- *1 – if 100% Government Owned/Funded*
- *2 – if Government / private owned/funded, not being Public Private Partnership*
- *3 – if Public Private Partnership Funded*

Operations Scale (OpS):

- *For each comparable airport, k, we computed the ratios of passenger, cargo and aircraft movement of these airports to that of MIAL in each of the years from 2015 to 2017.*

- *MIAL and DIAL are PPP airports and the level of traffic handled by it and the scale of operation is very different from that of AAI airports. Hence, it is submitted once again that the asset beta worked out for MIAL and DIAL based on its comparative data set cannot be applied straightaway to AAI airports.*

- *AAI had appointed M/s KPMG to carry out a study on Cost of Equity during 2011 the results of which are given below:*

Table 3: Beta of comparable airports

Airport / Group	Country	Equity Beta	Tax Rate	Debt (in Billion local currency)	Mkt Cap (in Billion local currency)	Debt /Mcap	Asset Beta
Airports of Thailand PCL	Thailand	1.14	30%	56.2	54.3	1.03	0.66
Beijing Capital International Airport	China	1.03	25%	18.5	14.8	1.25	0.53
Guangzhou Baiyun International Airport	China	0.91	25%	0.0	8.3	0.00	0.91
Shanghai International Airport	China	1.04	25%	2.5	22.0	0.11	0.96
Xiamen International Airport	China	0.95	25%	[illegible]	4.1	0.00	0.95
Grupo Aeroportuario del Sureste SAB de CV (Group of 9 airports in Mexico)	Mexico	0.94	30%	0.6	21.0	0.03	0.92
Grupo Aeroportuario del Pacifico SAB de CV	Mexico	[illegible]	[illegible]	1.0	27.2	0.04	0.82
Grupo Aeroportuario Centro Norte, S.A. de C.V.	Mexico	[illegible]	[illegible]	1.0	9.2	0.10	0.92

The median value of asset beta for the above comparable set is 0.92 which is being used as the asset beta for airport operations business of AAI. This needs to be re-levered as per the expected gearing of AAI in the control period to estimate the equity beta for AAI.

Table 4: Equity Beta for AAI

Estimated asset beta for AAI	0.92
Gearing for AAI	8.84%
Tax rate for AAI	32.45%
Equity beta for AAI	0.98

Equity beta for AAI works out to 0.98.

- *Please refer to Annexure 2 for full report as annexed in the FCP CP - Consultation Paper No. 16/2012-13.*

- *Based on the above report, AAI submitted during SCP consultation that the CoE was 16%. AERA in the SCP order had also considered CoE of 16% and since there was low debt, the FRoR was determined to be 14%. AAI submits that the debt was taken only during the end of FY 21 and hence, requests AERA to consider FRoR of 14% for SCP.*

AAI's Request

- *AAI submits that the FRoR may be considered at 14% for SCP in accordance with the decision no. 9a in SCP order no 3/2018-19."*

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

4.5.8. The Authority notes that no comments regarding true-up of FRoR were received from other stakeholders.

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

4.5.9. The Authority notes that no counter-comments regarding true-up of FRoR were received from AAI.

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

4.5.10. The Authority has taken note of AAI's comment regarding cost of equity for true-up of the Second Control Period. The Authority notes that the cost of equity is maintained at 14% in accordance with Order No. 03/2018-19 dated 16th April 2018 of the Second Control Period.

4.5.11. The Authority has noted that the FRoR is lower than 14% in the background of an increase in debt in the last year of the Second Control Period (i.e., FY 2020-21). Since the cost of debt is 6.21%, the FRoR has reduced by the virtue of the calculation of FRoR as detailed in the AERA Guidelines, 2011.

4.5.12. The Authority notes that the analysis presented in the true-up of RAB and depreciation of the Second Control Period would have an impact on FRoR considered for true-up of the Second Control Period. However, the Authority after considering the relevant adjustment notes a negligible impact in the

FRoR for the Second Control Period (not captured in two decimal places). Accordingly, the Authority decides to consider the composite FRoR of 13.92% across all years for the true-up of the Second Control Period as per the following table. This is in line with the practice followed by the Authority across other similar airports.

Table 35: FRoR for true-up of the Second Control Period decided by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021
Debt [A]	-	-	-	-	100.63
Equity [B]	2,121.98	1,923.25	1,958.31	1,990.67	1,898.11
Debt + Equity [C = A + B]	2,121.98	1,923.25	1,958.31	1,990.67	1,998.74
Cost of Debt [D]	6.21%	6.21%	6.21%	6.21%	6.21%
Cost of Equity [E]	14.00%	14.00%	14.00%	14.00%	14.00%
Individual Year Gearing	0.00%	0.00%	0.00%	0.00%	5.15%
Weighted Average Gearing	1.01%				
Weighted Average Cost of Debt	0.06%				
Weighted Average Cost of Equity	13.86%				
FRoR	13.92%				

4.6. True-up of Return on Land

AAI's submission regarding True up of Return on Land for the Second Control Period

4.6.1. AAI made the following submission regarding true up of return on land for Second and First Control Periods:

Table 36: Return on land submitted by AAI for true up of Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Return on Land (SCP)	0.81	0.81	0.84	0.77	0.45	**3.68**
Return on Land (FCP)	6.72	-	-	-	-	**6.72**

4.6.2. In order to substantiate the above, AAI has stated:

"AERA has vide its Order No.42/2018-19 dated 05.03.2019 determined to provide a FROR on cost of Land incurred by the Airport Operator. As per order of the Authority, return on land computed based on EMI method. This has been claimed from first control period. Interest cost till F.Y 19-20 has been considered as SBI Base rate + 2% and from F.Y 20-21, Term loan rate of 6.21% has been considered."

Decisions taken by the Authority regarding Return on Land

4.6.3. The Second Control Period tariff order does not include any provision for a Return on Land.

4.6.4. As per Authority's Order No. 42/2018-19 regarding determination of FRoR on cost of land:

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

Authority's examination of Return on Land for the Second Control Period as part of the Consultation Paper

4.6.5. AAI's response to the Authority's questions pertaining to the details for 'returns on land' is as follows:

"The total land area of Chennai Airport is 1,317.33 acres. Most of the lands were belongs to State government and the same were transferred by State Government to Civil Aviation Department before the year 1960. Only a very few acres of land was purchased from private parties for Airport expansion (Operational area expansion) purpose through State Government. ***For the past several years, the Government of Tamil Nadu is acquiring and handing over the land to AAI Chennai Airport on free of cost and free from encumbrances.*** *Now the entire land of 1317.33 acres have been mutated in Airports Authorities of India's name."*

4.6.6. The Authority had noted that AAI had submitted Rs. 3.68 Cr. for return on land for the First Control Period and Rs. 6.72 Cr. for return on land for the Second Control Period. The Authority had sought additional information from AAI regarding this land. AAI had not provided the required information and had responded that land had been acquired free of cost. Moreover, since return on land should be sought prospectively and not retrospectively, the Authority was of the opinion that return on land would not be included in the true up calculation.

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

4.6.7. During the stakeholders' consultation process, the Authority has received comments/views from stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to true-up of return on land for the Second Control Period. The comments are as follows:

AAI's comments regarding true-up of return on land for the Second Control Period

4.6.8. AAI's comment regarding return on land for the Second Control Period is as follows:

"AERA's Contentions

- *AERA notes that AAI has submitted Rs. 3.68 Cr. for return on land for the First Control Period and Rs. 6.72 Cr. for return on land for the Second Control Period. AERA sought additional information from AAI regarding this land. AAI has not provided the required information and responded that land had been acquired free of cost. Moreover, since return on land should be sought prospectively and not retrospectively, AERA is of the opinion that return on land will not be included in the true up calculation. (Para 3.6.6 of CP)*

AAI's submission

- *AAI submits that the while majority of land was provided free of cost, following compensation was paid for various parcels of land. Details are provided below for consideration by AERA:*

Asset Description	Operational area (Acres)	Non-Op area (Acres)	Capitalized on	Amount (Rs)
Transfer of 21 acres of defence land at pallavaram cantonment	1.76	19.24	24-Jan-11	3,37,20,579
Pallavaram & Meenabakkam village 1991 – 1992	1018.28	124.590	31-Mar-92	2,42,40,474
Land measuring 23.89 Acres - Meenabakkam village	23.89		31-Mar-04	1,05,06,764
Landowners, Advocate - Pozhichalur village - 1008 + 20 sqm	0.25		31-Mar-93	1,84,970
2.28 Acres Cowl bazar for parallel taxi track	2.28		25-Jan-18	50,001
Acquisition of Defence Land Vr.No.1451,16.09.97-De	0.48		31-Mar-98	9,750
Land received Free 126.56 acres - Kolapakkam Manapakkam	126.56		31-Mar-09	1
				6,87,12,539

AAI's Request

- *Since majority of the compensation was paid for land acquired for operational purposes, AAI requests AERA to consider the above details in their computation on return on land. AAI further requests AERA to consider this return in the ARR from the first control period.*

Other stakeholders' comments on true-up of return on land for the Second Control Period

4.6.9. IATA's comment regarding the return on land for the Second Control Period is as follows:

- *"IATA supports AERA's view to not include the aforementioned amount for Return of Land in the true up calculation, since the land was handed over to AAI by the Tamil Nadu State Government free of cost & free of encumbrances."*

AAI's counter-comments and response to stakeholder comments regarding true-up of return on land for the Second Control Period

4.6.10. In response to IATA's comment regarding the true-up of return on land for the Second Control Period, AAI reiterated the comment as stated in Para 4.6.8.

Authority's analysis on stakeholder comments regarding true-up of return on land for the Second Control Period

4.6.11. The Authority also notes that while submitting the actual capital additions for FY 2020-21, AAI submitted a capital outlay of Rs. 9.47 Cr. pertaining to enhanced compensation deposited as per the court order. In line with Para 3.6.1 of Order No. 42/2018-19 dated 05.03.2021, the Authority decides to not consider the enhanced compensation paid since it was incurred before the aforementioned order was passed.

4.6.12. The Authority has noted the comments submitted by AAI and IATA, and AAI's response thereon regarding return on land. This is explained in detail in Para 4.1.8 from Order No 42/2018-19 dated 05th March 2019 which states that return on land will be given from the next control period. Thus, the Authority decides to not allow any return on land purchased by AAI for the Second Control Period.

4.7. True-up of Operating and Maintenance (O&M) Expenses

AAI's submissions regarding the True up of O&M Expenses for the Second Control Period

4.7.1. AAI has made the following submissions with regards to operating expenses for truing up in the Second Control Period:

- **Payroll costs:** AAI has submitted actual year-wise expenses for the abovementioned categories, from FY 2016-17 to FY 2019-20. Pay roll costs for FY 2020-21 were estimated by assuming a 7%

growth over the FY 2019-20 expenses. The following table summarises payroll costs submitted by AAI:

Table 37: Payroll costs submitted by AAI for Second Control Period

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ	4.13	18.67	34.07	27.39	29.32	**113.59**
Payroll costs – non CHQ	118.11	120.10	129.57	139.41	149.17	**656.36**
Total payroll expenses	**122.24**	**138.77**	**163.64**	**166.80**	**178.49**	**769.94**

- **Administrative and general expenses:** AAI has submitted year-wise actual expenses for the abovementioned categories, from FY 2016-17 to FY 2019-20. Administrative and general expenses for FY 2020-21 were estimated by assuming a 10% growth over the FY 2019-20 for non-apportionment expenses. In the case of apportionment of admin expenses for CHQ FY 2020-21, expenses were estimated using a growth rate of 5% over FY 2019-20. The following table summarises administrative and general expenses submitted by AAI:

Table 38: Administrative and general expenses submitted by AAI for Second Control Period

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Admin and general expenses – non CHQ	25.28	10.3	10.26	15.9	17.31	**79.04**
Apportionment of Admin Expenses for CHQ	84.69	62.63	37.41	50.74	53.28	**288.75**
Total Admin & General Expenses	**109.97**	**72.93**	**47.67**	**66.64**	**70.59**	**367.79**

- **Repair and maintenance (R&M) expenses:** AAI has submitted year-wise actual expenses for all R&M expenses from FY 2016-17 to FY 2019-20. R&M expenses for FY 2020-21 have been estimated by assuming a 10% growth over the FY 2019-20 expenses. The expenses for digital signages and automatic tray retrieval system in FY 2020-21 are estimated based on actual annual maintenance contracts. The following table summarises R&M expenses submitted by AAI:

Table 39: R&M expenses submitted by AAI for Second Control Period

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total R&M Expenses	92.81	101.10	73.14	73.54	81.00	**421.59**

- **Utilities and outsourcing expenses:** AAI has submitted power charges based on actual rates per unit. The power charges for FY2020-21 have also been calculated based on the actual rate per unit as well. AAI has submitted actual expenses for all other utility and outsourcing expenses from FY2016-17 to FY2019-20. The FY2020-21 expenses have been estimated using a 10% growth rate over FY2019-20 expenses. The following table summarises the utilities and outsourcing expenses submitted by AAI:

Table 40: Utilities and outsourcing expenses submitted by AAI for Second Control Period

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total utilities & outsourced expenses	88.49	89.27	84.93	82.58	86.03	**431.30**

Other outflows: AAI has submitted actual collection charges on PSF for FY2017-18 and FY2019-20. Collection charges on UDF for FY2016-17 to FY2019-20 are based on actual traffic; for

FY2020-21, collection charges on UDF have been estimated using the estimated passenger traffic. The expenses for all other items for FY2020-21 have been estimated using a 10% growth over FY2019-20 expenses. The following table summarises other outflows submitted by AAI:

Table 41: Other Outflows as submitted by AAI for Second Control Period

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total Other outflows	21.17	18.34	21.50	19.74	18.23	**98.97**

*includes collection on UDF, municipal taxes, consumption of stores and spares, POL charges, hire charges, and other miscellaneous expenses

4.7.2. The aeronautical O&M expense for the Second Control Period considering the above-mentioned submissions are shown in the table below:

Table 42: Aeronautical O&M expenses submitted by AAI for true up for Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ	4.13	18.67	34.07	27.39	29.32	**113.59**
Payroll costs – non CHQ	118.11	120.1	129.57	139.41	149.17	**656.36**
Pay roll costs (A)	122.24	138.77	163.64	166.80	178.49	**769.94**
Repair & maintenance (B)	92.81	101.10	73.14	73.54	81.00	**421.59**
Utilities & outsourcing expenses* (C)	88.49	89.27	84.93	82.58	86.03	**431.30**
Admin and general expenses – non CHQ	25.28	10.3	10.26	15.9	17.31	**79.04**
Admin and general expenses –CHQ	84.69	62.63	37.41	50.74	53.28	**288.75**
Admin. & other expenses (D)	109.97	72.93	47.67	66.64	70.59	**367.79**
Other outflows (E)	21.17	18.34	21.50	19.74	18.23	**98.97**
Total operating expenditure (A to E)	**434.68**	**420.41**	**390.89**	**409.29**	**434.34**	**2,089.60**

*includes CSR expense

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

Forecasting of payroll expenses

4.7.3. The relevant decisions taken by the Authority while determining the tariff for the Second Control Period are as stated below:

- *"11.a. The Authority expects AAI to reduce O&M expenditure over a period of time."*
- *"11.c. The Authority decides to true-up the O&M expenditure for FY 2016-17 to FY 2020-21 of the 2nd control period based on the actuals at the time of determination of tariffs for the 3rd control period."*
- *"11.d. The Authority decides to undertake an independent study to assess the reasonableness of the operation and maintenance expenditure. The Authority would consider the results of the study to true-up the operation and maintenance expenditure at the time of tariff determination for the 3rd control period."*

4.7.4. In the tariff order for the Second Control Period, with respect to the forecasting of payroll expenses, the Authority decided that expenditure on apportionment of retirement benefits provided to the Corporate Headquarter (CHQ) in respect of Chennai International Airport employees be increased at a growth rate of 7%, except for FY 2017-18. Additionally, the Authority decided that the payroll cost components – Salaries and Wages, Medical Benefits and PF contribution would be increased at

7% for FY 2016-17 and at a growth rate of 5% for FY 2018-19, FY 2019-20 and FY 2020-21. The Authority had also proposed to increase CHQ overheads apportionment costs (admin. and general expenditure of CHQ) by 5% per annum.

Allocation Ratios of Common Expenses

4.7.5. The allocation ratios as approved by the Authority in the tariff order of the Second Control Period for various common expenses have been summarized below:

Table 43: Allocation ratios of common O&M expenses as approved in the tariff order of Second Control Period

Particulars	% Aeronautical Expense (excl. Cargo)
Payroll Expenses	95
Apportionment of Admin CHQ expenses	90
Retirement benefits provided at CHQ in respect of employees at Chennai International Airport	95
Vehicle Ratio	98.19
Terminal Building Ratio	92.5
Quarter Ratio	88.14
Operating Building Ratio	94.9

Correction in Projections

4.7.6. The Authority had proposed not to include financing charges as a part of O&M expenses for the Second Control Period.

4.7.7. As per para 14.21 of the Second Control Period tariff order, the Authority had proposed to undertake an independent study to assess the reasonableness of the O&M expenditure. The Authority had noted that it would consider the independent study's results to true up the O&M expenditure while determining the tariff for Third Control Period.

4.7.8. The Authority had decided to consider the O&M expenditure as per the following table:

Table 44: O&M Expenses as approved by the Authority in the tariff order of the Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ	21.3	26.0	27.2	28.6	30.0	**133.1**
Payroll costs – non CHQ	127.5	153.7	161.4	169.5	178.0	**790.2**
Pay roll costs (A)	148.8	179.7	188.7	198.1	208.0	**923.3**
Repair & maintenance (B)	87.9	82.4	89.7	97.0	105.3	**462.3**
Utilities & outsourcing expenses (C)	95.3	85.3	86.7	88.3	90.1	**445.7**
Admin and general expenses - non CHQ	4.40	4.30	4.70	5.20	5.70	**24.30**
Admin and general expenses - CHQ	26.30	21.70	22.80	23.90	25.10	**119.80**
Admin. & other expenses* (D)	30.7	26.0	27.5	29.1	30.8	**144.1**
Other outflows (E)	13.6	12.2	12.8	13.4	14.1	**66.1**

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total operating expenditure (A to E)	376.3	385.5	405.4	426.0	448.3	2,041.5

*includes CSR expense

Authority's examination regarding O&M Expenses for the Second Control Period as part of the Consultation Paper

4.7.9. The Authority had undertaken an independent study to assess the reasonableness of O&M expenses at Chennai International Airport in the Second Control Period, as per Decision 11.d. of the Second Control Period Order. The recommendations of this study had been taken into consideration while truing up O&M expenses of the Second Control Period. A summary of the study is given in Annexure IV.

4.7.10. The Authority had noted that AAI had allocated various sub-expenses within O&M expenses based on the following ratios:

Table 45: Allocation ratios of common expenses as submitted by AAI

Particular	Ratios
Payroll Expenses	EHCR, 1EHCR (P&A)
Admin. And General Expenses	EHCR, TBLR, VEHR
Repair and Maintenance	EQTR, TBLR, VEHR, EHCR
Utilities and Outsourcing Expenses	Electricity
Other Outflows	-

Where:

- EHCR – Employee Head Count Ratio
- 1EHCR (P&A) – Employee Headcount Ratio excl. the security department
- TBLR – Terminal Building Ratio
- VEHR – Vehicle Ratio
- Electricity - Electricity ratio is based on the no. of units consumed by aero and non-aero departments.

4.7.11. A summary of the percentage of expenses considered to be aeronautical based on the aforementioned ratios in AAI's submission is given below:

Table 46: Summary of percentage of common expenses levied on aeronautical portion for each year as submitted by AAI

Ratio (in %)	2017	2018	2019	2020	2021
TBLR	92.47	92.59	94.47	94.34	94.35
EHCR	98.18	98.18	98.18	98.18	97.77
1EHCR (P&A)	98.17	98.17	98.17	98.17	97.77
EQTR	99.73	99.73	99.73	99.73	99.55
VEHR	97.30	97.30	97.30	97.30	97.30

Ratio (in %)	2017	2018	2019	2020	2021
Electricity	99.99	99.99	99.99	99.99	99.99

4.7.12. The Authority had also noted that the TBLR as per the MYTP submission was changing on an annual basis. The allocation ratios may not change on a year-on-year basis since they are determined on a design layout that is considered at the beginning of the concerned control period and as stated in Para 4.3.29.

4.7.13. As per para 14.16 of the Second Control Period Order, the Authority had proposed to not include financing charges worth Rs. 26.90 Cr. in admin. and general expenses. Since the same had been included in the MYTP submission, the Authority had decided to exclude these expenses from O&M expenses for the Second Control Period.

4.7.14. The Authority had examined AAI's submission regarding CSR expenses under admin. and general expenses. Basis para 81 of Hon'ble TDSAT Order on BIAL, the Authority had decided that CSR expenses would be allowed as cost of the airport operator and thereby had included it in the truing up exercise of the Second Control Period for Chennai International Airport.

4.7.15. The Authority had also noted that AAI had provisioned towards an apportionment of Admin. Expenses to CHQ amounting to Rs. 288.75 Cr. The Authority believed that this amount was on a higher side as compared to Rs. 119.8 Cr. as approved in the Second Control Period. The Authority had proposed to consider the approved expenditure as per the Second Control Period tariff order for the true-up calculation.

4.7.16. The Authority had noted that O&M expenses for FY 2020-21 had been estimated by taking a growth rate of 10% (and 7% in the case of payroll costs) over the FY20 expenses. Since FY 2020-21 traffic was low due to the pandemic, the Authority was of the opinion that the O&M expenses of FY 2020-21 may not be more than that of FY 2019-20. Therefore, the Authority had proposed to estimate the FY 2020-21 expenses by considering nil growth over FY 2019-20.

4.7.17. The Authority had proposed to estimate the FY 2020-21 payroll costs by applying a 0% growth rate over the FY 2019-20 payroll costs instead of a 7% growth rate considered by AAI. The Authority had proposed to consider Rs. 166.83 Cr. for payroll expenses for FY 2020-21 as opposed to Rs. 178.49 Cr. submitted by AAI. Accordingly, the Authority had proposed to consider the following payroll expenses in the Second Control Period:

Table 47: Payroll costs proposed to be considered for true up of the Second Control Period by the Authority

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ*	4.13	18.67	34.07	27.39	27.41	**111.67**
Payroll costs – non CHQ	118.12	120.12	129.60	139.42	139.42	**646.68**
Total payroll expenses	**122.25**	**138.79**	**163.67**	**166.81**	**166.83**	**758.35**

* less – redeployed employees

4.7.18. The Authority proposes to consider apportionment of admin expenses for CHQ as approved by the Authority in the Second Control Period Order. Additionally, a 0% growth rate over FY 2019-20 was considered to estimate the admin and general expenses – non CHQ, instead of a 10% growth rate considered by AAI. The Authority proposes to consider Rs. 40.07 Cr. for administrative and general expenses for FY 2020-21 as opposed to Rs. 70.59 Cr. submitted by AAI. Accordingly, the Authority proposes to consider the following administrative and general expenses for the Second Control Period:

Table 48: Administrative and general expenses proposed to be considered for true up of the Second Control Period by the Authority

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Admin and general expenses – non CHQ*	4.52	5.71	10.23	15.13	14.97*	**50.56**
Apportionment of Admin Expenses for CHQ	26.30	21.70	22.80	23.90	25.10	**119.80**
Total Admin & General Expenses	**30.82**	**27.41**	**33.03**	**39.03**	**40.07**	**170.36**

* AAI submitted that project expenses in FY 2019-20 was Rs. 1.61 Cr. project expenses in FY 2020-21 were nil

4.7.19. The Authority had proposed to estimate the FY 2020-21 payroll costs by applying a 0% growth rate over the FY 2019-20 R&M expenses instead of a 10% growth rate considered by AAI. The Authority had proposed to consider Rs. 72.76 Cr. for R&M expenses for FY 2020-21 as opposed to Rs. 81.00 Cr. submitted by AAI. Accordingly, the Authority had proposed to consider the following R&M expenses for the Second Control Period:

Table 49: R&M expenses proposed to be considered for true up of the Second Control Period by the Authority

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total R&M Expenses	92.49	101.02	72.44	72.66	72.76*	**411.36**

* includes AMC charges for digital signages and ATRS

4.7.20. The Authority had noted that AAI's utilities and outsourcing expenses were inefficient with power recovery contributing to just 12% of the power charges incurred. The Authority expressed that it would like to understand why power recoveries are low in Chennai International Airport and would examine this in more detail in the Third Control Period tariff order. The Authority had proposed to estimate the FY 2020-21 utilities and outsourcing expenses by applying a 0% growth rate over the FY 2019-20 utilities and outsourcing expenses instead of a 10% growth rate considered by AAI. The Authority had proposed to consider Rs. 82.15 Cr. for utilities and outsourcing expenses for FY 2020-21 as opposed to Rs. 86.03 Cr. submitted by AAI. Accordingly, the Authority had proposed to consider the following utilities and outsourcing expenses for the Second Control Period:

Table 50: Utilities and outsourcing expenses proposed to be considered for true up of the Second Control Period by the Authority

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total utilities & outsourcing expenses	88.49	89.25	84.51	82.15	82.15	**426.54**

4.7.21. The Authority had proposed to consider the actual FY 2020-21 passenger traffic to compute the collections from UDF charges. Additionally, the Authority had proposed to consider miscellaneous expenses as approved by the Authority in the Second Control Period Order. The Authority had proposed to consider Rs. 10.80 Cr. for other outflows for FY 2020-21 as opposed to Rs. 18.23 Cr. submitted by AAI. Accordingly, the Authority had proposed to consider the following other outflows for the Second Control Period:

Table 51: Other outflows proposed to be considered for true up of the Second Control Period by the Authority

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Total Other Outflows	12.12	15.13	15.04	13.26	10.80	**66.36**

4.7.22. The Authority had proposed to consider interest on working capital loan as an operating expense. AAI submission considered working capital loan interest as an aeronautical expense. The Authority had proposed to use the share of aeronautical revenue at Chennai International Airport to bifurcate working capital loan interest into aeronautical and non-aeronautical expenses.

4.7.23. The Authority had recalculated the O&M expenses after taking into consideration the above points and considering specific details on sub-heads of O&M expenses. The table below provides the O&M expenses as considered by the Authority:

Table 52: O&M Expenses proposed to be considered for true up of the Second Control Period by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ	4.13	18.67	34.07	27.39	27.41	**111.67**
Payroll costs – non CHQ	118.12	120.12	129.60	139.42	139.42	**646.68**
Payroll costs (A)	122.25	138.79	163.67	166.81	166.83	**758.35**
Repair and maintenance (B)	92.49	101.02	72.44	72.66	72.76	**411.36**
Utilities & outsourcing expenses (C)	88.49	89.25	84.51	82.15	82.15	**426.54**
Admin and general expenses – non CHQ	4.52	5.71	10.23	15.13	14.97	**50.56**
Apportionment of Admin Expenses for CHQ	26.30	21.70	22.80	23.90	25.10	**119.80**
Admin & Other expenses (D)	30.82	27.41	33.03	39.03	40.07	**170.36**
Other Outflows (E)	12.12	15.13	15.04	13.26	10.80	**66.36**
Working capital loan interest	-	-	-	-	0.30	**0.30**
Total O&M Expenses	**346.17**	**371.60**	**368.68**	**373.91**	**372.91**	**1,833.29**

<u>Stakeholder comments on true-up of O&M Expenses for the Second Control Period</u>

4.7.24. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to true-up of O&M expenses for the Second Control Period. The comments are as follows:

AAI's comments regarding true-up of O&M expenses for the Second Control Period

4.7.25. AAI's comment regarding true-up of administrative expenses pertaining to CHQ is as follows:

"AERA's Contentions

- *Reference is invited to para 3.7.15 of the CP which stated as follows. "AERA also notes that AAI has provisioned towards an apportionment of Admin. Expenses to CHQ/RHQ amounting to Rs. 288.75 Cr. Authority believes that this amount is on a higher side as compared to Rs. 119.8 Cr. as approved in the Second Control Period. AERA proposes to consider the approved expenditure as per the Second Control Period tariff order for the true-up calculation."*

- *Further AERA vide para 3.4 of Annexure VI, Page No 139 of CP has stated that "Apportionment expenses to CHQ/RHQ requires further analysis of AAI's methodology/formula. In the absence of data on the methodology/formula used by AAI to compute, apportionment expenses, AERA may choose to consider the lower of actual/approved apportionment expenses as per the Second Control Period Order."*

AAI's submission

- *In this regard it is submitted that AAI is an entity established under an Act of the Parliament and its accounts, after audit by the C&AG is tabled before the Parliament.*

- *AAI has been consistently following the below given approach methodology/formula for the purpose of allocation of CHQ & RHQ Expenses to all the Profit Centers. It has adopted the same approach while finalising and submitting the tariff proposals for AERA in the past.*

    - *CHQ Expenses (Net off of Revenue) are allocated to all the profit Centers of AAI on the basis of Revenue earned.*
    - *RHQ Expenses (Net off of Revenue) are allocated to all the profit Centers under the respective region on the basis of Revenue earned.*
    - *Final allocation of CHQ & RHQ Expenses to the profit Centers*

- *AERA has in the past considered the above approach in its determination of tariffs for Amritsar, Raipur, Trichy and Varanasi Airport. However, a change in the approach in the case of determination of tariffs for Chennai Airport is proposed now as "………… AERA may choose to consider the lower of actual/approved apportionment expenses as per the Second Control Period Order."*

- *As the policy is uniform for AAI as a whole the change in approach / methodology between airports during the Control period would necessarily mean that the CHQ/RHQ apportioned expenses remain under recovered at Chennai Airport.*

- *It was also stated in para 3.4 of Annexure VI, Page No 139 of CP, "In the absence of data on the methodology/formula used by AAI to compute, apportionment expenses, AERA may choose to consider the lower of actual/approved apportionment expenses as per the Second Control Period Order." AAI submits that AERA, during the consultation process, had elicited responses for the methodology of allocation of CHQ/RHQ expenses. This was duly submitted to AERA through email. AAI submits that there were no further queries/data requirements provided by AERA in this regard. Hence, AAI submits that "absence of data on methodology/formula" to validate the CHQ/RHQ expenses cannot be the basis for considering the expenses as per SCP order.*

AAI's Request

- *In view of above, it is requested to go through the attached workings of CHQ/RHQ allocation and same may be considered in the true up exercise of 2nd control period. In addition to the above computations, AAI also submits a document which entails the allocation methodology. AAI submits that based on the above computation, the expenses for TCP may also be considered by AERA as per MYTP."*

4.7.26. AAI's comment regarding true-up of miscellaneous expenses for the Second Control Period is as follows:

"AERA's contention

- *AERA has stated in para 3.7.21 of CP as follows - "Additionally, the Authority proposes to consider miscellaneous expenses as approved by the Authority in the Second Control Period Order."*

AAI's Submission

- *AAI submits that reasoning for considering miscellaneous expenses as per the SCP Order has not been detailed in the CP. This has led to decrease in the opex by almost Rs 30 crores. AAI states that the entire financial accounts have been audited already for FY 16-17 to FY 19-20 and has also been audited by C&AG. Hence, AAI re-iterates that all expenses accounted in the trial balance of respective airports are to be considered.*

AAI's Request

- *AAI requests the Authority to consider the actual miscellaneous expenditure as per the trial balance submitted for SCP."*

4.7.27. AAI's comment regarding treatment of interest on bond (under financing charges) is as follows:

"AERA's contention

- *As per para 14.16 of the Second Control Period Order, AERA had proposed to not include financing charges worth Rs. 26.90 Cr. in admin. and general expenses. Since the same has been included in the MYTP submission, AERA decided to exclude these expenses from O&M expenses for the Second Control Period. (Para 3.7.13 of CP).*

AAI's Submission

- *AAI submits to that AERA to consider interest on bonds after date of capitalization in SCP as these are actual outflow of funds.*

AAI's Request

- *AAI requests AERA to consider interest on bonds in operating costs after date of capitalization in SCP."*

4.7.28. AAI's comment regarding bifurcation of working capital interest into aeronautical and non-aeronautical components is as follows:

"AERA's Contentions

- *AERA proposes to consider interest on working capital loan as an operating expense. AAI submission considered working capital loan interest as an aeronautical expense. AERA proposes to use the share of aeronautical revenue at Chennai International Airport to bifurcate working capital loan interest into aeronautical and non-aeronautical expenses. (Para 3.7.22 of CP)*

AAI's Submission

- *AAI firstly submits that it is not in receipt of the financial model after making changes as proposed by AERA in the CP. AAI further notes that the working capital interest has been re-computed after effecting the changes proposed by AERA in various building blocks.*

- *Following observation is based on the method of computation of working capital interest provided in the Model submitted as part of MYTP by AAI.*

- *AAI submits that the computation provided in "WC(MAA)" sheet in the MYTP model considers the aeronautical portion of the operating costs only. Since the working capital is purely determined on the basis of aeronautical cashflows, AAI submits that there is no necessity to further allocate the working capital interest so determined into aeronautical and non-aeronautical expenses.*

AAI's Request

- *AAI requests AERA to re-instate and consider the observations and submissions of AAI submitted in this document in various building blocks for second and third control period and to recompute the revised working capital interest without considering any further allocation ratios."*

4.7.29. AAI's comment regarding the computation of EQTR is as follows:

AERA's Contentions

- *3.3.26. Thus, AERA proposes to use the approved TBLR and Employee Quarter Ratio (EQTR) allocation ratios to segregate the value of common assets. (Para 3.3.26 of CP)*

Table 16: Comparison of Allocation ratios as approved by the Authority and as submitted by AAI

S No.	Allocation Ratio	Approved by Authority in SCP Order (excl. Cargo)	As per AAI (in %)				
			2017	2018	2019	2020	2021
1	TBLR	92.50	92.47	92.59	94.47	94.34	94.35
2	EHCR	97.87	98.18	98.18	98.18	98.18	97.77
3	EQTR	88.14	99.73	99.73	99.73	99.73	99.55
4	VEHR	98.19	97.30	97.30	97.30	97.30	97.30

AAI's Submission

- *In the SCP order, AERA had computed the above EQTR ratio of 88.14% based on the following para:*

7.2.4. Quarter ratio for residential building – Based on employees allotted quarters (10.8%, 8.9% and 80.3% for cargo, non-aero and aeronautical components respectively)

- *However, it is to be noted that the computation in SCP Order was on an estimated basis as well as consideration of cargo operations. Since cargo operations were hived off to AAICLAS in FY 17-18, AAI has now recomputed the EQTR for the second control period based on the actual occupancy of the employee quarters. This was submitted to AERA as part of MYTP as well as reproduced above in para 2.3.4 under AERA's analysis.*

AAI's Request

- *AAI requests AERA to consider the EQTR as submitted in MYTP for the second control period i.e by excluding cargo related employees in the computation.*

Other stakeholders' comments on true-up of O&M expenses for the Second Control Period

4.7.30. IATA's comment regarding clarity on CHQ expenses as part of AAI's projections is as follows:

- *"The CHQ takes up 16.43% of the payroll expenses in the Third Control Period, in comparison to 14.69% in SCP. However, for the administrative & general expenses, CHQ's share has reduced from 78.47% in the Second control period to 72% in the Third Control Period.*

- *There is opaqueness around the corporate and regional expenses that are being passed on to be borne by airlines and passengers flying from MAA and it is not clear what is their relationship with services delivered at the airport. This is not in line with ICAO's principles of transparency and cost-relatedness. And we would urge AERA to delve deeper into the allocation of CHQ & RHQ costs to individual airports."*

AAI's counter-comments and response to stakeholder comments regarding true-up of return on land for the Second Control Period

4.7.31. In response to IATA's comment regarding the clarity on calculation of CHQ expenses for the Second Control Period, AAI reiterated the comment as stated in Para 4.7.25.

Authority's analysis on stakeholder comments regarding true-up of O&M expenses for the Second Control Period

4.7.32. The Authority has noted comments from AAI and IATA and AAI's response thereon regarding the apportionment of CHQ expenses for the Second Control Period. The Authority has also taken note of the revised apportionment of CHQ expenses provided to the Authority vide email "Revised CHQ & RHQ Allocation for the F.Y 16-17 TO 19-20" dated 17.11.2021. AAI's apportionment of CHQ expenses towards Chennai International Airport, Chennai is provided in the following table:

Table 53: Revised apportionment of CHQ expenses to Chennai International Airport as per AAI

FY ending 31 March	2017	2018	2019	2020	2021*	Total
Admin. and General expenses (CHQ)	75.56	56.91	17.69	44.04	48.44	**242.64**

*estimated using 10% growth on FY 2019-20

4.7.33. The Authority notes the apportionment of CHQ expenses of AAI as part of MYTP submission made for the true up of the Second Control Period and projections for the Third Control Period. In this regard, the Authority observed that there were no clear trends for the apportionment of CHQ expenses over the control periods.

4.7.34. The Authority analysed the details of CHQ apportionment under the head of Admin & General expenses in the proportion of employees providing support services to the aeronautical and non-aeronautical services and bifurcated it into direct aeronautical, non-aeronautical and common categories based on the nature of the services being provided by them.

Pay and Allowances at CHQ:

4.7.35. AAI has considered pay and allowance of Commercial department at CHQ & RHQ as Aeronautical expenses, whereas such expenses are non-aeronautical in nature.

4.7.36. AAI has excluded pay and allowances of employees involved in ATM, CNS & Cargo department at CHQ while working out the allocation to airport. However, no exclusion has been done for support services of department relating to HR, Finance, Civil, Terminal Management (Housekeeping), etc.

4.7.37. AAI has considered 5% of Expenses (after excluding revenue) towards non aeronautical income. The Authority is of the view that percentage share of expenses should be worked out on total outflow of pay and allowances.

4.7.38. Manpower of CHQ is also providing services to non-aeronautical activities, ATC, CNS cadres at respective airports. Hence, pay and allowances needs to be adjusted accordingly.

4.7.39. Considering all the facts and figures as stated above, the Authority is of the considered view that:

i. 20% of the pay and allowances expenses of the CHQ are not incurred for aeronautical and are to be excluded as they are related to the following:
   - Support services to ANS, Cargo & Commercial at CHQ & airports
   - Officials of Directorate of Commercial

ii. Balance 80% of pay and allowances of CHQ has been allocated to airports as aeronautical expenses.

Admin. & General Expenses of CHQ & RHQ:

4.7.40. AAI has incurred legal and arbitration expenses at CHQ level. The Authority is of the considered view that this expense should be analysed and distributed to stations on a case-to-case basis. Such details have not been provided by AAI. Hence, it has not been allocated to stations. Further, 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 rationalise their costs and plan them in an efficient manner. However, in the absence of details, the Authority, proposes to not consider such expenses to be allocated to the respective airport.

4.7.41. AAI has paid interest/penalties to Government of India at the CHQ level. The Authority is of the considered view that stakeholders should not be burdened with interest/penalties paid to the Government of India due to various lapses/delays on the part of the airport operator. Hence such expenses have not been allocated to the respective airport.

4.7.42. Further, for tariff determination in future, Authority would highlight following issues:

i. AAI is allocating CHQ expenses to airports in the proportion of revenue earned by them. AAI is managing around 100 non-major airports. Tariff determination at these airports is not done on a regular basis and invariably revenues at these airports do not cover their expenditures. Resultantly, a substantial portion of CHQ expenses of these airports is allocated to major airports.

ii. AAI is not exploiting non traffic avenues fully. Due to the same, non-traffic revenues remains low at airports. AAI is advised to exploit the potential of non-traffic avenues fully so that 30% of the same by cross subsidization could be used to cover aeronautical expenses

iii. Allocation of CHQ expenses on the basis of revenue is not a transparent and efficient method, as it brings large variation in such expenses annually due to changes in revenue and is against the basic principle of cost relatedness in tariff determination. Users of major airports have to pay higher tariff due to higher allocation of CHQ expenses to these airports. Further, as the revenue from these airports goes up due to higher tariffs, it further leads to higher allocation of CHQ expenses with chain of cascading effect.

iv. The Authority, therefore, expects AAI to examine these issues in detail and devise a robust method for allocation of CHQ expenses on priority.

4.7.43. Based on the analysis in the above paras, the Authority decides to consider the following as apportionment of admin. and general expenses pertaining to CHQ to Chennai International Airport, Chennai:

Table 54: Apportionment of CHQ expenses considered for true-up of the Second Control Period by the Authority

FY ending 31 March	2017	2018	2019	2020	2021*	Total
Admin. and General expenses (CHQ)	49.08	29.40	0.85	30.87	37.10	**147.30**

*Recomputed based on actuals expenses of FY 2020-21 (discussed in subsequent paras)

4.7.44. The Authority notes AAI's comment on miscellaneous expenses between FY 2016-17 and FY 2019-20. The Authority has carefully examined the miscellaneous expenses and notes that the expenses incurred include expenses on horticulture, Swach Bharat scheme, etc. Since these expenses are necessary to maintain the cleanliness and aesthetics of the airport, the Authority decides to accept the same for the true-up of the Second Control Period.

4.7.45. The Authority has taken note of AAI's comment regarding not allowing interest on bond (financing charges) worth Rs. 26.09 Cr as an operating expense. The Authority notes that charges pertaining to financing of any loan other than working capital loan is provisioned to the airport operator under the fair rate of return provided on the regulatory asset base.

4.7.46. Keeping the above in view and also taking note of para 14.16 of Order No. 03/2018-19 dated 16th April 2018, the Authority decides to not allow the interest on bond claimed by AAI.

4.7.47. The Authority has noted AAI's comment on working capital interest. The Authority notes that the requirement for a working capital loan arises when the airport operator incurs an aeronautical loss in the concerned financial year. Further, the Authority has scrutinised AAI's computation of working capital loan and observes that the interest on the said working capital loan is already aeronautical in nature and that an allocation ratio may not be applied over it. In this context, the Authority decides to consider the interest on working capital loan after accounting for relevant changes in other regulatory blocks.

4.7.48. The Authority has taken note of AAI's comment on the computation of the employee quarter ratio. The Authority observes that AAI has provided a separate EQTR for every year of the Second Control Period. The Authority has been consistently working out the allocation based on a single ratio for all assets together, instead of a detailed asset by asset summation. The same has been done for the purposes of consistency, simplicity, and ease of calculations. Further, the Authority notes that the ratio considered for true-up of the Second Control Period has taken into account the separation of the cargo operations at AAI (i.e., the formation of AAICLAS in FY 2017). Based on Para 7.2.4 of the Order No. 03/2018-19 dated 16th April 2018, the Authority decides to consider the EQTR of 88.14% as a composite ratio across 5 years for the true-up of the Second Control Period.

4.7.49. The computation of the same is provided in the following table:

Table 55: Computation of EQTR

Tariff Years	Aero	Cargo	Non-aero	EQTR	Weighted Average
FY 2016-17 (incl. cargo)	80.3	10.8	8.9	80.3%	88.1%
FY 2017-18 to FY 2020-21 (excl. cargo)	80.3	0.0	8.9	90%	

AAI's submission of actual O&M expenses for FY 2020-21

4.7.50. As stated earlier, the Authority had sought data regarding the actual O&M expenses pertaining to FY 2020-21. The same was submitted to the Authority vide AAI's mail "In the matter of Determination of Tariff of Chennai Airport for 3rd Control Period (01.04.2021 to 31.03.2026) and True-up of 2nd Control Period (01.04.2016 to 31.03.2021) – Updation of Actuals for the F.Y. 2020-21- Reg." dated 24.12.2021.

4.7.51. AAI submitted a total actual O&M expenses for FY 2020-21 of Rs. 318.04 Cr. as opposed to projected FY 2020-21 expenses of Rs. 434.34 Cr. A summary of the deviation between actual and projected expenses is given in the following table:

Table 56: Actual O&M expenses for FY 2020-21 as submitted by AAI

Particulars	FY 2021 Projected (A)	FY2021 Actuals (B)	Deviation (B) – (A)
Repair and Maintenance Expenditure	81.00	72.93	(8.07)
Admin and General Expenses	70.59	38.81	(31.77)
Utilities and Outsourcing	86.03	59.48	(26.55)
Payroll Expenses	178.49	131.80	(46.69)
Other Outflows	18.23	15.02	(3.21)
Total	**434.34**	**318.04**	**(116.29)**

Authority's examination of the actual O&M expenses for FY 2020-21

4.7.52. The Authority has carefully analysed the actual O&M expenses submitted by AAI and notes that the actual FY 2020-21 expenses are lower than the projected FY 2020-21 expenses (as calculated in the consultation paper).

4.7.53. The Authority further notes that AAI has applied a terminal building ratio of 94.31% on all common expenses. In line with Para 4.3.29, the Authority proposes to consider a terminal building ratio of 92.5% and recalculate the O&M expenses. Further, the Authority also recomputes the apportionment of CHQ expenses using the methodology mentioned in Para 4.7.33 to Para 4.7.43.

4.7.54. After considering the stakeholder comments and actual FY 2020-21 expenses, the O&M expenses considered for the true-up of the Second Control Period by the Authority are as follows:

Table 57: O&M expenses for true-up of the Second Control Period decided by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ	4.13	18.67	34.07	27.39	4.67	**88.94**
Payroll costs – non CHQ	118.12	120.12	129.60	139.42	127.13	**634.38**
Payroll costs (A)	122.25	138.79	163.67	166.81	131.80	**723.32**
Repair and maintenance (B)	92.49	101.02	72.44	72.66	72.32	**410.93**
Utilities & outsourcing expenses (C)	88.49	89.25	84.51	82.15	59.15	**403.55**
Admin and general expenses – non CHQ	4.52	5.71	10.23	15.13	1.71	**37.30**
Apportionment of Admin Expenses for CHQ	49.08	29.40	0.85	30.87	37.10	**147.30**
Admin & Other expenses (D)	53.60	35.11	11.08	46.00	38.81	**184.60**
Other Outflows (E)	20.99	18.14	20.93	19.25	14.90	**94.22**
Working capital loan interest	-	-	-	-	0.30	**0.30**
Total O&M Expenses	**377.82**	**382.31**	**352.62**	**386.87**	**316.99**	**1,816.61**

4.8. True-up of Non-Aeronautical Revenues

AAI's submissions regarding true-up of Non-Aeronautical Revenues for the Second Control Period

4.8.1. AAI submitted the revenue from non-aeronautical services for cross subsidising 30% of the same in the determination of the ARR for the Second Control Period. The following table provides the actual non-aeronautical revenues earned by Chennai International Airport in the Second Control Period:

Table 58: Non-aeronautical revenue submitted by AAI for true up of Second Control Period

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Revenue from Rent and services						
Land rent & leases	29.46	22.95	28.54	11.76	11.76	**104.48**
Building residential	-	-	-	-	-	**-**
Building non residential	32.31	21.70	26.20	23.24	23.24	**126.68**
Revenue related to passenger traffic						
Duty free shops	57.38	62.06	72.10	77.11	4.58	**273.24**
Flight kitchen	8.31	8.48	9.86	8.57	1.64	**36.87**
Car rentals	4.61	8.09	18.82	16.13	3.09	**50.73**
Car parking	21.14	23.48	24.99	19.28	3.69	**92.58**
Admission tickets	4.39	6.59	8.79	0.70	0.13	**20.61**
MRO	-	-	-	0.55	0.11	**0.66**
Other income	11.37	16.82	14.16	16.52	3.16	**62.03**
Land Rent & Leases - hanger	1.01	6.27	6.45	7.10	1.36	**22.18**
Restaurant / snack bars	17.76	19.65	21.50	24.00	4.59	**87.51**
T.R. Stall	35.28	46.13	53.41	71.09	13.61	**219.51**
Hoarding & display	21.49	34.50	41.49	62.61	11.99	**172.07**
Total	**244.52**	**276.71**	**326.31**	**338.67**	**82.95**	**1,269.16**

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

4.8.2. The Authority had proposed that non-aeronautical revenues would not be trued-up in case of a surplus. However, in case of a shortfall, the Authority would perform the true up, provided there are reasonable grounds for the same.

4.8.3. As per the Second Control Period tariff order, the Authority had decided to include cargo revenue for FY 2016-17 while determination of tariff for the Second Control Period. Additionally, the Authority had noted that there was no clarity on the revenue sharing mechanism between AAI and AAICLAS. Further, it had proposed that that this matter would be taken up during the true up in Third Control Period, which will be based on the decision taken by AAI on revenue sharing mechanism.

4.8.4. As per the provisions of the AERA Act, services rendered in respect of cargo, ground handling and fuel supply are aeronautical services. Thus, the Authority had proposed to consider land lease revenues from CGF as aeronautical revenue.

4.8.5. Thus, after adjusting for land lease revenues and growth rates assumed by AAI (and considering stakeholders' comments) in the Second Control Period, the approved non-aeronautical revenue is as follows:

Table 59: Non-aeronautical Revenue as per the tariff order of the Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Non-Aeronautical Revenues as per Authority	243.4	266.0	290.7	317.7	347.4	**1,465.2**

Authority's examination regarding Non-Aeronautical Revenues for the Second Control Period as part of the Consultation Paper

4.8.6. The Authority had studied AAI's submission with respect to non-aeronautical revenue. The analysis conducted by the Authority is discussed below.

4.8.7. It had been observed that the non-aeronautical revenues projected for FY 2020-21 in the tariff order of the Second Control Period were higher than the actual non-aeronautical revenues realised at Chennai International Airport. This may be attributed to the impact of the pandemic on traffic volumes. Along these lines, the Authority had noted that non-aeronautical revenues and traffic volumes in FY 2020-21 have reduced by 76% and 75% respectively.

4.8.8. The Authority had asked AAI to submit all agreements and award letters for non-aeronautical services at Chennai International Airport. The following table summarizes AAI submission in this regard.

Table 60: Summary of Concession Agreements for non-aeronautical services as submitted by AAI

S.No.	Major Concession Agreements	Date of Agreement	Concession Term
1	Design, build, finance and maintain general retail outlets	12.07.2018	7 years
2	Develop, operate and maintain duty free outlets	06.01.2016	7 years

S.No.	Major Concession Agreements	Date of Agreement	Concession Term
3	Operate automated parking management system and collection of parking fees, and lane management	02.08.2019	1 year (extendable)
4	Design, develop, operate and market the advertising opportunity at Chennai International Airport	30.08.2018	10 years
5	Develop, operate and maintain F&B outlets	29.10.2013	10 years

4.8.9. Based on AAI's submission, it had been noted that the actual non-aeronautical revenue for the Second Control Period was lower than the projected non-aeronautical revenue approved by the Authority. The Authority understood that this discrepancy of Rs 196.04 Cr. in non-aeronautical revenues of the Second Control Period could largely be attributed to the low traffic in FY 2020-21 because of the pandemic. It had also been noted that, for all tariff years other than FY 2020-21, the non-aeronautical revenue exceeded the projected amounts.

4.8.10. The Authority had noted that the non-aeronautical revenue for FY 2020-21 submitted by AAI was based on the estimated passenger and ATM traffic. The Authority had proposed to recalculate the non-aeronautical revenue for FY 2020-21 based on the actual traffic. Accordingly, the Authority had proposed to consider the following non-aeronautical revenue for the Second Control Period:

Table 61: Non-aeronautical revenue proposed to be considered for true-up of the Second Control Period by the Authority

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Revenue from Rent and Services						
Land Rent & Leases	29.46	22.95	28.54	11.76	11.76	**104.48**
Building Non Residential	32.31	21.70	26.20	23.24	23.24	**126.68**
Revenue related to passenger traffic						
Duty Free Shops	57.38	62.06	72.10	77.11	7.08	**275.73**
Flight Kitchen	8.31	8.48	9.86	8.57	1.90	**37.13**
Car Rentals	4.61	8.09	18.82	16.13	3.58	**51.22**
Car Parking	21.14	23.48	24.99	19.28	4.28	**93.17**
Admission Tickets	4.39	6.59	8.79	0.70	0.16	**20.63**
MRO	-	-	-	0.55	0.12	**0.68**
Other Income	11.37	16.82	14.16	16.52	3.67	**62.54**
Land Rent & Leases- hanger	1.01	6.27	6.45	7.10	1.58	**22.40**
Restaurant / snack bars	17.76	19.65	21.50	24.00	5.33	**88.24**
T.R. Stall	35.28	46.13	53.41	71.09	15.79	**221.70**
Hoarding & Display	21.49	34.50	41.49	62.61	13.91	**173.99**
Total	**244.52**	**276.71**	**326.31**	**338.67**	**92.40**	**1,278.61**

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

4.8.11. There were no stakeholder comments with respect to true-up of non-aeronautical revenue for the Second Control Period.

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

4.8.12. It is noted that no stakeholder comments were received regarding true-up of non-aeronautical revenues for the Second Control Period. The Authority decides to consider the actual non-aeronautical revenues for FY 2020-21.

AAI's submission of actual Non-Aeronautical Revenue for FY 2020-21

4.8.13. The Authority had sought data regarding the actual non-aeronautical revenue pertaining to FY 2020-21. The same was submitted to the Authority vide AAI's mail "In the matter of Determination of Tariff of Chennai Airport for 3rd Control Period (01.04.2021 to 31.03.2026) and True-up of 2nd Control Period (01.04.2016 to 31.03.2021) – Updation of Actuals for the F.Y. 2020-21- Reg." dated 24.12.2021.

4.8.14. AAI submitted an actual non-aeronautical revenue of Rs. 171.37 Cr. as opposed to the projected revenues of Rs. 82.95 Cr., thereby causing a deviation of Rs. 88.42 Cr. (171.37 – 82.95).

Table 62: Actual Non-aeronautical revenues for FY 2020-21 as submitted by AAI

Particulars (in Rs. Cr.)	FY 2020-21 Projected (A)	FY 2020-21 Actual (B)	Deviation (B) – (A)
Non-aeronautical revenues	82.95	171.37	88.42

Authority's examination of the actual Non-Aeronautical Revenue for FY 2020-21

4.8.15. The Authority has noted AAI's submission of actual non-aeronautical revenues for FY 2020-21 and has examined the same accordingly. The Authority decides to consider the actual non-aeronautical revenues submitted by AAI for true-up of the Second Control Period.

Table 63: Non-aeronautical revenues for true-up of the Second Control Period decided by the Authority

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Revenue from Rent and Services						
Land Rent & Leases	29.46	22.95	28.54	11.76	12.90	**105.61**
Building Non Residential	32.31	21.70	26.20	23.24	16.92	**120.36**
Revenue related to passenger traffic						
Duty Free Shops	57.38	62.06	72.10	77.11	11.18	**279.83**
Flight Kitchen	8.31	8.48	9.86	8.57	2.10	**37.33**
Car Rentals	4.61	8.09	18.82	16.13	0.26	**47.91**
Car Parking	21.14	23.48	24.99	19.28	3.14	**92.03**
Admission Tickets	4.39	6.59	8.79	0.70	0.55	**21.03**
MRO	-	-	-	0.55	0.23	**0.79**
Other Income	11.37	16.82	14.16	16.52	11.31	**70.18**
Land Rent & Leases- hanger	1.01	6.27	6.45	7.10	8.45	**29.27**
Restaurant / snack bars	17.76	19.65	21.50	24.00	4.98	**87.89**
T.R. Stall	35.28	46.13	53.41	71.09	38.01	**243.92**
Hoarding & Display	21.49	34.50	41.49	62.61	61.35	**221.44**
Total	**244.52**	**276.71**	**326.31**	**338.67**	**171.38**	**1,357.58**

4.9. True-up of Aeronautical Revenue

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

4.9.1. AAI has submitted that the following are the sources of aeronautical revenue:

a. Landing, parking, and housing charges
b. User development fee (UDF)
c. Oil throughput charges (AAI submitted that it has stopped levying oil throughput charges from 15.01.2020.
d. Land leases (from ground handling and oil companies)
e. Ground handling charges
f. Royalty from CUTE charges
g. Cargo revenue (for FY17 only)
h. Cargo revenue share – 30% from AAICLAS

4.9.2. AAI has submitted the following details regarding aeronautical revenue for the Second Control Period:

Table 64: Aeronautical revenue submitted by AAI for true-up of Second Control Period

FY ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Landing	301.39	337.32	60.61	34.68	16.04	**750.04**
Parking & Housing	6.59	8.59	3.12	2.98	1.11	**22.39**
UDF	280.79	299.20	127.32	69.39	14.42	**791.12**
Oil throughput charges	102.83	108.53	22.61	10.60	-	**244.56**
Land lease	34.44	32.89	32.31	29.03	29.03	**157.71**
Ground handling charges	54.72	39.77	44.71	42.17	15.14	**196.51**
Royalty from CUTE	19.49	16.45	18.28	18.08	3.85	**76.14**
Cargo revenue	178.32	-	-	-	-	**178.32**
Cargo revenue share from AAICLAS	-	-	136.10	65.73	56.01	**257.85**
Total	**978.58**	**842.74**	**445.05**	**272.67**	**135.60**	**2,674.65**

Decisions taken by the Authority regarding Aeronautical Revenue for the Second Control Period

4.9.3. Following are the relevant decisions that the Authority has taken with respect to aeronautical revenue for the Second Control Period:

"10.a. The Authority decides to consider the revenues accruing to AAI on account of the aeronautical services of Cargo facility, Ground Handling Services and Supply of fuel to aircraft (FTC) including land lease rentals as aeronautical revenue."

4.9.4. The following aeronautical revenues were approved by the Authority in the Second Control Period:

Table 65: Aeronautical revenue as approved by the Authority in the tariff order of Second Control Period

FY ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Landing	299.9	305.6	35.7	37.9	40.1	**719.2**
Parking & Housing	7.3	7.5	1.5	0.9	1.0	**18.2**
UDF	282.9	301.8	96.2	82.2	89.7	**852.8**
FTP + ITP and lease rentals	129.2	131.7	45.8	38.2	39.1	**384.0**

FY ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Ground handling charges and lease rentals	49.6	50.6	53.6	56.8	60.2	**270.8**
Royalty from CUTE	19.3	21.0	22.9	25.0	27.3	**115.5**
Cargo revenue	193.8	-	-	-	-	**193.8**
Total approved revenue	**982.0**	**818.2**	**255.7**	**241.0**	**257.4**	**2554.3**

Authority's examination of Aeronautical Revenues for the Second Control Period as part of the Consultation Paper

4.9.5. The Authority had noted that aeronautical revenue is based on the following two factors:

a. ATM traffic – Landing charges, parking & housing charges, and ground handling charges
b. Passenger traffic – UDF and royalty from CUTE

4.9.6. The Authority had noted that the fall in aeronautical revenue from FY 2017-18 to FY 2018-19 was on account of the downward revision in tariffs as per the Second Control Period Order. AAI had stated that, although the revision in tariff were released in the Second Control Period Order dated 16th April 2018, the revised tariffs were implemented from September 2018. Hence, the impact of tariff reduction was spread partially over FY 2018-19 and fully over FY 2019-20. Further, the fall in aeronautical revenue from FY 2018-19 to FY 2019-20 was also on account of the fall in traffic due to the pandemic from FY 2018-19 to FY 2019-20 by 1% among passengers and 6% in ATM.

4.9.7. The following table provides the recomputed summary of aeronautical revenue based on the revised passenger and ATM traffic volumes of FY 2020-21:

Table 66: Aeronautical revenue proposed to be considered for true up of the Second Control Period by the Authority

FY ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Landing	301.39	337.32	60.61	34.68	17.33	**751.33**
Parking & Housing	6.59	8.59	3.12	2.98	1.18	**22.47**
UDF	280.79	299.20	127.32	69.39	16.79	**793.50**
Oil throughput charges	102.83	108.53	22.61	10.60	-	**244.56**
Land lease	34.44	32.89	32.31	29.03	29.03	**157.71**
Ground handling charges	54.72	39.77	44.71	42.17	16.22	**197.59**
Royalty from CUTE	19.49	16.45	18.28	18.08	4.46	**76.76**
Cargo revenue	178.32	-	-	-	-	**178.32**
Cargo revenue share from AAICLAS	-	-	136.10	65.73	56.01	**257.85**
Total	**978.58**	**842.74**	**445.05**	**272.67**	**141.03**	**2,680.08**

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

4.9.8. During the stakeholders' consultation process, the Authority has received comments/views from stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to true-up of aeronautical revenue for the Second Control Period. The comments are as follows:

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

4.9.9. IndiGo's comment regarding considering 100% revenue of AAICLAS in tariff determination is as follows:

- *"IndiGo submits that as per section 2 of Airport Economic Regulatory Authority of India Act, 2008 (AERA Act), under sub-section (a), "aeronautical services means any services provided - (i) For navigation, surveillance and supportive communication thereto for air traffic management... (v) for the cargo facility at an airport.."*
- *IndiGo submits that considering the above provisions of the AERA Act, revenue from Air Navigation Services, Cargo services (100% revenue accruing to AAICLAS) should form part of aeronautical revenues and accordingly Authority should take into account of the corresponding revenue and revise the tariff card."*

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

4.9.10. AAI's counter-comment to IndiGo's comment regarding considering 100% revenue of AAICLAS in tariff determination is as follows:

- *"AAI submits that the tariff determination for airports is done only for the charges collected by the airports. Tariff for air navigation charges and cargo services are separately determined.*
- *Air Navigation Services - Following was quoted in the consultation paper released by the Ministry of Civil Aviation in respect of tariff determination for air navigation services:*

  5.4.2. Powers and Functions of Airport Economic Regulatory Authority of India (AERA) are laid out in Section 13(1) of the AERA Act, 2008, which is reproduced below:

  "...13. Functions of Authority - (1) The Authority shall perform the following functions in respect of major airports, namely:—

  (a) to determine the tariff for the 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) the 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 the development fees in respect of major airports;

  (c) to determine the amount of the passenger service fee levied under rule 88 of the Aircraft Rules, 1937 made under the 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 (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..."

5.4.3. Definition of "Aeronautical services" as per Section 2(a) of the AERA Act is as follows:

"..."aeronautical service" means any service provided—

(i) for navigation, surveillance and supportive communication thereto for air traffic management;

(ii) for the landing, housing or parking of an aircraft or any other ground facility offered in connection with aircraft operations at an airport;

(iii) for ground safety services at an airport;

(iv) for ground handling services relating to aircraft, passengers and cargo at an airport;

(v) for the cargo facility at an airport;

(vi) for supplying fuel to the aircraft at an airport; and

(vii) for a stake-holder at an airport, for which the charges, in the opinion of the Central Government for the reasons to be recorded in writing, may be determined by the Authority;..."

5.4.4. Through combined reading of the above definitions contained in the AERA Act, it is determined that AERA has the authority to determine the tariff relating to air navigation services in "major" airports. However, ANS is a service which treats Indian airspace as a single sky/entity. The Indian airspace is indivisible and cannot be attributed to its constituent airports.

5.4.5. Further, the following sections are present in the AAI Act, 1994 as amended by the AAI Amendment Act 2003:

"...22. The Authority may,-

(i) With the previous approval of the Central Government, charge fees, or rent-

(b) for providing air traffic services, ground safety services, aeronautical communications and navigational aids and meteorological services at any airports and at any aeronautical communication station;"

"...22A. The Authority may, after the previous approval of the Central Government in this behalf, levy on, and collect from, the embarking passengers at an airport, the development fees at the rate as may be prescribed and such fees shall be credited to the Authority and shall be regulated and utilized in the prescribed manner, for the purposes of...."

"...41. (1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act..."

5.4.6. Sections 22A and 41 of the AAI Act were further amended with the introduction of AERA Act, 2008.

- *Through this amendment, the determination of 'development fees' by AAI, with approval of Central Government was restricted to other than major airports. However, such amendment was not extended to Section 22(i)(b). Hence, it is inferred that it was not the intention of law* *that AERA should determine tariff for Air Navigation Services. Further, through Section 22 of the AAI Act, AAI has the authority to levy charges for air navigation services with prior approval of the Central Government (in this case, with prior approval of the Ministry of Civil Aviation (MoCA)).*

- *Similarly, cargo is a service provided by a separate legal entity from 1st April 2017 - AAICLAS. AAICLAS is a 100% subsidiary of AAI providing cargo services. Hence, the determination of tariff for cargo services is submitted and approved for the respective cargo terminals from this separate legal entity.*

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

4.9.11. The Authority has noted IndiGo's comment regarding revenue from AAICLAS.

4.9.12. It may be noted that tariff for ANS is presently regulated by the Ministry of Civil Aviation (MoCA). All the assets, expenses, and revenues pertaining to ANS are considered separately by MoCA while determining tariff for ANS services. Further, the tariff for ANS services is determined at the central level to ensure uniformity across all airports in the country. Hence, the Authority determines the tariff for aeronautical services of the airport operator by excluding the revenues and expenses for ANS.

4.9.13. A separate tariff determination exercise is carried out for cargo handling services, wherever these services are provided by Independent Service Providers (ISPs) other than the Airport Operator. Further, the Authority considers expenses, revenues, and assets pertaining to these services separately while determining tariff for these services. Under the current tariff determination exercise for the airport operations, the Authority has considered the earnings accruing to AAI by way of revenue share (which is 30% of revenue from AAICLAS) and rent from these service providers.

<u>AAI's submission of actual Aeronautical Revenue for FY 2020-21</u>

4.9.14. The Authority had sought data regarding the actual aeronautical revenue pertaining to FY 2020-21. The same was submitted to the Authority vide AAI's mail "In the matter of Determination of Tariff of Chennai Airport for 3rd Control Period (01.04.2021 to 31.03.2026) and True-up of 2nd Control Period (01.04.2016 to 31.03.2021) – Updation of Actuals for the F.Y. 2020-21- Reg." dated 24.12.2021.

4.9.15. AAI submitted actual aeronautical revenue of Rs. 161.00 Cr. as opposed to the projected revenues of Rs. 135.60 Cr. for FY 2020-21, thereby causing a deviation of Rs. 25.40 Cr. (161.00 – 135.60).

Table 67: Actual aeronautical revenues for FY 2020-21 as submitted by AAI

Particulars (in Rs. Cr.)	FY 2020-21 Projected (A)	FY 2020-21 Actual (B)	Deviation (B) – (A)
Non-aeronautical revenues	135.60	161.00	25.40

<u>Authority's examination of the actual Aeronautical Revenues for FY 2020-21</u>

4.9.16. The Authority has noted AAI's submission of actual aeronautical revenues for FY 2020-21 and has examined the same accordingly. The Authority decides to consider the actual aeronautical revenues submitted by AAI for true-up of the Second Control Period.

Table 68: Aeronautical revenue for true-up of the Second Control Period decided by the Authority

FY ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Landing	301.39	337.32	60.61	34.68	21.86	**755.85**
Parking & Housing	6.59	8.59	3.12	2.98	10.22	**31.50**
UDF	102.83	108.53	22.61	10.60	-	**244.56**
Oil throughput charges	280.79	299.20	127.32	69.39	15.72	**792.43**
Land lease	34.44	32.89	32.31	29.03	27.50	**156.17**
Ground handling charges	54.72	39.77	44.71	42.17	17.74	**199.11**
Royalty from CUTE	19.49	16.45	18.28	18.08	4.31	**76.61**
Cargo revenue	178.32	-	-	-	-	**178.32**
Cargo revenue share from AAICLAS	-	-	136.10	65.73	63.66	**265.49**
Total	**978.58**	**842.74**	**445.05**	**272.67**	**161.00**	**2,700.05**

4.10. True-up of Aeronautical Taxes

AAI's submission regarding true-up of Aeronautical Taxes for the Second Control Period

4.10.1. AAI has submitted tax calculations using a tax rate of 34.94% from FY 2016-17 to FY 2018-19. For FY 2019-20 and FY 2020-21, a tax rate of 25.17% was used. These tax rates were used on Chennai International Airport's profit before tax (PBT) after setting-off the prior period tax losses. The following table summarises the tax working for the true-up period as per AAI's submission:

Table 69: Aeronautical Taxes submitted by AAI for true up of Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Aero Revenue (A)	978.58	842.74	445.05	272.67	135.60	**2,674.64**
O&M Expense (B)	434.68	420.41	390.89	409.29	434.34	**2,089.61**
Total Interest and Financing Charges (C)	-	-	-	-	3.89	**3.89**
Depreciation (D)	172.41	172.07	165.40	169.07	161.06	**840.01**
Total expenditure (E) = (B to D)	607.09	592.47	556.30	578.35	599.29	**2,933.50**
Profit Before Tax (F) = (A – E)	371.49	250.27	(111.24)	(305.68)	(463.69)	**(258.85)**
Set-off of prior period tax losses (G)	-	-	-	-	-	**-**
PBT after set-off of losses (H) = (F – G)	371.49	250.27	(111.24)	(305.68)	(463.69)	**(258.85)**
Tax [34.944% up to FY 2018-19 & 25.17% from FY 2019-20] (I)	129.81	87.45	-	-	-	**217.26**
Profit After Tax (J) = (H – I)	241.68	162.82	(111.24)	(305.68)	(463.69)	**(476.11)**

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

4.10.2. Relevant decisions taken by the Authority at the time of tariff determination of the Second Control Period as are follows:

"12.b. The Authority decides to true up the difference between the actual/ apportioned corporate tax paid and that estimated by the Authority for the 2nd control period during determination of tariffs for the 3rd control period."

4.10.3. Additionally, the Authority decided to consider corporate tax pertaining to earnings from aeronautical services under shared till as per MIAL Order No. 32/2012-13 (Decision No. XV). The Authority has therefore proposed to exclude non-aeronautical component from revenues considered while determining tax for aeronautical services.

4.10.4. Based on the abovementioned examination by the Authority, the following tax projections were made for the Second Control Period:

Table 70: Aeronautical Taxes as approved by the Authority in the tariff order of Second Control Period

FY ending March 31 (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Aero Revenue	981.1	818.2	279.8	241.0	257.4	**2,577.5**
Aeronautical O&M	328.7	337.9	355.4	373.5	393.2	**1,788.7**
CHQ Overheads	47.5	47.6	50.0	52.5	55.1	**252.7**
Depreciation as per IT Act	185.1	173.2	160.0	155.7	215.4	**729.4**
Profit Before Tax	419.7	259.5	(285.6)	(340.7)	(406.3)	**(353.4)**
Tax	145.3	89.8	-	-	-	**235.1**

Authority's examination of Aeronautical Taxes for the Second Control Period as part of the Consultation Paper

4.10.5. The Authority had not proposed any material changes in calculating the tax for the Second Control Period. The Authority had incorporated the changes in regulatory blocks relevant to tax calculation and recalculated aeronautical tax imposed on Chennai International Airport as follows:

Table 71: Aeronautical Taxes proposed to be considered for true up of the Second Control Period by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Aeronautical Revenue (A)	978.58	842.74	445.05	272.67	141.03	**2,680.07**
Operating Expense (B)	346.17	371.60	368.68	373.91	372.61	**1,832.97**
Total Interest and Finance Charges (C)	-	-	-	-	0.30	**0.30**
Depreciation as per IT Act (D)	171.84	170.80	163.88	167.40	159.48	**833.40**
Total Expenditure (E) = (B + C + D)	518.01	542.40	532.57	541.31	532.39	**2,666.68**
PBT (F) = (A – E)	460.57	300.34	(87.52)	(268.64)	(391.36)	**13.39**
Set-off of prior period tax losses (G)	-	-	-	-	-	-
PBT after set-off of prior period tax losses (H) = (F – G)	460.57	300.34	(87.52)	(268.64)	(391.36)	**13.39**
Tax 34.944% (FY19) & 25.17% w.e.f. FY20 (I)	160.94	104.95	-	-	-	**265.89**
PAT (J) = (H – I)	299.63	195.39	(87.52)	(268.64)	(391.36)	**(252.50)**

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

4.10.6. There were no stakeholder comments with respect to true-up of aeronautical taxes for the Second Control Period.

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

4.10.7. It is noted that no stakeholder comments were received regarding true-up of aeronautical taxes for the Second Control Period. However, the Authority notes that incorporation of actual FY 2020-21 expenses would lead to changes in the computation of aeronautical taxes of FY 2020-21. The Authority decides to consider the aeronautical taxes based on the actual FY 2020-21 expenses as well as other relevant changes in the regulatory building blocks discussed above. The aeronautical taxes considered by the Authority for the true-up of the Second Control Period are as follows:

Table 72: Aeronautical taxes for true-up of the Second Control Period decided by the Authority

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Aeronautical Revenue (A)	978.58	842.74	445.05	272.67	161.00	**2,700.05**
Operating Expense (B)	377.82	382.31	352.62	386.87	316.99	**1,816.61**
Total Interest and Finance Charges (C)	-	-	-	-	-	-
Depreciation as per IT Act (D)	172.10	171.28	164.30	167.75	163.14	**838.56**
Total Expenditure (E) = (B + C + D)	549.92	553.59	516.92	554.62	480.13	**2,655.18**
PBT (F) = (A – E)	428.66	289.15	(71.87)	(281.95)	(319.12)	**44.87**
Set-off of prior period tax losses (G)	-	-	-	-	-	-
PBT after set-off of prior period tax losses (H) = (F – G)	428.66	289.15	(71.87)	(281.95)	(319.12)	**44.87**
Tax 34.944% (FY19) & 25.17% w.e.f. FY20 (I)	149.79	101.04	-	-	-	**250.83**
PAT (J) = (H – I)	278.87	188.11	(71.87)	(281.95)	(319.12)	**(205.96)**

4.11. True-Up of Aggregate Revenue Requirement

AAI's submission of ARR for the Second Control Period

4.11.1. The ARR as submitted by AAI is given in the table as follows:

Table 73: ARR submitted by AAI for true up of Second Control Period

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Average RAB [1]	2,111.59	1,920.83	1,893.20	1,915.29	1,853.54	-
FRoR [2] (% p.a.)	14.00	14.00	14.00	14.00	14.00	-
Return on Average RAB [3] = [1] * [2]	295.62	268.92	265.05	268.14	259.50	1,357.22
Add: Depreciation [4]	142.42	134.82	149.06	157.07	162.18	745.56
Add: Working Capital Interest [5]	-	-	-	-	3.89	3.89

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
Add: Operating expenses [6]	434.68	420.41	390.89	409.29	434.34	**2,089.60**
Add: Taxation [7]	129.81	87.45	-	-	-	**217.27**
Less: 30% of Non - Aeronautical revenue [8]	73.36	83.01	97.89	101.60	24.89	**380.75**
Return on Land [9]	0.81	0.81	0.84	0.77	0.45	**3.69**
Return on FCP for Land [10]	6.72	-	-	-	-	**6.72**
Financing Allowance for FCP [11]	89.54	-	-	-	-	**89.54**
Over-recovery of FCP as on 31st March 2017 [12]	(874.41)	-	-	-	-	**(874.41)**
ARR [13] = Sum of [3] to [12]	151.85	829.40	707.96	733.67	835.47	**3,258.34**
Aeronautical Revenue [14]	978.58	842.74	445.05	272.67	135.60	**2,674.65**
Discount Factor (#)	1.93	1.69	1.48	1.30	1.14	-
PV (Discounted ARR) [15]	292.38	1,400.83	1,048.87	953.47	952.43	**4,647.98**
PV (Discounted aeronautical revenues) [16]	1,884.17	1,423.36	659.36	354.36	154.59	**4,475.84**
PV (Under)/ Over-recovery of the current control period as on 31st March 2022 [17] = [16] - [15]	1,591.79	22.54	(389.50)	(599.11)	(797.84)	**(172.13)**
True Up Over-recovery for SCP [Σ (17)] as on 31st March 2022	**(172.13)**					

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

4.11.2. The Authority had decided to true up for the Second Control Period at the time of the tariff determination for the Third Control Period. The following table was the approved ARR as per the Authority:

Table 74: ARR as approved by the Authority in the tariff order of Second Control Period

FY Ending 31 March (Rs Cr.)	2017	2018	2019	2020	2021	Total
Average RAB [1]	2,020.1	1,858.3	1,803.7	1,815.6	2,270.3	**9,768.0**
FRoR (% p.a.) [2]	14.00	14.00	14.00	14.00	14.00	
Return on Average RAB [3] = [1] * [2]	282.8	260.2	252.5	254.2	317.8	**1,367.5**
Add: Depreciation [4]	138.1	132.2	142.8	146.7	182.9	**742.7**
Add: Operating expenses [5]	376.3	385.5	405.4	426.0	448.3	**2,041.5**
Add: Taxation [6]	145.3	89.8	-	-	-	**235.1**
Less: 30% of Non - Aeronautical revenue [7]	73.0	79.8	87.2	95.3	104.2	**439.5**
True Up for FCP [8]	(874.4)					**(874.4)**
ARR [9] = Sum of [3] to [8]	(4.9)	787.9	713.5	731.5	844.9	**3,072.9**
Discounted ARR	(4.9)	691.1	549.0	493.8	500.2	**2,229.2**

Authority's examination regarding ARR for the Second Control Period as part of the Consultation Paper

4.11.3. As per AAI's submission, interest on working capital loan had been provided separately as a purely aeronautical expense in the ARR working. However, Authority had proposed to consider it as a part of operating expenses; the same has been reflected in the table below. After incorporating the changes discussed in the earlier sections, the Authority had recalculated the ARR as follows:

Table 75: ARR proposed to be considered for true up of the Second Control Period by Authority

FY Ending 31 March (Rs Cr.)	Ref	2017	2018	2019	2020	2021	Total
Average RAB [1]	Table 20	2,022.26	1,829.57	1,802.54	1,825.31	1,765.80	**9,245.48**
FRoR [2] (% p.a.)	Table 34	13.92%	13.92%	13.92%	13.92%	13.92%	
Return on Average RAB [3] = [1] * [2]		281.52	254.70	250.94	254.11	245.82	**1,287.08**
Add: Depreciation [4]	Table 31	139.02	131.40	145.40	153.28	158.39	**727.49**
Add: Operating expenses [5]	Table 52	346.17	371.60	368.68	373.91	372.91	**1,833.29**
Add: Taxation [6]	Table 71	160.94	104.95	-	-	-	**265.89**
Less: 30% of Non - Aeronautical revenue [7]	Table 61	(73.36)	(83.01)	(97.89)	(101.60)	(27.72)	**(383.58)**
Return on Land [8]	Para 4.6.6	-	-	-	-	-	-
Return on Land for FCP [9]	Para 4.6.6	-	-	-	-	-	-
Financing Allowance for FCP [10]	Para 4.3.6	-	-	-	-	-	-
Over-recovery of FCP as on 31st \ March 2017 [11]		(874.41)	-	-	-	-	**(874.41)**
ARR [12] = [3] + [4] + [5] + [6] + [7] + [8] + [9] + [10] + [11]		(20.11)	779.64	667.13	679.70	749.41	**2,855.76**
Aeronautical revenues [13]	Table 66	978.58	842.74	445.05	272.67	141.03	**2,680.08**
Discount Factor (#)		1.92	1.68	1.48	1.30	1.14	
PV (Discounted ARR) [14]		(38.59)	1,313.14	986.33	882.12	853.73	**3,996.73**
PV (Discounted aeronautical revenues) [15]		1,877.67	1,419.43	658.00	353.87	160.67	**4,469.63**
PV (Under)/ Over recovery of the current control period as on 31st March 2022 [16] = [15] - [14]		1,916.26	106.28	(328.33)	(528.24)	(693.07)	**472.90**
True Up Over-recovery for SCP [Σ (16)] as of 31st March 2022		**472.90**					

4.11.4. The Authority had noted that there was an over-recovery of Rs. 472.90 Cr. in the Second Control and proposes to readjust the same in the ARR computation of the Third Control Period.

<u>Stakeholder comments on true-up of Aggregate Revenue Requirement for the Second Control Period</u>

4.11.5. During the stakeholders' consultation process, the Authority has received comments/views from stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to true-up of ARR for the Second Control Period. The comments are as follows:

Other stakeholders' comments on true-up of ARR for the Second Control Period

4.11.6. IndiGo's comment regarding an over-recovery of Rs. 472.90 Cr. is as follows:

- *"IndiGo submits that as per Table 58 of the Consultation Paper, it appears that on true up of the Second Control Period, AAI has made an over recovery of INR 472.90 Cr.*

- *In view of the above, IndiGo submits that AERA and AAI should undertake appropriate measures that to ensure that there are no/minimal case of over recovery, which will assist in lowering of burden of tariff on airlines/passengers.*

- *While IndiGo appreciates that independent studies have been conducted by AERA on Operating Expenditure/O&M expenses, IndiGo submits that such studies should be undertaken prior to commencement of each 'Control Period' to minimise any large variations in projections and to ensure suitable benchmarking of costs."*

4.11.7. SpiceJet's comment regarding over-recovery in the Second Control Period is as follows:

- *"The Authority has noted an over recovery of Rs. 472.90 Cr. in the Second Control and proposed to readjust the same (claw back) in the ARR computation of the Third Control Period. The Authority and AAI - Chennai should undertake a detailed scrutiny (including independent studies/audits) and other appropriate measures to ensure that there are no cases of over recovery, which will assist in lowering the burden of tariff on airlines/ passengers. It appears that the costs are exaggerated/inflated, and revenues suppressed in the projections, which leads to over recoveries.*

- *In case of excess recoveries, not only the original amount of excess recovery but also the interest calculated thereon should be taken into account, at the rates at which airport operators charges interest on dues from airlines, from the date of recovery of such excess from time to time."*

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

4.11.8. AAI's response to IndiGo's and SpiceJet's comment regarding over-recovery in the Second Control Period is as follows:

- *"AAI submits that this over recovery of Rs 472 crores stems from the large disallowances made by AERA. Some of the disallowances include CHQ/RHQ expenses, disallowance of Financing Allowance, etc. On the other hand, the traffic in pre-Covid years was higher than anticipated. Hence, in AERA's computation, an excess recovery of Rs 472 crores was computed. However, in AAI's submission, as per Table 56 of the CP, AAI had submitted a shortfall of Rs. 172.13 crores."*

Authority's analysis on stakeholder comments regarding true-up of ARR for the Second Control Period

4.11.9. The Authority has noted comments from IndiGo and SpiceJet on the over-recovery of Rs. 472.90 Cr. The Authority further notes that the tariff determination process has considered submissions of the airport operator and is based on a scientific methodology as per the AERA Act, Hon'ble TDSAT Orders, AERA Guidelines, and other orders issued by the Authority from time to time.

4.11.10. Keeping this in view, it may not be possible for the Authority or the airport operator to accurately forecast expenses for the control period due to complexity and interplay of multiple factors. In order to account for such differences, true up of the control period ensures that any over/under recovery is accounted for, through an adjustment in the tariff, in the subsequent control period.

4.11.11. With respect to SpiceJet's comment regarding interest on excess recovery in true-up period, it may be noted that the Authority follows its own well-laid methodology for calculating the true-up on net present value (NPV) basis, which is applied across all major airports.

4.11.12. Considering the above analysis in each of the regulatory building blocks, the ARR considered for true-up of the Second Control Period by the Authority is as follows:

Table 76: ARR for true-up of the Second Control Period decided by the Authority

FY Ending 31 March (Rs Cr.)	Ref	2017	2018	2019	2020	2021	Total
Average RAB [1]	Table 24	2,023.89	1,832.72	1,805.46	1,828.00	1,790.20	
FRoR [2] (% p.a.)	Table 35	13.92%	13.92%	13.92%	13.92%	13.92%	
Return on Average RAB [3] = [1] * [2]		281.76	255.14	251.35	254.49	249.22	**1,291.96**
Add: Depreciation [4]	Table 32	139.25	131.63	145.63	153.51	160.57	**730.59**
Add: Operating expenses [5]	Table 57	377.82	382.31	352.62	386.87	316.99	**1,816.61**
Add: Taxation [6]	Table 72	149.79	101.04	-	-	-	**250.83**
Non-Aeronautical revenue	Table 63	244.53	276.70	326.30	338.67	171.37	**1,357.57**
Less: 30% of Non - Aeronautical revenue [7]	Table 63	73.36	83.01	97.89	101.60	51.41	**407.27**
Return on Land [8]	Para 4.6.12	-	-	-	-	-	-
Return on Land for FCP [9]	Para 4.6.12	-	-	-	-	-	-
Financing Allowance for FCP [10]	Para 4.3.6	-	-	-	-	-	-
Over-recovery of FCP as on 31 March 2017 [11]		(874.41)	-	-	-	-	**(874.41)**
ARR [12] = Sum of [3] to [11]		0.85	787.12	651.71	693.27	675.36	**2,808.31**
Aeronautical revenues [13]	Table 68	978.58	842.74	445.05	272.67	161.00	**2,700.05**
Discount Factor (#)		1.92	1.68	1.48	1.30	1.14	
PV (Discounted ARR) [14]		1.63	1,325.75	963.55	899.73	769.39	**3,960.05**
PV (Discounted aeronautical revenues) [15]		1,877.70	1,419.45	658.00	353.87	183.42	**4,492.44**
PV (Under)/ Over recovery of the Second Control Period as on 31st March 2022 [16] = [15] - [14]		1,876.06	93.70	(305.55)	(545.86)	(585.97)	**532.39**
True Up Over-recovery for SCP [Σ (16)] as of 31st March 2022		**532.39**					

4.11.13. The Authority notes that there is an over-recovery of Rs. 532.39 Cr. in the Second Control and decides to readjust the same in the ARR computation of the Third Control Period. The main reasons for the over-recovery of Rs. 532.39 Cr. are:

(i) Capital additions in the Second Control Period are Rs. 542.98 Cr. as opposed to Rs. 1,434.2 as approved by the Authority in the Second Control Period Order

(ii) High tariffs of First Control Period continued till 30th April 2018

4.12. Authority's decisions regarding true-up for the Second Control Period

Based on the materials before it and its analysis, the Authority had decided the following with respect to true-up for the Third Control Period

4.12.1. To consider traffic volumes as per Table 8 for true-up of the Second Control Period.

4.12.2. To consider aeronautical RAB as per Table 24 for true-up of the Second Control Period.

4.12.3. To consider aeronautical depreciation as per Table 32 for true-up of the Second Control Period.

4.12.4. To consider FRoR as per Table 35 for true-up of the Second Control Period

4.12.5. To disallow return on land for the First and Second Control Periods

4.12.6. To consider operating expenses as per Table 57 for the true-up of the Second Control Period.

4.12.7. To consider the non-aeronautical revenue as per Table 63 for true-up of the Second Control Period.

4.12.8. To consider aeronautical revenue as per Table 68 for the true-up of the Second Control Period.

4.12.9. To consider aeronautical tax as per Table 72 for true-up of the Second Control Period.

4.12.10. To carry forward the over-recovery amount of Rs. 532.39 Cr. as on 31st March 2022 as per Table 76 to the Third Control Period.

5. TRAFFIC FOR THE THIRD CONTROL PERIOD

5.1. AAI's submission regarding Traffic in Third Control Period

5.1.1. In order to assess the passenger traffic in India in light of the ongoing pandemic, AAI has referred to various studies by IATA and ACI Aviation Consulting. Accordingly, AAI has submitted its traffic projections as a part of MYTP submission. The passenger traffic, air traffic movement and their expected annual growth rates assumed in the tariff determination process for Third Control Period are as given in the table below:

Table 77: ATM and Passenger Traffic for Third Control Period submitted by AAI

FY ending March 31	2020	2021	2022	2023	2024	2025	2026
Passenger Traffic (Mn)							
Domestic	**16.47**	**4.90**	**8.05**	**10.87**	**14.68**	**16.88**	**19.41**
% growth over previous year		-70%	64%	35%	35%	15%	15%
% of FY20		30%	49%	66%	89%	102%	118%
International	**5.80**	**0.59**	**0.86**	**1.46**	**2.20**	**3.08**	**4.15**
% growth over previous year		-90%	46%	70%	51%	40%	35%
% of FY20		10%	15%	25%	38%	53%	72%
Total	**22.27**	**5.49**	**8.91**	**12.34**	**16.87**	**19.95**	**23.56**
% growth over previous year		-75%	62%	38%	37%	18%	18%
% of FY20		25%	40%	55%	76%	90%	106%
Air Traffic Movement ('000s)							
Domestic	**130.21**	**52.77**	**84.15**	**100.98**	**121.18**	**133.29**	**146.62**
% growth over previous year		-59%	59%	20%	20%	10%	10%
% of FY20		41%	65%	78%	93%	102%	113%
International	**37.77**	**11.82**	**20.52**	**23.60**	**25.96**	**28.03**	**30.00**
% growth over previous year		-69%	74%	15%	10%	8%	7%
% of FY20		31%	54%	62%	69%	74%	79%
Total	**167.98**	**64.59**	**104.67**	**124.58**	**147.13**	**161.33**	**176.62**
% growth over previous year		-62%	62%	19%	18%	10%	9%
% of FY20		38%	62%	74%	88%	96%	105%

5.1.2. The rationale behind the traffic projections provided by AAI include the following:

- The traffic for FY 2020-21 has been estimated on the basis of monthly traffic handled at the airport, after commencement of operations post lockdown.
- It is assumed that international flights are likely to continue under Vande Bharat Mission and Air Bubble Agreement.
- Since uncertainty continues with regard to regular international flight operations, for the purpose of traffic forecast, AAI has assumed that regular international flight operations may resume in a phased manner w.e.f. April 2021.
- As per IATA report, the pre-pandemic level of passenger demand may be attained in five years.
- According to ACI report, domestic passenger traffic is expected to recover in 2023. The recovery of international passenger traffic will require one more year, thus achieving the 2019 levels only in 2024.
- Lastly, AAI has assumed that there will be no major hike in the price of aviation fuel and there will be no major shift in policies that would have a negative impact on the growth of air traffic.

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

5.2.1. The Authority had taken note of the impact that COVID-19 pandemic had on the aviation sector and the resultant disruption in air traffic demand (both domestic and international) while analysing Chennai International Airport's submission of traffic forecast for Third Control Period. The Authority had also evaluated recent trends in air traffic (Passenger and ATMs) for the purpose of traffic projections.

5.2.2. As per AAI's submission, the domestic and international pre-pandemic passenger traffic level was expected to return by FY 2024-25 and FY 2027-28 respectively; same assumptions had been used in the case of ATM traffic. However, it had been observed that the IATA report expected pre-Covid-19 level traffic to return by CY 2024. Moreover, ACI report suggested that domestic and international traffic would return to pre-Covid-19 levels by CY 2023 and CY 2024 respectively.

5.2.3. The Authority noted that the domestic passenger traffic growth in FY 2020-21 was bouncing back after being impacted by Covid-19 pandemic. However, the second wave of Covid-19 had again hit the sector adversely. The Authority was cognizant of the impact that the second wave had on the aviation sector and accordingly had remained conservative in its estimation of traffic.

5.2.4. The Authority had computed the 5-year CAGR and 3-year CAGR using the actual traffic data till FY 2019-20, as FY 2019-20 had not been adversely impacted by the Covid-19 pandemic (except for a small impact towards the end of the year). The following table provides the details:

Table 78: CAGR for passenger traffic and ATM traffic at Chennai International Airport

FY ending March 31	5 Year CAGR (in %)	3 Year CAGR (in %)
Passenger Traffic		
Domestic	11.41	7.78
International	4.26	3.65
Total	9.26	6.64
Air Traffic Movement		
Domestic	8.21	5.36
International	1.76	1.20
Total	6.54	4.37

5.2.5. The corresponding traffic for passengers and ATM as considered by the Authority for Third Control Period are given below:

Table 79: Traffic projections proposed to be considered for Third Control Period by the Authority

FY ending March 31	2020 (actuals)	2021	2022	2023	2024	2025	2026
Passenger Traffic (in Mn.)							
Domestic	**16.47**	**4.90**	**11.20**	**17.29**	**18.12**	**19.76**	**23.05**
% growth over previous year		-70%	128%	54%	5%	9%	17%
% of FY20 traffic		30%	68%	105%	110%	120%	140%
International	**5.80**	**0.59**	**1.34**	**4.35**	**5.80**	**6.27**	**6.73**
% growth over previous year		-90%	127%	225%	33%	8%	7%
% of FY20 traffic		10%	23%	75%	100%	108%	116%
Total	**22.27**	**5.50**	**12.54**	**21.65**	**23.92**	**26.03**	**29.79**

FY ending March 31	2020 (actuals)	2021	2022	2023	2024	2025	2026
% growth over previous year		-75%	128%	73%	10%	9%	14%
% of FY20 traffic		25%	56%	97%	107%	117%	134%
Air Traffic Movement (in 000's)							
Domestic	**130.21**	**52.77**	**88.73**	**137.00**	**143.53**	**156.58**	**182.67**
% growth over previous year		-59%	68%	54%	5%	9%	17%
% of FY20 traffic		41%	68%	105%	110%	120%	140%
International	**37.77**	**11.82**	**8.54**	**27.86**	**37.15**	**40.12**	**43.09**
% growth over previous year		-69%	-28%	226%	33%	8%	7%
% of FY20 traffic		31%	23%	74%	98%	106%	114%
Total	**167.98**	**64.59**	**97.27**	**164.87**	**180.68**	**196.69**	**225.76**
% growth over previous year		-62%	51%	69%	10%	9%	15%
% of FY20 traffic		38%	58%	98%	108%	117%	134%

5.3. Stakeholder comments on Traffic for the Third Control Period

5.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 16/2021-22 with respect to traffic for the Third Control Period. The comments by stakeholders are presented below:

AAI's comments on traffic for the Third Control Period

5.3.2. AAI has proposed a total passenger traffic of 85.7 million passengers for the Third Control Period based on its evaluation. The comments from AAI with regards to traffic forecasts are given below:

"AERA's Contentions

To consider passenger traffic and ATM projections as given in Para 4.2.5 (Table 61) for the determination of tariff for the Third Control Period. (Para 4.3.1 of CP)

AAI's Submission

For determination of tariff for the third control period for Chennai airport, the traffic projections proposed by AERA appears to be highly optimistic.

The submissions of AAI are as furnished below:

- *The traffic for the year 2021-22 has been estimated based on the previous year traffic trend and the traffic handled in the recent months (up to August 2021). The traffic handled for 2021-22 up to August 2021 is given in the table below:*

PASSENGER TRAFFIC (In numbers)			
MONTH	INTERNATIONAL	DOMESTIC	TOTAL
APRIL	89380	576348	665728
MAY	38406	186079	224485
JUNE	33328	246995	280323
JULY	53291	446697	499988
AUGUST (Provisional)	83232	621095	704327
TOTAL (UPTO AUGUST)	297637	2077214	2374851
ESTIMATED TRAFFIC 2021-22	916935	8091824	9008759

- *As per AAI forecast, the estimated traffic for 2021-22 is 0.92 million for international and 8.09 millions for domestic passengers while AERA has forecasted the same to be 1.34 millions for international and 11.20 millions for domestic passengers.*

- *As per the traffic forecast, domestic and international pre covid level of traffic will be achieved by the year 2024-25 and 2025-26 respectively.*
- *The traffic started recovering after 1st Covid wave and reached 45% of pre covid level for the month of February 2021 as compared to February 2020. However, during the 2nd Covid wave, traffic recovery was hit badly and traffic declined by 66% during May 2021 as compared to April 2021.*
- *As total uncertainty is still continuing regarding regular international flight operations, it is assumed that international flights are likely to continue under Vande Bharat Mission and Air Bubble Agreement for the year 2021-22 and regular international flight operations may resume in a phased manner w.e.f. April 2022 but the same will be dependent on the bilateral agreement between the countries.*
- *As per health experts, the third wave of COVID may also hit this year. The forecast is prepared considering the impact of 3rd wave of COVID on Indian Aviation Sector."*

TRAFFIC FORECAST - CHENNAI AIRPORT

YEAR	AIRCRAFT MOVEMENTS (in Nos.)			PASSENGERS (in Nos.)		
	International	Domestic	Total	International	Domestic	Total
2019-20 (Actual)	37768	130214	167982	5799387	16467335	22266722
2020-21 (Actual)	11817	52773	64590	591571	4904136	5495707
GROWTH RATE	20.0%	60.0%	52.7%	55.0%	65.0%	63.9%
2021-22	14180	84437	98617	916935	8091824	9008759
GROWTH RATE	30.0%	20.0%	21.4%	80.0%	35.0%	39.6%
2022-23	18435	101324	119759	1650483	10923963	12574446
GROWTH RATE	28.0%	20.0%	21.2%	70.0%	35.0%	39.6%
2023-24	23596	121589	145185	2805821	14747350	17553171
GROWTH RATE	26.0%	10.0%	12.6%	50.0%	15.0%	20.6%
2024-25	29731	133748	163479	4208732	16959452	21168184
GROWTH RATE	25.0%	10.0%	12.7%	40.0%	15.0%	20.0%
2025-26	37164	147123	184287	5892225	19503370	25395595
GROWTH RATE	14.0%	10.0%	10.8%	15.0%	15.0%	15.0%
2026-27	42367	161835	204202	6776058	22428876	29204934
GROWTH RATE	9.0%	7.0%	7.4%	10.0%	8.0%	8.5%
2027-28	46180	173163	219343	7453664	24223186	31676850
2028-29	50336	185285	235621	8199031	26161041	34360071
2029-30	54866	198255	253121	9018934	28253924	37272858

Other stakeholder comments on traffic for the Third Control Period

5.3.3. IATA's comment regarding traffic for the Third Control Period is as follows:

"AERA's proposal is realistic and in line with IATA's own expectations for recovery. The traffic forecast submitted by AAI was much more conservative."

5.3.4. IndiGo's comment regarding traffic for the Third Control Period is as follows:

"IndiGo requests AERA to conduct an independent study for traffic assessment, in accordance with the AERA Act. IndiGo further requests AERA to consider gradual increase in traffic - passenger and ATM along with gradual relaxation in operational capacity (domestic) allowed by the Ministry of Civil Aviation i.e. 85%."

5.4. AAI's response to stakeholder comments regarding traffic for the Third Control Period

5.4.1. AAI's comment as per Para 5.3.2 was submitted as a response to IATA and IndiGo's comments regarding traffic for the Third Control Period.

5.5. Authority's analysis on stakeholders' comments regarding traffic for the Third Control Period

5.5.1. The Authority has taken note of AAI's comment regarding traffic for the Third Control Period. Considering the ongoing Covid-19 pandemic, the Authority has reviewed various reports published by the international agencies on traffic forecast and also the Authority's own traffic assessment based on discussion with various industry bodies. Based on this, the Authority projected passenger and ATM traffic for the Third Control Period at Chennai International Airport.

5.5.2. Further, the Authority has moderated the passenger traffic after considering the impact of the third wave of the Covid-19 pandemic on air travel. The Authority also notes that the traffic estimates will be trued-up at the end of the Control Period. The following table summarises the revised passenger and ATM traffic considered by the Authority in the Third Control Period:

Table 80: Traffic for the Third Control Period as decided by the Authority

FY ending March 31	2020 (actuals)	2021	2022	2023	2024	2025	2026
Passenger Traffic (in Mn.)							
Domestic	**16.47**	**4.90**	**8.23**	**16.47**	**18.12**	**19.76**	**23.05**
% growth over previous year		-70%	68%	100%	10%	9%	17%
% of FY20 traffic		30%	50%	100%	110%	120%	140%
International	**5.80**	**0.59**	**1.34**	**2.90**	**5.80**	**6.27**	**6.73**
% growth over previous year		-90%	127%	116%	100%	8%	7%
% of FY20 traffic		10%	23%	50%	100%	108%	116%
Total	**22.27**	**5.50**	**9.57**	**19.37**	**23.92**	**26.03**	**29.79**
% growth over previous year		-75%	74%	102%	24%	9%	14%
% of FY20 traffic		25%	43%	87%	107%	117%	134%
Air Traffic Movement (in 000's)							
Domestic	**130.21**	**52.77**	**88.73**	**137.00**	**143.53**	**156.58**	**182.67**
% growth over previous year		-59%	68%	54%	5%	9%	17%
% of FY20 traffic		41%	68%	105%	110%	120%	140%
International	**37.77**	**11.82**	**8.54**	**27.86**	**37.15**	**40.12**	**43.09**
% growth over previous year		-69%	-28%	226%	33%	8%	7%
% of FY20 traffic		31%	23%	74%	98%	106%	114%
Total	**167.98**	**64.59**	**97.27**	**164.87**	**180.68**	**196.69**	**225.76**
% growth over previous year		-62%	51%	69%	10%	9%	15%
% of FY20 traffic		38%	58%	98%	108%	117%	134%

5.5.3. The Authority has noted the comments of IATA regarding traffic for the Third Control Period. The Authority has addressed the same in Para 5.5.2 (above).

5.5.4. The Authority has taken note of IndiGo's comment regarding traffic for the Third Control Period. Considering the ongoing Covid-19 pandemic, the Authority has reviewed various international studies and conducted discussions with various stakeholders. Based on this, the Authority projected passenger and ATM traffic for the Third Control Period at Chennai International Airport. At present the traffic situation is very dynamic. There is no scientific model available for traffic projection to cater to such pandemic situation. Therefore, the Authority is of the view that any independent study regarding traffic may not be fruitful at this stage. Moreover, it may be noted that traffic is subject to true-up in the tariff determination of the next control period.

5.6. Authority's decisions on traffic for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to traffic for the Third Control Period

5.6.1. The Authority has decided to consider the passenger traffic and ATM traffic as per Table 80.

5.6.2. The Authority decides to true-up the traffic for the TCP based on actuals, at the time of determination of traffic in the Fourth Control Period.

6. REGULATORY ASSET BASE AND DEPRECIATION FOR THIRD CONTROL PERIOD

6.1. AAI's submission regarding RAB and Depreciation for the Third Control Period

6.1.1. The aeronautical capital additions submitted by Chennai International Airport can be divided into the following heads:

I. Capital additions deferred from the Second Control Period to the Third Control Period
II. New capital additions proposed for the Third Control Period
III. Other capital additions for the Third Control Period

6.1.2. These are detailed in the same sequence in the following paragraphs.

I. Aeronautical capital additions deferred from the Second Control Period

6.1.3. As per AAI's MYTP submission, capital additions deferred from the Second Control Period to the Third Control Period are as follows:

a. Modernization of Chennai International Airport, Phase II (NITB Part – 1)
b. Straightening of B Taxiway
c. Construction of R-Taxi track
d. Modification of Storm Water Drain
e. Construction of Fillet at Taxiway F

6.1.4. Details regarding the capital expenditure for the above projects as submitted by AAI for the Third Control Period are as follows:

Table 81: Aeronautical capital additions deferred from the Second Control Period to the Third Control Period submitted by AAI

S. No.	Name of Work	Year of Cap. (FY)	Project Cost	Financing Allowance	IDC	Exp. Cap.	Total amount (incl. FA, IDC, Exp Cap)
1	NITB Part - 1	2021-22	1,233.58	6.13	27.50	19.23	1,286.45
2	Straightening of B Taxiway	2021-22	76.25	0.38	-	1.19	77.82
3	Construction of R Taxi track	2021-22	58.96	0.29	-	0.92	60.17
4	Modification of Storm Water Drain	2025-26	530.00	11.57	21.02	26.97	589.56
5	Construction of Fillet at Taxiway F	2022-23	29.94	3.63	0.82	0.51	34.89
	Total		**1,928.73**	**21.99**	**49.34**	**48.82**	**2,048.88**

II. New aeronautical capital additions for the Third Control Period as submitted by AAI

6.1.5. Details of the new capital additions submitted by AAI in the Third Control Period are provided as follows:

Table 82: New Aeronautical Capital Additions for the Third Control Period submitted by AAI

S. No.	Name of Work	Year of Cap. (FY)	Project Cost	Financing Allowance	IDC	Exp. Cap	Total amount (incl. FA, IDC, Exp Cap)
1	NITB Part - 2	2023-24	1,202.59	13.36	45.80	18.83	1,280.59
2	Residential Colony	2023-24	184.93	2.05	-	2.89	189.88
3	Security Equipment	Across TCP	155.97	6.09	-	2.60	164.66
4	Resurfacing of Main Runway	2024-25	30.00	1.09	0.87	1.09	33.05
5	Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway	2021-22	35.00	0.17	-	0.55	35.72
6	Reconstruction and Strengthening of H-taxi track and E-taxi track	2021-22	44.00	0.22	-	0.69	44.90
7	Providing false ceiling and replacing floor tile	2024-25	60.84	2.22	3.62	2.21	68.89
8	Enhancing CBR value in Main and Secondary Runways	2023-24	50.00	0.56	1.59	0.78	52.93
9	Resurfacing of Perimeter Road	2023-24	10.00	0.11	0.32	0.16	10.59
10	Other works	Across TCP	43.36	1.73	0.79	0.92	46.80
	Total		**1,816.70**	**27.61**	**52.98**	**30.72**	**1,928.01**

III. Other aeronautical capital additions for the Third Control Period

6.1.6. Details regarding capital expenditure to keep the operations sustainable in the Third Control Period as provided as follows:

Table 83: Other Capital Additions for the Third Control Period submitted by AAI

S. No.	Name of Work	Year of Cap. (FY)	Project Cost	Financing Allowance	IDC	Exp. Cap.	Total amount (incl. FA, IDC, Exp Cap)
1	IT related	Across TCP	20.54	0.60	-	0.65	21.78
2	Replacement of Vehicles	Across TCP	4.15	0.31	-	0.09	4.55
3	Other Electric works	Across TCP	112.47	1.37	5.85	6.79	126.48
	Total		**137.15**	**2.28**	**5.85**	**7.53**	**152.81**

Allocation of Assets into aeronautical and non-aeronautical components as submitted by AAI

6.1.7. AAI has submitted the aeronautical and non-aeronautical proportions of the total project cost estimated for Third Control Period. The new assets capitalised in Third Control Period have been bifurcated into aeronautical and non-aeronautical categories as per the following table:

Table 84: Allocation of assets to be capitalized in Third Control Period submitted by AAI

Particulars	Aero (%)	Non-Aero (%)
Runways, Taxiways, Aprons	100.00	0.00
Roads, Bridges & culvert	100.00	0.00
Terminal/Other Buildings	99.79	0.21

Particulars	Aero (%)	Non-Aero (%)
Building - Residential	99.55	0.45
Computer, IT Hardware & Access.	99.77	0.23
Plant and Machinery	100.00	0.00
Electrical Installations	99.93	0.07
Furniture & Fixtures	100.00	0.00
X-Ray Baggage	100.00	0.00
CFT	98.06	1.94

Additions to RAB

6.1.8. AAI has proposed the following capitalisation (additions to RAB) for the Third Control Period:

Table 85: Additions to RAB for the Third Control Period submitted by AAI

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Land	-	-	-	-	-	-
Runways, Taxiways, Aprons	218.67	34.96	52.97	33.15	1.03	**340.78**
Roads, Bridges & culvert	48.59	0.02	57.53	0.04	0.04	**106.22**
Terminal/Other Buildings	710.91	11.57	706.88	304.56	354.31	**2,088.24**
Building - Residential	-	-	189.93	0.08	0.07	**190.07**
Computer, IT Hardware & Access.	100.69	3.38	105.27	3.24	6.37	**218.95**
Plant and Machinery	-	3.79	0.00	5.64	2.20	**11.64**
Electrical Installations	233.20	47.87	223.63	1.28	128.59	**634.57**
Office Equipment	-	-	-	-	-	-
Furniture & Fixtures	48.46	0.02	0.02	0.02	0.02	**48.54**
X-Ray Baggage	277.12	0.13	206.64	0.19	0.16	**484.25**
CFT	-	4.44	1.07	0.95	0.00	**6.45**
Total	**1,637.64**	**106.20**	**1,543.94**	**349.14**	**492.79**	**4,129.71**

Depreciation

6.1.9. AAI has computed depreciation based on the rates prescribed by AERA vide Order No. 35/2017-18 dated 12th January 2018, in the matter of determination of useful life of Airports Assets. For the additions to RAB, AAI has calculated the depreciation during year of capitalisation on 50% of the asset value (assuming that the asset is capitalised in the middle of the financial year). The following table summarises the depreciation rates considered for additions and deletions to RAB:

Table 86: Depreciation rates as per AAI's Submission and the Authority

Assets (in %)	As submitted by AAI	As per Order No. 35/2017-18
Land	0.00	0.00
Runways, Taxiways, Aprons	3.33	3.33
Roads, Bridges & culvert	10.00	10.00
Terminal/Other Buildings	3.33	3.33 / 1.67
Building - Residential	3.33	3.33 / 1.67
Computer, IT Hardware & Access.	33.33	33.33
Computer Software	20.00	16.67
Plant and Machinery	6.67	6.67
Electrical Installations	10.00	10.00
Office Equipment	20.00	20.00

Assets (in %)	As submitted by AAI	As per Order No. 35/2017-18
Furniture & Fixtures	14.29	14.29
X-Ray Baggage	6.67	6.67
CFT	6.67	6.67

6.1.10. The following table summarises AAI's submission of aeronautical depreciation for various assets in Third Control Period.

Table 87: Aeronautical Depreciation for Third Control Period submitted by AAI

FY ending March 31	2022	2023	2024	2025	2026	Total
Runways, Taxiways, Aprons	23.09	26.95	28.41	29.85	30.05	**138.35**
Roads, Bridges & culvert	7.84	9.38	11.88	14.73	14.74	**58.58**
Terminal/Other Buildings	52.50	64.51	76.46	93.22	104.20	**390.89**
Building - Residential	0.20	0.19	3.36	6.52	6.52	**16.79**
Security Fencing	0.38	0.38	0.38	0.38	0.38	**1.92**
Boundary wall (operational)	2.98	2.98	2.68	2.05	2.02	**12.71**
Other Buildings - Unclassified	0.85	0.78	0.78	0.69	0.69	**3.79**
Computer, IT Hardware & Access.	17.95	34.85	52.60	70.32	45.48	**221.21**
Computer Software	0.08	0.08	0.07	0.03	-	**0.25**
Plant and Machinery	16.58	16.67	16.69	16.76	17.02	**83.72**
Tools & Equipment	3.41	3.41	3.40	3.40	3.40	**17.02**
Office Furniture & Fixtures	3.60	3.60	3.57	3.12	2.15	**16.04**
Other Vehicles	0.57	0.57	0.52	0.44	0.35	**2.45**
Electrical Installations	68.81	78.83	56.03	62.86	68.88	**335.41**
Office Equipment	0.39	0.34	0.30	0.09	0.01	**1.12**
Furniture & Fixtures	4.38	7.44	6.93	6.93	6.94	**32.61**
X-Ray Baggage	14.26	23.47	30.36	37.25	37.26	**142.61**
CFT	1.22	1.36	1.54	1.60	1.64	**7.36**
Total	**219.09**	**275.78**	**295.97**	**350.25**	**341.73**	**1,482.82**

RAB for Third Control Period

6.1.11. As per AAI's submission, the net closing RAB of FY 2020-21 has been considered as the opening RAB for FY 2021-22 after accounting for additions and deletions to RAB and depreciation. Considering the above capex plan, additions to RAB, and depreciation working, the RAB for Third Control Period as considered by AAI is shown below:

Table 88: RAB at Chennai International Airport during Third Control Period submitted by AAI

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Opening RAB [1]	1,779.90	3,198.45	3,028.86	4,276.83	4,275.72	-
Additions to RAB [2]	1,637.64	106.20	1,543.94	349.14	492.79	**4,129.71**
Deletions [3]	-	-	-	-	-	-
Depreciation [4]	219.09	275.78	295.97	350.25	341.73	**1,482.82**
Closing RAB [(1 + 2) – (3 + 4)] [5]	3,198.45	3,028.86	4,276.83	4,275.72	4,426.78	-
Average RAB [(1 + 5)/2]	**2,489.17**	**3,113.66**	**3,652.85**	**4,276.28**	**4,351.25**	-

6.2. Authority's examination of RAB and Depreciation for Third Control Period as part of the Consultation Paper

6.2.1. The Authority had analysed the RAB and capital additions submitted by AAI for the Third Control Period. For the purpose of analysis, the Authority had grouped the aeronautical capital additions into three categories, as follows:

I. Capital additions deferred from the Second Control Period to the Third Control Period
II. Capital additions proposed in the Third Control Period
III. Other capital additions for the Third Control Period

6.2.2. The Authority noted that AAI had a trend of proposing capex in the respective control period and postponing it to the next control period. While AAI proposed capitalisation worth Rs. 2,862.71 Cr. in the First Control Period, it executed only Rs. 2,235.90 Cr. Similarly, in the Second Control Period, AAI had proposed capital additions worth Rs. 1,434.2 Cr., it capitalised only Rs. 243.73 Cr. Although the Authority acknowledged the effect of the pandemic in the Second Control Period, it was of the opinion that the passenger must not bear the burden in case of a delay in capitalisation due to the airport operator.

6.2.3. Thus, the Authority proposed to reduce 1% of the total project cost from ARR/Target Revenue as readjustment in case any particular capital project is not completed as per the approved capitalization schedule. This would be examined during the true up of the Third Control Period, at the time of determination of tariff for the Fourth Control Period.

6.2.4. The Authority had taken into account the lower traffic caused by the Covid-19 pandemic and the resultant stress on the financials of all the stakeholders of civil aviation while analysing the requirement for capital expenditure for the Third Control Period. In this background, the Authority analysed AAI's submission and had accordingly proposed capital additions for the Third Control Period.

I. Aeronautical capital additions deferred from the Second Control Period to the Third Control Period

6.2.5. The following table gives details of the capital additions that were deferred from the Second Control Period to the Third Control Period, as submitted by AAI.

Table 89: Aeronautical capital additions deferred from the Second Control Period to Third Control Period submitted by AAI

Reference	Project / Group	No.	Particulars (in Rs. Cr.)	Approved in SCP	Proposed Cost in TCP	Cost overrun
A	New Integrated Terminal Building (Part– I)	A.1	Modernization of Chennai International Airport, Phase II (NITB Part – I) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	971.25	601.67	262.33
		A.2	Electrical Part I		187.79	
		A.3	Baggage Handling System Part I		197.47	
		A.4	Passenger Boarding Bridge & Visual Docking Guidance System Part I		44.31	
		A.5	Interior works (Civil) Part I		47.25	
		A.6	Others		155.10	

Reference	Project / Group	No.	Particulars (in Rs. Cr.)	Approved in SCP	Proposed Cost in TCP	Cost overrun
		A	**Sub-total (NITB Part 1)**	**971.25**	**1,233.58**	**262.33**
B	Storm water drain	B.1	Modification of Storm water drain (Phase I) 5 kms	4.50	210.00	525.50
		B.2	Modification of Storm water drain (Phase II) 5 kms		200.00	
		B.3	Modification of Storm water drain (Phase III) 3 kms		120.00	
		B	**Sub-total (Storm Water Drain)**	**4.50**	**530.00**	**525.50**
C	Construction/strengthening of pavement related works deferred from SCP to TCP	C.1	Straightening of B-Taxiway	62.06	76.25	14.59
		C.2	Construction of balance portion of link taxiway's 'N1' and 'F'.	4.00	29.94	25.94
		C.3	Construction of 'R' taxi track	68.25	58.96	(9.29)
		C	**Pavement works (sub-total)**	**134.31**	**165.15**	**30.84**
	Total			**1,110.06**	**1,928.73**	**818.67**
	Financing Allowance			-	21.99	21.99
	IDC			-	49.34	49.34
	Project division expenses capitalized (Exp. Cap)			-	48.82	48.82
	Total (including FA, IDC and Exp. Cap)			**1,110.06**	**2,048.88**	**938.82**

(A) Modernization of Chennai International Airport, Phase II (NITB Part – 1)

6.2.6. The Authority had noted that the approved aeronautical cost of modernization of Chennai International Airport, Phase II (NITB Part – 1) was Rs. 971.25 Cr. in the Second Control Period Order, and that AAI had submitted a revised aeronautical cost of Rs. 1,233.58 Cr. for the Third Control Period. AAI submitted that the revised cost was based on the actual awarded amount.

6.2.7. Modernization of Chennai International Airport, Phase II (NITB Part – 1) was scheduled to be capitalised in FY 2020-21 (SCP). Modernization of Chennai International Airport, Phase II (NITB Part – 2) was discussed along with the analysis on new capital additions in the Third Control Period. Modernization of Chennai International Airport, Phase II NITB Part - 1 and Part – 2 includes the demolition of Terminal T2 and T3 respectively. AAI had conducted a stakeholder meeting regarding Modernisation of Chennai Airport – Phase II on 21.07.2017 and the minutes of the meeting were submitted vide an email correspondence dated 20.04.2021 ("Reply of MYTP of Chennai Airport"). The Authority had directed AAI to re-conduct a stakeholder meeting as per decision 6.b. of the tariff order of the Second Control Period. The same was re-conducted by AAI on 20.07.2021 and the minutes were circulated vide email dated 04.08.2021 ("Minutes of AUCC Meeting held on 20.07.2021 @ 1130 hrs"). Minutes of the AUCC meeting are given in Annexure III.

6.2.8. A brief of the proposed plan of the modernisation of Chennai International Airport was submitted on 17.05.2021. AAI appointed M/s AECOM as a consultant for planning and project management of the modernisation of Chennai airport on 21.06.2017. The purpose of the modernisation of Chennai airport was to increase passenger capacity from 17 MPPA to 35 MPPA, both international and domestic.

6.2.9. The existing Domestic Terminal T-2 (area 19,250 sq.m.) and International Terminal T-3 (area 42,300 sq.m.) were demolished (as per schedule) to be rebuilt in two parts within the area available between Terminals T1 and T4. These were to be integrated as a new integrated terminal building.

6.2.10. AAI had submitted that the NITB will function as one large integrated terminal for international operations with a total area of 2,20,972 sq.m., which would enable the airport to enhance the passenger handling capacity to nearly 35 MPPA by June 2023, from 17 MPPA presently. The modernisation in Phase – II shall include integration of airside corridor for seamless flow, augmentation of contact bays, integration of multi-level mechanized car park, metro rail, etc.

6.2.11. The modernisation plan focuses on enhancing various facilities and sustaining greater traffic given the space constraints on the city-side and airside. A few features of the NITB include 140 check-in counters, 108 immigration counters, 28 Automatic Tray Retrieval Systems (ATRS), 12 walkators, etc. The modernisation also proposed to ensure seamless flow of vehicular movement from the Grand Southern Trunk (GST) Road to all terminals as well as a multilevel car park, inter-connectivity of terminals on the city side and through direct connectivity to metro rail.

6.2.12. The Authority acknowledged that the planned capitalization of modernization of Chennai International Airport, Phase II (NITB Part – 1) was to be done in FY 2020-21. However, AAI has submitted vide its email correspondence on 25.05.2021("Information required from AAI-Regarding Chennai") that Part 1 of the plan is 71% complete and the projected date of completion of the same would be 31.03.2022. It also added that all efforts were being made by AAI to complete as per timeline, provided that the working conditions would be conducive given the pandemic situation. A site visit was conducted by AERA's consultant to assess the progress. Post site visit by AERA's consultant, the Authority was of the opinion that capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 1) would be completed in FY 2022-23. Despite the physical progress of construction being 71%, the Authority believed that operationalising the building will take at least 6 months thereby making the commissioning possible only in FY 2022-23. Thus, the Authority proposed to postpone the commissioning to FY 2022-23.

6.2.13. The Authority noted that the non-aeronautical component of TBLR was in the range of 5-8%. This was in contrast to the 8-12% that the IATA and IMG norms recommend. Since, Chennai International Airport is one of the largest AAI airports and attracts a substantial amount of traffic, the Authority encouraged AAI to incorporate larger non-aeronautical component at the airport (especially so since a new integrated terminal is being capitalised). Thus, the Authority proposed to consider a TBLR of 90:10 for the Third Control Period.

6.2.14. As per the MYTP submission of AAI, the envisaged years of capitalisation of modernization of Chennai International Airport, Phase II NITB Part - 1 and NITB Part – 2, are FY 2021-22 and FY 2023-24 respectively. The Authority noted that the normative cost working of modernization of Chennai International Airport, Phase II NITB Part - 1 and NITB Part – 2, was submitted in a consolidated manner. As per AAI's submission, the cost is Rs. 1,09,232 per sq.m. for the whole integrated terminal building. The Authority noted that as per Table 38 of the Second Control Period tariff order, Rs 1,00,000 per sq.m. was to be allowed as the cost for construction of terminal. This amount would increase to Rs. 1,12,000 per sq.m. with an inflation rate of 4% p.a. up to FY 2023-24.

6.2.15. The Normative Cost submitted by AAI for modernization of Chennai International Airport, Phase II NITB Part – 1 and Part – 2 is given in the table below.

Table 90: Normative Cost calculation for NITB submitted by AAI

Name (Rs in Cr.)	NITB Part - 1 to be capitalized in FY 2021-22	NITB Part - 2 to be capitalized in FY2023-24
Modernization of Chennai International Airport, Phase II - Incl. AS, IT MEP & Civil (Excl. Interior), Furniture's	601.67	631.29
Electrical	187.79	198.14
AS	74.62	78.74
IT	16.49	17.40
Baggage Handling System	197.47	189.42
Passenger Boarding Bridge & Visual Docking Guidance system	44.31	29.28
Interior works (Civil)	47.25	31.22
Interior works (Electrical)	15.36	10.15
Signage's	3.15	2.08
STP (Civil)	9.17	-
STP (MEP)	19.71	-
AS packages (i.e. XBIS-HB, DFMD, ETD & HHMD)	16.60	-
C/o of road in front of Terminal building and internal modification of road in car park area	-	14.87
Total	**1,233.58**	**1,202.59**
Total Cost		**2,436.18**
Total area proposed to be constructed (in sq.m.)		**2,23,027**
Cost per sq.m. (Rs.)		**1,09,232**

6.2.16. Since the modernization of Chennai International Airport, Phase II is getting capitalised (and as a result – operational) in two parts, the Authority was of the opinion that the normative cost analysis of the two should also be done separately. Moreover, a separate analysis for both the parts would ensure that the quality and passenger experience remain uniform across the NITB. Thus, the Authority analysed the normative cost of modernization of Chennai International Airport, Phase II (NITB Part – 1) as per the proposed capitalisation in FY 2022-23. The reworked analysis of modernization of Chennai International Airport, Phase II (NITB Part – 1) is provided in Table 91. Since the cost per sq. m. is less than the inflation adjusted normative cost of Rs. 1,08,160 per sq m., the Authority proposed to consider the amount submitted by AAI for modernization of Chennai International Airport, Phase II (NITB Part – 1).

Table 91: Normative Cost of NITB Part – 1 proposed to be considered by the Authority

Particulars	Amount
Total Cost of NITB – Part 1 (in Rs. Cr.)	1,270.51

Particulars	Amount
Area pertaining to Part I (in sq. m)	1,37,669
Cost per sq m. (in Rs.)	92,287

(B) Storm Water Drainage

6.2.17. The Authority noted that the approved amount for modification of storm water drain in the Second Control Period was Rs. 4.50 Cr. AAI submitted a revised amount of Rs. 530.00 Cr. in the Third Control Period. AAI submitted that the scope of work of the project increased as there was a need for a more effective drainage system at Chennai International Airport post the flooding of the airport in 2015. AAI appointed IIT Madras to carry out a detailed study and the revised project scope was as recommended by the study.

6.2.18. Upon a query about the completion status and the rationale for the modification of storm water drainage, AAI replied that Chennai International Airport was affected due to historic floods in 2015 and aircraft operations were halted for more than a week. As a part of a study, IIT-Madras had recommended for modifications of storm water drains for a stretch of 13km, stability check of compound wall, providing and fixing of flood barriers, pumps and other miscellaneous civil works. AAI has divided this work into three phases. In Phase I, a stretch of 5km drain, compound wall, flood barriers and miscellaneous works have been taken up for tender action. After completion of Phase-I, Phase-II and III will be taken up with concurrence of CHQ. The Authority had studied the construction plan and the layout of the storm water drainage. Upon inquiry, AAI submitted that the part of the drainage system outside the premises of Chennai International Airport would be taken up by the state government. The Authority had noted that Phase I of the storm water drainage is in the final stage of being tendered. The had Authority noted that the amount as per the award letter is Rs. 165.05 Cr. as opposed to Rs. 210 Cr. originally submitted by AAI. Since Phase I of storm water drainage was scheduled to be completed in FY 2024-25, the Authority was of the opinion that Phase II and III be shifted to the Fourth Control Period, given that the completion of each phase takes approximately 18 months, and hence it would be difficult to complete these modifications by FY 2025-26 (as proposed in the plan). Thus, it had proposed a new capex plan for Phase II and III of modification of storm water drainage. The revised plan for the storm water drain after taking into account the award letter for Phase – I of modification of storm water drain, is summarized in the following table:

Table 92: Revised capitalisation plan for modification of stormwater drain proposed to be considered for Third Control Period by the Authority

FY ending March 31 (Rs. Cr.)	As per AAI	Approved in SCP	As per the Authority	Year of Cap as per AAI	Year of Cap as per the Authority
Modification of Stormwater Drain (Phase – I) 5 km	210.00	4.50	165.05	FY 2024-25	FY 2025-26
Modification of Stormwater Drain (Phase – II) 5 km	200.00		-	FY 2025-26	Shifted to Fourth Control Period
Modification of Stormwater Drain (Phase – III) 5 km	120.00		-	FY 2025-26	Shifted to Fourth Control Period

(C) Construction/strengthening of pavement related works deferred from the Second Control Period to the Third Control Period

6.2.19. Capital expenditure on pavement works that were deferred from the Second Control Period to the Third Control Period consist of the following:

(C.1) Straightening of B-Taxiway from Bay No. 8 to Runway 30 along with parking bays and RET-I at a distance of 1,831m from the threshold of R/w 07 and RET 25-1 at a distance of 1908m from the threshold of R/w 25: B Taxiway, which was parallel to the main runway, had a kink. All aircrafts using this taxiway had to change their direction and take a turn, as a result of which waiting period increased on the taxiway. This work was taken up in order to reduce waiting time and improve the efficiency of the operations. Upon inspection, it was found that the kink has been straightened (physical progress of 95%).

(C.2) Construction of balance portion of Link taxiway's 'N1' and 'F' connecting with B taxi, Resurfacing of B taxi way Between 'K' taxiway to 'M' taxiway and construction of cargo bays in the Old ceremonial lounge and Air India Cargo location. The remote apron is situated on the other side of the main runway and access to this apron involves either crossing the main runway or going around the main runway. This has resulted in wastage of time. With the link taxiways, access to the remote apron is quicker, which in turn enhances the handling capacity of the runway. Given that the passenger handling capacity would increase after the capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 1), the Authority was of the opinion that link taxiways would help in handling more air traffic.

(C.3) Construction of 'R' Taxi track up to Runway 07/25 - The remote apron is situated in the airside. This apron could be accessed either by-passing the main runway or going around it. Access to the remote apron ensures smooth flow of aircrafts and enhances the handling capacity of the runway.

6.2.20. The cost per sq.m. for the above pavement works were submitted by AAI vide an email correspondence dated 08.04.2021. The cost per sq.m. for these works has been calculated in the following table. The permissible benchmarks had been calculated based on the normative costs considered in the tariff order of Second Control Period and an inflation rate of 4% p.a.

Table 93: Normative Cost Calculation for Pavement Works deferred from SCP to TCP submitted by AAI

S No.	Particulars	Area	Cost per sq.m. (with culvert)	Cost per sq.m. without culvert	Inflation Adjusted Normative Benchmark
1	Construction of balance portion of Link taxiways 'N1' and 'F' connecting with B taxi, Resurfacing of B taxi way Between 'K' taxiway to 'M' taxiway and construction of cargo bays in the Old ceremonial lounge and Air India Cargo location	Rigid Apron – 8,976 sq.m Rigid Apron Shoulder – 1,538 sq.m. Flexible taxiway – 4,443 sq.m. Flexible taxiway shoulders – 694 sq.m. Re-Surfacing of B Taxi – 28,600 sq.m. Total Pavement area (excluding	Estimated Cost (excluding resurfacing) = Rs.20.00Cr. – Rs. 6.50 Cr. = 13.50 Cr. Cost per sq.m. = Rs. 8,625.65	Rs. 5,939 per sq.m.	Rs. 6,184.88 per sq.m.

S No.	Particulars	Area	Cost per sq.m. (with culvert)	Cost per sq.m. without culvert	Inflation Adjusted Normative Benchmark
		resurfacing) = 15,651 sq.m.			
2	Construction of 'R' Taxi track up to Runway 07/25 - Civil - C/o 'R' Taxi track left out portion connecting Runway 12-30 - Construction of 'R' Taxi track up to Runway 07/25 – Electrical	Rigid taxiway – 47,245 sq.m. Flexible taxiway – 11,709 sq.m. Taxiway Shoulder flexible – 34,556 sq.m. Total Pavement area= 93,510 sq.m.	Work Order Amount = Rs. 58.96 Cr. Cost Per Sq.m. = Rs.6,305.21	Rs. 3,966 per sq.m.	Rs. 5,947.00 per sq.m.
3	Straightening of B-Taxiway from Bay No. 8 to Runway 30 along with parking bays and RET-I at a distance of 1831 m from the threshold of R/w 07 and RET25_1at a distance of 1908m from the threshold of R/w 25	Rigid Apron – 32,032 sq.m Rigid Apron Shoulder – 3,888 sq.m. Flexible Taxiway for RET1,2,3, F and N – 41,806 sq.m. Shoulders – 20,822 sq.m. B taxi Resurfacing = 17,325 sq.m. Total Pavement area (excluding resurfacing) = 98,548 sq.m.	Work Order Amount (excluding resurfacing) = Rs. 76.24 Cr. – Rs. 3.84 Cr. = Rs. 72.40 Cr. Cost per sq.m. = Rs. 7,346.67	Rs. 5,100 per sq.m.	Rs. 5,947.00 per sq.m.

6.2.21. The Authority had noted that financing allowance and the methodology for computation of the same was detailed in the airport guidelines and the same would need to be provided to the Airport Operator. However, the Airport Operator had computed financing allowance on the entire WIP amount being capitalised, whereas the Authority was of the view that such an allowance was essentially the IDC for a project and should be provided only on the debt portion of the project funds. Accordingly, the Authority had considered IDC to be provided based on revisions in the proposed capital expenditure discussed for the Third Control Period and the notional gearing considered for the Third Control Period.

Aeronautical capital additions proposed to be considered by the Authority for capital works deferred from the Second Control Period to the Third Control Period

6.2.22. Based on the examination in the paragraphs above, the Authority had proposed to consider the capital additions of projects deferred from the Second Control Period to the Third Control Period as provided in Table 94.

Table 94: Aeronautical capital additions deferred from the Second Control Period to Third Control Period proposed to be considered by the Authority

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
A	New Integrated Terminal Building (Part– I)	A.1	Modernization of Chennai International Airport, Phase II (NITB Part – 1) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	601.67	574.74	(26.93)
		A.2	Electrical Part 1	187.79	152.14	(35.65)
		A.3	Baggage Handling System Part 1	197.47	177.72	(19.75)
		A.4	Passenger Boarding Bridge & Visual Docking Guidance System Part 1	44.31	36.38	(7.93)
		A.5	Interior works (Civil) Part 1	47.25	42.52	(4.73)
		A.6	Others	155.10	139.59	(15.51)
		A	**Sub-total (Terminal Building Phase I)**	**1,233.58**	**1,123.09**	(110.49)
B	Storm water drain	B.1	Modification of Storm water drain (Phase I) 5 kms	210.00	165.05	(44.95)
		B.2	Modification of Storm water drain (Phase II) 5 kms	200.00	-	(200.00)
		B.3	Modification of Storm water drain (Phase III) 3 kms	120.00	-	(120.00)
		B	**Sub-total (Storm Water Drain)**	**530.00**	**165.05**	(364.95)
C	Construction/strengthening of pavement related works deferred from SCP to TCP	C.1	Straightening of B-Taxiway	76.25	76.25	-
		C.2	Construction of balance portion of link taxiway's 'N1' and 'F'.	29.94	29.94	-
		C.3	Construction of 'R' taxi track	58.96	58.96	-
		C	**Pavement works (sub-total)**	**165.15**	**165.15**	-
	Total			**1,928.73**	**1,453.29**	(475.44)
	Financing Allowance			21.99	-	(21.99)
	IDC			49.34	9.49	(39.85)
	Project division expenses capitalized (Exp. Cap)			48.82	34.23	(14.59)
	Total (including FA, IDC and Exp. Cap)			**2,048.88**	**1,497.01**	(551.87)

II. New aeronautical capital additions proposed for the Third Control Period as submitted by AAI

6.2.23. Details regarding the new capital additions for the Third Control Period as submitted by AAI is given in Table 95:

Table 95: New aeronautical capital additions for the Third Control Period submitted by AAI

Reference	Project / Group	No.	Particulars	Proposed Cost (Rs. Cr.)
D	New Integrated Terminal Building (Part – 2)	D.1	Modernization of Chennai International Airport, Phase II (NITB Part – 2) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	631.29
		D.2	Electrical Part 2	198.14
		D.3	Baggage Handling System Part 2	189.42

Reference	Project / Group	No.	Particulars	Proposed Cost (Rs. Cr.)
		D.4	Others	183.74
		D	**Sub-total (NITB Part – 2)**	**1,202.59**
E	Residential Colony			184.93
F	Security Equipment	E.1	PIDS	40.00
		E.2	Body Scanner	47.50
		E.3	DARK	41.54
		E.4	Others	26.93
		E	**Sub-total (Security Equipment)**	**155.97**
G		G.1	Resurfacing of Main Runway 07-25	30.00
		G.2	Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway	35.00
		G.3	Reconstruction and strengthening of H-taxi track and 'E' - taxi track.	44.00
		G	**Pavement works (sub-total)**	**109.00**
H	Providing false ceiling and replacing of floor tile			60.84
I	Enhancement of CBR value in Basic strip of Main Runway and Secondary Runway			50.00
J	Resurfacing of perimeter road			10.00
K	Others	K.1	Additions/alterations to existing toilets in TB	9.50
		K.2	Artistic painting works at city side.	5.00
		K.3	Other works	28.86
		K	**Others (sub-total)**	**43.36**
	Total			**1,816.70**
	Financing Allowance			27.61
	IDC			52.98
	Project division expenses capitalized (Exp. Cap)			30.72
	Total (including IDC)			**1,928.01**

6.2.24. The Authority had examined the new capital additions as submitted by AAI. Details of the same are elaborated in the following paragraphs.

(D) Modernization of Chennai International Airport, Phase II (NITB Part – 2)

6.2.25. AAI submitted that the construction of modernization of Chennai International Airport, Phase II (NITB Part – 2) would be started after commissioning modernization of Chennai International Airport, Phase II (NITB Part – 1). Given that commissioning of modernization of Chennai International Airport, Phase II (NITB Part – 1) is to be postponed to FY 2022-23, the Authority envisaged the construction of modernization of Chennai International Airport, Phase II (NITB Part – 2) of the project to commence towards the middle of FY 2022-23. AAI also submitted that a part of the existing terminal T3 is still operational and is therefore not demolished completely. This was verified during the site visit by AERA's consultant as well. Considering that the demolition of the existing T3 is yet to be done, the Authority estimated that the construction of modernization of Chennai International Airport, Phase II (NITB Part – 2) would be completed towards the end of FY 2025-26. Further, the Authority was of the opinion that modernization of Chennai International Airport, Phase II (NITB Part – 2) would take at least 6 more months to be made operational. Thus, the Authority had proposed to shift the capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 2) to the first year of the Fourth Control Period (i.e., FY 2026-27).

6.2.26. The Authority had further proposed to conduct a normative cost analysis for modernization of Chennai International Airport, Phase II (NITB Part – 2) during the tariff determination exercise of the Fourth Control Period. Along the lines of Decision 6.d. of the Second Control Period Order, the Authority had proposed to undertake a study to determine the allowable capital expenditure for modernization of Chennai International Airport, Phase II (NITB Part – 2) in the Fourth Control Period.

(E) Residential Colony

6.2.27. AAI has proposed to build a new residential colony which is due to be completed in FY 2023-24. The Authority had examined the award letter of the residential building in construction. It was noted that the total amount of the award letter was Rs. 370.89 Cr. (excl. GST). The cost levied on the tariff determination at Chennai International Airport pertains only to the aeronautical portion of the airport. As per AAI's submission, the remaining part of the new colony would be used by non-aeronautical employees, including AAI officials posted in the Southern region. The Authority was of the opinion that the construction of the residential colony could be completed by FY 2023-24 and did not propose any change to the cost allocated to Chennai International Airport.

(F) Security Equipment

6.2.28. AAI had proposed a capex plan regarding various security equipment amounting to Rs. 155.97 Cr. Major purchases and their respective purchase/completion status are as follows:

a. Perimeter Intrusion Detection System (PIDS): AAI, vide its correspondence on 18.05.2021, submitted that global tenders had been invited for PIDS at the Kolkata airport in December 2019. It further added that a tender for Chennai International Airport would be called after the finalization of the Kolkata tender. Since the equipment was directly purchased by AAI, the Authority had proposed that these expenses be allowed.

b. Body Scanner: Airport System directorate had floated the tender for 198 Body Scanners for Hypersensitive and Sensitive airports comprising a total of 63 Airports (16 - Hypersensitive and 47 - Sensitive Airports). Post meetings and discussion with the Public Investment Board, Proposal of A/A & E/S is put up to AAI Board for approval. The proposal was under scrutiny by Finance Department. A total of 19 body scanners had been included in the scope of work for Chennai International Airport.

c. Self-Baggage Drop Systems (SBDS): The tender for self-bag Drop for 14 Airports of 64 units was under preparation. The scope of work included SITC of 8 units of SBDS for Chennai Airport for which the tender was expected to be invited by first week of June 2021.

d. X-ray Baggage Inspection System (XBIS): A tender regarding this was under preparation and was expected to be invited by the first week of June 2021 as per AAI's communication. The scope of work included the supply of total 20 units of XBIS machines for Chennai International Airport.

6.2.29. The Authority did not propose any changes to the capitalisation plan pertaining to security equipment for the Third Control Period.

(G) Construction/strengthening of pavement work

6.2.30. Capital additions pertaining to pavement related works that were newly proposed in the Third Control Period are as follows:

(G.1) Resurfacing of Main Runway 07-25: Since the nature of the work is to maintain the existing quality of the runway (and not modify it), the Authority had proposed to shift this to O&M expenses.

(G.2) Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway 07/25 merging with B-Taxi track (beyond critical portion of runway) and resurfacing between taxiway-D and taxiway-M and associated works: Aircrafts landing at Chennai International Airport had to take a detour and then make their way into the taxi track and parking bay. With these rapid exits taxiways (RET), the idle time spent on the runway is reduced thereby helping in increasing peak hour handling capacity of the terminals.

(G.3) Reconstruction and Strengthening of H-Taxi Track, 'E' - Taxi Track for Code 'E' Aircraft Operations, Construction of Link Taxi Track from RET- M to 'H' Taxi Track in Domestic Apron and Re-surfacing of Secondary Runway 12-30: The H Taxi and E-Taxi track cannot accommodate Code-E Aircrafts (airbuses) due to the narrow path of the track. Hence, aircrafts have to take alternate taxi tracks. With the reconstruction and strengthening, Code-E aircrafts can use this path for movement and reduce the operational time.

Table 96: Normative cost calculation of pavement works for Third Control Period submitted by AAI

S No.	Particulars	Area	Cost per sq.m. (with culvert)	Cost per sq.m. without culvert	Inflation Adjusted Normative Benchmark
1	Construction of Balance portion of 02 rapid exit taxiways (RET) for the main runway 07/25 merging with B-Taxi track (beyond critical portion of runway) and resurfacing between taxiway-D and taxiway-M and associated works at Chennai Airport, Chennai	RET 1 and 2 main portion – 9,071 sq.m. RET 1 and 2 Shoulders – 5,300 sq.m B taxiway re-surfacing – 37,488 sq.m. Total Pavement area (excluding resurfacing) = 14,371 sq.m.	Work Order Amount (excluding resurfacing) = Rs. 42.25 Cr. – Rs. 8.30 Cr. = Rs. 33.95 Cr. Cost per sq.m. = Rs. 23,623.96	Rs. 7,499 per sq.m.	Rs. 5,947.00 per sq.m.
2	Reconstruction and Strengthening of H-Taxi Track, 'E' - Taxi Track for Code 'E' Aircraft Operations, Construction of Link Taxi Track from RET- M to 'H' Taxi Track in Domestic Apron and Re-surfacing of Secondary Runway 12-30 at Chennai Airport, Chennai	Rigid taxiway – 32,800 sq.m. Flexible taxiway – 5,200 sq.m. Secondary runway re-surfacing – 1,34,400 sq.m. Total Pavement Area = 38,000 sq.m	Work Order Amount (excluding resurfacing) = Rs. 36.83 Cr. – Rs. 16.30 Cr. = Rs. 20.53 Cr. Cost per sq.m. = Rs. 5,402.63	Rs. 3,966 per sq.m.	Rs. 5,947.00 per sq.m.

6.2.31. The Authority had noted that the cost per sq.m. for construction of balance portion of two Rapid Exit Taxiways (RET) for the main runway 07/25 merging with B-Taxi track (beyond critical portion of runway) and resurfacing between taxiway-D and taxiway-M, is Rs. 7,499 per sq.m. This was more than the inflation adjusted normative benchmark of Rs. 5,947.00 per sq.m. for FY 2021-22. The Authority had proposed to consider a cost per sq.m. of Rs. 5,947.00 for the above capex work.

(H) Providing false ceiling and replacing of floor tiles

6.2.32. This work involved replacement of airport assets consisting of civil, electrical, HVAC, AS & IT in Terminal T1 and T4. This work also included provision of additional infrastructure and new facilities, as well as adding new features to improve ambience (i/c civil, electrical, HVAC, AS & IT works). Since T1 and T4 were modernized during Phase I of the modernisation plan, the Authority was of the opinion that this work should be dropped. Upon physical inspection, the floor tiles did not seem depleted and were expected to have a life of at least 5 years from FY 2020-21.

The Authority was also of the opinion that the work of a false ceiling must not be pursued in the existing terminal buildings. The Authority acknowledged AAI's comment on the electricity saving that may occur due to a prolonged cooling effect by the false ceiling. However, the Authority believed that a false ceiling would reduce the natural lighting (thereby increasing costs) and impede the beauty of the high ceilings built as per the Phase I modernisation plans.

(I) Enhancement of CBR value in basic strip of main runway and secondary runway

6.2.33. This work included increasing the CBR value of the basic strip of main and secondary runways at Chennai International Airport. Currently, the California Bearing Ratio (CBR) value in the graded portion of both, the main runway and secondary runway, is in the range of 4 to 8. However, as per DGCA CAR, the graded portion of basic strip of runways should have a CBR strength equal to 15 to 20. Since this work pertains to security and quality improvements, the Authority did not propose any changes in this.

(J) Resurfacing of perimeter road

6.2.34. Resurfacing includes strengthening of perimeter road by adding addition of one layer of bituminous course. Due to continuous wear and tear, the gaps and cracks are being patched through AMCs which results only in short-term benefits. Moreover, since resurfacing was last done 6-7 years back, it needs to be redone in order to maintain quality. Lastly, since this work also included the expansion of the perimeter road so that two CFTs can pass simultaneously, the Authority had proposed to consider this work to be a capital addition to the airport and did not propose any other material change.

(K) Others

6.2.35. (K.1.) Additions/alterations to toilets: Upon site visit by AERA's consultant, it was observed that the work involved a complete modification of toilets in T1 and T4. Since these were essential to maintain quality passenger experience, the Authority had proposed to consider this as capital work.

(K.2.) Artistic painting works at city side: As per the master plan for modernisation of Chennai Airport, AAI was planning on designing the interiors of the building with local architecture, culture, performing arts, and festivals. This work would involve installation of various murals and wall arts that depicted the local theme of Chennai using traditional materials.

(K.3.) Other works included the following capital expenditure:

- Miscellaneous electrical works (Rs. 3.15 Cr.)
- Replacement of existing conventional column light fittings with RGB LED fittings (Rs. 2.83 Cr.)
- Strengthening of roofing in T-1 and T- 4 Terminals (Rs. 2.00 Cr.)
- Flood Mitigation measures by constructing underground sumps (Rs. 2.00 Cr.)
- MLCP link bridge (Rs. 2.48 Cr.)
- Other miscellaneous works (Rs. 26.39 Cr.)

6.2.36. Based on the examination by the Authority in the paragraphs above on new capital additions proposed in the Third Control Period, the Authority had proposed to consider the capital additions as detailed in the table below:

Table 97: New Aeronautical Capital Additions for the Third Control Period proposed to be considered by the Authority

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
D	New Integrated Terminal Building (Part – 2)	D.1	Modernization of Chennai International Airport, Phase II (NITB Part – 2) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	631.29	-	(631.29)
		D.2	Electrical Part 2	198.14	-	(198.14)
		D.3	Baggage Handling System Part 2	189.42	-	(189.42)
		D.4	Others	183.74	-	(183.74)
		D	**Sub-total (NITB Part 2)**	**1,202.59**	-	(1,202.59)
E	Residential Colony			184.93	184.93	
F	Security Equipment	E.1	PIDS	40.00	40.00	-
		E.2	Body Scanner	47.50	47.50	-
		E.3	DARK	41.54	41.54	-
		E.4	Others	26.93	26.93	-
		E	**Sub-total (Security Equipment)**	**155.97**	**155.97**	-
G	Construction/ strengthening of pavement work	G.1	Resurfacing of Main Runway 07-25	30.00	-	(30.00)
		G.2	Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway	35.00	32.77	(2.23)
		G.3	Reconstruction and strengthening of H-taxi track and 'E' - taxi track.	44.00	44.00	-
		G	**Pavement works (sub-total)**	**109.00**	**76.77**	(32.23)
H	Providing false ceiling and replacing of floor tile			60.84	-	
I	Enhancement of CBR value in Basic strip of Main Runway and Secondary Runway			50.00	50.00	
J	Resurfacing of perimeter road			10.00	10.00	
K	Others	K.1	Additions/alterations to existing toilets in TB	9.50	9.50	-
		K.2	Artistic painting works at city side.	5.00	5.00	-
		K.3	Other works	28.86	28.54	(0.32)
		K	**Others (sub-total)**	**43.36**	**43.04**	(0.32)
	Total			**1,816.70**	**520.72**	(1,295.98)
	Financing Allowance			27.61	-	(27.61)
	IDC			52.98	2.99	(49.99)

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
	Project division expenses capitalized (Exp. Cap)			30.72	9.67	(21.05)
	Total (including IDC)			**1,928.01**	**533.38**	(1,394.63)

III. Other Capital Additions for the Third Control Period

6.2.37. Details regarding the other capital works (in order to maintain efficiency at the airport) that were submitted by AAI are as follows:

Table 98: Other Aeronautical Capital Additions as submitted for the Third Control Period as submitted by AAI

Reference	Project / Group	No.	Particulars	Proposed Cost (Rs. Cr.)
L	Other electric works			112.47
M	Replacement of vehicles			4.15
N	IT related	N.1	Replacement of computers and IT hardware	5.19
		N.2	New IT infrastructure and software	15.35
		N	**IT related (sub-total)**	**20.54**
	Total			**137.15**
	Financing Allowance			2.28
	IDC			5.85
	Project division expenses capitalized (Exp. Cap)			7.53
	Total (including IDC)			**152.81**

6.2.38. The Authority had examined the capital additions submitted by AAI for the Third Control Period. The same has been given in detail in the following paragraphs:

(L) Other electrical works

6.2.39. Other electrical works include provision, replacement and augmentation of electrical works in the existing terminal buildings T-1 and T-4, as well as the operational areas. Upon examination, AAI had submitted that these expenses would pertain to:

a. Ground lighting and perimeter lighting facilities
b. Internal and external electrification of T1 and T4
c. Fire-fighting and fire alarm works in T1 and T4

6.2.40. In its submission, AAI had claimed that the amount would get capitalised in FY 2025-26. Upon inquiry, AAI had clarified that these expenses are to be carried out across the five years of the Third Control Period in order to maintain the quality and standard of operations at the Chennai International Airport. The Authority was of the opinion that such capital works would lead to better passenger facilitation and improve the operational efficiency of the airport. Barring the change due to the revised terminal building ratio, the Authority had not proposed any change for other electrical works.

(M) Replacement of vehicles

6.2.41. Replacement of vehicles pertained to routine replacement of existing vehicles at Chennai International Airport. The life of vehicles is 5 years or 1.5 lakh kilometres, whichever is less. Replacement of vehicles includes:

- Replacement of SUVs, jeeps, and motorcycles worth Rs. 3.14 Cr.
- Replacement of ambulances worth Rs. 0.64 Cr.
- Replacement of tractors worth Rs. 0.37 Cr.

The Authority had not proposed any change in the vehicle replacement plans since it contributed in maintaining a smooth flow of operations at the airport.

(N) IT Related:

6.2.42. Details regarding IT related expenses are provided as follows:

(N.1.) Replacement of computers and hardware: This capital expenditure included replacement of desktop with software and printers. While replacement of desktops with software amounts to capital expenditure of Rs. 4.31 Cr., replacement of various printers amounts to capital expenditure of Rs. 0.87 Cr.

(N.2.) New IT infrastructure and software: While capital expenditure on introduction of new IT infrastructure amounts to Rs. 10.75 Cr., capital expenditure on refreshing IT infrastructure at Chennai International Airport amounts to Rs. 4.59 Cr.

6.2.43. The Authority had proposed the following other capital additions for the Third Control Period after considering the abovementioned points:

Table 99: Other Aeronautical Capital Additions for the Third Control Period as proposed to be considered by the Authority

Reference	Project / Group	No.	Particulars	Submitted by AAI	Proposed by Authority	Difference
L	Other electric works			112.47	108.90	(3.57)
M	Replacement of vehicles			4.15	4.15	-
N	IT related	N.1	Replacement of computers and IT hardware	-	5.19	
		N.2	New IT infrastructure and software	-	15.35	
		N	**IT related (sub-total)**	-	**20.54**	
	Total			**137.15**	**133.58**	(3.57)
	Financing Allowance			2.28	-	(2.28)
	IDC			5.85	8.59	2.74
	Project division expenses capitalized (Exp. Cap)			7.53	3.16	(4.37)
	Total (including IDC)			**152.81**	**145.34**	7.47

Total aeronautical capital additions proposed by the Authority in the Third Control Period

6.2.44. Based on the discussion above, the total capital additions proposed to be considered by the Authority in the Third Control Period is tabulated below:

Table 100: Aeronautical Capital Additions for the Third Control Period proposed to be considered by the Authority

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
Capital Additions Deferred from the Second Control Period to the Third Control Period						
A	New Integrated Terminal Building (Part– 1)	A.1	Modernization of Chennai International Airport, Phase II (NITB Part – 1) Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	601.67	574.74	(26.93)
		A.2	Electrical Part 1	187.79	152.14	(35.65)
		A.3	Baggage Handling System Part 1	197.47	177.72	(19.75)
		A.4	Passenger Boarding Bridge & Visual Docking Guidance System Part 1	44.31	36.38	(7.93)
		A.5	Interior works (Civil) Part 1	47.25	42.52	(4.73)
		A.6	Others	155.1	139.59	(15.51)
		A	**Sub-total (NITB Part 1)**	**1,233.58**	**1,123.09***	(110.49)
B	Storm water drain	B.1	Modification of Storm water drain (Phase I) 5 kms	210	165.05	(44.95)
		B.2	Modification of Storm water drain (Phase II) 5 kms	200	0	(200.00)
		B.3	Modification of Storm water drain (Phase III) 3 kms	120	0	(120.00)
		B	**Sub-total (Storm Water Drain)**	**530**	**165.05**	(364.95)
C	Construction/strengthening of pavement related works deferred from SCP to TCP	C.1	Straightening of B-Taxiway	76.25	76.25	-
		C.2	Construction of balance portion of link taxiway's 'N1' and 'F'.	29.94	29.94	-

Reference	Project / Group	No.	Particulars	Submitted by AAI	Proposed by Authority	Difference
				(1)	(2)	(3) = (2) – (1)
		C.3	Construction of 'R' taxi track	58.96	58.96	-
		C	**Pavement works (sub-total)**	**165.15**	**165.15**	-
Subtotal of Capital Additions Deferred from the Second Control Period to the Third Control Period	Total			**1,928.73**	**1,453.29**	(475.44)
	Financing Allowance			21.99	0	(21.99)
	IDC			49.34	9.49	(39.85)
	Project division expenses capitalized (Exp. Cap)			48.82	34.23	(14.59)
	Total (including FA, IDC and Exp. Cap)			**2,048.88**	**1,497.01**	(551.87)
New Capital Additions proposed in the Third Control Period						
D	New Integrated Terminal Building (Part – 2)	D.1	Modernization of Chennai International Airport, Phase II (NITB Part – 2) Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	631.29	-	(631.29)
		D.2	Electrical Part 2	198.14	-	(198.14)
		D.3	Baggage Handling System Part 2	189.42	-	(189.42)
		D.4	Others	183.74	-	(183.74)
		D	**Sub-total (NITB Part 2)**	**1,202.59**	-	(1,202.59)
E	Residential Colony			184.93	184.93	-
F	Security Equipment	E.1	PIDS	40	40	-
		E.2	Body Scanner	47.5	47.5	-
		E.3	DARK	41.54	41.54	-
		E.4	Others	26.93	26.93	-
		E	**Sub-total (Security Equipment)**	**155.97**	**155.97**	-
G		G.1	Resurfacing of Main Runway 07-25	30	-	(30.00)
		G.2	Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway	35	32.77	(2.23)

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
		G.3	Reconstruction and strengthening of H-taxi track and 'E' - taxi track.	44	44	-
		G	**Pavement works (sub-total)**	**109**	**76.77**	(32.23)
H	Providing false ceiling and replacing of floor tile			60.84	-	(60.84)
I	Enhancement of CBR value in Basic strip of Main Runway and Secondary Runway			50	50	-
J	Resurfacing of perimeter road			10	10	-
K	Others	K.1	Additions/alterations to existing toilets in TB	9.5	9.5	-
		K.2	Artistic painting works at city side.	5	5	-
		K.3	Other works	28.86	28.54	(0.32)
		K	**Others (sub-total)**	**43.36**	**43.04***	(0.32)
Subtotal of New Capital Additions proposed in the Third Control Period	Total			**1,816.70**	**520.72**	(1,295.98)
	Financing Allowance			27.61	0	(27.61)
	IDC			52.98	2.99	(49.99)
	Project division expenses capitalized (Exp. Cap)			30.72	9.67	(21.05)
	Total (including FA, IDC and Exp. Cap)			**1,928.01**	**533.38**	(1,394.63)
Other Capital Additions proposed to be considered in the Third Control Period						
L	Other electric works			112.47	108.90	(3.57)
M	Replacement of vehicles			4.15	4.15	-
N	IT related	N.1	Replacement of computers and IT hardware	5.19	5.19	-
		N.2	New IT infrastructure and software	15.35	15.35	-
		N	**IT related (sub-total)**	**20.54**	**20.54**	-
Subtotal of Other Capital Additions proposed to be considered in the Third Control Period	Total			**137.15**	**133.58**	(3.57)
	Financing Allowance			2.28	-	(2.28)
	IDC			5.85	8.59	2.74
	Project division expenses capitalized (Exp. Cap)			7.53	3.16	(4.37)
	Total (including FA, IDC and Exp. Cap)			**152.81**	**145.34**	7.47
Grand Total of Capital Additions Proposed in the Third Control Period						
Grand total of capital additions proposed to	Total			**3,882.58**	**2,107.59**	**(1,774.99)**
	Financing Allowance			51.88	-	(51.88)
	IDC			108.17	28.61	(79.56)
	Project division expenses capitalized (Exp. Cap)			87.07	47.06	(40.01)

Reference	Project / Group	No.	Particulars	Submitted by AAI	Proposed by Authority	Difference
				(1)	(2)	(3) = (2) – (1)
be considered in the Third Control Period	Total (including FA, IDC and Exp. Cap)			4,129.70	2,175.73	(1,946.43)

*Terminal Building Ratio applied as per 6.2.13

Aeronautical Allocation of Assets for the Third Control Period

6.2.45. The following table summarises the allocation ratios considered by AAI in its MYTP submission:

Table 101: Allocation ratios for the Third Control Period submitted by AAI

Allocation to Aero (%)	2022	2023	2024	2025	2026
Terminal Building Ratio	94.22	93.69	93.52	91.85	91.47
Employee Headcount Ratio	97.74	97.74	97.74	97.74	97.74
Vehicle Ratio	97.30	97.30	97.30	97.30	97.30
Employee Quarter Ratio	99.55	99.55	99.55	99.55	99.55

6.2.46. The Authority had sought clarification from AAI regarding the computation of the allocation ratios. AAI responded vide its email dated 18.05.2021 ("Data/Documents required for the Chennai MYTP") explaining the same. A summary is provided in the table below.

Table 102: Description of allocation ratios as submitted by AAI

Allocation Ratios	Description
Terminal Building Ratio	The terminal building ratio has been computed based on the identified aeronautical and non-aeronautical parts of the airport.
Employee Headcount Ratio	Employees have been categorised into aeronautical, non-aeronautical and common services. The employees pertaining to common services have been allocated to aeronautical and non-aeronautical categories based on the ratio between aeronautical and non-aeronautical employees from all departments.
Vehicle Ratio	Vehicle ratio has been calculated based on the use of vehicles in aeronautical, non-aeronautical and common departments.
Employee Quarter Ratio	The employee quarter ratio has been computed based on the employee quarters of aeronautical, non-aeronautical and common employees.

6.2.47. The Authority had noted that the non-aeronautical component of TBLR ratio is in the range of 5-8%. As mentioned earlier, this was in contrast to the 8-12% that the IATA and IMG norms recommend. Therefore, the Authority had proposed to consider a TBLR of 90:10 for the Third Control Period. The Authority had sought stakeholder comments in this regard.

Depreciation for the Third Control Period

6.2.48. The Authority had noted that AAI had considered a depreciation rate of 20.00% for Computer Software for the Third Control Period. This was not in line with the depreciation rate of 16.67% as mentioned in Order No. 35/2017-18. The Authority had proposed to revise the depreciation rate. Moreover, the following table summarizes the revised depreciation working after incorporating the changes in capex plan:

Table 103: Depreciation proposed to be considered by the Authority for Third Control Period

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Runways, Taxiways, Aprons	22.63	26.38	27.79	28.68	28.34	**133.82**
Roads, Bridges & culvert	5.53	6.64	8.65	9.15	9.16	**39.13**
Terminal/Other Buildings	38.55	49.79	61.05	63.98	66.99	**280.36**
Building – Residential	0.18	0.18	3.32	6.46	6.45	**16.60**
Security Fencing	0.38	0.38	0.38	0.38	0.38	**1.91**
Boundary wall (operational)	2.98	2.98	2.68	2.05	2.02	**12.71**
Other Buildings - Unclassified	0.85	0.78	0.78	0.69	0.69	**3.79**
Computer, IT Hardware & Access.	2.16	17.21	31.88	32.54	23.71	**107.51**
Computer Software	0.06	0.06	0.06	0.06	0.02	**0.27**
Plant and Machinery	16.11	16.18	16.20	16.25	16.50	**81.23**
Tools & Equipment	3.40	3.40	3.40	3.40	3.40	**17.00**
Office Furniture & Fixtures	3.43	3.43	3.41	2.95	1.98	**15.20**
Other Vehicles	0.57	0.57	0.52	0.44	0.35	**2.45**
Electrical Installations	58.82	68.31	45.19	43.59	46.10	**262.01**
Office Equipment	0.39	0.34	0.30	0.09	0.01	**1.12**
Furniture & Fixtures	4.36	7.41	6.90	6.91	6.91	**32.49**
X-Ray Baggage	6.34	14.70	21.46	21.63	21.64	**85.78**
CFT	1.22	1.35	1.51	1.57	1.60	**7.25**
Total	**167.98**	**220.10**	**235.47**	**240.81**	**236.26**	**1,100.63**

RAB for the Third Control Period

6.2.49. Considering the above, the RAB for the Third Control Period as considered by the Authority is shown below:

Table 104: RAB proposed to be considered by the Authority for Third Control Period

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Opening RAB [1]	1,694.05	1,886.26	2,935.94	2,990.22	2,964.03	-
Additions to RAB [2]	360.18	1,269.78	289.76	214.62	41.39	**2,175.73**
Deletions [3]	-	-	-	-	-	-
Depreciation [4]	167.98	220.10	235.47	240.81	236.26	**1,100.63**
Closing RAB [5] = [1 + 2 - 3 – 4]	1,886.26	2,935.94	2,990.22	2,964.03	2,769.16	-
Average RAB [6] = [(1 + 5)/2]	1,790.15	2,411.10	2,963.08	2,977.13	2,866.60	-

6.3. Stakeholder comments regarding RAB and depreciation for the Third Control Period

6.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 16/2021-22 with respect to regulated asset base and depreciation for the Third Control Period. The comments by stakeholders are presented below:

AAI's comments on RAB and depreciation for the Third Control Period

6.3.2. AAI commented as follows on the shifting of construction of modernization of Chennai International Airport, Phase – II (NITB Part 2) to the Fourth Control Period:

"AERA's Contentions

- *AAI submitted that the construction of modernization of Chennai International Airport, Phase II (NITB Part – 2) will be started after commissioning modernization of Chennai International Airport, Phase II (NITB Part – 1). Given that commissioning of modernization of Chennai International Airport, Phase II (NITB Part – 1) is to be postponed to FY 2022-23, AERA envisages the construction of modernization of Chennai International Airport, Phase II (NITB Part – 2) of the project to commence towards the middle of FY 2022-23. AAI also submitted that a part of the existing terminal T3 is still operational and is therefore not demolished completely. This was verified during the site visit by AERA's consultant as well. Considering that the demolition of the existing T3 is yet to be done, AERA estimates that the construction of modernization of Chennai International Airport, Phase II (NITB Part – 2) would be completed towards the end of FY 2025-26. Further, AERA is of the opinion that modernization of Chennai International Airport, Phase II (NITB Part – 2) would take at least 6 more months to be made operational. Thus, AERA proposes to shift the capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 2) to the first year of the Fourth Control Period (i.e., FY 2026-27). (Para 5.2.25 of CP)*

AAI's Submission

- *AAI submits the following reasons for considering NITB part 2 in third control period i.e in FY 23-24 itself:*
  - i. *The NITB was not planned to function separately as part-1 and part-2. It is a single Integrated building catering to both International and Domestic passengers (as per DPR submitted by PMC and approved by AAI, CCEA, PIB and MOCA). Only due to site constraints, and to have unhindered airport operations, the construction was planned in two parts.*
  - ii. *The contracts awarded to the agencies like L&T (Main work), Godrej (Interior works) and Pteris Global (Baggage Handling System) are consolidated contracts for both the parts of the terminal. Mobilizing material, Machinery, and labor after a break in construction is not feasible.*
  - iii. *There may be huge monetary escalations on material and labor costs. The Construction of a Terminal of this magnitude requires Specialized fabrications and skilled manpower. Bringing all the specialized agencies currently on board after a break may lead to coordination issues.*
  - iv. *There shall be contractual obligations, if the work is halted for more than the specified timelines in the contract. As it is already mentioned that the work awarded was for the entire project and not for parts.*
  - v. *It is further submitted that AERA, in the Order No. 57/2020-21 for DIAL has analysed as follows:*

4.5.2 Authority has also examined the comments made by IATA, AOC, BAOA and the response to their comments by DIAL regarding the freeze and review of Expansion Capex. In this regard, Authority is in agreement with DIAL and BAOA that the expansion of airport should not be put on hold as the traffic for the airport is expected to reach the pre-COVID levels within the next two years and post the same is expected to follow the past growth trajectory which would require the presence of the added capacity expansion facilities for efficient and effective handling of traffic. Authority is of the view that the current Covid-19 pandemic which has resulted in a massive drop in traffic could be utilized to expedite the construction activities in the airport.

4.5.3 Authority is of the view that capex projects being long term in nature should not be withheld or suspended due to temporary phenomenon including the pandemic which is expected to not have a consistent long-lasting impact on the traffic in the long-term future. The necessity for capex for Phase 3A could be questioned if there is enough justification that the traffic handled pre-COVID shall never be achieved. However, such a prediction could mean that economic growth will also come to a halt in the future and will never be able to achieve the earlier achieved levels. As such a prediction cannot be justified, Authority considers that the capex schedule for Phase 3A expansion has to be considered with the necessary delays due to Covid-19 as submitted by the airport operator.

Authority would like to add that given the magnitude of the capex that is being undertaken by DIAL, mandating a complete freeze on all capex activities could indeed lead to a much higher escalation in costs associated with delay and could in the end lead to a much higher cost burden being passed on to the passengers. Authority has hence decided to consider the timelines as submitted by DIAL for the capex for Phase 3A expansion which have been assessed post impact of COVID pandemic.

vi. *Similar to the situation in DIAL, AAI submits that the current capacity of Chennai International Airport is only 17 MPPA though it was operating at 22.5 MPPA in pre-covid period. This is expected to grow to about 35 MPPA in the next 10 years. AAI submits that the current dip in traffic is only a temporary phenomenon, and this should not affect the development of infrastructure to cater to anticipated growth for the future. AAI re-iterates that all infrastructure projects should aim at future proofing and should not be hindered by short term situations.*

<u>AAI's Request</u>

- *Considering the above facts, AAI requests AERA to allow Part 2 of the NITB in third control period itself i.e in FY 2023-24. Further, AAI requests AERA to re-instate all operating costs (R&M, other operating costs, employee costs, utilities (power cost may be considered as 40% as submitted in MYTP instead of 33% as proposed by AERA due to shifting of Part 2 of Phase 2), etc. which have been proposed to be disallowed by AAI due to shifting of part 2 to fourth control period) in third control period itself as proposed by AAI in its MYTP."*

6.3.3. AAI commented as follows on the re-adjustment of 1% in ARR in case of non-completion of approved project costs:

<u>"AERA's Contention</u>

- *AERA noted that AAI has had a trend of proposing capex in the respective control period and postponing it to the next control period. While AAI proposed capitalisation worth Rs. 2,862.71 Cr. in the First Control Period, it executed only Rs. 2,235.90 Cr. Similarly, in the Second Control Period, AAI had proposed capital additions worth Rs. 1,434.2 Cr., it capitalised only Rs. 243.73 Cr. Although AERA acknowledges the effect of the pandemic in the Second Control Period, it is of the opinion that the passenger must not bear the burden in case of a delay in capitalisation due to the airport operator.*
- *Thus, AERA proposes to reduce 1% of the total project cost from ARR/Target Revenue as readjustment in case any particular capital project is not completed as per the approved capitalization schedule. This will be examined during the true up of the Third Control Period, at the time of determination of tariff for the Fourth Control Period. (Para 5.2.2 and 5.2.3 of CP)*

AAI's Submission

- *AAI submits that the shifting of the phase 1 of the terminal from second control period to third control period was because of the pandemic. Due to the severe impact of Covid-19 which resulted in lockdowns in Tamil Nadu, construction activities at site were severely impacted and there was steady migration of labor back to their native places, resulting in delays in completion of Terminal. Hence, AAI submits that the shifting of terminal work to third control period cannot be construed as a benchmark as it was due to a delay which was beyond the control of AAI.*

AAI's Request

- *While AAI strives to stick to the committed deadlines, we request AERA to not levy any penalty in case any projects are not completed due to circumstances that may be beyond the control of the Airport."*

6.3.4. AAI commented as follows on the disallowance of financing allowance:

"AERA's Contentions

- *AERA noted that financing allowance and the methodology for computation of the same was detailed in the airport guidelines and the same would need to be provided to the Airport Operator. However, the Airport Operator has computed financing allowance on the entire WIP amount being capitalised, whereas AERA is of the view that such an allowance is essentially the IDC for a project and should be provided only on the debt portion of the project funds. Accordingly, AERA has considered IDC to be provided based on revisions in the proposed capital expenditure discussed for the Third Control Period and the notional gearing considered for the Third Control Period. (Para 5.2.1)*

AAI's Submission and Request

- *We request AERA to refer to the detailed explanations provided in comments to the Second Control Period True up."*

6.3.5. AAI commented as follows on expenditure for resurfacing of main runway 07/25 being considered as an operating and maintenance cost:

"AERA's Contentions

- *(G.1) Resurfacing of Main Runway 07-25: Since the nature of the work is to maintain the existing quality of the runway (and not modify it), AERA proposes to shift this to O&M expenses. (Para 5.2.30 of CP)*
- *AERA proposes to consider capital expenditure submitted by AAI on resurfacing of main runway worth Rs. 30.00 Cr. as R&M expenditure. (Para 8.2.10 of CP)*

AAI's Submission

- *The current PCN value determined for Main Runway is 105/F/C/W/T. The last resurfacing of the Main Runway was carried out in FY 2016. Hence, there is a requirement for carrying out resurfacing once again.*
- *AAI submits that with the resurfacing, PCN value shall increase. Hence it is considered under Capital Expenditure. The regular maintenance works such as rubber removal, etc., are considered under O&M expenses. This being major expenditure and as there will be increase in PCN value, this shall be considered under Capital Expenditure.*

AAI's Request

- *Since there is an expected increase in PCN value, AAI requests AERA to consider this spend as a capital expenditure."*

6.3.6. AAI commented as follows on normative cost being applied in respect of construction of balance portion of 02 RET:

"AERA's Contentions

- *AERA noted that the cost per Sq.m. for construction of balance portion of two Rapid Exit Taxiways (RET) for the main runway 07/25 merging with B-Taxi track (beyond critical portion of runway) and resurfacing between taxiway-D and taxiway-M, is Rs. 7,499 per Sq.m. This is more than the inflation adjusted normative benchmark of Rs. 5,947.00 per Sq.m. for FY 2021-22. AERA proposes to consider a cost per Sq.m. of Rs. 5,947.00 for the above capex work. This led to reduction in the additions to RAB by Rs. 2.23 crores. (Para 5.2.31 of CP)*

AAI's Submission

- *AAI submits the following justification for difference in the actual cost vs normative cost for this project is as under:*

  i. *The operational area works in Chennai Airport are being done in one of the busiest Airports in India. It is imperative to ensure unhindered operations while the works are in progress. This requires adopting to quicker methods of construction by using improved pavement designs.*
  ii. *In Chennai Airport, it is required to connect the new taxiway being constructed to the existing operational runways as well as taxiways at 16 places.*
  iii. *At all these 16 locations, a special pavement design was adopted to quickly complete the work on day-to-day basis to minimize runway/taxiway closure.*
  iv. *It is required to construct 12 of the culverts across the newly built taxiways to ensure proper drainage.*
  v. *The soil condition is also poor at most of the places. The pavement section was improvised to accommodate the poor soil conditions.*

AAI's Request

- *AAI requests AERA to consider the cost as submitted for this project as the deviation from the normative cost has been justified above."*

6.3.7. AAI commented as follows on the terminal building ratio for the Third Control Period being considered as 90%:10%:

"AERA's Contentions

- *AERA notes that the non-aeronautical component of TBLR ratio is in the range of 5-8%. As mentioned earlier, this is in contrast to the 8-12% that the IATA and IMG norms recommend. Therefore, AERA proposes to consider a TBLR of 90:10 for the Third Control Period. AERA seeks stakeholder comments in this regard. (Para 5.2.47 of CP)*

AAI's Submission

  i. *As per the design, the new integrated terminal has commercial space of about 8.70%.*

ii. *The actual commercial area utilization in T1 and T4 is also lesser than 7.50%. AAI further submits that the commercial area cannot be increased due to space constraints inside the Terminal Building.*

iii. *Hence, if one considers the utilization in T1 to T4, the average % of commercial area will be lesser than 7.50% i.e average of T2 and T3's commercial space of 8.70% and the T1 and T4's commercial space of less than 7.50% will result in an overall average of less than 7.50% of commercial space.*

iv. *Since AERA has already considered 7.5% in SCP for the proposed terminal building, we request the same may be continued in TCP for the same proposed terminal building.*

v. *AAI further submits that AERA has mentioned in Para 5.2.47 of the CP that 8-12% is the recommended range of commercial space by IATA and IMG norms. However, the basis for considering 10% as the commercial area is adhoc and without any basis.*

<u>AAI's Request</u>

i. *AAI thus requests AERA to consider 7.50% as the terminal building ratio for the proposed additions in the third control period.*

ii. *True up of the ratio may be carried out in the next control period based on a study to determine the actual commercial space and re-determine the Terminal building ratio accordingly."*

6.3.8. AAI commented as follows on the use of allocation ratios on common assets for the Third Control Period:

<u>"AERA's Contentions</u>

- *As per Table 81 of CP, AERA has applied aeronautical ratio for assets which are purely aeronautical in nature:*

Reference	Project / Group	No.	Particulars	Submitted by AAI	Proposed by Authority	Difference
				(1)	(2)	(3) = (2) – (1)
Capital Additions Deferred from the Second Control Period to the Third Control Period						
A	New Integrated Terminal Building (Part - 1)	A.1	Modernization of Chennai International Airport, Phase II (NITB Part – 1) Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	601.67	574.74	(26.93)
		A.2	Electrical Part 1	187.79	152.14	(35.65)
		A.3	Baggage Handling System Part 1	197.47	177.72	(19.75)
		A.4	Passenger Boarding Bridge & Visual Docking Guidance System Part 1	44.31	36.38	(7.93)
		A.5	Interior works (Civil) Part 1	47.25	42.52	(4.73)
		A.6	Others	155.1	139.59	(15.51)
		A	Sub-total (NITB Part 1)	1,233.58	1,123.09*	(110.49)

<u>AAI's Submission</u>

- *AAI submits that as per the above table, Baggage Handling systems, Airport Systems, Signages, STP, Airport Systems packages (i.e., XBIS-HB, DFMD, ETD & HHMD), Passenger boarding bridges and visual docking guidance system are purely aeronautical in nature. This has been provided by AERA in the independent study reports on asset allocation for MIAL and DIAL also. However, aeronautical ratio has been applied even on the above assets resulting in a reduction in the additions to RAB by about Rs 27 crores.*

- *AAI also submits that the ratio adopted for electricals portion is around 20% (Rs 35.65/187.79 crores). Reasons for such application of such high ratio is not provided nor justified in the CP. AAI submits that the same terminal building ratio as applicable for other heads ought to be applied on this head also.*

<u>AAI's Request</u>

- *AAI requests AERA to consider the above assets which are purely aeronautical in nature and add back the disallowances from RAB as well as depreciation accordingly."*

Other stakeholder comments on RAB and Depreciation for the Third Control Period

6.3.9. IATA submitted the following regarding the capitalisation of modernisation of Chennai International Airport Phase – II NITB Part 1 in FY 2022-23:

- *"In lieu of any project details provided by AAI with the Authority's logic that operationalization of New Integrated Terminal Building (NITB) phase 2 Part 1 is not likely to be feasible before FY2022-23 given delays resulting from COVID impacts, IATA confirms in principle that major development such as NITB ORAT takes at least 6 month per best practices."*

6.3.10. IATA submitted the following regarding the use of a terminal building ratio of 90:10 for the Third Control Period:

- *"IATA supports AERA's proposal to consider the Terminal Building Ratio of 90:10 for the Third Control Period."*

6.3.11. IATA submitted the following regarding the shifting of capitalisation of modernisation of Chennai International Airport Phase – II NITB Part 2 to the Fourth Control Period:

- *"Based on AAI's information that NITB phase 2, Part 2 cannot progress until Part 1 is completed, we agree in lieu of details provided by the airport with Authority's logic the design, development, construction, and operationalization including ORAT is likely to push the programme beyond into the Fourth Control Period, with a cost estimate of 1202.59cr.*

- *As context for the development of NITB Phase 2, Part 2, IATA would add:*

  i. *All non-essential capital investment costs recovered through aeronautical charges should be avoided to the greatest extent possible given the crippling impact of Covid on airline users.*
  ii. *Consultation and transparency regarding AAI's capital investment plans is very limited with 1 or 2 short stakeholder update meetings. An effective AUCC consultation process would benefit both stakeholders and MAA to identify users' needs and ensure functionality meet required levels of service, capacity, and operational efficiency. IATA would be pleased to support such a process in coordination with AOC and users moving forwards.*
  iii. *Traffic Forecasts indicated there could be capacity challenges developing towards the end of CP3 assuming the passenger terminal capacity is 28MAP. Every effort should be made by AAI to apply technology and design solutions to avoid constraints and level of service passenger impacts in this respect for existing and planned future facilities. COVID trends have accelerated the application and use of technology that can help to mitigate capacity impacts for DOM and INT traffic."*

6.3.12. IATA submitted the following regarding the capitalisation of residential colony at Chennai International Airport in the Third Control Period:

- *"We would respectfully comment that the rationale for a Residential colony funded by users for staff with Aeronautical duties is rather unclear and an unusual practice to IATA's knowledge outside India, as employees are typically expected to commute to and from their place of work or find accommodations independently. We request the rationale is shared and if accepted, the cost of accommodation is reflected as a reasonable reduction in the relevant staff overhead costs."*

6.3.13. IATA submitted the following regarding the proposal to readjust (reduce) the RAB by 1% if projects are not completed as per the approved capitalisation schedule in the Third Control Period:

- *"IATA welcomes the proposal of 1% readjustment to RAB if projects are not completed/capitalised as per the approved capitalization schedule. We would also like to reiterate the need for a more effective AUCC process to ensure that users are consulted in a meaningful manner to obtain agreement for capital projects, including any subsequent changes over their development."*

6.3.14. IATA submitted the following regarding the capital additions proposed to be considered by the Authority for the Third Control Period:

- *"IATA broadly agrees with the position reflected in Table 81 regarding Third Control Period additions."*

6.3.15. IndiGo submitted the following regarding RAB for the Third Control Period:

- *"IndiGo submits that AERA has observed AAI's historical trend in postponing the proposed capex to a subsequent ' Control Period' and has rightly held that the passenger must not bear the burden in case of a delay in capitalisation due to the airport operator.*

- *In view of the above, and similar to proposal under para 5.2.3 of the CP for Third Control Period, IndiGo requests AERA to impose the penalty of 1% or higher, as deemed fit, on the total project cost from the ARR for all the delays in capex by AAI till date. This approach is in line with the decision of Hon'ble TDSAT judgment dated 16 December 2020 applicable for Bangalore International Airport Limited (BIAL).*

- *IndiGo appreciates that considering the reduced traffic owing to COVID-19, AERA has rationalised the capital expenditure and excluded certain proposed additions by AAI to RAB. However, AERA and AAI must ensure that 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 by AAI.*

- *In particular, AERA may review the cost of New Integrated Terminal Building (NITB) Part - I proposed to be capitalised at Rs. 92,287 per sq. mtrs. (Refer Table 72 of the CP). IndiGo submits that as per Normative Order No. 07/2016-17 "in the matter of normative approach to building blocks in economic regulation of major airports - capital costs reg." dated 13.06.2016 (Normative Order), the ceiling cost per sq. mtrs. for terminal building is stated as INR 65,000. IndiGo would also like to highlight that the cost per square meter of the terminal building in the case of Vishakhapatnam Airport is INR 58,546.60 per sq. mt., which can be considered as a benchmark costs.*

- *Accordingly, IndiGo submits that any cost to be allocated for capital expenditures should be within the normative norms prescribed by the Normative Order.*

- *Further, respect of Residential Colony, AERA may kindly note that 'Residential Quarters' in the case of Patna Airport were approved at a total cost of Rs 32.56 Crore. Accordingly, AERA is requested to review the proposed cost of Rs. 370.89 Crores for building the new 'Residential Colony' at Chennai Airport.*

- *Further, IndiGo requests AERA to conduct an independent study for allocation of assets and allowable capital expenditure in the Third Control Period in accordance with AERA Act, 2008. It may be pertinent to note that AERA has itself recommended the need for such study for allowable capital expenditure as mentioned in para 5.2.26 of the CP."*

6.3.16. IndiGo submitted the following regarding depreciation for the Third Control Period:

- *"While IndiGo acknowledges the correct depreciation rate applied by AERA in relation to Computer Software, being in accordance with AERA Order No. 35/2017-18 reg 'Useful Life of Airport Assets', IndiGo submits that AERA should consider useful life of Building including Terminal Building as sixty (60) years (as envisaged in AERA Order No. 35/2017-18 read with Schedule II of Companies Act 2013, as applicable), and revise the amount of depreciation accordingly.*

- *It is pertinent to note 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. IndiGo submits 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."*

6.3.17. SpiceJet submitted the following regarding section 6.1., and Paras 6.2.2., 6.2.89. to 6.2.97., and 6.2.44. on RAB and depreciation for the Third Control Period:

- *We appreciate that considering the reduced traffic owing to COVID-19, AERA has rationalised the capital expenditure and excluded certain proposed additions by AAI - Chennai to RAB. Stoppage of non-safety related capital expenditure:*

- *As noted by the Authority, AAI - Chennai has had a trend of proposing capex in the respective control period and postponing it to the next control period. While AAI – Chennai proposed capitalisation worth Rs. 2,862.71 Cr. in the First Control Period, it executed only Rs. 2,235.90 Cr. Similarly, in the Second Control Period, AAI - Chennai had proposed capital additions worth Rs. 1,434.2 Cr., it capitalised only Rs. 243.73 Cr.*

- *Further, Authority acknowledged the effect of the pandemic in the Second Control Period, also opined that the passenger must not bear the burden in case of a delay in capitalisation due to the airport operator.*

- *As mentioned above it will take around two (2) -three (3) years for the flight operations to reach to its pre COVID-19 peak levels.*

- *In view of the above, in order to support the airlines to continue and sustain its operations, all non-essential capital expenditure proposed by AAI - Chennai should be put on hold/ deferred, unless deemed critical from a safety compliance perspective. Further, in case AAI - Chennai wants to make capital expenditure, then it should be at no additional expense to the airlines until the project is completed and put to use by the airlines. Similarly, if any proposed Capex projects can be deferred from the Third Control Period to the Fourth Control Period, same should be considered by the Authority."*

6.4. AAI's response to stakeholder comments regarding RAB and depreciation for the Third Control Period

6.4.1. With respect to IATA's comment on the capitalisation of modernisation of Chennai International Airport Phase – II NITB Part 1 in FY 2022-23, AAI responded as follows:

- *"AAI submits that it is in agreement with the treatment carried out by AERA in regard to Part 1 of Phase 2 of NITB in the Consultation Paper."*

6.4.2. With respect to IATA's comment on the use of a terminal building ratio of 90:10, AAI submitted that its response detailed in Para 6.3.7 be referred.

6.4.3. With respect to IATA's comment on the shifting of the modernisation of Chennai International Airport Phase – II NITB Part -2, and SpiceJet's comment on deferring projects from the Third Control Period to the Fourth Control Period, AAI submitted that its response detailed in Para 6.3.2 be referred.

6.4.4. With respect to IATA's and IndiGo's comments on capitalisation of residential colony at Chennai International Airport in the Third Control Period, AAI responded as follows:

- *"Chennai is one of the major metro city in India. Chennai Airport is lying within city circle with dense road traffic conjunctions. Those who have staying faraway of Chennai Airport are very difficult to and from their place of work. Airport is mandatory to keep Fire Fighter staffs and Operation Staffs for operation of flight handling purpose. The Fire Fighter staffs and Operation staffs are requiring to stay nearby the Airport to meet any emergency of flight landing, avoid undue incidents and maintaining Chennai Airport in hassle free operations for 24 x 7.*

- *Residential colonies are situated very close to the airports. For operational requirements and better management, residential colonies have been set up by AAI for all its employees. This practice is common amongst all AAI airports.*

- *Further, employees do not get House Rent Allowance as they are provided accommodation in these colonies. This practice has led to decrease in recurring employee cost as HRA would have been paid to employees if these quarters were not constructed. Hence, AAI states that this leads to operational efficiencies and better management of operations."*

6.4.5. With respect to IATA's and IndiGo's comments on the proposal to readjust (reduce) the RAB by 1% if projects are not completed as per the approved capitalisation schedule in the Third Control Period, AAI submitted that its response detailed in Para 6.3.3 be referred.

6.4.6. With respect to IndiGo's comment on the normative cost of modernisation of Chennai International Airport Phase – II NITB Part 1, AAI responded as follows:

- *"In respect of normative costs for terminal building, AAI submits that the cost per sq mt estimated by AAI for NITB is well within the normative costs plus inflation determined vide Order No. 7/16-17. Hence, AAI submits that it has not deviated from a cost per sq mt which has been already determined by AERA and which is a well settled matter."*

6.4.7. With respect to IndiGo's comment on depreciation for the Third Control Period, AAI responded as follows:

- *"The annexure to Amendment No. 01 to Order 35/2017-18 issued by AERA states that the useful life for terminal buildings can be 30 or 60 years as evaluated by the airport operator. Hence, AAI submits that the useful lives adopted by AAI is in line with approved rates prescribed by AERA in its order."*

6.5. Authority's analysis on stakeholders' comments regarding RAB and depreciation for the Third Control Period

6.5.1. The Authority has taken note of Indigo's comment on the re-adjustment (reduction) of 1% of uncapitalised project costs in the Second Control Period. In this regard, the Authority has decided not to make any adjustment as no such provision was made by the Authority in the Second Control Period Order.

The Authority has also taken note of IATA, and AAI's comments for the Third Control Period, regarding the re-adjustment (reduction) of 1% of non-completed project costs in the ARR/target revenue. The Authority acknowledges that AAI has done due diligence while proposing the capitalisation schedule upon which tariffs are determined in the Third Control Period. Thus, the contention of AAI to not readjust ARR if projects are not completed, is not justified. Accordingly, the Authority decides to readjust (reduce) 1% of the uncapitalised project cost from ARR/target revenue in true-up exercise of the Third Control Period if any particular project is not capitalised as per the capex schedule approved in the tariff order. The Authority further clarifies that in case there is delay in completion of the project beyond the approved timeline given in the tariff order due to any reason beyond the control of AAI or its contracting agencies and is justified, the same would be considered by the Authority at the time of tariff determination of the Fourth Control Period.

6.5.2. The Authority has carefully noted IATA and AAI's comments regarding terminal building ratio for the Third Control Period. The Authority analysed the components and allocation of capital additions into aeronautical, non-aeronautical and common assets considered by AAI. Pursuant to the analysis, the Authority has noted that the non-aeronautical component is lower considering the size and scale of operations of Chennai International Airport and its likely potential for enhanced non-aeronautical revenue, more so after considering the capitalisation of NITB part 1. Accordingly, the Authority decides to consider a ratio of 90:10 of aeronautical to non-aeronautical allocation as the terminal building ratio, in line with the IMG recommendations in order to expand non-aeronautical operations at Chennai International Airport.

The Authority intends to ascertain the reasonableness and efficiency of AAI to increase non-aeronautical component at Chennai International Airport at the time of true-up of the Third Control Period.

6.5.3. The Authority has noted AAI's comments on financing allowance. In this regard, Para 4.3.46 to Para 4.3.50 may be referred.

6.5.4. The Authority takes note of IATA's comment on the need for a more effective AUCC process. The Authority expects AAI to conduct an AUCC meeting as per the Direction No. 5 of the AERA

Guidelines, 2011 for capital works that are to be capitalised in the Fourth Control Period including the works postponed to the Fourth Control Period as per Consultation Paper 16/2021-22 dated 07th September 2021.

6.5.5. The Authority has noted comments from IndiGo and SpiceJet regarding deferring of non-essential capital expenditure to the Fourth Control Period. The Authority observes that the benefit of the stakeholders is considered before accepting any proposals for capital additions by taking into account the essentiality, cost efficiency and requirement of aeronautical services to airport users. The same has been ensured by the Authority for the capital additions at Chennai International Airport. Further, capital additions are also deliberated on and agreed to in the Airports Users Consultative Committee (AUCC) meetings.

Further, the Authority would like to state that the airport users pay a considerable price to avail services at the airport and any delay beyond its extended date of completion of the projects would result in the Airport Operator getting an undue advantage at the expense of the airport user as the Airport Operator would be able to recover the cost of investments without the investments happening in the first place or the investment not culminating in asset capitalisation. In this regard, the Authority decides to consider the provision for an adjustment cost to the extent of 1% of the project cost while determining RAB in the case of delay in capitalisation of the project beyond the stipulated dates. The Authority considers that such a provision would ensure that efficiency standards are maintained by the Airport Operator and would dis-incentivise AAI from allowing the project getting delayed beyond the committed timelines for implementation of the project thereby ensuring efficiency in the cost incurrence. The same is a balancing exercise which ensures that the Airport Operator meets the commitment to complete the Project as per the schedule submitted.

6.5.6. The Authority has reviewed IndiGo's comments regarding deferment of capital expenditure in the Second Control Period and accordingly penalising AAI for the same. It may be noted that the there is no such direction in the Second Control Period tariff order. Therefore, the Authority decides not to retrospectively readjust the ARR for delays in capitalisation.

I. Aeronautical capital additions deferred from the Second Control Period to the Third Control Period

(A) Modernization of Chennai International Airport, Phase II (NITB Part – 1)

6.5.7. The Authority has analysed IATA's comment and AAI's response thereon regarding capitalising modernization of Chennai International Airport, Phase II (NITB Part – 1) in FY 2022-23. The Authority has taken into account the impact of the Covid-19 pandemic, the Operational Readiness and Airport Transfer (ORAT) period and the current status of the work. Accordingly, the Authority expects AAI to operationalise NITB part 1 by the end of FY 2022-23.

Further, in order to avoid a delay in capitalisation, the Authority has provisioned for a 1% readjustment (reduction) of the non-completed project cost from the ARR/target revenue provided that there is no delay in completion of the project due to unforeseeable circumstances as deemed appropriate by the Authority during the true-up of the Third Control Period.

6.5.8. The Authority has also analysed IndiGo's comment and AAI's response regarding the use of the normative cost of the project. The Authority notes that the approved per sq m. cost for NITB is Rs. 1,00,000 as on FY 2020-21 (along with a yearly increase on account of inflation) as per para 9.54 of Second Control Period Order No. 03/2018-19 dated 16th April 2018. An excerpt of the same is as follows:

"The Authority has already undertaken studies for a few other major airports for determining the reasonableness of the capital expenditure for their respective terminal buildings. As per these studies, the cost works out to approximately Rs. 100,000 per sq. m. of terminal building assuming glass & steel facade. The Authority is of the view, that this cost reflects a realistic estimate of the capital expenditure. The Authority, therefore, decides to consider capital expenditure towards first phase of the construction of terminal building based on cost per sq. m. benchmark of Rs. 100,000 per sq. m. subject to review, later on."

6.5.9. The Authority has noted AAI's comment regarding application of allocation ratios in modernization of Chennai International Airport, Phase – II NITB Part -1. The Authority notes that the bifurcation of individual components of the project may not be accurately bifurcated into aeronautical and non-aeronautical portions. Thus, the Authority decides to consider an average ratio of 90:10 based on the IMG recommendations and apply the same on the overall capitalisation amount of NITB – part 1. The reasons for the same have been elaborated in Para 6.5.2.

6.5.10. Based on the above examination, the Authority decides the aeronautical capital additions of projects deferred from the Second Control Period to the Third Control Period remain as stated in Table 94.

II. New aeronautical capital additions proposed for the Third Control Period as submitted by AAI

(D) Modernization of Chennai International Airport, Phase II (NITB Part – 2)

6.5.11. The Authority has carefully noted AAI's comments and counter comments to IATA's comment regarding the shifting of NITB Part 2 capitalization to the Fourth Control Period and its reference to DIAL Order No. 57/2020-21 dated 30th December 2020. The Authority's observations are as follows:

i. The Authority's proposal of shifting the capitalization of NITB Part -2 to the next control period is based on a site-visit and an independent analysis of the projected completion date of NITB Part – 2 by the Authority's consultant.

ii. The Authority has observed a trend among airport operators of proposing capital additions in one control period and then postponing the same to the next control period. The Authority is of the view that such a practice is not in the interest of airport users as they start paying higher tariffs in anticipation of provisions of enhanced services against the capital expenditure proposed, which is then postponed to the next control period by the airport operator. Therefore, the Authority has taken this into consideration while proposing the capitalisation of NITB Part 2 in the Fourth Control Period.

iii. Further, the Authority reiterates that the capitalisation of NITB Part 2 in the Fourth Control Period is not disallowance of capital additions in the Third Control Period. As discussed in the stakeholder consultation meeting, the Authority reiterates that NITB Part 2 shall be eligible for true-up from the actual year of capitalisation, if it were to be capitalised in the Third Control Period.

6.5.12. Hence, the Authority sees no merit in AAI's contention and continues with its proposal to consider the capitalisation of NITB Part 2 to take place in the Fourth Control Period as per Para 6.2.26. Further, the Authority also notes the delays in project implementation by AAI in the previous control periods.

(E) Residential Colony

6.5.13. The Authority has analysed IATA and IndiGo's comments and AAI's response thereon regarding the capitalisation of the residential colony. The Authority notes that setting up of residential colonies for airport employees is a functional requirement across AAI airports. This saves O&M expenditure which would have otherwise been incurred on house rent allowance.

(G) Construction/strengthening of pavement work

(G.1) Resurfacing of main runway 07-25

6.5.14. The Authority has examined AAI's comment regarding the capitalisation of resurfacing of main runway 0725 at Chennai International Airport. The Authority is of the view that since the resurfacing of the main runway 0725 is expected to lead to an increase in the PCN value, it will ensure enduring benefits to the users upon its completion. Along these lines, the Authority decides to consider resurfacing of the main runway 0725 as an aeronautical capital addition to the airport.

On completion of work, AAI shall conduct a re-evaluation of the PCN and submit a report to the Authority.

(G.2) Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway 07/25 merging with B-Taxi track (beyond critical portion of runway) and resurfacing between taxiway-D and taxiway-M and associated works

6.5.15. The Authority has noted AAI's comment on normative cost for RETs. Further, the Authority notes that the costs of work submitted by AAI and considered by the Authority is excluding the cost of culverts.

6.5.16. The Authority also notes that the normative cost benchmarks as per Order No. 07/2016-17 dated 06[th] June 2016 are used in order to avoid over-expenditure on pavement or terminal building works at the airport. This is a measure used by the Authority to avoid over-burdening passengers with higher tariffs and to ensure the operational efficiency of the airport operator.

6.5.17. However, the Authority notes that the capital work is located beyond the critical portion of the runway and involves improvements in the pavement sections where soil condition is poor. The Authority, therefore, decides to consider the cost submitted by AAI for construction of balance portion of 2 RETs.

6.5.18. Based on the above examination, the Authority decides the new aeronautical capital additions of the Third Control Period as per the following table:

Table 105: New aeronautical capital additions for the Third Control Period as decided by the Authority

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
D	New Integrated Terminal Building (Part – 2)	D.1	Modernization of Chennai International Airport, Phase II (NITB Part – 2) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	631.29	-	(631.29)

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
		D.2	Electrical Part 2	198.14	-	(198.14)
		D.3	Baggage Handling System Part 2	189.42	-	(189.42)
		D.4	Others	183.74	-	(183.74)
		D	**Sub-total (NITB Part 2)**	**1,202.59**	-	(1,202.59)
E	Residential Colony			184.93	184.93	
F	Security Equipment	E.1	PIDS	40.00	40.00	-
		E.2	Body Scanner	47.50	47.50	-
		E.3	DARK	41.54	41.54	-
		E.4	Others	26.93	26.93	-
		E	**Sub-total (Security Equipment)**	**155.97**	**155.97**	-
G	Construction/ strengthening of pavement works	G.1	Resurfacing of Main Runway 07-25	30.00	30.00	-
		G.2	Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway	35.00	35.00	-
		G.3	Reconstruction and strengthening of H-taxi track and 'E' - taxi track.	44.00	44.00	-
		G	**Pavement works (sub-total)**	**109.00**	**109.00**	-
H	Providing false ceiling and replacing of floor tile			60.84	-	60.84
I	Enhancement of CBR value in Basic strip of Main Runway and Secondary Runway			50.00	50.00	
J	Resurfacing of perimeter road			10.00	10.00	
K	Others	K.1	Additions/alterations to existing toilets in TB	9.50	9.50	-
		K.2	Artistic painting works at city side.	5.00	5.00	-
		K.3	Other works	28.86	28.54	(0.32)
		K	**Others (sub-total)**	**43.36**	**43.04**	(0.32)
	Total			**1,816.70**	**552.95**	**(1,263.75)**
	Financing Allowance			27.61	-	(27.61)
	IDC			52.98	3.85	(49.99)
	Project division expenses capitalized (Exp. Cap)			30.72	10.18	(21.05)
	Total (including IDC)			**1,928.01**	**566.98**	**(1,362.40)**

Note: The aeronautical additions (excluding IDC and expense capitalisation) proposed by the Authority has increased by Rs. 32.23 Cr. from Rs. 520.72 Cr. as per Table 97, to Rs. 552.95 Cr. due to the inclusion of capital additions in G.1 (Rs. 30.00 Cr.) and G.2. (Rs. 2.23 Cr.)

III. Other aeronautical capital additions for the Third Control Period

6.5.19. The Authority has noted that no comments were submitted by AAI and other stakeholders on other capital additions for the Third Control Period. Therefore, the Authority decides the other aeronautical capital additions as per Table 99.

Total aeronautical capital additions decided by the Authority in the Third Control Period

6.5.20. Based on the above examination, the Authority decides the aeronautical capital additions in the Third Control Period as per the following table:

Table 106: Aeronautical capital additions for the Third Control Period as decided by the Authority

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
Capital Additions Deferred from the Second Control Period to the Third Control Period						
A	New Integrated Terminal Building (Part– 1)	A.1	Modernization of Chennai International Airport, Phase II (NITB Part – 1) Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	601.67	574.74	(26.93)
		A.2	Electrical Part 1	187.79	152.14	(35.65)
		A.3	Baggage Handling System Part 1	197.47	177.72	(19.75)
		A.4	Passenger Boarding Bridge & Visual Docking Guidance System Part 1	44.31	36.38	(7.93)
		A.5	Interior works (Civil) Part 1	47.25	42.52	(4.73)
		A.6	Others	155.1	139.59	(15.51)
		A	**Sub-total (NITB Part 1)**	**1,233.58**	**1,123.09***	(110.49)
B	Storm water drain	B.1	Modification of Storm water drain (Phase I) 5 kms	210	165.05	(44.95)
		B.2	Modification of Storm water drain (Phase II) 5 kms	200	0	(200.00)
		B.3	Modification of Storm water drain (Phase III) 3 kms	120	0	(120.00)
		B	**Sub-total (Storm Water Drain)**	**530**	**165.05**	(364.95)
C	Construction/strengthening of pavement related works deferred from SCP to TCP	C.1	Straightening of B-Taxiway	76.25	76.25	-
		C.2	Construction of balance portion of link taxiway's 'N' and 'F'	29.94	29.94	-

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
		C.3	Construction of 'R' taxi track	58.96	58.96	-
		C	**Pavement works (sub-total)**	**165.15**	**165.15**	-
Subtotal of Capital Additions Deferred from the Second Control Period to the Third Control Period	Total			1,928.73	1,453.29	(475.44)
	Financing Allowance			21.99	0	(21.99)
	IDC			49.34	9.49	(39.85)
	Project division expenses capitalized (Exp. Cap)			48.82	34.23	(14.59)
	Total (including FA, IDC and Exp. Cap)			**2,048.88**	**1,497.01**	(551.87)
New Capital Additions proposed in the Third Control Period						
D	New Integrated Terminal Building (Part – 2)	D.1	Modernization of Chennai International Airport, Phase II (NITB Part – 2) Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	631.29	-	(631.29)
		D.2	Electrical Part 2	198.14	-	(198.14)
		D.3	Baggage Handling System Part 2	189.42	-	(189.42)
		D.4	Others	183.74	-	(183.74)
		D	**Sub-total (NITB Part 2)**	**1,202.59**	-	(1,202.59)
E	Residential Colony			184.93	184.93	-
F	Security Equipment	E.1	PIDS	40	40	-
		E.2	Body Scanner	47.5	47.5	-
		E.3	DARK	41.54	41.54	-
		E.4	Others	26.93	26.93	-
		E	**Sub-total (Security Equipment)**	**155.97**	**155.97**	-
G	Construction/ strengthening of pavement works	G.1	Resurfacing of Main Runway 07-25	30.00	30.00	-
		G.2	Construction of Balance portion of 2 rapid exit taxiways (RET) for the main runway	35.00	35.00	-

Reference	Project / Group	No.	Particulars	Submitted by AAI	Proposed by Authority	Difference
				(1)	(2)	(3) = (2) – (1)
		G.3	Reconstruction and strengthening of H-taxi track and 'E' - taxi track.	44.00	44.00	-
		G	**Pavement works (sub-total)**	**109.00**	**109.00**	-
H	Providing false ceiling and replacing of floor tile			60.84	-	(60.84)
I	Enhancement of CBR value in Basic strip of Main Runway and Secondary Runway			50.00	50.00	-
J	Resurfacing of perimeter road			10.00	10.00	-
K	Others	K.1	Additions/alterations to existing toilets in TB	9.50	9.50	-
		K.2	Artistic painting works at city side.	5.00	5.00	-
		K.3	Other works	28.86	28.54	(0.32)
		K	**Others (sub-total)**	**43.36**	**43.04**	(0.32)
Subtotal of New Capital Additions proposed in the Third Control Period	Total			**1,816.70**	**552.95**	**(1,263.75)**
	Financing Allowance			27.61	-	(27.61)
	IDC			52.98	3.85	(49.99)
	Project division expenses capitalized (Exp. Cap)			30.72	10.18	(21.05)
	Total (including FA, IDC and Exp. Cap)			**1,928.01**	**566.98**	**(1,362.40)**
Other Capital Additions proposed to be considered in the Third Control Period						
L	Other electric works			112.47	108.90	(3.57)
M	Replacement of vehicles			4.15	4.15	-
N	IT related	N.1	Replacement of computers and IT hardware	5.19	5.19	-
		N.2	New IT infrastructure and software	15.35	15.35	-
		N	**IT related (sub-total)**	**20.54**	**20.54**	-
Subtotal of Other Capital Additions proposed to be considered in the Third Control Period	Total			**137.15**	**133.58**	**(3.57)**
	Financing Allowance			2.28	-	(2.28)
	IDC			5.85	8.59	2.74
	Project division expenses capitalized (Exp. Cap)			7.53	3.16	(4.37)
	Total (including FA, IDC and Exp. Cap)			**152.81**	**145.34**	**7.47**
Grand Total of Capital Additions Proposed in the Third Control Period						
Grand total of capital additions proposed to be considered in	Total			**3,882.58**	**2,139.82**	**(1,742.66)**
	Financing Allowance			51.88	-	(51.88)
	IDC			108.17	21.93	(86.27)
	Project division expenses capitalized (Exp. Cap)			87.07	47.58	(39.57)

Reference	Project / Group	No.	Particulars	Submitted by AAI	Proposed by Authority	Difference
				(1)	(2)	(3) = (2) – (1)
the Third Control Period	**Total (including FA, IDC and Exp. Cap)**			**4,129.70**	**2,209.32**	**(1,920.38)**

6.5.21. In summary, the Authority notes that changes decided in the RAB of the Second Control Period would have an impact on the RAB of Chennai International Airport, Chennai. Further, the same would have an impact on depreciation as well. Based on the detailed examination above, the Authority decides to consider aeronautical capital additions in the Third Control Period as follows:

Table 107: Yearly aeronautical capital additions for the Third Control Period as decided by the Authority

FY Ending March 31 (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Runways, Taxiways, Aprons	217.79	31.17	52.56	31.61	1.00	**334.13**
Roads, Bridges & culvert	2.52	37.29	10.51	0.03	0.03	**50.38**
Terminal/Other Buildings	-	672.39	0.49	176.82	0.45	**850.15**
Building - Residential	-	-	188.36	0.09	0.08	**188.53**
Computer, IT Hardware & Access.	5.96	87.06	3.05	3.07	6.11	**105.25**
Plant and Machinery	-	3.42	0.00	5.38	2.12	**10.92**
Electrical Installations	33.52	236.93	28.36	27.93	31.45	**358.19**
Furniture & Fixtures	48.26	0.02	0.02	0.02	0.02	**48.35**
X-Ray Baggage	54.39	197.50	5.26	0.15	0.13	**257.44**
CFT	-	4.00	1.06	0.90	0.00	**5.96**
Total	**362.45**	**1,269.80**	**289.68**	**246.01**	**41.39**	**2,209.32**

<u>Depreciation for the Third Control Period</u>

6.5.22. The Authority has noted IndiGo's comment regarding the depreciation rate of terminal buildings. As per Order No. 35/2017-18 dated 12th January 2018, the Authority has given the option to airport operators to decide the useful life for terminal buildings as either 30 years or 60 years. AAI, based on its assessment, has submitted 30 years as the useful life for terminal buildings. Therefore, the Authority has decided not to consider any further revisions in this regard.

6.5.23. Based on the above, the depreciation decided by the Authority for the Third Control Period is given in the table below:

Table 108: Depreciation for the Third Control Period decided by the Authority

FY Ending March 31 (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Runways, Taxiways, Aprons	22.66	26.46	27.87	29.28	29.47	**135.74**
Roads, Bridges & culvert	5.53	6.64	8.65	9.15	9.16	**39.13**
Terminal/Other Buildings	38.66	49.91	61.16	64.09	67.10	**280.92**
Building - Residential	0.19	0.18	3.32	6.46	6.46	**16.61**
Security Fencing	0.38	0.38	0.38	0.38	0.38	**1.91**
Boundary wall (operational)	2.98	2.98	2.68	2.05	2.02	**12.71**
Other Buildings - Unclassified	0.85	0.78	0.78	0.69	0.69	**3.79**
Computer, IT Hardware & Access.	1.96	17.01	31.60	32.54	23.71	**106.81**

FY Ending March 31 (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Computer Software	0.24	0.24	0.24	0.23	0.20	**1.16**
Plant and Machinery	17.84	17.91	17.93	17.98	18.23	**89.89**
Tools & Equipment	3.54	3.54	3.53	3.53	3.53	**17.67**
Office Furniture & Fixtures	3.49	3.49	3.47	3.01	2.04	**15.50**
Other Vehicles	0.59	0.59	0.54	0.46	0.37	**2.56**
Electrical Installations	59.83	69.32	46.20	44.60	47.10	**267.05**
Office Equipment	0.39	0.34	0.30	0.09	0.01	**1.12**
Furniture & Fixtures	4.82	7.87	7.36	7.36	7.37	**34.77**
X-Ray Baggage	6.57	14.94	21.69	21.87	21.88	**86.95**
CFT	1.22	1.35	1.51	1.58	1.61	**7.26**
Total	**171.75**	**223.92**	**239.20**	**245.35**	**241.32**	**1,121.55**

RAB for the Third Control Period

6.5.24. Based on the discussions in the previous sections on the aeronautical capital additions and depreciation, the Authority decides to consider the following RAB for the Third Control Period:

Table 109: RAB for the Third Control Period as decided by the Authority

FY ending March 31 (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Opening Aeronautical RAB (A)	1,740.28	1,930.98	2,976.86	3,027.33	3,027.98	-
Aeronautical Assets Capitalised during the year (B) (Table 107)	362.45	1,269.80	289.68	246.01	41.39	**2,209.32**
Disposals/Transfers (C)	-	-	-	-	-	-
Depreciation (D) (Table 108)	171.75	223.92	239.20	245.35	241.32	**1,121.55**
Closing Aeronautical RAB (A+B+C+D) (E)	1,930.98	2,976.86	3,027.33	3,027.98	2,828.05	-
Average RAB [F] [(A+E)/2]	1,835.63	2,453.92	3,002.09	3,027.66	2,928.02	-

6.6. Authority's decisions regarding 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 RAB and depreciation for the Third Control Period:

6.6.1. To readjust (reduce) 1% of the uncapitalised portion of the project cost from the ARR/target revenue in case any particular capital project is not capitalised as per the capitalisation schedule approved in the tariff order as per Para 6.5.1, during the true-up of the Third Control Period.

6.6.2. To consider a terminal building ratio of 90:10 for the Third Control Period as mentioned in Para 6.5.2.

6.6.3. To disallow financing allowance for the Third Control Period as mentioned in Para 6.5.3.

6.6.4. To consider the aeronautical capital additions given in Table 107 for the Third Control Period.

6.6.5. To consider depreciation given in Table 108 for the Third Control Period.

6.6.6. To consider the aeronautical RAB given in Table 109 for the Third Control Period.

6.6.7. To true-up the aeronautical capital additions, asset allocation, and depreciation for the Third Control Period based on the actual asset addition completed in the Third Control Period and subject to its reasonableness.

7. FAIR RATE OF RETURN FOR THE THIRD CONTROL PERIOD

7.1. AAI's submission regarding the FRoR for the Third Control Period

7.1.1. AAI has submitted that Chennai International Airport would require debt to fund the capital expenditures that are planned to take place in the Third Control Period. Further, AAI has also submitted that a debt:equity ratio of 60%:40% was considered for the cost of modernization of Chennai International Airport, Phase II (NITB Part – 1 and Part - 2) and the remaining capital expenditure would be financed by debt and equity in the ratio of 50%:50%. Considering this composition of capital for the Third Control Period, AAI has submitted the projected debt and equity computation as follows.

Debt and Cost of Debt

7.1.2. The cost of debt submitted by AAI for the FRoR calculation of the Third Control Period pertaining to Chennai International Airport is 6.21% per annum.

7.1.3. The outstanding debt and cost of debt as submitted by AAI for the Third Control Period of Chennai International Airport is summarized in the table below.

Table 110: Debt computation for Third Control Period submitted by AAI

FY Ending 31 March (in Rs. Cr.)	2022	2023	2024	2025	2026
Opening Debt	-	911.79	893.45	1530.00	1574.21
Closing Debt	911.78	893.45	1,530.00	1,574.20	1,589.63
Average Debt	455.89	902.62	1,211.72	1,552.10	1,581.92
Cost of Debt (%)	6.21	6.21	6.21	6.21	6.21

*Closing debt for FY21 as submitted by AAI is zero

Equity and Cost of Equity

7.1.4. The cost of equity as submitted by AAI for the Third Control Period is 16.00% per annum.

7.1.5. The equity projections of Chennai International Airport for the Third Control Period as submitted by AAI is summarized in the table below:

Table 111: Equity computation for Third Control Period submitted by AAI

FY Ending 31 March (in Rs Cr.)	2022	2023	2024	2025	2026
Equity	2,347.23	2,322.42	2,859.63	2,940.33	3,074.83
Cost of Equity (%)	16.00	16.00	16.00	16.00	16.00

Fair Rate of Return

7.1.6. Based on the financials pertaining to Chennai International Airport as discussed above, AAI has computed the FRoR for the Third Control Period. The same has been summarized in the table below.

Table 112: FRoR for Third Control Period submitted by AAI

FY Ending 31 March (in Rs. Cr.)	2022	2023	2024	2025	2026
Debt [1]	911.78	893.45	1,529.99	1,574.20	1,589.63
Equity [2]	2,347.23	2,322.42	2,859.63	2,940.33	3,074.83
% of Debt [3] = [1]/[1+2]	27.98	27.78	34.85	34.87	34.08
% of Equity [4] = [2]/[1+2]	72.02	72.22	65.15	65.13	65.92
Cost of Debt [5] (%)	6.21	6.21	6.21	6.21	6.21
Cost of Equity [6] (%)	16.00	16.00	16.00	16.00	16.00
FRoR [(3*5) + (4*6)] (%)	13.26	13.28	12.59	12.59	12.66

7.2. Authority's examinations regarding Fair Rate of Return for the Third Control Period as part of Consultation Paper

Debt and Cost of Debt

7.2.1. The Authority had taken note of the cost of debt and the debt projections for the Third Control Period as submitted by AAI. In order to verify the debt taken by Chennai International Airport for the Third Control Period and the cost of debt regarding the same, the Authority had sought the repayment structure as well as the term loan agreement from AAI. AAI in its email vide 05.05.2021 ("Chennai MYTP for 3rd control Period and true up of 2nd Control Period --- follow up Query") responded stating that AAI availed a term loan facility of Rs. 2100 Cr. from M/s. Axis Bank. AAI had further explained that the interest rate on this loan is at 6.21% per annum and that the borrowings of Chennai International Airport have been allocated from the borrowings for AAI as a whole.

7.2.2. With regard to the discussion in the para above, the Authority had noted a confirmation via AAI's email vide 18.05.2021 ("Information required from AAI- Chennai Airport") wherein Jt. General Manager (Fin.), AAI had verified the term loan facility details as mentioned in Para 7.2.1. Additionally, it had been explained in the aforementioned email that the said term loan facility had been taken for a period of 10 years with three years moratorium period for payment of principal amount and that AAI has availed Rs. 1828.07 Cr. till 31.03.2021 in different tranches.

7.2.3. The Authority had noted that as per the MTYP submission for Chennai International Airport, AAI had not included the closing debt of Rs. 100.63 Cr. for FY 2020-21 in the debt computation for the Third Control Period as stated in Table 110. The Authority had proposed to include the same. The Authority was of the understanding that parts of the term loan have been availed from FY 2021-22 onwards (in accordance with the capitalisation plan). The Authority was of the opinion that AAI must pass on the full benefit. of the three-year moratorium to the passengers and schedule its repayment from FY 2024-25.

7.2.4. The Authority had also noted that AAI had accounted for depreciation in its submission of debt proportion. The Authority had proposed to rectify the same and recalculate the debt proportion (excluding depreciation) for Chennai International Airport in the Third Control Period.

7.2.5. The Authority had recalculated the debt computation considering the total fund requirement of Chennai International Airport as per the capitalisation for the Third Control Period, and the change in repayment structure as discussed above. The debt computation is summarized as follows:

Table 113: Debt computation proposed to be considered for Third Control Period by the Authority

FY Ending 31 March	2022	2023	2024	2025	2026
Opening Debt [1]	100.63	280.72	1,027.92	1,172.80	1,133.27
Drawdown [2]	180.09	747.20	144.88	107.31	20.69
Repayment [3]	-	-	-	147.00	168.00
Closing Debt [4] = [1] + [2] - [3]	280.72	1,027.92	1,172.80	1,133.27	986.42
Average Debt [5] = ([1] + [4])/2	190.68	654.32	1,100.36	1,153.03	1,059.84
Cost of Debt (%)	6.21	6.21	6.21	6.21	6.21

Equity and Cost of Equity

7.2.6. The Authority had analysed the cost of equity pertaining to Chennai International Airport as submitted by AAI for the Third Control Period. The Authority had acknowledged the debt taken by AAI for Chennai International Airport in the Third Control Period and its impact on a change in the debt-equity ratio. However, the Authority was of the opinion that the gearing ratio is still suboptimal and does not justify a cost of equity of 16.00% per annum as submitted by AAI. The Authority had drawn reference to the independent studies conducted in the tariff determination exercise for DIAL (Refer to Order No. 57/2020-21) and MIAL (Refer to Order No.64/2020-21). The independent study considered an optimal gearing ratio of 48%:52% and determined a cost of equity in the range of 15.00% to 15.50%. Given that the debt-equity ratio for Chennai International Airport ranges between 30%:70% and 12%:88% in the Third Control Period, the Authority had proposed to maintain a cost of equity of 14.00% across the Third Control Period.

7.2.7. Considering the changes in the capitalisation plan for the Third Control Period and the cost of equity, the Authority had recalculated the equity computation of Chennai International Airport. The same has been summarized in the table below.

Table 114: Equity computation proposed to be considered for Third Control Period by the Authority

FY Ending 31 March (in Rs. Cr.)	2022	2023	2024	2025	2026
Equity	2,032.37	2,554.96	2,699.84	2,807.15	2,827.84
Cost of Equity (%)	14.00	14.00	14.00	14.00	14.00

Fair Rate of Return

7.2.8. The FRoR as recalculated by the Authority after considering the points discussed above is summarized in the table below.

Table 115: FRoR proposed to be considered for Third Control Period by the Authority

FY ending March 31 (in Rs. Cr.)	2021	2022	2023	2024	202
Debt [A]	280.72	1,027.92	1,172.80	1,133.27	986.42
Equity [B]	2,032.37	2,554.96	2,699.84	2,807.15	2,827.84
Debt + Equity [C = A + B]	2,313.10	3,582.88	3,872.64	3,940.41	3,814.26

FY ending March 31 (in Rs. Cr.)	2021	2022	2023	2024	202
Cost of Debt [D]	6.21%	6.21%	6.21%	6.21%	6.21%
Cost of Equity [E]	14.00%	14.00%	14.00%	14.00%	14.00%
Individual Year Gearing	12.14%	28.69%	30.28%	28.76%	25.86%
Weighted Average Gearing	26.26%				
Weighted Average Cost of Debt	1.63%				
Weighted Average Cost of Equity	10.32%				
FRoR	11.95%				

7.3. Stakeholder comments regarding Fair Rate of Return for the Third Control Period

7.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 16/2021-22 with respect to FRoR for the Third Control Period. The comments by stakeholders are presented below:

AAI's comments on FRoR for the Third Control Period

7.3.2. AAI commented as follows on the FRoR for the Third Control Period:

"AERA's Contentions

- *6.3.1 To consider the cost of equity at 14.00% as per Table 90.*
- *6.3.2. To consider the cost of debt at 6.21% as per Table 89.*
- *6.3.3. To consider an FRoR of 11.95% for the Third Control Period as calculated in Para 6.2.8 (Table 91)*

AAI's Submission

- *AAI submits that as per the Second Control Period Order – decision no. 9.b, AERA had decided to carry out an independent study of the FRoR for major AAI airports. However, it was noted that the results of such study was not mentioned in the CP.*

- *It was also noted by AAI that AERA had referred to the workings carried out in the Orders of MIAL and DIAL and had recomputed the Cost of Equity for Chennai airport. However, it is submitted that the comparable airport set used for MIAL and DIAL along with the proximity score computations may not hold good for AAI airports. Proximity scores were computed based on three criteria - Revenue till, Ownership structure and Operations. The scores assigned for each of the airports in the comparable set would be very different if re-applied and re-computed for AAI airports. Extract of the proximity score computation is provided below:*

The proximity scores of these airports with CSMIA are as follows:

Airport	Revenue till	Ownership structure	Operations	Proximity scores
Mumbai	0.00	0.00	0.00	0.0000
Sydney	1.00	1.00	0.41	1.4726
Melbourne	1.00	1.00	1.09	1.7851
Gatwick	2.00	1.00	0.99	2.4474
Auckland	1.00	1.00	2.05	2.4935
Amsterdam	1.00	1.00	-2.28	2.6796
Johannesburg	2.00	1.00	1.50	2.6920
Changi	0.00	2.00	-2.14	2.9319
Dublin	2.00	2.00	1.56	3.2295
Heathrow	2.00	1.00	-2.47	3.3295
MAHB	2.00	1.00	-3.40	4.0670
Incheon	2.00	2.00	-2.93	4.0721
AoT	1.00	1.00	-4.15	4.3822

- *Scoring mechanism for proximity scores:*

  Revenue till structure:

  - *1 – 'single till' or where information is not available*
  - *2 – 'dual till'*
  - *3 – Hybrid Till*

  Ownership structure:

  - *1 – if 100% Government Owned/Funded*
  - *2 – if Government / private owned/funded, not being Public Private Partnership*
  - *3 – if Public Private Partnership Funded*

  Operations Scale (OpS):

  - *For each comparable airport, k, we computed the ratios of passenger, cargo and aircraft movement of these airports to that of MIAL in each of the years from 2015 to 2017.*

- *MIAL and DIAL are PPP airports and the level of traffic handled by it and the scale of operation is very different from that of AAI airports. Hence, it is submitted once again that the asset beta worked out for MIAL and DIAL based on its comparative data set cannot be applied straightaway to AAI airports.*

- *AAI had appointed M/s KPMG to carry out a study during 2011 the results of which is given below:*

Table 3: Beta of comparable airports

Airport / Group	Country	Equity Beta	Tax Rate	Debt (In Billion local currency)	Mkt Cap (In Billion local currency)	Debt /Mcap	Asset Beta
Airports of Thailand PCL	Thailand	1.14	30%	56.2	54.3	1.03	0.66
Beijing Capital International Airport	China	1.03	25%	18.5	14.8	1.25	0.53
Guangzhou Baiyun International Airport	China	0.91	25%	0.0	8.3	0.00	0.91
Shanghai International Airport	China	1.04	25%	2.5	22.0	0.11	0.96
Xiamen International Airport	China	0.95	25%	0.0	4.1	0.00	0.95
Grupo Aeroportuario del Sureste SAB de CV (Group of 9 airports in Mexico)	Mexico	0.94	30%	0.6	21.0	0.03	0.92
Grupo Aeroportuario del Pacifico SAB de CV	Mexico	0.84	30%	1.0	27.2	0.04	0.82
Grupo Aeroportuario Centro Norte, S.A. de C.V.	Mexico	0.99	30%	1.0	9.2	0.10	0.92

The median value of asset beta for the above comparable set is 0.92 which is being used as the asset beta for airport operations business of AAI. This needs to be re-levered as per the expected gearing of AAI in the control period to estimate the equity beta for AAI.

Table 4: Equity Beta for AAI

Estimated asset beta for AAI	0.92
Gearing for AAI	8.84%
Tax rate for AAI	32.45%
Equity beta for AAI	0.98

Equity beta for AAI works out to 0.98.

- *Please refer to Annexure 2 for full report as annexed in the FCP CP - Consultation Paper No. 16/2012-13.*

- *Applying the above beta for arriving at the current cost of equity, following are the results:*

Airport	MAA as per AAI based on KPMG
Third Control Period	
Gearing Type	Actual
Rf	7.56%
Asset Beta	0.9200
D/D+E	26%
D/E	0.3561
Equity Beta	1.1493
Rm-Rf	8.06%
Cost of Equity	16.82%
Cost of Debt	6.21%
FRoR	14.04%
Debt Equity ratio	34.54%:65.46%
Weighted Avg Gearing%	26.26%

- *It is further submitted that the debt rate of AAI would also increase in the third control period as the cost of debt would be reset based on the financial health and other factors of AAI.*

AAI's Request

- *AAI thus requests AERA to consider CoE of 16.82%, CoD of 6.21%, actual gearing and FRoR of 14.04% for TCP."*

Other stakeholder comments on RAB and Depreciation for the Third Control Period

7.3.3. IndiGo commented as follows on the FRoR for the Third Control Period:

- *"While IndiGo appreciates that AERA has drawn references to independent studies for FRoR conducted in case of DIAL and MIAL, independent study for FRoR should be done in case of Chennai Airport.*

- *IndiGo 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 provider like AAI has 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 kind of scenario may result in inefficiencies and higher costs, which are ultimately borne by the airlines.*

- *In view of the above, AERA is requested to immediately review WACC/FRoR by capping the returns."*

7.3.4. SpiceJet commented as follows regarding Para 7.2.8. on the FRoR for the Third Control Period:

- *"We appreciate that AERA has considered a lower FRoR of 11.95 %, which is net of income tax return to the airport operator, for the Third Control Period.*

- *However, while such fixed/ assured return favours the service provider, it creates an imbalance against the airlines, which are already suffering from huge losses and bear the adverse financial impact through higher tariffs.*

- *Due to such fixed/assured returns, Airport Operators like AAI - Chennai have no incentive to look for productivity improvement or ways of increasing efficiencies, take steps to reduce costs as they are fully covered for all costs plus their hefty returns. Such a scenario breeds inefficiencies and higher costs, which are ultimately borne by airlines. In the present scenario any assured return on investment to any services providers like AAI - Chennai, in excess of three (3) % (including those on past orders), i.e. being at par with bank fixed deposits (i.e., return on investment after the income tax), will be onerous for the airlines. Without prejudice to the above, in case the Authority is unable to accept our recommendation mentioned above, the Authority is requested to conduct an independent study for determination of FRoR to be provided to AAI - Chennai. Such independent study can be exercised by the Authority in terms of powers conferred under the Airports Economic Regulatory Authority of India Act, 2008, as amended, and in line with studies being conducted by Authority in case of certain major airport operators."*

7.4. AAI's response to stakeholder comments regarding Fair Rate of Return for the Third Control Period

7.4.1. With respect to comments from IndiGo and SpiceJet on FRoR for the Third Control Period, AAI submitted that its response detailed in Para 7.3.2 be referred.

7.5. Authority's analysis on stakeholders' comments regarding Fair Rate of Return for the Third Control Period

7.5.1. The Authority notes AAI's comment regarding the FRoR proposed in the Third Control Period for Chennai International Airport. The Authority notes that the cost of equity of 16.8% proposed by AAI for Chennai International Airport is on the higher side when compared to other major airports. The Authority has analysed the working and the report annexed in AAI's comments for the same. The Authority is of the view that the risk-free rate considered in the computation of the cost of equity is higher than the prevailing risk-free rates in the market.

7.5.2. It may be noted that the debt-equity ratio considered by the Authority and AAI is on an actual basis i.e. 26%:74% as mentioned in Table 115. Further, it may be noted that major PPP airports consider a notional debt-equity ratio of 48%:52%. The proposition of considering a notional debt-equity ratio was presented to AAI during the stakeholder consultation meeting. The Authority notes that there has been no comment from AAI regarding the same. Further, the Authority may use a notional debt-equity ratio for AAI airports in future in line with PPP airports.

7.5.3. The Authority is of the view that the actual debt-equity ratio of AAI does not justify the cost of equity of 16.8%. Therefore, the Authority decides to consider a cost of equity of 14% as mentioned in Para 7.2.6.

7.5.4. The Authority notes IndiGo's comment on assured return on investment for airport operators, and SpiceJet's comment on limiting the return on investment to 3%. The Authority notes that this predetermined return on investments is part of regulated businesses such as airports. With respect to IndiGo's and SpiceJet's suggestions to cap the FRoR in order to avoid burdening the stressed airlines, the Authority is of the view that an airport is a long-term asset while the pandemic is a short-term phenomenon that is not likely to have a long-term impact. Further, the Authority notes that in such long-term projects, investors focus on a stable return on equity rather than on the project life cycle. Therefore, the Authority finds that it is not pragmatic or fair to cap the FRoR.

7.5.5. Based on the cost of equity and cost of debt mentioned in the Authority's examination in the Consultation Paper and the changes in RAB decided by the Authority, the Authority decides to consider the following FRoR for the Third Control Period:

Table 116: FRoR for the Third Control Period as decided by the Authority

FY ending March 31 (in Rs. Cr.)	2022	2023	2024	2025	2026
Debt [A]	280.72	1,027.92	1,172.80	1,133.27	986.42
Equity [B]	2,078.21	2,600.79	2,745.67	2,852.98	2,873.67
Debt + Equity [C = A + B]	2,358.93	3,628.71	3,918.47	3,986.25	3,860.09
Cost of Debt [D]	6.21%	6.21%	6.21%	6.21%	6.21%
Cost of Equity [E]	14.00%	14.00%	14.00%	14.00%	14.00%
Individual Year Gearing	11.90%	28.33%	29.93%	28.43%	25.55%
Weighted Average Gearing	25.92%				
Weighted Average Cost of Debt	1.61%				
Weighted Average Cost of Equity	10.37%				
FRoR	11.98%				

7.6. Authority's decisions regarding Fair Rate of Return 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 FRoR for the Third Control Period:

7.6.1. To consider a cost of equity of 14.00% as per Para 7.2.6.

7.6.2. To consider a cost of debt of 6.21% as per Table 113.

7.6.3. To true-up the cost of debt for the Third Control Period based on actuals subject to its reasonableness and efficiency.

7.6.4. To consider the FRoR of 11.98% for the Third Control Period as per Table 116.

8. RETURN ON LAND FOR THE THIRD CONTROL PERIOD

8.1. AAI's submissions regarding Return on Land for the Third Control Period

8.1.1. As per the tariff order for the Second Control Period, the Authority proposed to exclude the existing cost of land and additions from RAB until a final decision on return on land is taken by the Authority.

8.1.2. AAI has computed the return on land based on the relevant decision taken by the Authority in Order No. 42/2018-19 dated 05.03.2019 where the Authority states that:

- *"In case land is purchased by the airport operating company either from private parties or from government, the compensation shall be in the form of equated annual instalments computed at actual cost of debt or SBI base rate plus 2% whichever is lower over a period of thirty years. The equated annual instalment is to be calculated as per the following formula:*

$$Equated\ Annual\ Instalment = \frac{[Cost\ \times Rate\ (1 + Rate)^{30}]}{(1 + Rate)^{30} - 1}$$

Where,
Cost: Actual cost of land
Rate: Actual cost of debt or SBI base rate plus 2% whichever is lower."

8.1.3. AAI has accordingly submitted the following return on land that has been computed for land purchased from private parties (excluding freehold land) as part of their submission:

Table 117: Return on land for Third Control Period submitted by AAI

FY ending March 31	2022	2023	2024	2025	2026	Total
Land Area (in acres) [1]	1301	1301	1301	1301	1301	1301
Cost of land (Rs. Cr.) [2]	6.86	6.86	6.86	6.86	6.86	34.30
Cost of debt (in %) [3]	6.21	6.21	6.21	6.21	6.21	-
Return on land (Rs. Cr.) [4] = [3*2]	0.45	0.45	0.45	0.45	0.45	2.25

8.2. Authority's examination regarding Return on Land for the Third Control Period as part of Consultation Paper

8.2.1. The Authority had examined AAI's submission regarding return on land. The Authority had sought additional details from AAI on the purchase and use of land. AAI in its mail dated 18.05.2021 ("Information required from AAI – Chennai Airport Land dte") stated the following:

"The total land area of Chennai Airport is 1317.33 acres. Major portion of the land is being utilized for Terminal Buildings, Runways, Taxiways, Aprons, periphery roads, control tower, ATC tower, ATC building, Operational offices for Chennai Airport and Southern Region, Residential colony car park, AC plant, powerhouse etc.

About 1,61,897sqm of land was leased to various agencies (Airlines, oil companies, Ground handling agencies etc.,) and AAI is generating revenue from these leases. The land leased to most *of the agencies are situated inside the Operational area and purpose of lease / utilization is mostly pertains to Aeronautical.*

The total land area of Chennai Airport is 1317.33 acres. Most of the lands were belongs to State government and the same were transferred by State Government to Civil Aviation Department before the year 1960. Only a very few acres of land was purchased from private parties for Airport expansion (Operational area expansion) purpose through State Government. For the past several years, the Government of Tamil Nadu is acquiring and handing over the land to AAI Chennai Airport on free of cost and free from encumbrances. Now the entire land of 1317.33 acres have been mutated in Airports Authorities of India's name.

The land is being utilized for Terminal buildings, Runways, Taxiways, Aprons, periphery roads, ATC tower, ATC building, Operational offices, Residential colony, Car park, etc.,
AAI is generating revenue from land by leasing the land to various agencies (Airlines, oil companies, Ground handling agencies etc.,) at Chennai Airport."

8.2.2. Th Authority notes that the Government of Tamil Nadu has acquired and handed over the land to Chennai International Airport free of cost and free from encumbrances. Moreover, the Authority understands that the land has been mutated in the name of AAI.

8.2.3. As per Order No. 42/2018-19 dated 05.03.2019, the Authority decided that:

"4.1.1. In case land is provided free of cost, then no return shall be given on the land."

8.2.4. The Authority notes that AAI has submitted Rs. 2.25 Cr. for return on land for the Third Control Period. The Authority sought additional information from AAI regarding this land. AAI has not provided the required information and responded that land had been acquired free of cost. Thus, the Authority is of the opinion that return on land may not be provided to Chennai International Airport for the Third Control Period.

8.3. Stakeholder's comments regarding Return on Land for the Third Control Period

8.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 16/2021-22 with respect to return on land for the Third Control Period. The comments by stakeholders are presented below:

AAI's comments on return on land for the Third Control Period

8.3.2. AAI commented as follows on return on land for the Third Control Period:

"AERA's Contentions

- *AERA notes that AAI has submitted Rs. 2.25 Cr. for return on land for the Third Control Period. AERA sought additional information from AAI regarding this land. AAI has not provided the required information and responded that land had been acquired free of cost. Thus, AERA is of the opinion that return on land may not be provided to Chennai International Airport for the Third Control Period. (Para 7.2.4 of CP)*

AAI's Submission

- *AAI submits that the while majority of land was provided free of cost, following compensation was paid for various parcels of land. Details are provided below for consideration by AERA:*

Asset Description	Operational area (Acres)	Non-Op area (Acres)	Capitalized on	Amount (Rs)
Transfer of 21 acres of defence land at pallavaram cantonment	1.76	19.24	24-Jan-11	3,37,20,579
Pallavaram & Meenabakkam village 1991 – 1992	1018.28	124.590	31-Mar-92	2,42,40,474
Land measuring 23.89 Acres - Meenabakkam village	23.89		31-Mar-04	1,05,06,764
Landowners, Advocate - Pozhichalur village - 1008 + 20 sqm	0.25		31-Mar-93	1,84,970
2.28 Acres Cowl bazar for parallel taxi track	2.28		25-Jan-18	50,001
Acquisition of Defence Land Vr.No.1451,16.09.97-De	0.48		31-Mar-98	9,750
Land recd. Free 126.56 acres - Kolapakkam Manapakkam	126.56		31-Mar-09	1
				6,87,12,539

AAI's Request

- *Since majority of the compensation was paid for land acquired for operational purposes, AAI requests AERA to consider the above details in their computation on return on land. AAI further requests to AERA to consider this return in the ARR from the first control period."*

8.4. AAI's response to stakeholder's comments regarding Return on Land for the Third Control Period

8.4.1. The Authority did not receive any comments from other stakeholders regarding return on land for the Third Control Period.

8.5. Authority's analysis on stakeholders' comments regarding Return on Land for the Third Control Period

8.5.1. The Authority has reviewed AAI's comment with regards to return on land for the Third Control Period. The Authority notes that AAI has not provided documentary proof of any purchase of land.

8.5.2. Therefore, the Authority sees no merit in AAI's contention and decides not to consider return on land in the Third Control Period as stated in Para 8.2.4.

8.6. Authority's decisions regarding Return on Land 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 return on land for the Third Control Period:

8.6.1. To not to consider return on land in the Third Control Period as stated in Para 8.5.2.

9. OPERATING & MAINTENANCE EXPENSES FOR THIRD CONTROL PERIOD

9.1. AAI's Submissions regarding O&M Expenses for the Third Control Period

9.1.1. Operation and Maintenance (O&M) expenditure submitted by AAI is segregated into the following:
a) Payroll expenses;
b) Admin and general expenditure;
c) Repair and maintenance expenditure;
d) Utilities and outsourcing expenditure; and
e) Other outflows, i.e. collection charges on UDF

9.1.2. AAI has submitted that expenses related to cargo, ANS, and CISF security have not been considered as a part of the O&M expenses. Moreover, AAI has segregated all O&M expenses into aeronautical expenses, non-aeronautical expenses, and common expenses. Aeronautical allocation ratios were used to further segregate common expenses into aeronautical and non-aeronautical expenses.

9.1.3. AAI has also submitted that expenses related to CHQ apportionment under payroll expenses and admin and general expenses, were done on the basis of revenue of AAI airports.

9.1.4. The following table summarises the growth rates in O&M expenses submitted by AAI in the Third Control Period:

Table 118: Growth in O&M Expenses for the Third Control Period submitted by AAI

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026
Payroll expenses – non CHQ	7.00%	12.35%	7.00%	12.35%	7.00%
Payroll expenses – CHQ	7.00%	12.35%	7.00%	12.35%	7.00%
Administration and general expenses – non CHQ	10.00%	10.00%	10.00%	10.00%	10.00%
Administration and general expenses – CHQ	5.00%	5.00%	5.00%	5.00%	5.00%
Repairs and maintenance	11.86%	15.29%	9.74%	19.16%	12.50%
Utilities and outsourcing expenses	4.42%	33.63%	4.15%	33.32%	3.92%
Other outflows	13.30%	11.99%	12.32%	10.87%	10.91%
Total	**7.50%**	**16.02%**	**7.02%**	**17.28%**	**7.44%**

9.1.5. The following table summarises the O&M expenses submitted by AAI in the Third Control Period:

Table 119: O&M Expenses submitted by AAI for the Third Control Period submitted by AAI

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026	Total
Payroll expenses – non CHQ	159.47	179.17	191.71	215.39	230.46	**976.20**
Payroll expenses – CHQ	31.38	35.25	37.72	42.38	45.34	**192.07**
Administration and general expenses – non CHQ	19.04	20.95	23.04	25.34	27.88	**116.25**
Administration and general expenses – CHQ	55.94	58.74	61.67	64.76	68.00	**309.11**
Repairs and maintenance	90.60	104.46	114.63	136.59	153.66	**599.94**
Utilities and outsourcing expenses	89.83	120.04	125.02	166.69	173.23	**674.81**
Other outflows	20.68	23.13	25.98	28.81	31.95	**130.53**

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026	Total
Total	**466.92**	**541.73**	**579.78**	**679.95**	**730.52**	**2,998.90**

9.1.6. The following table summarises the allocation of expenses between aeronautical and non-aeronautical in O&M expenses as submitted by AAI in the Third Control Period:

Table 120: Allocation of expenses as submitted for the Third Control Period as submitted by AAI

FY ending March 31 (Rs Cr.)	Aero %	Non-aero %
Payroll expenses – non CHQ	98.19%	1.81%
Payroll expenses – CHQ	98.17%	1.83%
Administration and general expenses – non CHQ	99.39%	0.61%
Administration and general expenses –CHQ	95.00%	5.00%
Repairs and maintenance	97.44%	2.56%
Utilities and outsourcing expenses	98.38%	1.62%
Other outflows	98.05%	1.95%
Total	**98.30%**	**1.70%**

9.2. Authority's examination of O&M expenses in the Third Control Period as part of Consultation Paper

9.2.1. The Authority had observed that AAI had allocated 95% of Administration and General expenses - CHQ to aeronautical expenses. The Authority found it to be appropriate based on AERA's decision for other AAI airports. For payroll expenses – CHQ, the Authority had noted that AAI had allocated 98.17% of the expense as aeronautical based on the employment headcount excluding the security department. The Authority found this to be appropriate.

9.2.2. The Authority had compared the aeronautical allocation of O&M expenses between aeronautical and non-aeronautical submitted by AAI for Chennai International Airport to that of other AAI airports. The following table summarises the same:

Table 121: Aeronautical allocation of O&M expenses at other AAI airports

FY ending March 31 (Rs Cr.)	Patna	Kolkata	Jaipur
Payroll expenses – non CHQ	97%	88%	94%
Payroll expenses – CHQ	95%	88%	95%
Administration and general expenses – non CHQ	99%	96%	88%
Administration and general expenses –CHQ	95%	85%	90%
Repairs and maintenance	95%	89%	93%
Utilities and outsourcing expenses	90%	91%	93%
Other outflows	100%	93%	100%

9.2.3. The Authority had noted that AAI has projected O&M expenses at Chennai International Airport by applying a growth rate over the expenses of FY 2020-21, which itself is an estimated expense. Since the Authority had proposed to consider O&M expenses of FY 2020-21 by applying a 0% growth rate over FY 2019-20 in the Second Control Period, the Authority had proposed to consider the revised FY 2020-21 expenses as the base year.

9.2.4. The Authority had proposed the following allocation of O&M expenses into aeronautical and non-aeronautical based on a terminal building ratio of 90:10:

Table 122: Allocation of O&M expenses for the Third Control Period as proposed to be considered by the Authority

FY ending March 31 (Rs Cr.)	Aero %	Non-aero %
Payroll expenses – non CHQ	98.19%	1.81%
Payroll expenses – CHQ	98.17%	1.83%
Administration and general expenses – non CHQ	96.30%	3.70%
Administration and general expenses –CHQ	95.00%	5.00%
Repairs and maintenance	95.68%	4.32%
Utilities and outsourcing expenses	90.00%	10.00%
Other outflows*	95.26%	4.74%
Total	**98.30%**	**1.70%**

9.2.5. The Authority had noted that AAI submitted a growth rate of 7% for payroll expenses. An additional 5% growth was used in FY 2022-23 and FY 2024-25 on account of terminal building expansion. The Authority found a 5% additional increase in payroll expenses in FY 2022-23 to be reasonable on account of the commissioning of modernization of Chennai International Airport, Phase II (NITB Part – 1). However, since the Authority did not expect modernization of Chennai International Airport, Phase II (NITB Part – 2) to get commissioned in the Third Control Period, the Authority had proposed to disallow the use of an additional growth rate of 5% in FY 2024-25.

9.2.6. AAI had submitted utilities and outsourcing expenses after accounting for recoveries made from concessionaires. The Authority had noted that 99.99% of the power charges under utilities and outsourcing expenses had been allocated as aeronautical and that upkeep expenses have been allocated to aeronautical on the basis of the terminal building ratio. The Authority had noted operational inefficiency in utilities and outsourcing expenses as the recoveries from concessionaires is 8.7% of the total power charges at Chennai International Airport. The Authority had proposed to allocate upkeep expenses into aeronautical on the basis of a terminal building ratio of 90% in line with the IATA and IMG recommendations that the non-aeronautical component should be in the range of 8-12%.

9.2.7. The Authority had noted that AAI had applied an additional growth in FY 2022-23 and FY 2024-25 each, to account for the terminal building expansion:

- A growth of 10% had been applied on upkeep expenses under utility and outsourcing expenses in FY 2022-23 and FY 2024-25
- A growth of 40% had been applied on power charges under utility and outsourcing expenses in FY 2022-23 and FY 2024-25

Since the Authority had not expected modernization of Chennai International Airport, Phase II (NITB Part – 2) to be commissioned in the Third Control Period, the Authority had proposed to disallow the additional growth proposed by AAI in FY 2024-25.

9.2.8. The Authority had considered the additional 10% growth rate for upkeep expenses in FY 2022-23 to be reasonable. The Authority had noted that there would be a 33% net increase in terminal building area in FY 2022-23 after capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 1). Along these lines, the Authority had proposed a 33% increase in power charges in FY 2022-23, as opposed to the 40% increase submitted by AAI.

9.2.9. The Authority had noted that the recovery of power charges is 10.6% of the total power charges in the Third Control Period. The power recovery percentage was significantly lower than that for comparable airports. The Authority had also noted that the recovery percentage is even lower than that in the Second Control Period. The Authority had proposed to consider power recoveries at a notional rate of 25% in the tariff order of the Third Control Period if the airport operator is unable to provide sufficient justification for the low recovery. The Authority had invited stakeholder comments on the same and had proposed to analyse this further in the Third Control Period Order.

9.2.10. The Authority had proposed to consider capital expenditure submitted by AAI on resurfacing of main runway worth Rs. 30.00 Cr. as R&M expenditure.

9.2.11. In line with the efficiency study, the Authority had proposed to use a growth rate of 4.9% (benchmarked to inflation as proposed by the Authority for the Third Control Period) for R&M expenses and to true-up the same based on the actual R&M expenses incurred during the tariff determination exercise of the Fourth Control Period.

9.2.12. The Authority had proposed to consider a 5% per annum growth rate for administrative and general expenses – CHQ over that proposed to be considered in the Second Control Period.

9.2.13. The Authority had noted that AAI had submitted CSR projections for the Third Control Period using a growth rate. The Authority had proposed to recalculate CSR expenses as 2% of the average of the previous three years' PBT instead of applying a growth rate over actual CSR expenses. The recalculation had resulted in zero CSR expenses in the Third Control Period.

9.2.14. AAI had proposed to charge off the interest on loans availed by AAI under administrative and general expenses – non CHQ. The Authority had proposed not to consider these financing charges as O&M expenses.

9.2.15. For collection charges on UDF under other outflows, AAI had considered the growth rate to be the same as that of passenger traffic. The Authority had proposed to use the same fundamental approach, as it finds the same to be a reasonable driver. For other expenses under other outflows, the Authority had proposed to consider a growth rate of 7.5% instead of 10% as submitted by AAI.

9.2.16. After incorporating the above observations by the Authority, the revised O&M expenses have been summarised below:

Table 123: O&M expenses for the Third Control Period as proposed to be considered by the Authority

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026	Total
Payroll expenses – non CHQ	149.06	167.47	179.19	191.73	205.15	**892.60**
Payroll expenses – CHQ	29.32	32.95	35.25	39.61	42.38	**179.51**
Administration and general expenses – non CHQ	3.96	4.36	4.79	5.27	5.8	**24.18**
Administration and general expenses – CHQ	26.36	27.67	29.06	30.51	32.03	**145.63**
Repairs and maintenance	76.89	85.54	104.79	120.04	114.53	**501.79**
Utilities and outsourcing expenses	78.74	102.06	106.3	110.95	116.08	**514.13**
Other outflows	18.43	21.13	22.82	24.59	26.75	**113.71**
Total	**382.76**	**441.17**	**482.20**	**522.70**	**542.72**	**2,371.55**

9.2.17. Based on the above O&M expenses, the Authority had proposed to consider the following revised growth rates in O&M expenses:

Table 124: Growth rates of O&M expenses for the Third Control Period proposed to be considered by the Authority

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026
Payroll expenses – non CHQ	6.91%	12.35%	7.00%	7.00%	7.00%
Payroll expenses – CHQ	6.99%	12.38%	6.98%	12.37%	6.99%
Administration and general expenses – non CHQ	-73.51%*	10.10%	9.86%	10.02%	10.06%
Administration and general expenses – CHQ	5.02%	4.97%	5.02%	4.99%	4.98%
Repairs and maintenance	7.00%	11.25%	22.50%	14.55%	-4.59%
Utilities and outsourcing expenses	-3.46%	29.62%	4.15%	4.37%	4.62%
Other outflows	70.66%	14.64%	8.00%	7.78%	8.79%
Total	2.73%	15.26%	9.30%	8.40%	3.83%

*growth rate negative because CSR expenses have reduced from Rs. 11.35 Cr. in FY 2020-21 to zero in FY 2021-22

9.3. Stakeholder comments regarding O&M expenses for the Third Control Period

9.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in the Consultation Paper No. 16/2021-22 with respect to operation and maintenance expenses for the Third Control Period. The comments by stakeholders are presented below:

AAI's comments on O&M expenses for the Third Control Period

9.3.2. AAI submitted the following with respect to power cost recovery in the Third Control Period:

"AERA's Contentions

- *AERA notes that the recovery of power charges is 10.6% of the total power charges in the Third Control Period. The power recovery percentage is significantly lower than that for comparable airports. AERA also notes that the recovery percentage is even lower than that in the Second Control Period. AERA proposes to consider power recoveries at a notional rate of 25% in the tariff order of the Third Control Period if the airport operator is unable to provide sufficient justification for the low recovery. AERA invites stakeholder comments on the same and proposes to analyze this further in the Third Control Period Order. (Para 8.2.9 in CP)*

AAI's Submission

- *As a general business principle, the infrastructure and utilities at an Airport are being provided by the Airport Operator and the cost of providing such utilities have been charged to the concessionaire to the extent the area occupied by the concessionaire. Accordingly, the cost of utilities which are recovered from the concessionaire (i.e., non-aeronautical portion) gets reduced from the overall utility cost of the Airport Operator and hence the net utility cost left with the airport operator is fully aeronautical in nature.*

- *It is further to be noted that the airport also recovers the power cost from Air Navigation Services, Southern Region as well as Cargo operations from the respective cost centers. Such* *recovery is netted off with the power cost ledger itself. Hence, AAI submits the following revised computation for computing the power charges recovery for kind consideration by AERA:*

Expenses (Rs in crores)		FY 2016	FY 2017	FY 2018	FY 2019
OAAI/726001000Electricity Expenses		73.95	75.82	68.51	63.99
Cargo		-	-	4.03	8.87
Southern Region		0.82	0.79	0.80	0.83
ANS		3.09	3.31	3.33	3.85
Gross Expenses	A	77.86	79.91	76.67	77.54

Recovery (Rs in crores)		FY 2016	FY 2017	FY 2018	FY 2019
OAAI/940017000EWChgs(Oth)		-6.49	-8.24	-6.28	-7.16
OAAI/980012000EWC(Staff)		-0.21	-0.24	-0.27	-0.27
Cargo		-	-	-4.03	-8.87
Southern Region		-0.82	-0.79	-0.80	-0.83
ANS		-3.09	-3.31	-3.33	-3.85
Gross Recoveries	B	-10.61	-12.57	-14.71	-20.98

Recovery %	C=B/A	14%	16%	19%	27%

AAI's Request

- *AAI requests AERA to consider the above computations and would like to re-iterate that the total recovery from concessionaires plus ATC, cargo etc. has been consistently growing over the years and has reached even up to 27% in FY 2019."*

9.3.3. AAI submitted the following comment with respect to repair and maintenance expenses in the Third Control Period:

"AERA's Contentions

- *8.2.11. In line with the efficiency study, AERA proposes to use a growth rate of 4.9% (benchmarked to inflation as proposed by AERA for the Third Control Period) for R&M expenses and to true-up the same based on the actual R&M expenses incurred during the tariff determination exercise of the Fourth Control Period (Para 8.2.11 of CP)*

AAI's Submission

- *AAI draws attention to Table 57 of SCP Order where the Repairs and Maintenance expenditure for SCP was approved as follows:*

Repair and Maintenance (Aero) (Rs in crores)	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Total
Approved by AERA (Table 57 of SCP Order)	87.90	82.40	89.70	97.00	105.30	462.30
Growth rate		-6.26%	8.86%	8.14%	8.56%	

- *As against this amount of Rs 462.30 crores approved for SCP, AAI had spent about Rs. 421.59 crores for the five-year period. AAI submits that the actuals was not very different from the approved amounts. But for the pandemic situation, the actual expenditure would have been closer to the approved amounts. With further ageing of the assets, the R&M expenditure is only bound to increase. An analysis of the operating expenditure to the gross block over the SCP and TCP is as follows:*

Rs in crores

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Gross Block	2,817.75	2,886.01	2,945.20	3,114.65	3,295.51
Additions	69.71	60.31	179.19	186.31	14.89
Deletions	-1.45	-1.13	-9.74	-5.46	-
Closing Gross Block	2,886.01	2,945.20	3,114.65	3,295.51	3,310.40
Aero Repairs and Maintenance Expenses	92.81	101.10	73.14	73.54	81.00
% R&M to Closing Gross Block	3.22%	3.43%	2.35%	2.23%	2.45%

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Opening Gross Block	3,310.40	4,948.04	5,054.24	6,598.17	6,947.32
Additions	1,637.64	106.20	1,543.94	349.14	492.79
Deletions	-	-	-	-	-
Closing Gross Block	4,948.04	5,054.24	6,598.17	6,947.32	7,440.11
Aero Repairs and Maintenance Expenses	90.60	104.46	114.63	136.59	153.66
% R&M to Closing Gross Block	1.83%	2.07%	1.74%	1.97%	2.07%

- *As per the above table, the total R&M expenditure is less than 2% of the gross block over SCP and TCP. This amount is the bare minimum spend projected by AAI for airport operations and for maintenance of all equipment.*

AAI's Request

- *Hence, AAI requests AERA to consider the amount which has been submitted in MYTP as the R&M expenditure."*

9.3.4. AAI submitted the following comment with respect to estimation of other outflows in the Third Control Period:

"AERA's Contentions

- *AERA proposes to consider the actual FY 2020-21 passenger traffic to compute the collections from UDF charges. Additionally, AERA proposes to consider miscellaneous expenses as approved by AERA in the Second Control Period Order. AERA proposes to consider Rs. 10.80 Cr. for other outflows for FY 2020-21 as opposed to Rs. 18.23 Cr. submitted by AAI. Accordingly, AERA proposes to consider the following other outflows for the Second Control Period: (Para 3.7.21 of CP)*

- *8.2.15 For other expenses under other outflows, AERA proposed to consider a growth rate of 7.5% instead of 10% as submitted by AAI. (Para 8.2.15 of CP)*

AAI's Submission

- *AAI draws attention to Table 57 of SCP Order where the Other Outflows expenditure for SCP was approved as follows:*

Other Outflows(Aero)	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Total
Approved by AERA (Table 57 of SCP Order)	13.60	12.20	12.80	13.40	14.10	66.10
Actuals incurred	21.17	18.34	21.50	19.74	18.23	98.98

- *As against this amount of Rs 66.10 crores approved for SCP, AAI had spent about Rs. 98.98 crores for the five-year period. AAI submits that the actuals spent was much more than the approved amounts. This is due to increase in the passengers which led to increase in the collection charges for UDF as well as other components in the other outflows by much more than the traffic increase.*

- *Though collection charges on UDF is the main component of other outflows, it may be noted that the increase now given for this head for the third control period which is 7.5% only does not compensate the increase in traffic also which is provided below:*

FY ending March 31	2020 (actuals)	2021	2022	2023	2024	2025	2026
% growth over previous year		-90%	127%	225%	33%	8%	7%
% of FY20 traffic		10%	23%	75%	100%	108%	116%
Total	22.27	5.50	12.54	21.65	23.92	26.03	29.79
% growth over previous year		-75%	128%	73%	10%	9%	14%
% of FY20 traffic		25%	56%	97%	107%	117%	134%
Air Traffic Movement (in 000's)							

AAI's Request

- *AAI requests AERA to consider the other outflows be split into UDF collection charges and other charges. UDF collection charges may be increased in line with the increase in traffic and other charges may be increased by 10% year on year itself as submitted by AAI in its MYTP. AAI also requests AERA to consider the actual spend for other outflows while truing up for the second control period instead of considering the amount as approved in the SCP Order."*

9.3.5. AAI submitted the following comment with respect to interest on term loan not being considered as an O&M expense in the Third Control Period:

"AERA's Contentions

- *AAI has proposed to charge off the interest on loans availed by AAI under administrative and general expenses – non CHQ/RHQ. AERA proposes not to consider these financing charges as O&M expenses. (Para 8.2.14 of CP)*

AAI's Submission

- *AAI submits to that AERA to consider interest on term loans after date of capitalization in TCP as these are actual outflow of funds.*

AAI's Request

- *AAI requests AERA to consider interest on term loans in operating costs after date of capitalization in TCP."*

Other stakeholder comments regarding O&M expenses for the Third Control Period

9.3.6. IATA submitted the following comment with respect to energy efficiency with airport modernization in the Third Control Period:

- *"We would like to see a greater efficiency being realized from the airport modernization that is currently underway. AERA has allowed a 33% increase in power charges given the 33% increase in terminal building area after capitalization of NITB Part 1 in 2022-23. This is sub-optimal.*

- *On a related point, we do agree with AERA insisting on a 25% minimum recovery of power charges by the airports – which helps in urging the airport operator for achieving greater operational efficiency."*

9.3.7. IATA submitted the following comment with respect to CHQ expenses in the Third Control Period:

- *"The CHQ takes up 16.43% of the payroll expenses in the Third Control Period, in comparison to 14.69% in SCP. However, for the administrative & general expenses, CHQ's share has reduced from 78.47% in the Second control period to 72% in the Third Control Period.*

- *There is opaqueness around the corporate and regional expenses that are being passed on to be borne by airlines and passengers flying from MAA and it is not clear what is their relationship with services delivered at the airport. This is not in line with ICAO's principles of transparency and cost-relatedness. And we would urge AERA to delve deeper into the allocation of CHQ & RHQ costs to individual airports."*

9.3.8. IndiGo submitted the following comment with respect to O&M expenses in the Third Control Period:

- *"While IndiGo appreciates that AERA has undertaken an independent study for Operating Expenditure/ Operations & Maintenance expenses for the Second Control Period, AERA may undertake similar independent study for the Third Control Period.*

- *Without prejudice to the above:*
    - *i. AERA may advise AAI to rationalize/re- negotiate all the cost/expenditure items or heads, as deemed fit. Further, no escalations should be permitted under these items or heads.*
    - *ii. Expenses on account of CSR may be excluded. This will be in line with the similar treatment to CSR expenditure, given to CIAL at Cochin International Airport."*

9.3.9. SpiceJet submitted the following comment with respect to O&M expenses in the Third Control Period:

- *"We appreciate that an independent study was commissioned through E&Y LLP on "Study of Operations and Maintenance Expenses of Chennai International Airport".*

- *We are unaware as to whether AAI - Chennai has taken cost cutting measures including re-negotiations of all the cost items on its profit and loss account. It may be noted that cost incurred by AAI by the airlines.*

- *Chennai impacts the airlines, as such cost is passed through or borne*

- *Further, in view of industry reports from IATA and CAPA, which foresee a minimum period of two (2)-three (3) years for air traffic and flight operations to reach pre COVID-19 levels, we request Authority should:*

  i. *Put on hold any increase in operational expenditure by AAI - Chennai;*
  ii. *Advise AAI - Chennai to review its spending on operational expenditure and re- negotiate all the operational expenditure costs in a significant manner and address any increase in fees sought by AAI - Chennai. It may be noted that across various industries, instead of cost escalations, all the costs have been renegotiated downwards substantially. Accordingly, AAI - Chennai needs to significantly reduce all such costs in a very aggressive manner. AAI - Chennai may be advised to reduce its cost by at least 35% and no escalation should be permitted; and .*
  iii. *In view of the above, AAI - Chennai should be directed to pass on cost benefits to the airlines.*

- *In particular, we submit that:*

  i. *Y-O-Y Increase in the O&M expenses proposed by AAI - Chennai is between 2.73% - 9.30%. Instead of a significant reduction in cost items of operating expenses, Authority has considered a percentage increase in OPEX of around 42% between 2022 and 2026. Such an increase in the name of escalation, in a highly uncertain environment, where airlines are operating under curtailed operations (60-65%), appears without any rationale and should be avoided.*

- *Payroll Cost:*

  i. *Although the activity level has gone down drastically, rather than significant reduction in the cost, the employee expenses are proposed to increase Y-O-Y between 6.91% to 12.38% over the five (5) year control period.*
  ii. *We submit that while the aviation sector, including airlines have incurred huge losses and are struggling to meet their operational costs, and are not able to pay even to the support staff, on the other hand AAI - Chennai seems to have paid/will pay incremental salaries which may not appear prudent considering the significant losses incurred by the aviation sector.*
  iii. *It appears that AAI - Chennai wants to recover its full employee cost from the airlines, which are facing significant challenges to meet its operating expenses.*
  iv. *We submit that there should not be any increase in manpower till the existing manpower is effectively utilised as it will take another two (2)- three (3.) years to recover. Existing manpower can be reviewed and any additional costs due to contract manpower or otherwise should be reduced.*

- *Without prejudice to the above, AAI - Chennai needs to considerably restructure its employee benefit expenses and other expenses and hold any revisions at least for the next two (2) years."*

9.3.10. Blue Dart Aviation submitted the following comment with respect to O&M expenses in the Third Control Period:

- *"The airline fraternity and other airport user community have taken drastic measures to reduce their cost of operations in order to sustain the aviation transportation infrastructure that is so crucial to our economy. As you are aware, when all connectivity was shut down during the various lockdowns in the face of the pandemic, our operations continued relentlessly, despite the risks to our people, to bring in essential materials and save lives. Any exorbitant increase* *as requested by AAI at this juncture will only negatively impact our critical aviation transportation infrastructure."*

9.4. AAI's response to stakeholder comments regarding O&M expenses for the Third Control Period

9.4.1. With respect to IATA's comment on CHQ expenses for the Third Control Period, AAI submitted that its response detailed in Para 4.7.25 be referred.

9.4.2. With respect to IndiGo's and SpiceJet's comments on O&M expenses for the Third Control Period, AAI submitted the following:

- *"AAI submits that there is a continuous internal process to rationalize costs and more specifically during the pandemic. This has only helped the airports sustain even while operating to near zero revenues.*
- *CSR expense has been approved in the BIAL's recent TDSAT order and hence AAI does not see a reason why CSR expenses ought not to be allowed as a projection based on expected PAT."*

9.5. Authority's analysis on stakeholders' comments regarding O&M expenses for the Third Control Period

9.5.1. The Authority has noted that the actual O&M expenses for FY 2020-21 submitted by AAI during the consultation stage are substantially lower than that of FY 2019-20 due to the reduced operations at Chennai International Airport on account of the Covid-19 pandemic and travel restrictions. Since FY 2020-21 was an abnormal year, the Authority decides to consider FY 2019-20 as the base year while projecting O&M expenses for the Third Control Period.

9.5.2. The Authority has noted comments from AAI and IATA and AAI's counter-comments on considering a notional power recovery of 25% in the Third Control Period. The Authority has also noted the revised computation provided by AAI during the consultation process which includes the power recoveries from ANS, Southern Region and Cargo operations, and notes that the power recoveries now submitted by AAI in the consultation process are higher than that submitted in the MYTP. The Authority expects the power recoveries to improve significantly during the Third Control Period. However, it may be noted that if there is no significant improvement, the Authority may consider a minimum notional rate of power recoveries in the Fourth Control Period in line with the private airport operators.

9.5.3. The Authority has noted AAI's comments on R&M expenses and notes the following:

i. The Authority notes AAI's comment on the growth in R&M expenses as per Table 57 of the Order No. 03/2018-19 dated 16th April 2018. The Authority is of the view that R&M expenses are bound to be low due to the commissioning of the NITB Part 1 in FY 2022-23 and other pavement works.

ii. The Authority further notes AAI's comment on R&M expenses forming 2.2-3.4% of the gross block in the Second Control Period, and 1.7-2.1% in the Third Control Period. The Authority notes that the gross block in AAI's calculations include assets that the Authority expects would get capitalised in the Fourth Control Period. Moreover, the R&M expenses proposed in Consultation Paper No. 16/2020-21 dated 07th September 2021 form a similar percentage of the gross block as worked out by AAI. The Authority decides to consider the growth assumptions for R&M expenses as proposed in Table 124 in order to emphasize on the operational efficiency of the system.

9.5.4. The Authority has carefully noted AAI's comment on other outflows and notes the following:

i. The Authority notes AAI's comment on how collection charges on UDF is determined based on passenger traffic. It noted that this component of other outflows has been projected based on passenger traffic as mentioned in Table 80.

ii. The increase of 7.5% is applicable to other expenses, such as municipal taxes and miscellaneous expenses, within other outflows only. Since this is in line with the growth observed during the Second Control Period, the Authority decides to consider a 7.5% p.a. increase for miscellaneous expenses as given in Table 124.

9.5.5. The Authority has taken note of AAI's comment regarding not allowing interest on term loan as an operating expenditure. The Authority notes that charges pertaining to financing of any loan other than working capital loan is provisioned to the airport operator under the fair rate of return provided on the regulatory asset base.

Keeping the above in view and also taking note of Para 14.16 of Order No. 03/2018-19 dated 16th April 2018, the Authority decides to not allow the interest on bond claimed by AAI.

9.5.6. The Authority notes IATA's comment and AAI's response thereon on the increase in power charges due to the capitalisation of the NITB Part 1 in FY 2022-23. It may be noted that the Authority has decided on a 33% increase in power charges after considering the recommended operational efficiencies at the airport as against a 40% increase submitted by AAI in the MYTP. Further, the Authority has also taken a decision to review the power recoveries in the Fourth Control Period if they are below the notional rate of 25%.

9.5.7. The Authority has carefully noted IATA's comment on CHQ expenses and the CHQ expense workings submitted by AAI. The Authority has addressed the same in detail in Paras 4.7.33 to 4.7.42. Further, the Authority may true up CHQ expenses subject to a maximum ceiling of 10% increase while determining tariff for the Fourth Control Period.

9.5.8. The Authority has carefully reviewed IndiGo's comment regarding CSR expenses. The Authority notes that CSR expenditure is mandatory as per latest amendments to the Companies Act, 2013. Need for provision of CSR as part of Operating Expenditure has been upheld by TDSAT. Accordingly, the same has been considered by the Authority. The CSR expenses have been calculated as at least 2% of the average net aeronautical profit made during the three preceding financial years in line with Section 135 of Companies Act, 2013.

Moreover, the Authority has applied the same principles for O&M expense allocation as was done in other airports for tariff determination. In future, the Authority will continue to undertake such detailed independent studies wherever it is deemed necessary and appropriate.

9.5.9. The Authority has noted SpiceJet's comments on payroll expenses. The Authority applies the same principles for projecting operating expenses as was done in other airports for tariff determination. The Authority decides to use an annual growth rate of 6% to project payroll costs -CHQ and payroll costs – non-CHQ in the Third Control Period, instead of considering an annual growth rate of 7% as submitted by AAI for the Third Control Period.

9.5.10. The Authority also noted that the use of an annual growth rate of 10% to project admin and general expenses – non-CHQ, is higher than that applied by other comparable airports. The Authority decides to apply the same principles for projecting admin and general expenses – non-CHQ, and use an annual growth rate of 4.9% (benchmarked to inflation) to project the admin and general expenses – non-CHQ for the Third Control Period.

9.5.11. The Authority takes cognisance of Blue Dart Aviation's comments. The Authority is conscious of the impact of the Covid-19 pandemic on the aviation sector and has tried to take into account the interests of all the stakeholders. Accordingly, the Authority has considered the following while determining the tariffs for the Third Control Period of Chennai International Airport:

i. The Authority has considered the tariff increase in the Third Control Period in a gradual and graded manner. Further, the Authority has also decided to not allow a tariff increase in the first year of the control period (i.e., FY 2021-22) since airport users were significantly impacted by the Covid-19 pandemic.

ii. The Authority has also decided to carry-forward a significant portion of the target revenue to the Fourth Control Period in order to lower the burden on airport users and bolster the revival of the aviation sector in the post-pandemic years.

iii. The Authority has decided to reduce the tariff in the last quarter of the last year of the Third Control Period. The rationale for the same has been elaborated in Para 15.5.12.

iv. The Authority also highlights that the existing tariff rates at Chennai International Airport are already substantially lower than other comparable airports. The increase in tariffs decided in the Third Control Period appears to be significantly high due to the low existing tariff rates. It may also be noted that the revised tariffs following the increment are in line with that of other major airports.

9.5.12. Based on the above examination, the Authority decides to consider the following O&M expenses for the Third Control Period:

Table 125: O&M expenses for the Third Control Period as decided by the Authority

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026	Total
Payroll expenses – non CHQ	147.66	164.35	174.21	184.66	195.74	**866.62**
Payroll expenses – CHQ	29.05	32.33	34.27	38.15	40.43	**174.23**
Administration and general expenses – non CHQ	3.78	3.96	4.16	4.36	4.57	**20.83**
Administration and general expenses – CHQ	38.96	40.90	42.95	45.10	47.35	**215.25**
Repairs and maintenance	76.89	85.54	89.79	105.04	114.53	**471.81**
Utilities and outsourcing expenses	78.74	102.06	106.3	110.95	116.08	**514.13**
Other outflows	17.69	20.24	22.17	23.89	25.95	**109.94**
Working capital	2.27	-	-	-	-	**2.27**
Total	**395.04**	**449.38**	**473.85**	**512.15**	**544.65**	**2,375.09**

9.6. Authority's decisions regarding O&M expenses 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 O&M expenses for the Third Control Period:

9.6.1. The Authority decides to consider O&M expenses as set out in Table 125 for the Third Control Period.

9.6.2. To true-up the O&M expenses for the Third Control Period based on actuals subject to reasonableness and efficiency, at the time of determination of tariff for the Fourth Control Period.

10. NON-AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

10.1. AAI's Submissions regarding Non-Aeronautical Revenue for the Third Control Period

10.1.1. AAI has submitted its forecast of non-aeronautical revenue for the Third Control Period. The non-aeronautical revenue proposed by AAI primarily comes from three sources: (a) Trading Concessions; (b) Rent and Services; (c) Miscellaneous sources. The assumptions regarding the sub-heads of non-aeronautical revenue forecasts are described in the table as follows:

Table 126: Summary of assumptions for non-aeronautical revenue for Third Control Period submitted by AAI

Particular	Sub Head	Assumptions
Trading Concessions	1. Restaurant/Snack Bars 2. T.R Stalls 3. Hoarding and Display	Growth assumptions for Third Control Period are: (a) For FY 2021-22, AAI expects to achieve 60% of the pre-pandemic (FY 2019-20) levels in the first quarter and 80% for the rest of the 3 quarters of the year. (b) For FY 2022-23, AAI expects to achieve 80% of the pre-pandemic revenue. (c) FY 2023-24 onwards, AAI assumes a constant growth rate of 4% over FY 2019-20 revenue.
Rent and Services	1. Land Rent and Leases 2. Land Rent and Leases – Hangars 3. Building – Non-Residential	(a) Land Rent and Leases for FY 2020-21 have been assumed to be the same as FY 2019-20. For the rest of the control period, AAI has assumed a constant growth rate of 7.5% annually. (b) For Land Rent and Leases (Hangars) in FY 2021-22, AAI expects to achieve 60% of the pre-pandemic (FY 2019-20) levels in the first quarter and 80% for the rest of the 3 quarters of the year, as well as for FY 2022-23. Thereafter, it assumes an annual growth rate of 4%. (c) Building- Non-Residential increases by 27.5% in the first year of Third Control Period and subsequently at a constant rate of 7.5% annually for the rest of the control period.

Particular	Sub Head	Assumptions
Miscellaneous	1. Duty Free Shops 2. Flight Kitchen 3. Car Rentals 4. Car Parking 5. Admission Tickets 6. MRO	(a) For FY 2021-22, AAI assumes to achieve 60% of the pre-pandemic (FY20) levels in the first quarter and 80% for the rest of the 3 quarters of the year. (b) For FY 2022-23, AAI expects to achieve 80% of the pre-pandemic revenue. (c) FY 2023-24 onwards, AAI assumes a constant growth rate of 4% over the FY 2019-20 revenue.

10.1.2. Revenue from Non-Aeronautical services for Third Control Period, as submitted by AAI, is as follows:

Table 127: Non-aeronautical revenue for the Third Control Period submitted by AAI

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Revenue from Rent and Services						
Land Rent & Leases	11.76	12.65	13.59	14.61	15.71	**68.32**
Building Non Residential	29.62	31.85	34.24	36.80	39.56	**172.07**
Revenue related to passenger traffic						
Duty Free Shops	8.59	15.58	60.78	74.75	91.79	**251.49**
Flight Kitchen	2.57	3.80	6.76	8.31	10.21	**31.65**
Car Rentals	4.84	7.15	12.71	15.63	19.20	**59.53**
Car Parking	5.79	8.55	15.20	18.69	22.95	**71.18**
Admission Tickets	0.21	0.31	0.55	0.68	0.84	**2.59**
MRO	0.17	0.25	0.44	0.54	0.66	**2.02**
Other Income	4.96	7.32	13.02	16.01	19.66	**60.97**
Land Rent & Leases- hanger	2.13	3.15	5.59	6.88	8.45	**26.20**
Restaurant / snack bars	7.21	10.64	18.91	23.26	28.57	**88.59**
T.R. Stall	21.35	31.51	56.03	68.90	84.62	**262.41**
Hoarding & Display	18.80	27.75	49.35	60.69	74.53	**231.12**
Total	**118.01**	**160.49**	**287.16**	**345.76**	**416.75**	**1,328.17**

10.2. Authority's examination regarding Non-Aeronautical Revenue for the Third Control Period as part of Consultation Paper

10.2.1. The Authority had noted that revenues from the following non-aeronautical services have been projected using a growth rate, as these revenues were based on existing allotments and leases:

- Land rent and leases
- Building (non-residential)

10.2.2. The Authority had noted that revenues from the following non-aeronautical services have been made on the basis of traffic projections:

- Restaurant/Snack Bar
- T.R. Stalls

- Hoarding and Displays
- Land, rent, and leases of hangar
- Duty Free shops
- Flight Kitchen
- Car rentals
- Car parking
- Admission tickets
- MRO
- Other income

10.2.3. The non-aeronautical revenue submitted by AAI for the Second Control Period is Rs. 1,269.16 Cr. and that for the Third Control Period is Rs. 1,328.17 Cr. The Authority had noted that non-aeronautical revenue had increased in the Third Control Period by only 4.6% which is even less than inflation rate. The Authority had invited stakeholder comments on the same. The Authority had also proposed to conduct a detailed study on non-aeronautical revenue before tariff determination of the Fourth Control Period.

10.2.4. The Authority had carefully examined AAI's submission regarding various non-aeronautical revenue streams for the Third Control Period and had the following observations:

Revenue from Rent and Services

10.2.5. The Authority had noted that AAI estimated revenue from land rent and leases for FY 2021-22 by assuming a 0% growth over FY 2020-21 revenues. From FY 2022-23, AAI had used a growth of 7.5% per annum to estimate revenue from land rent and leases.

Revenue related to passenger traffic

10.2.6. The Authority had noted that AAI estimated revenue for FY 2021-22 by assuming that the non-aeronautical revenue for the Third Control Period would be in proportion to the projected passenger traffic. As a result, AAI had projected revenues by applying the ratio between passenger traffic between each tariff year and FY 2019-20. In addition to this, AAI had assumed that non-aeronautical revenues would change on account of change in consumption behaviour of passengers for non-aeronautical services. The Authority had noted that AAI has made the following assumptions regarding consumption of passengers:

Table 128: Consumption of non-aeronautical services (as a % of FY 2019-20) submitted by AAI

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026
% of FY 2019-20 consumption	75%	80%	104%	108%	112%

10.2.7. The Authority had recalculated the non-aeronautical revenues for the Third Control Period by applying the percentage of total traffic vis-a-vis the pre-pandemic levels (FY 2019-20) for the respective tariff years to the relevant non-aeronautical service revenue achieved in FY 2019-20. The Authority had further proposed to link the traffic rates without accounting for changes in consumption behaviour (as opposed to AAI's submission in Table 128). The following non-aeronautical revenue projections had been arrived at after incorporating the traffic projections for the Third Control Period as considered by the Authority in Para 5.2.5 (Table 79):

Table 129: Non-aeronautical revenue proposed to be considered for Third Control Period by the Authority

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Revenue from Rent and Services						
Land Rent & Leases	6.63	11.44	12.64	13.75	15.74	**60.19**
Building Non Residential	13.09	22.59	24.96	27.16	31.08	**118.88**
Revenue related to passenger traffic						
Duty Free Shops	43.43	74.97	82.84	90.15	103.15	**394.55**
Flight Kitchen	4.83	8.34	9.21	10.02	11.47	**43.87**
Car Rentals	9.08	15.68	17.32	18.85	21.57	**82.51**
Car Parking	10.86	18.75	20.71	22.54	25.79	**98.65**
Admission Tickets	0.40	0.68	0.76	0.82	0.94	**3.60**
MRO	0.31	0.54	0.59	0.65	0.74	**2.83**
Other Income	9.30	16.06	17.74	19.31	22.10	**84.51**
Land Rent & Leases- hanger	4.00	6.90	7.63	8.30	9.50	**36.32**
Restaurant / snack bars	13.52	23.33	25.78	28.06	32.10	**122.79**
T.R. Stall	40.04	69.11	76.37	83.11	95.09	**363.71**
Hoarding & Display	35.27	60.87	67.26	73.20	83.75	**320.34**
Total	**190.76**	**329.25**	**363.81**	**395.92**	**453.03**	**1,732.76**

10.3. Stakeholder comments regarding non-aeronautical revenue for the Third Control Period

10.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to the non-aeronautical revenues for the Third Control Period. The comments by the stakeholders are presented below:

AAI's comments regarding non-aeronautical revenue for the Third Control Period

10.3.2. AAI's comment regarding projection of non-aeronautical revenue at Chennai International Airport, Chennai is as follows:

"AERA's Contention

- *The Authority has noted that AAI estimated revenue for FY 2021-22 by assuming that the non-aeronautical revenue for the Third Control Period will be in proportion to the projected passenger traffic. As a result, AAI has projected revenues by applying the ratio between passenger traffic between each tariff year and FY 2019-20. In addition to this, AAI has assumed that non-aeronautical revenues would change on account of change in consumption behaviour of passengers for non-aeronautical services. The Authority notes that AAI has made the following assumptions regarding consumption of passengers:*

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026
% of FY 2019-20 consumption	75%	80%	104%	108%	112%

AAI's Submission

- *AAI submits that the computation of NAR which is based on passenger traffic has been computed for the first 2 years of TCP as follows:*

- o *For FY 22, based on internal AAI Circular 24 read with Circular 26 (copies of which have been shared during consultation), support schemes were introduced in the airport in view of supporting the concessionaires during the pandemic period. Hence, concession on the fees paid in whatsoever form by the concessionaires was provided to the extent of 40% till Jun 21 and to the extent of 20% after this period. The revenue computation also took into consideration increase in the number of passengers.*
- o *For FY 23, the discount of 20% was proposed to be continued. The revenue computation also took into consideration increase in the number of passengers.*
- o *After FY 23, the passenger traffic plus inflationary increases were given effect to in the computation.*

<u>AAI's Request</u>

- *AAI requests the Authority to consider the above concession schemes together with the revised traffic submitted by AAI in this document while deciding on the final non-aeronautical revenues."*

Other stakeholders' comments on non-aeronautical revenue for the Second Control Period

10.3.3. IATA's comment regarding non-aeronautical revenues for the Third Control Period is as follows:

- *"The non-aeronautical revenue which is used to cross-subsidize the aero charges, is clearly under-developed in the case of MAA. As also observed by AERA, the non-aeronautical revenue in Second Control Period as well as projections for the Third Control Period does not even cover for cost of inflation and is therefore far from a rational projection.*

- *The AAI has shown an increase of 4.6% in the non-aeronautical revenue between the Second and Third Control Period. However, it must be noted that during the same period, we can see Mumbai International Airport (BOM) has provisioned an increase of 47% in the non-aeronautical revenue between the Second and the Third Control Period. There is clear case for the Airports Authority of India to further rationalise its non-aeronautical projections for MAA."*

10.3.4. IndiGo's comment regarding non-aeronautical revenue for the Third Control Period is as follows:

- *"In reference to para 9.2.3 of the CP, IndiGo wishes to submit that a minimal increase of non-aeronautical revenue (i.e. 4.6%) being less than inflation rate requires a detailed scrutiny by way of an independent study by AERA. In our view, such an independent should be done in the Third Control Period itself and not kept pending till Fourth Control Period of Chennai Airport.*

- *Without prejudice to the above, IndiGo submits that:*
  - o *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. AERA should also review;*

  - o *'Royalty' is in the nature of market access fee, charged by the services providers under various headings. These charges are passed on to the airlines by the service providers. 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."*

10.3.5. SpiceJet's comment regarding non-aeronautical revenue for the Third Control Period is as follows:

- *"The Authority has sought to take into consideration stakeholder's view on the proposed non-aeronautical revenue increase. While we appreciate Authorities' view of conducting a detailed independent study on the non-aeronautical revenue before the tariff determination of the Fourth Control Period, we are of the view that considering the low base of increase of only 4.6%, the Authority may kindly set a target of at least 50% increase Y-O-Y. Considering that nearest comparable airport like Bangalore and Hyderabad have a non-aero revenue projected percentage increase between Second Control Period and Third Control Period in the region of 30% each, the low figures of Chennai are disappointing, especially since the projected passenger throughput increase of Chennai is comparable with the passenger throughput increase of Bangalore and Hyderabad, being in the region of 22% to 27% between Second Control Period and Third Control Period.*

- *Without prejudice to the above, our submission is that 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."*

10.4. AAI's response to stakeholder comments regarding Non-Aeronautical Revenue for the Third Control Period

10.4.1. AAI's response to comments from IATA, IndiGo and SpiceJet is as follows:

- *AAI submits that the computation of NAR which is based on passenger traffic has been computed for the first 2 years of TCP as follows:*

- *For FY22, based on internal AAI Circular 24 read with Circular 26 (copies of which have been shared during is it MYTP Review), support schemes were introduced in the airport in view of supporting the concessionaires during the pandemic period. Hence, concession on the fees paid in whatsoever form by the concessionaires was provided to the extent of 40% till Jun 21 and to the extent of 20% after this period. The revenue computation also took into consideration increase in the number of passengers.*

- *AAI's Request: AAI requests the Authority to consider the above concession schemes together with the revised traffic submitted by AAI in the comments to CP document while deciding on the final non-aeronautical revenues.*

10.5. Authority's analysis on stakeholders' comments regarding Non-Aeronautical Revenue for the Third Control Period

10.5.1. The Authority takes note of AAI's comment on how non-aeronautical revenue was projected after taking into account relief measures provided to its concessionaires as well as IATA's comment and AAI's counter comment to the same. The Authority decides to estimate the non-aeronautical revenue projections using the traffic forecasts decided by the Authority in Para 5.2.5. However, the Authority notes that the growth in AAI's non-aeronautical revenue between the Second and Third Control Period is even less than inflation. Given the capitalisation of the NITB, the Authority expects AAI to increase Chennai International Airport's non-aeronautical revenues.

10.5.2. Moreover, the Authority also draws reference to non-aeronautical revenues at other major airports like that of MIAL, BIAL, etc. and notes a substantial portion of non-aeronautical revenues in total airport revenues. Along these lines, the Authority urges AAI to strive to recover the non-aeronautical revenue lost during the pandemic in the remaining years of the Third Control Period so as to benefit the airport users through higher cross-subsidisation.

10.5.3. The Authority has taken note of IndiGo's comments regarding non-aeronautical revenue. The Authority has applied appropriate basis for extrapolation based on the nature of each non-aeronautical revenue. The Authority used appropriate parameters – passenger traffic and concession agreement based – to estimate non-aeronautical revenues in the Third Control Period.

10.5.4. **Regarding Royalty:** The Authority has noted the issue of high royalty fees/license fees and revenue share payable to airport operators by the service providers as a pass-through expenditure. It may be noted that the Authority has a separate tariff determination process for service providers during which issues relating to royalty charges are addressed alongside a rigorous stakeholder consultation process.

10.5.5. The Authority takes note of SpiceJet's comment on the computation of non-aeronautical revenue. The Authority decides to estimate the non-aeronautical revenue projections using the traffic forecasts decided by the Authority. The Authority further notes that setting a 50% increase in the non-aeronautical revenue in this Control Period cannot be achieved by the airport operator due to the revival of pre-pandemic traffic only by FY 2022-23 for domestic passengers and FY 2023-24 for international passengers. Instead, the Authority decides to project non-aeronautical revenues that are dependent on traffic (i.e., restaurants, T.R stalls, duty free shops, car parking, etc.) using the traffic projections decided by the Authority for the Third Control Period.

10.5.6. The Authority may sponsor an independent study during the tariff determination of Fourth Control Period to assess the appropriateness of non-aeronautical revenue at Chennai International Airport.

10.5.7. The Authority notes that the non-aeronautical revenue is subject to change due to the revised passenger traffic as provided in Table 80. The following table summarises the non-aeronautical revenue for the Third Control Period as decided by the Authority:

Table 130: Non-aeronautical revenue for the Third Control Period as decided by the Authority

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
Revenue from Rent and Services						
Land Rent & Leases	5.06	10.23	12.64	13.75	15.74	**57.41**
Building Non Residential	9.99	20.21	24.96	27.16	31.08	**113.41**
Revenue related to passenger traffic						
Duty Free Shops	33.16	67.07	82.84	90.15	103.15	**376.37**
Flight Kitchen	3.69	7.46	9.21	10.02	11.47	**41.85**
Car Rentals	6.93	14.03	17.32	18.85	21.57	**78.71**
Car Parking	8.29	16.77	20.71	22.54	25.79	**94.11**
Admission Tickets	0.30	0.61	0.76	0.82	0.94	**3.44**
MRO	0.24	0.48	0.59	0.65	0.74	**2.70**
Other Income	7.10	14.37	17.74	19.31	22.10	**80.62**
Land Rent & Leases- hanger	3.05	6.17	7.63	8.30	9.50	**34.65**
Restaurant / snack bars	10.32	20.87	25.78	28.06	32.10	**117.14**
T.R. Stall	30.57	61.83	76.37	83.11	95.09	**346.96**
Hoarding & Display	26.92	54.46	67.26	73.20	83.75	**305.59**
Total	**145.62**	**294.57**	**363.81**	**395.92**	**453.03**	**1,652.95**

10.6. Authority's decisions regarding non-aeronautical revenue for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to non-aeronautical revenue for the Third Control Period

10.6.1. To consider non-aeronautical revenue for the Third Control Period as per Table 130.

10.6.2. To true-up the non-aeronautical revenue if the same exceeds the projected amount in the tariff determination of the Fourth Control Period.

11. TAXATION FOR THE THIRD CONTROL PERIOD

11.1. AAI's Submissions regarding Taxation for the Third Control Period

11.1.1. AAI has calculated the revenue generated from regulated services, aeronautical operating expenses, interest and financing charges, and depreciation on written down value (WDV) of assets as per income tax. After calculating the Profit Before Tax (PBT), a tax rate of 25.17% was applied, after setting off prior losses. The aeronautical taxes as submitted by AAI to be considered for tariff calculation are as shown in the table below:

Table 131: Aeronautical taxes submitted by AAI for Third Control Period

FY ending March 31 (Rs Cr.)	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Aeronautical Revenue [1]	758.73	994.14	1,292.06	1,542.87	1,841.67	**6,429.46**
Operational Expenses [2]	466.92	541.73	579.78	679.95	730.52	**2,998.90**
Total Interest and Finance charges [3]	5.36	57.46	60.61	97.64	88.81	**309.88**
Dep. as per Income Tax Act [4]	265.59	349.93	403.17	458.23	424.94	**1,901.85**
Total expenses. [5] = [2 + 3 + 4]	737.86	949.12	1,043.57	1,235.81	1,244.27	**5,210.63**
PBT [6] = [1 – 5]	20.86	45.02	248.49	307.05	597.40	**1,218.83**
Set-off of prior period tax losses [7]	(20.86)	(45.02)	(248.49)	(307.05)	(259.18)	**(880.61)**
PBT after set-off of prior period tax losses [8]	-	-	-	-	338.22	**338.22**
Tax (25.17%) [9] = 25.17%*[8]	-	-	-	-	85.13	**85.13**

11.2. Authority's examination regarding Aeronautical Tax for the Third Control Period as part of the Consultation Paper

11.2.1. The Authority had noted that AAI has calculated income tax based on the aeronautical revenues projected. The Authority had re-computed the taxes based on the revised regulatory blocks for the Third Control Period proposed in the previous sections. The following table summarizes the aeronautical taxes proposed by the Authority for the Third Control Period:

Table 132: Aeronautical taxes proposed to be considered by the Authority for Third Control Period

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026	Total
Aeronautical Revenue [1]	185.46	512.14	752.13	984.15	1,239.09	**3,672.97**
Operational Expenses [2]	382.76	441.17	482.20	522.70	542.72	**2,371.55**
Total Interest and Finance charges [3]	5.97	33.32	36.93	37.49	65.91	**179.62**
Dep. As WDV as per income tax [4].	166.03	266.63	327.61	292.24	263.88	**1,316.39**
Total expense.[5] = [2 + 3 + 4]	554.76	741.12	846.74	852.43	872.51	**3,867.56**
PBT [6] = [1 – 5]	(369.30)	(228.98)	(94.61)	131.72	366.59	**(194.58)**
Set-off of prior period tax losses [7]	-	-	-	(131.72)	(366.59)	**(498.31)**
PBT after set-off of prior period tax losses [8]	(369.30)	(228.98)	(94.61)	-	-	**(692.89)**
Tax (25.17%) [9] = 25.17%*[8]	-	-	-	-	-	-

11.3. Stakeholder comments regarding Aeronautical Tax for the Third Control Period

11.3.1. There were no stakeholder comments with respect to aeronautical tax for the Third Control Period.

11.4. AAI's response to stakeholder comments regarding Aeronautical Tax for the Third Control Period

11.4.1. There were no stakeholder comments with respect to aeronautical tax for the Third Control Period.

11.5. Authority's analysis on stakeholders' comments regarding Aeronautical Tax for the Third Control Period

11.5.1. It is noted that no stakeholder comments were received regarding aeronautical taxes for the Third Control Period. However, the Authority also notes that the analysis presented earlier under different regulatory building blocks would have an impact on the aeronautical taxes in the Third Control Period. The Authority has accordingly recalculated the aeronautical taxes for the Third Control Period and decides to consider the same for the tariff determination process.

Table 133: Aeronautical taxes for the Third Control Period as decided the Authority

FY ending March 31 (Rs Cr.)	2022	2023	2024	2025	2026	Total
Aeronautical Revenue [1] (Table 142)	191.34	512.05	773.72	1,010.61	1,229.60	**3,717.32**
Operational Expenses [2] (Table 125)	392.78	449.38	473.85	512.15	544.65	**2,372.82**
Total Interest and Finance charges [3]	5.82	33.32	36.93	37.49	66.62	**180.17**
Dep. As WDV as per income tax [4]	172.63	272.36	332.47	298.74	271.77	**1,347.97**
Total expense.[5] = [2 + 3 + 4]	571.22	755.07	843.26	848.37	883.04	**3,900.95**
PBT [6] = [1 – 5]	(379.87)	(243.02)	(69.53)	162.24	346.55	**(183.63)**
Cumulative prior period losses till end of FY	1,041.66	1,258.30	1,353.72	1,224.84	903.70	
Set-off of prior period tax losses [7]	-	-	-	(162.24)	(346.55)	**(508.79)**
PBT after set-off of prior period tax losses [8]	(379.87)	(243.02)	(69.53)	-	-	**(692.42)**
Tax (25.17%) [9] = 25.17%*[8]	-	-	-	-	-	-

11.6. Authority's decisions regarding aeronautical tax for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to taxation for the Third Control Period

11.6.1. To consider aeronautical tax as per Para 11.5.1 (Table 133) for the Third Control Period.

11.6.2. To true up the aeronautical tax estimates based on actual tax outflow at the end of the Third Control Period.

12. INFLATION FOR THE THIRD CONTROL PERIOD

12.1. AAI's Submission regarding Inflation for the Third Control Period

12.1.1. The rate of inflation considered by AAI is based on the Consumer Price Index as per RBI. AAI has stated that it has considered the CPI forecast for four quarters of FY 2020-21 by RBI and computed an arithmetic mean of the same. The inflation rates submitted by AAI are given in the table below:

Table 134: Inflation submitted by AAI for Third Control Period

Quarter (FY21)	Inflation (in %)
Q1	5.60
Q2	4.90
Q3	3.20
Q4	2.80
Mean	**4.13**

12.2. Authority's examination regarding Inflation for the Third Control Period as part of the Consultation Paper

12.2.1. The Authority had analysed the submission made by AAI regarding inflation for the Third Control Period. The Authority had noted that inflation figures submitted by AAI for FY 2020-21 (CPI Combined) pertain to forecast by the RBI as per its 64th round of survey of professional forecasters on macroeconomic indicators (released on 04.06.2020).

12.2.2. The Authority, however, had proposed to consider the recent inflation forecast by the RBI as per its 69th round of survey of professional forecasters on macroeconomic indicators (released on 07.04.2021). It was of the view that the same would be consistent with the recent macroeconomic developments.

12.2.3. Based on the recent inflation forecast by the RBI, the Authority had proposed to consider inflation of 4.9%, i.e. the mean WPI inflation forecast for FY 2021-22 (WPI Non-food Manufactured Products) given in the table below:

Table 135: WPI (non-food manufactured products) as per RBI's 69th round of survey

Items (%)	FY 2020-21 (Q4)	FY 2021-22 (Q1)	FY 2021-22 (Q2)	FY 2021-22 (Q3)	FY 2021-22 (Q4)	Mean
Inflation	5.5	6.2	5.8	4.3	2.6	4.9

12.3. Stakeholder comments regarding Inflation for the Third Control Period

12.3.1. There were no stakeholder comments with respect to inflation for the Third Control Period.

12.4. AAI's response to stakeholder comments regarding Inflation for the Third Control Period

12.4.1. There were no stakeholder comments with respect to inflation for the Third Control Period.

12.5. Authority's analysis on stakeholders' comments regarding Inflation for the Third Control Period

12.5.1. It is noted that no stakeholder comments were received regarding inflation for the Third Control Period. In this regard, the Authority has decided to consider inflation based on 69th round of the survey of professional forecasters on macroeconomic indicators of RBI, in line with its proposal made in this regard in Consultation Paper No. 16/2021-22. The inflation considered by the Authority is given in detail in Table 135.

12.6. Authority's decisions regarding inflation for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to inflation for the Third Control Period

12.6.1. To consider 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 of professional forecasters on macroeconomic indicators of RBI, as per Para 12.2.3 (Table 135).

13. QUALITY OF SERVICES FOR THE THIRD CONTROL PERIOD

13.1. AAI's Submissions regarding Quality of Services for the Third Control Period

13.1.1. AAI has not made any submissions related to Quality of Service as part of its MYTP submission made in March 2021.

13.1.2. With respect to Quality of Service the Authority notes the following:

- As per section 13(1) (a)(ii) of the AERA Act, 2008, the Authority shall determine the tariff for aeronautical services taking into consideration - "the service provided, its quality and other relevant factors."
- As per section 13 (1) (d) of the AERA Act, 2008, the Authority shall "monitor the set performance standards relating to quality, continuity and reliability of service as may be specified by the Central Government or any authority authorized by it in this behalf;"

13.1.3. In the tariff order for Chennai International Airport for the Second Control Period, the Authority had noted that it expects AAI to maintain ASQ rating above 3.75 in 3rd control period (para 17.13).

13.1.4. The following table summarises the annual ASQ ratings of Chennai International Airport obtained during the Second Control Period:

Table 136: ASQ Ratings for Chennai International Airport from 2017-20

Year	ASQ Rating
2017	4.60
2018	4.65
2019	4.58
2020	4.67

13.1.5. The Authority has noted that the ASQ ratings awarded by ACI to Chennai International Airport during FY 2016-17 to 2019-20 was in the range of 4.58 - 4.67.

13.1.6. Further, the Authority has noted that Chennai International Airport won the ASQ award by ACI in 2017. It ranked the Third Best Airport by size in the category of 15-25 MPPA.

13.2. Authority's examination regarding Quality of Services for the Third Control Period as part of Consultation Paper

13.2.1. The Authority had not proposed any adjustment towards tariff determination for the Third Control Period on account of quality of service maintained by Chennai International Airport.

13.3. Stakeholder comments regarding Quality of Services for the Third Control Period

13.3.1. During the shareholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to the quality of services for the Third Control Period. The comments by stakeholders are presented below:

Other stakeholders' comments on Quality of Services for the Third Control Period

13.3.2. AOC, Chennai's comment regarding the need for more ground-handling agencies (GHAs) is as follows:

- *"Chennai Airport also has only one GHA from JAN21 which is causing serious hardship to all airlines. The current GHA is under prepared to handle the huge volume of business thrust upon them and they are slowly sprucing up their infrastructure. The requirement for a minimum of 3 GHA as per the aviation policy is not adhered to by AAI."*

13.3.3. IATA's comment regarding the quality of services at Chennai International Airport, Chennai is as follows:

- *"IATA notes that AAI has not made any submissions related to Quality of Service as part of its MYTP submission made in March 2021, which, as per the AERA Act, 2008, should be taken into consideration to determine the tariff for aeronautical services. The airport would benefit greatly from the introduction of a regulated service level agreement based on a blend of passenger and operational quantitative and qualitative metrics agreed with the airline community.*

- *In this regard, we have received following feedback from the airline community operating out of MAA:*

    - *MAA has only one single Ground Handling Agency since January 2021, i.e AIATSL which caters to both International and Domestic flights.*
    - *The handling and manpower coverage is sub-optimal. Airlines also have to deal with*
    - *GHA equipment shortage and lack of professionalism.*
    - *The matter has been highlighted to AAI Regional office as well as headquarters, but*
    - *no resolution has been achieved thus far.*

- *This is not in line with India's Ground-handling policy which requires that an "airport having annual passenger throughput of ten million passengers per annum or above, the airport operator shall ensure that there will be three ground-handling agencies". The requirement for a minimum of 3 ground-handling agencies (GHA) as per the policy, has not been adhered to by AAI.*

- *This is also not in line with the recommendation made by ICAO in its Doc 9587- Policy and Guidance Material on the Economic Regulation of International Air Transport. ICAO states that competition may have the beneficial effect of reducing ground-handling charges without compromising the quality of the service provided."*

13.4. AAI's response to stakeholder comments regarding Quality of Services for the Third Control Period

13.4.1. AAI's response to comments from AOC, Chennai and IATA is as follows:

- *"Contract between AAI and M/s Bhadra at Chennai Airport expired on 22.09.20. Thereafter, as per interim arrangement, M/s Bhadra was allowed by CHQ to operate in Chennai Airport till 31.12.20. Thereafter, M/s Bhadra approached the Hon'ble high Court of Madras for continuing operations in Chennai Airport beyond 31.12.20. As per the High Court of Madras Order Dt. 16.6.20, M/s Bhadra exited the airport along with the equipment.*

- *AAI had called for a global tender to appoint a Ground Handler in January-20. Due Covid-19, the tender end date was extended from time to time till 31st July-20. M/s LAS Ground Force was identified as the highest bidder and issued LOIA by CHQ in January -21. However, after the issue of LOIA, the agency did not fulfill the terms and conditions of the LOIA (Security Deposit as per LOIA was not deposited by the agency). Therefore, the LOIA was cancelled in May-21. Also, Writ petition has been filed by M/s Global Flight Handling Services Limited (one of the participant in the Global tender for GH at Chennai Airport) in the high court of Delhi regarding the above mentioned tender. The matter is sub-judice.*

- *In Chennai Airport, almost all the domestic Airlines are self-handling except GO Air and Air Asia. Go Air and Air Asia have very few operations. The scheduled international operations are still not permitted by GOI. Only, non- scheduled operations are currently operating in Chennai Airport. Also, the annual passenger traffic is projected to be less than 10 million for this financial year. M/s AIASL has been handling these non- scheduled operations. A meeting was held between CEO, AIASL and the stakeholders in September-21 to address the issues of Ground handling."*

13.5. Authority's analysis on stakeholders' comments regarding Quality of Services for the Third Control Period

13.5.1. The Authority notes comments from AOC and IATA and AAI's response thereon regarding the need for more ground handling agencies at Chennai International Airport. The Authority expects AAI to appoint the required number of GHAs as per the GHA Regulation, 2018 of Government of India (GoI).

13.5.2. Further, the Authority notes that Ground Handling Agencies are Independent Service Providers (ISPs). It may be noted that the Authority has a separate tariff determination process for service providers during which such issues are addressed alongside a rigorous stakeholder consultation process.

13.5.3. **Regarding Quality of Services**: The Authority noted IATA's comments regarding the submission of quality of services at Chennai International Airport. The Authority reviewed the MoU between AAI and MoCA for the FY 2019-20 and noted that the ASQ rating target for the FY 2019-20 was 4.68. The actual ASQ rating achieved by Chennai International Airport for the FY 2019-20 was 4.67. The Authority notes that AAI has achieved an ASQ rating of 4.67 despite the ongoing terminal building expansion works. Therefore, the Authority does not propose any adjustment towards tariff determination for the Third Control Period on account of quality of service maintained by Chennai International Airport. However, the Authority expects AAI to improve the quality of services in the Third Control Period.

13.6. Authority's decisions regarding Quality of Services for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to quality of services for the Third Control Period

13.6.1. Authority decides that AAI shall ensure that service quality at Chennai International Airport, Chennai conforms to the performance parameters ad indicated in the MoU with MoCA over the Third Control Period.

13.6.2. To not consider any adjustment towards tariff determination for the Third Control Period on account of quality of service.

14. AGGREGATE REVENUE REQUIREMENT FOR THE THIRD CONTROL PERIOD

14.1. AAI's Submissions regarding Aggregate Revenue Requirement for the Third Control Period

14.1.1. AAI has arrived at the following ARR for the Third Control Period based on the submissions made for the regulatory building blocks as per the previous sections:

Table 137: ARR submitted by AAI for Third Control Period

FY ending March 31 (in Rs Cr.)	Ref	2022	2023	2024	2025	2026	Total
Opening RAB	A	1,779.90	3,198.45	3,028.86	4,276.83	4,275.72	-
Closing RAB	B	3,198.45	3,028.86	4,276.83	4,275.72	4,426.78	-
Average RAB	C = Av(A+B)	2,489.17	3,113.66	3,652.85	4,276.28	4,351.25	-
FRoR (%)	D	13.26%	13.28%	12.59%	12.59%	12.66%	
Return on RAB	E = C*D	330.09	413.50	459.81	538.22	551.03	2,292.65
O&M Expenses	F	466.92	541.73	579.78	679.95	730.52	2,998.90
Working Capital Interest	G	-	-	-	-	-	-
Depreciation	H	219.09	275.78	295.97	350.25	341.73	1,482.82
Tax	I	-	-	-	-	85.13	85.13
Return on Land	J	0.45	0.45	0.45	0.45	0.45	2.26
Under-recovery of Second Control Period as on 31st March 2022	K	172.13	-	-	-	-	172.13
Aggregate Revenue Requirement (including true-up)	L = SUM(E:K)	1,188.68	1,231.47	1,336.01	1,568.88	1,708.86	7,033.90
Non-Aeronautical Revenue	M	118.01	160.49	287.16	345.76	416.75	1,328.17
Less: 30% Non-Aeronautical Revenue	N = 30%*M	35.40	48.15	86.15	103.73	125.02	398.45
Net ARR	O = L + N	1,153.28	1,183.32	1,249.86	1,465.15	1,583.84	6,635.44
Discount rate	P	13.26%	13.28%	12.59%	12.59%	12.66%	
Discount Factor	Q	1.00	0.88	0.79	0.70	0.62	
NPV of Net ARR as on 31st March 2022	R = O*Q	1,153.28	1,044.59	986.01	1,026.66	983.05	5,193.59
Passengers (in mns)	S	40.82					40.82
Yield Per Passenger (in Rs.)	T = (R/S)*10	1,272.26					1,272.26

14.1.2. Accordingly, the yield per passenger as submitted by AAI at the beginning of the Third Control Period is Rs. 1,272.26 Cr.

14.2. Authority's examination regarding Aggregate Revenue Requirement for the Third Control Period as part of Consultation Paper

14.2.1. Based on the changes proposed by the Authority for each building block, and after accounting for the over-recovery of Rs. 472.90 Cr. in FY 2021-22 as per the true-up calculation, Authority had proposed the following ARR for the Third Control Period in the table below:

Table 138: ARR proposed to be considered by the Authority for the Third Control Period

FY ending March 31 (in Rs Cr.)	Ref	2022	2023	2024	2025	2026	Total
Opening RAB (Table 104)	A	1,694.05	1,886.26	2,935.94	2,990.22	2,964.03	-
Closing RAB (Table 104)	B	1,886.26	2,935.94	2,990.22	2,964.03	2,769.16	-
Average RAB (Table 104)	C = Av(A+B)	1,790.15	2,411.10	2,963.08	2,977.13	2,866.60	-
FRoR (%) (Table 115)	D	11.95%	11.95%	11.95%	11.95%	11.95%	
Return on RAB	E = C*D	214.01	288.24	354.22	355.90	342.69	**1,555.06**
O&M Expenses (Table 123)	F	382.76	441.17	482.20	522.70	542.72	**2,371.55**
Working Capital Interest	G	2.42	-	-	-	-	**2.42**
Depreciation (Table 103)	H	167.98	220.10	235.47	240.81	236.26	**1,100.63**
Tax (Table 132)	I	-	-	-	-	-	-
Return on Land (Para 8.2.4)	J	-	-	-	-	-	-
Over-recovery of Second Control Period (Table 75) as on 31st March 2022	K	(472.90)	-	-	-	-	**(472.90)**
Aggregate Revenue Requirement (including true-up)	L = SUM(E:K)	294.26	949.51	1,071.89	1,119.42	1,121.67	**4,556.75**
Non-Aeronautical Revenue (Table 129)	M	190.76	329.25	363.81	395.92	453.03	**1,732.76**
Less: 30% Non-Aeronautical Revenue	N = 30%*M	57.23	98.77	109.14	118.78	135.91	**519.83**
Net ARR	O = L + N	237.04	850.73	962.75	1,000.64	985.76	**4,036.92**
Discount rate	P	11.95%	11.95%	11.95%	11.95%	11.95%	
Discount Factor	Q	1.00	0.89	0.80	0.71	0.64	
PV of Net ARR as on 31st March 2022	R = O*Q	237.04	759.89	768.12	713.11	627.48	**3,105.64**
Passengers (in mns) (Table 79)	S			**56.96**			**56.96**
Yield Per Passenger (in Rs.)	T = (R/S)*10			**545.20**			**545.20**

14.2.2. The yield per passenger beginning in the Third Control Period computed by the Authority is Rs. 545.20. Further, the Authority estimates the present value of ARR to be Rs. 3,105.64 Cr. as seen in the table above.

14.3. Stakeholder comments regarding Aggregate Revenue Requirement for the Third Control Period

14.3.1. During the stakeholder consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to aggregate revenue requirement for the Third Control Period. The comments by the stakeholders are mentioned below:

AAI's comments regarding aggregate revenue requirement for the Third Control Period

14.3.2. AAI's comment regarding aggregate revenue requirement for the Third Control Period is as follows:

"AERA's Contentions

- *AERA has proposed shortfall of Rs 372 crores to be carried forward to the next control period*
- *Revised Tariff commencement date is set to be 1st April 2022*

AAI's Submission and Request

- *After considering all the above changes, the AERA is requested to consider full recovery of ARR as our rates are in line with that charged by comparable airports of BIAL and HIAL.*
- *AAI in its MYTP submission proposed to increase the rate from 1st April 2021*
- *AERA in its CP proposed to increase the rate from 1st April 2022.*
- *However, AAI requests AERA to consider increase in rate as submitted from 1st January 2022.*
- *AAI submits to AERA to kindly recompute the IDC, expenses capitalization, interest on working capital, non-aeronautical revenues and other all other building blocks in which there would be consequential changes/impact based on the revised considerations/points submitted in this document.*

14.3.3. SpiceJet's comment regarding aggregate revenue requirement is as follows:

- *AERA is requested to review the suggestions/comments on the regulatory building blocks, which is likely to reduce the ARR (including shortfall) of MAA. This will further ensure the lowering of tariff including UDF, which will be beneficial to passengers and airlines.*

- *We submit 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 MAA's Third Control Period will now be issued after the commencement of the Control Period i.e. 1 April 2021."*

14.4. AAI's response to stakeholder comments regarding ARR for the Third Control Period

14.4.1. AAI's response to SpiceJet's comment regarding aggregate revenue requirement is given in detail in Para 15.4.4.

14.5. Authority's analysis on stakeholders' comments regarding ARR for the Third Control Period

14.5.1. The Authority notes AAI's comment on considering full recovery of ARR in the Third Control Period. Considering the fact that the aviation sector is stressed, the Authority is of the view that carrying forward a portion of the target revenue will reduce the burden on stakeholders. However, at the same time, the Authority acknowledges that passing on the entire burden to the next control period could impact the cash flows of AAI and might require an abrupt increase in charges in the Fourth Control Period which may not be sustainable. The impact of this carry forward will be trued-up in the tariff determination of the Fourth Control Period. Therefore, the Authority decided to continue with its proposal as stated in Para 15.2.4.

14.5.2. The Authority has noted the nine points made by SpiceJet. All these issues have been addressed by the Authority in the relevant chapters related to those building blocks/issues in Consultation Paper No. 16/2021-22 dated 07th September 2021.

14.5.3. The Authority has taken note of SpiceJet's comment and its reference to Hon'ble TDSAT Order dated 16th December 2020 regarding the timely release of the order. The Authority has consistently endeavoured to issue tariff orders for all major airports on a timely basis. However, the current delay is attributed to factors such as the Covid-19 pandemic as well as the delay in submission of the MYTP by airport operators despite rigorous follow-ups by the Authority. The Authority notes that the timely issuance of order is contingent upon airport operators' submission of the MYTP at least 6 months before the control period expires. Keeping this in view, the Authority notes that AAI had submitted the MYTP for Chennai International Airport vide letter dated 17th March 2021 ("Submission of Multi Year Tariff Proposal [MYTP] for 3rd control period (01.04.2021 to 31.03.2026) and True-up of 2nd control period (01.04.2016 to 31.03.2021) in respect of Chennai International Airport"). Further, the Authority notes that the MYTP for Chennai International Airport lacked vital information on regulatory building blocks such as capital expenditure and O&M expenditure.

14.5.4. Additionally, while the Authority notes the importance of releasing tariff orders in a timely manner, the Authority had to take into account the impact of multiple waves of the pandemic into its projections for various building blocks while determining the tariffs at Chennai International Airport.

14.5.5. Further, the Authority also notes that the analysis presented under each regulatory building block would have an impact on the aggregate revenue requirement of the Third Control Period. Accordingly, the Authority has recalculated the same as given in the table below:

Table 139: ARR for the Third Control Period decided by the Authority

FY ending March 31 (in Rs Cr.)	Ref	2022	2023	2024	2025	2026	Total
Opening RAB (Table 109)	A	1,740.28	1,930.98	2,976.86	3,027.33	3,027.98	-
Closing RAB (Table 109)	B	1,930.98	2,976.86	3,027.33	3,027.98	2,828.05	-
Average RAB (Table 109)	C = Av(A+B)	1,835.63	2,453.92	3,002.09	3,027.66	2,928.02	-
FRoR (%) (Table 116)	D	11.98%	11.98%	11.98%	11.98%	11.98%	-
Return on RAB	E = C*D	219.93	294.00	359.68	362.74	350.80	**1,587.16**
O&M Expenses (Table 125)	F	392.78	449.38	473.85	512.15	544.65	**2,372.82**

FY ending March 31 (in Rs Cr.)	Ref	2022	2023	2024	2025	2026	Total
Working Capital Interest (Table 125)	G	2.27	-	-	-	-	2.27
Depreciation (Table 108)	H	171.75	223.92	239.20	245.35	241.32	1,121.55
Tax (Table 133)	I	-	-	-	-	-	-
Return on Land (Para 8.5.2)	J	-	-	-	-	-	0.00
Over-recovery of Second Control Period (Table 76) as on 31 March 2022	K	(532.39)	-	-	-	-	(532.39)
AAI's adjustment for SpiceJet (Para 15.5.5)			33.10				33.10
Aggregate Revenue Requirement (including true-up)	L = SUM(E:K)	254.33	1,000.41	1,072.74	1,120.25	1,136.78	4,584.51
Non-Aeronautical Revenue (Table 130)	M	145.62	294.57	363.81	395.92	453.03	1,652.95
Less: 30% Non-Aeronautical Revenue	N = 30%*M	43.69	88.37	109.14	118.78	135.91	495.88
Net ARR	O = L + N	210.65	912.04	963.59	1,001.47	1,000.87	4,088.62
Discount rate	P	11.98%	11.98%	11.98%	11.98%	11.98%	
Discount Factor	Q	1.00	0.89	0.80	0.71	0.64	
PV of Net ARR as on 31st March 2022	R = O*Q	210.65	814.46	768.43	713.19	636.50	3,143.23
Passengers (in mns) (Table 80)	S	54.34					54.34
Yield Per Passenger (in Rs.)	T = (R/S)*10	578.45					578.45

14.5.6. The yield per passenger in the Third Control Period computed by the Authority is Rs. 578.45. Further, the Authority estimates the present value of ARR to be Rs. 3,143.23 Cr. as seen in the table above. Based on the ARR, the Authority has decided tariffs for the Third Control Period in Annexure – I.

14.6. Authority's decisions regarding ARR for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to ARR for the Third Control Period

14.6.1. To consider the ARR as per Table 139 as the eligible ARR for the Third Control Period.

14.6.2. To true up all building blocks based on actuals during the tariff determination exercise of the Fourth Control Period.

15. AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

15.1. AAI's submission regarding Aeronautical Revenue for the Third Control Period

15.1.1. AAI has proposed to increase the aeronautical tariffs as applicable from 01st April 2021 as per below schedule:

a. Landing charges: An upward increase of 920% and 975% for Domestic landing and International Landing respectively from existing rates w.e.f. 01.04.2021 and thereafter an increase of 4% on 01st April every F.Y up to F.Y 2025-26 is proposed.

b. Parking charges: An upward increase of Parking charges (Domestic/International) at 1220% from existing rates w.e.f. 01.04.2021 and thereafter an increase of 4% on 1st April every F.Y up to F.Y 2025-26 is proposed. Housing Charges are proposed to be categorized as parking charges.

c. UDF: Domestic UDF at Rs. 630 per embarking passenger (increase of 813% from existing rate of Rs. 69) and. International UDF at Rs 1,350 per embarking passenger (increase of 1,857% from existing rate of Rs 69) with effect from 01st April 2021 and thereafter an increase of 4% on 01st April of every F.Y up to F.Y 2025-26 is proposed.

15.1.2. Aviation Security Fee (ASF): Will continue to be charged as rate prescribed by MoCA.

15.1.3. The annual tariff proposal submitted by AAI is given in Annexure I of Consultation Paper No. 16/2021-22 dated 07th September 2021.

15.1.4. As per AAI's submission, aeronautical revenue is as given below:

Table 140: Aeronautical revenue as submitted by AAI

FY Ending 31 March (in Rs. Cr.)	2021	2022	2023	2024	2025	2026	Total
Landing	16.04	303.24	369.82	440.89	499.65	563.65	2,177.26
Parking	1.11	25.08	31.21	38.72	44.25	50.53	189.78
UDF	14.42	311.84	459.00	660.47	831.64	1,043.23	3,306.17
Land Lease	29.03	29.03	31.21	33.55	36.07	38.77	168.64
Ground Handling Charges	15.14	26.28	31.28	36.94	40.50	44.34	179.34
Royalty from Cute Charges	3.85	7.24	10.02	13.70	16.20	19.13	66.29
Cargo Revenue share from AAICLAS (30%)	56.01	56.01	61.62	67.78	74.55	82.01	341.97
Total	**135.60**	**758.73**	**994.14**	**1,292.06**	**1,542.87**	**1,841.67**	**6,429.46**

AAI's additional submission on landing charges for aircrafts with maximum capacity of less than 80 seats

15.1.5. AAI has submitted vide its letter dated 18th August 2021 (attached in Appendix-1) that the Authority has to compensate AAI in the Third Control Period for the revenue loss in the matter of

M/s SpiceJet's claim on levy of landing charges by AAI for aircrafts having maximum capacity of less than 80 seats in the First and Second Control Period.

15.2. Authority's examination regarding Aeronautical Revenue for the Third Control Period as part of Consultation Paper

15.2.1. The Authority had noted that air traffic demand had been widely impacted due to challenges posed by the Covid-19 pandemic and the resultant slowdown in the economy. Moreover, airport operators had ongoing capital expenditure projects as also other planned works, thus resulting in a higher ARR. Further, the Authority had noted that the existing traffic base was not sufficient for complete recovery of ARR in the Third Control Period and that this would require a significant increase in tariffs.

15.2.2. The Authority was cognizant of the situation and was of the view that keeping the tariff at the current level for the entire control period and postponing the full recovery of shortfalls to the next control period would create substantial recovery burden and would have lead to steep tariff increases in the Fourth Control Period. Besides, it would have also adversely impacted the cash flows of the airport operator in the Third Control Period. The Authority, however, was of the view that targeting a full recovery at this time may not be fair to all stakeholders and may dampen the stakeholders' efforts to revive demand. The Authority had noted that the airport operator had the provision of the true up of any shortfalls in revenue recovery in the Fourth Control Period.

15.2.3. Based on the above analysis, the Authority had proposed not to increase any aeronautical tariff both for domestic and international traffic in the current financial year 2021-22 and had proposed to revise the Landing and Parking charges and UDF from 01st April 2022.

15.2.4. Further, the Authority had proposed to carry forward Rs. 372.55 Cr. of the ARR of the Third Control Period to the Fourth Control Period in order to reduce the burden on users during the Third Control Period on account of lower traffic.

15.2.5. The Ministry of Civil Aviation had discontinued the levy of fuel throughput charge at all airports with effect from 15th January 2020 vide MoCA letter no. F.No. AV-13030/216/2016-ER (Pt.2) dated 8th January 2020.

15.2.6. The Authority had proposed to consider ground handling charges and royalty from CUTE charges based on the traffic growth rates proposed in Table 79.

Authority's examination of AAI's additional submission on landing charges for aircrafts with maximum capacity of less than 80 seats

15.2.7. Ministry of Civil Aviation vide letter dated 09th February 2004 decided to exempt, "aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled operators and helicopters of all types", from paying landing charges at AAI airports.

15.2.8. AERA while issuing the aeronautical tariff order for Chennai airport for 1st control period (01.04.2011 to 31.03.2016) did not mention this clause in its Order No.38/2012-13 dated 01.02.2013.

15.2.9. M/s Spicejet vide letter dated 19.02.2021 (refer Appendix II) has submitted that AAI had not exempted the landing charges for aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled operators during the currency of 1st control period order of

AERA. M/s Spicejet stated that AAI has billed Rs.29.50 Cr. on Spicejet for operating aircraft at Chennai with a maximum certified capacity of less than 80 seats. Now M/s Spicejet has requested AAI to accord necessary credit for excess billing during 1st control period.

15.2.10. In this regard, Airports Authority of India vide letter dated 18.08.2021submitted that it will consider the request of M/s Spicejet and accord credit if AERA allows exemption from landing charge in respect of aircraft with a maximum certified capacity of less than 80 seats in 1st control period and suitably compensate AAI for amount of credit to be accorded. The Authority proposes to elicit the views of stakeholders before taking final decision on this matter.

15.2.11. The Authority had determined the aeronautical revenues with the proposed aeronautical charges as follows:

Table 141: Aeronautical revenues and shortfall proposed to be considered in the Third Control Period by the Authority

Particulars (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Total PV of ARR including true-up (A)			**3,105.64**			**3,105.64**
Landing charges:						
Domestic	14.19	63.56	95.34	121.98	166.89	**461.97**
International	6.43	60.78	116.05	146.98	185.14	**515.38**
Subtotal (landing charges) (B)	**20.62**	**124.35**	**211.39**	**268.96**	**352.04**	**977.35**
Parking charges:						
Domestic	1.86	8.32	12.49	15.98	21.86	**60.50**
International	0.06	0.54	1.03	1.31	1.65	**4.59**
Subtotal (P&H charges) (C)	**1.92**	**8.87**	**13.52**	**17.28**	**23.51**	**65.09**
Other revenues						
Land leases	29.03	31.21	33.55	36.07	38.77	**168.64**
Revenue from ground handling	24.42	41.39	45.36	49.38	56.68	**217.24**
CUTE charges (royalty)	10.18	17.58	19.42	21.14	24.19	**92.50**
Revenue from AAICLAS	56.01	61.62	67.78	74.55	82.01	**341.97**
Subtotal (other revenues) (D)	**119.65**	**151.80**	**166.11**	**181.14**	**201.65**	**820.36**
UDF						
Domestic UDF	38.64	167.06	245.06	347.48	460.00	**1,258.25**
International UDF	4.63	60.08	116.05	169.28	201.90	**551.92**
Subtotal (UDF) (E)	**43.27**	**227.14**	**361.11**	**516.76**	**661.90**	**1,810.17**
Total revenue [F = B + C + D + E]	**185.46**	**512.15**	**752.13**	**984.15**	**1,239.09**	**3,672.97**
PV factor (G)	**1.00**	**0.89**	**0.80**	**0.71**	**0.64**	
PV of total revenue [H = F*G]	185.46	457.46	600.08	701.35	788.75	**2,733.09**
Total PV of revenue [I = Σ(H)]			**2,733.09**			**2,733.09**
(Surplus) / Shortfall [A – H]			**372.55**			**372.55**

15.2.12. The Authority proposed to carry-forward the shortfall of Rs. 372.55 Cr. (as per Table 141) to the Fourth Control Period, with a view to not burden the airlines further which are already suffering with the Covid-19 pandemic's impact, as also the other Users, with excessive tariff at this juncture. However, the Authority had proposed to adjust the above shortfall based on the aeronautical revenue achieved by Chennai International Airport in line with the actual traffic data of the Third Control Period.

15.3. Stakeholder comments regarding Aeronautical Revenue for the Third Control Period

15.3.1. During the stakeholders' consultation process, the Authority has received comments/views from various stakeholders in response to the proposals of the Authority in Consultation Paper No. 16/2021-22 with respect to the aeronautical revenue for the Third Control Period. The comments by the stakeholders are presented below:

AAI's comments regarding aeronautical revenue for the Third Control Period

15.3.2. AAI's comment regarding landing charge for aircrafts with less than 80-seater capacity is as follows:

"AERA's Contentions

- *"14.2.8 Ministry of Civil Aviation vide letter dated 09th February 2004 decided to exempt, "aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled operators and helicopters of all types", from paying landing charges at AAI airports.*
- *14.2.9. AERA while issuing the aeronautical tariff order for Chennai airport for 1st control period (01.04.2011 to 31.03.2016) did not mention this clause in its Order No.38/2012-13 dated 01.02.2013*
- *14.2.10 M/s Spicejet vide letter dated 19.02.2021 has submitted that AAI had not exempted the landing charges for aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled operators during the currency of 1st control period order of AERA. M/s Spicejet stated that AAI has billed Rs.29.50 Cr. on Spicejet for operating aircraft at Chennai with a maximum certified capacity of less than 80 seats. Now M/s Spicejet has requested AAI to accord necessary credit for excess billing during 1st control period.*
- *14.2.11. In this regard, Airports Authority of India vide letter dated 18.08.2021 submitted that it will consider the request of M/s Spicejet and accord credit if AERA allows exemption from landing charge in respect of aircraft with a maximum certified capacity of less than 80 seats in 1st control period and suitably compensate AAI for amount of credit to be accorded. The Authority proposes to elicit the views of stakeholders before taking final decision on this matter"*

AAI's Submission and Request

AAI's comments on the above are as under:

- *It needs to be placed on record that order for exemption from landing charges in respect of aircrafts with maximum certified seating capacity of less than 80 seats was issued by MOCA on 08/02/2004 (applicable from 00.00 hours of 12.02.2004). This was neither included in the consultation paper nor raised by any stakeholder during public hearings. The tariff order for the first CP laid down the landing charges of all aircrafts including aircrafts with maximum certified seating capacity of less than 80 seats, and the same were recovered by AAI from all airlines.*
- *It would be pertinent to point out that this is not a case of excess billing during first control period as claimed by M/s Spice Jet. AAI has rightfully recovered the landing charges as per the tariff order then in force. In case, AERA decided that exemption prevailing prior to 1/04/2011*

should have continued and directs AAI to pay back the landing charges collected during the first CP with interest, then AAI must be compensated for the full amount including interest.

- *It is because that amount so refunded will be treated as revenue gap for the particular period. Any revenue gap of preceding period is compensated/covered in future tariff period with carrying cost. Hence carrying cost on this amount which would be required to be refunded or adjusted to SpiceJet is required to be given, It is even more so as M/s Spice Jet would be asking for interest on this amount.*

- *It is not known to AAI whether any other airlines have also sought or will seek similar benefits, AAI would request AERA to give time to all airlines that may like to seek similar relief so that AAI does not suffer any loss on account of similar payment it will have to make.*

- *The amount to be paid back, if any, should be without taxes only.*

Other stakeholders' comments on non-aeronautical revenue for the Second Control Period

15.3.3. AOC's comment regarding increase in UDF and space rents is as follows:

- *Since the NITB project is delayed and may open to passengers sometime next year, UDF increase needs to be in line with the opening of the NITB for international passengers.*

- *AAI has increased the space Rents for Non-air conditioned space by 45% and Air condition office space by 45% at T3 and 25% in T4 from 01 Apr 2022 which is not justified with no service value addition.*

15.3.4. IATA's comment regarding the carry-forward of the shortfall is as follows:

- *We note the carry forward of the shortfall of Rs. 372.55 crores. (as per Table 112) to the Fourth Control Period, which is being considered with a view to not burden the airlines further.*

- *We would like to request AERA to consider a larger carry-forward amount to the Fourth Control Period. It has been noted that a greater percentage of the ARR has been carried forward to the next control period in the case of other recent tariff orders like for BLR & HYD.*

15.3.5. IATA's comment regarding landing and UDF charges are as follows:

- *IATA supports AERA's recent tariff orders for BLR & HYD where the charges both landing & UDF will reduce in the last quarter of the control period in order to moderate a constant increase of user charges. We hope the same will be followed in the case of MAA as well.*

15.3.6. IndiGo's comment regarding aeronautical revenue for the Third Control Period is as follows:

- ***Overall Tariff/ARR***
  AERA is requested to review the suggestions/comments on the regulatory building blocks, which is likely to reduce the ARR of AAI. This will further ensure the lowering of tariff including UDF, which will be beneficial to passengers and airlines.

- ***Collection Charges***
  With regards to the entitlement of the collection charge of Rs. 5 per departing passenger, IndiGo submits that instead of the same being conditional upon all dues, interest of dues, and other

charges being paid within the due date, the entitlement should be against AAI having received the undisputed invoiced UDF amount with the applicable due date.

IndiGo further submits that AAI, Chennai should clear any pending payment of Collection Charges, as due to the airlines.

- ***Shrinkage in Control Period***

IndiGo submits that the Hon'ble TDSAT Order dated 16 December, 2020 for BIAL stated as follows: '100...However, there is substance in this grievance and AERA will do well to ensure that U' 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 AAI, Chennai Third Control Period will now be issued after the commencement of the Control Period i.e. 1 April, 2021.

- ***No compensation to AAI***

Exemption of Landing Charges for aircraft less than 80 seats (Para 14.2.8 to 14.2.11 of the CP) IndiGo submits that the issue raised by M/s. Spice Jet relating to an apparent excess billing of landing charges by AAI (amounting to Rs. 29.50 Cr.), pertaining to aircraft with a maximum certified capacity of less than 80 seats, during the First Control Period, is a bilateral issue between M/s. Spice Jet and AAI, and as such should be dealt between the said parties.

In view of the above, IndiGo submits that AERA should not allow any compensation to be paid to AAI, including by way of adjustment in ARR (in the Third Control Period), for rectifying/reversing any excess billing by AAI in the First Control Period. AERA will appreciate that any such adjustment to ARR leading to an increase in tariffs, will unfairly burden the airlines and passengers at Chennai Airport during the Third Control Period.

15.3.7. SpiceJet's comment regarding exemption of landing charges for aircrafts with capacity of less than 80 seats is as follows:

Refund of Landing. Charges: (Refer 14.2.8 to 14.2.10 of the CP)

- *The Authority has sought to take into consideration stakeholder's view before taking final decision on matter of refund of landing charges to SpiceJet for Q-400 landing charges at Chennai by AAI - Chennai during the First Control Period.*

- *In line with the recommendations of the Naresh Chandra Committee, the Ministry of Civil Aviation (MOCA) announced exemption of landing charges in respect of aircraft with maximum seating capacity of less than 80 seats (small aircraft) and being operated by domestic scheduled operators, vide its letter no. G-17108/07/2001-AAI dated. February 9, 2004. Airports Authority of India (AAI) also issued orders in line with the above letter, vide its letter no. Av.11014/22/2002-Rev/ dated February 11, 2004. All the airports (except Civil Enclaves at Defence Airports) stopped charging landing charges on small aircraft in line with the above letters.*

- *In accordance with the above Government policy airline operators in India inducted small aircraft with less than 80 seats into their fleet to boost connectivity to small and far flung* *airports which has immensely helped in promotion of travel, trade and tourism along with generating a lot of employment opportunities to the people in those areas. The small aircraft have played a vital role in the success of the ambitious UDAN scheme launched by the Government of India.*

- *With the privatisation of airports and constitution of Airports Economic Regulatory Agency (AERA), some airports, as part of their tariff, got landing charges on small aircraft approved from AERA which were not in line with the above letters of MOCA and AAI. Such landing charges were recovered by the airport operators from the airlines. Since such recovery was contrary to the government policy on the basis of which airlines had made large investments, airlines raised this issue with MOCA and AERA. After the representations, AERA stopped approving landing charges on small aircraft from second control period onwards on domestic flights. It is worth mentioning that as per the letter no. G- 17108/07/2001-AA1 dated February 9, 2004, no landing charges were to be charged in respect of the flights being operated by small aircraft by a scheduled domestic operator without any limitation of domestic or international flights.*

- *In view of the above, it is submitted that all the landing charges charged by AAI - Chennai at Chennai Airport for operations of the aircraft with less than 80 seat be refunded to the airlines along with interest to be calculated as per interest charged by AAI - Chennai from the airlines from time of time. The principal amount charged from SpiceJet by AAI - Chennai are as under:-*

Financial Year	Amount invoiced by AAI Chennai (in INR)
2012-13	2,374,201
2013-14	58,523,804
2014-15	64,037,529
2015-16	61,097,674
2016-17	68,631,451
2017-18	68,255,785
2018-19	10,221,529
Grand Total	333,141,972

- *Airports Authority of India Chennai has confirmed an amount of Rs. 33,10,45,277 vide its letter no. AAI/CH/REV/SJ dated 24.09.2021, which has been submitted by SpiceJet to AERA vide SpiceJet letter no. AERA/250921 dated September 24, 2021.*

Compensation to AAI (Refer 4.2.11 of the CP)

- *We are thankful to AAI for considering the claim of SpiceJet for the refund of the amounts as mentioned in Point 1(a) above, and to rectify the errors that had crept into the MYTP, Consultation paper and Tariff Order for the First Control Period regarding the levying of landing charges in respect of aircraft with maximum seating capacity of less than 80 seats being operated by domestic scheduled operators, in contradiction with the Ministry of Civil Aviation, Government of India's letter no. G-17108/07/2001-AA1 dated February 9, 2004 and AAI's letter no. Av.11014/22/2002-ReW dated February 11, 2004. We are also thankful that this oversight has been rectified in the Tariff Order for the Second Control Period, in line with the MOCA's letter no. G-17108/07/2001-AAI dated February 9, 2004 and AAI's letter no. Av.11014/22/2002-Rev/ dated February 11, 2004. We are also thankful that aforementioned exemption has been stated in the proposal of AAI - Chennai for the Third Control Period and has been considered accordingly by AERA.*

- *In our view, subject to the aforementioned amounts being refunded to SpiceJet, AAI - Chennai may be suitably compensated for the deficit that may be created due to such refund to SpiceJet.*

15.3.8. SpiceJet's comment regarding tendering process and royalty is as follows:

Tendering Mechanism:

- *Authority should ensure that instead of the Concession agreements being for a period of 7 to 10 years, the same should not exceed five (5) years such that there is no monopolistic situation, and in a fair and transparent manner, with the agreement awarded to only those parties which provide best-in-class services at the most competitive (at the least) price, from at least three to four parties.*

  Length of Concession agreements at Chennai:

Retail	Duty Free	Parking	Advertising	F & B
7 Years	7 Years	1 Years (Extendable)	10 Years	10 Years

- *Any attempt to award the contracts on highest revenue share basis should be discouraged as it breeds inefficiencies and tends to disproportionately increase the cost. It is general perception Airport operator has no incentive to reduce its expenses as any such increase will be passed on to the airlines through tariff determination mechanism process and indirectly airlines will be forced to bear these additional costs. There needs to be a mechanism for incentivizing the parties for increasing efficiencies and cost savings and not for increasing the royalty for the airport operator.*

Royalty:

- *As you are aware, royalty is in the nature of market access fee, charged (by any name or description) by the Airport operator under various headings without any underlying services. These charges are passed on to the airlines by the airport operator or other services providers. The rates of royalty at some of the airports are as high as forty-six (46) %. 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. Sometimes it is argued by the airport operators that 'Royalty' on 'Aero Revenues' helps in subsidizing the aero charges for the airlines, however royalty in 'Non-Aero Revenues' hits the airlines directly without any benefit.*

  The rates of royalty/concession fee for various services at Chennai Airport are mentioned below:

GHA(Dom)	GHA(Intl)	Catering	Freight	Security	MRO
13%	13%	13%	13%	32.50%	13%

- *In view of the above, we urge Authority to abolish such royalty which may be included in any of the cost items.*

15.3.9. SpiceJet's comment regarding exemption of tariffs/collection charges due to Government restrictions is as follows:

Tariff:

- *While AAI - Chennai has proposed to increase the aeronautical tariffs as applicable from 1 April 2021 between 920% to 975% for Domestic and International Landing charges respectively from existing rates and thereafter an increase of 4% on 1st April every F.Y. up to F.Y 2025-26, AERA has considered increases up to around 470% as compared to existing* *charges. Similarly, while AAI - Chennai has proposed increase of Parking charges (Domestic/International) at 1220% from existing rates w.e.f. 01 04.2021 and thereafter an increase of 4% on 1st April every F.Y up to F.Y 2025-26, AERA has considered increases up to around 470% as compared to existing charges. Further, for UDF, AAI - Chennai has proposed an increase of 813% for Domestic and 1857% for international passengers as compared to existing rates with effect from 01.04.2021 and thereafter an increase of 4% on 1st April of every F.Y up to F.Y 2025-26, while AERA has considered increases up to around 480% for domestic and around 770% for international passengers as compared to existing charges. These rates of increase in tariff are shockingly high especially in the backdrop of COVID-19. It is in the interest of all the stakeholders not to increase the tariffs in order to encourage middle class people to travel by air, which will help in sharp post-COVID-19 recovery of aviation sector.*

Government Restrictions:

- *Please further note, there were no scheduled operations between March 25, 2020 to May 24, 2020 due to the restrictions imposed by the Government of India which was caused due to the lockdown during the pandemic period. Hence it is requested that:*
    - *no space rentals should be chargeable during the above mentioned period- to the airlines, and refund of rentals already charged should be made immediately,*
    - *no parking charges (including housing charges, if any) should be applicable during the aforementioned period, and refund of such parking charges already charged should be made immediately;*
    - *After the above mentioned period, there was a calibrated opening of operations allowed by the Government, and thus instead of applying the full rates, the space rentals and parking charges should only be applicable only in the same ratio as of the allowed operations, and refund in accordance with this request be made immediately,*
    - *no parking charges should be applicable on the aircraft which continue to be grounded due to the above mentioned reasons, and refund of such parking charges already charged should be made immediately. In addition, it is requested that no further charges should be applicable till the end of the restrictions as outlined above.*

Collection Charges:

- *With regard to the entitlement of the collection charges per departing passenger, as it is mentioned that the same would be subject to the policy pertaining to such charges between the airport operator and the airline, and since it is not specifically mentioned what such policy might be, we submit that the same should not be conditional upon all dues, interest of dues, and other charges being paid within the due date, and the entitlement should be against AAI - Chennai having received the undisputed invoiced UDF amount with the applicable due date.*

15.3.10. Blue Dart Aviation's comment regarding aeronautical revenue for the Third Control Period is as follows:

- *We wish to submit to AERA that the prolonged COVlD19 pandemic has imposed a period of great distress on airlines. In the current scenario, based on the request by the Airport Operator, the AERA proposal of 42% CAGR increase in the Landing Charges and 55% CAGR increase in parking charges, are completely unacceptable and is not line with the support which is expected from an Airport Operator to protect the Airlines and Airport user community from further decline. Airlines are already severely challenged, with no relief from any quarter and any further increase in charges at this time will do irreparable damage.*

- *In view of the current unprecedented situation in the history of the airline industry, we would request 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 normalises.*

15.4. AAI's response to stakeholder comments regarding Aeronautical Revenue for the Third Control Period

15.4.1. AAI's response to AOC's comment on increase in UDF and space rents is as follows:

- *AAI submits that the rationalization of space license fee was last undertaken in the year 2008 which was implemented w.e.f 1st April 2008 for a period of three years. The same continued with application of annual escalation from time to time.*

- *After this exercise a considerable change has been witnessed in the business landscape. Hence, it was thought fit to realign the rates with the prevailing market conditions. After a holistic review exercise, the proposal of the new rates was scrutinized in a detailed manner and then approved for implementation.*

15.4.2. AAI's response to IATA's response regarding carry-forward of the shortfall is as follows:

- *After considering all the changes submitted by AAI, AERA is requested to consider full recovery of ARR as our rates are in line with that charged by comparable airports of BIAL and HIAL.*
- *AAI in its MYTP submission proposed to increase the rate from 1st April 2021*
- *AERA in its CP proposed to increase the rate from 1st April 2022.*
- *However, AAI requests AERA to consider increase in rate as submitted from 1st January 2022.*
- *AAI submits to AERA to kindly recompute the IDC, expenses capitalization, interest on working capital, non-aeronautical revenues and other all other building blocks in which there would be consequential changes/impact based on the revised considerations/points submitted in this document.*

15.4.3. AAI's response to IATA's comment on reduction of landing and UDF charges is as follows:

- *Chennai airport's reduction in tariff in the second control period was around 90%. This led to very low tariff in Chennai – eg: UDF for both domestic and international passengers was as low as Rs 69 per passenger. Hence, any increase sought by AAI would seem very large in % terms as the base rate currently in force is very low. However, the rates sought by AAI, optically are not very large and is comparable with its nearby airports of Bangalore and Hyderabad. Further, rates allowed by AERA are far lower than the rates allowed to be adopted in Bangalore and Hyderabad. Due to these low rates, AERA has carried forward a shortfall of Rs 372 crores to the next control period. AAI is also affected by the pandemic equally as its peers in this segment and submits that such low increases in tariff would further affect the financial health of the airport. Based on the materials before it and its analysis, the Authority proposes the following with respect to aeronautical revenue for the Third Control Period.*

15.4.4. AAI's response to IndiGo's comment regarding aeronautical revenue and SpiceJet's comment regarding tariff, collection and government restrictions is as follows:

- *Practice of Collection charges has been in force for many years now and AAI submits that the same may be continued for consistency.*

- *AAI submits that it has made the submissions for the third control period before the commencement of the period. Further, AAI submits that the airports are also burdened due to the delay as the next increased is deferred by a year in this case as proposed by AERA. AAI requests AERA to provide the rate increase from 1st January 2022 itself instead of 1st April 2022.*

- *For response on Exemption of Landing charges for aircraft less than 80 seats please refer to counter-response to SpiceJet.*

15.4.5. The Authority notes that AAI reiterated its comment in Para 15.3.2 as a response to SpiceJet's comment on exemption of landing charges for aircrafts with less than 80-seat capacity.

15.4.6. AAI's response to SpiceJet's comment on the tendering process and royalty is as follows:

Regarding tendering process:

- *Commercial Department in Chennai Airport has initiated tender as per the terms and conditions, period of license etc., mentioned in line with the AAI commercial manual.*

Regarding royalty:

- *Commercial Department is collecting 13% of GTO from Inflight Caterers for doing business at Airport. Collection of 13% royalty from Inflight catering service provider is prevailing all the AAI managed Airports.*

15.4.7. AAI's response to Blue Dart Aviation's comment regarding aeronautical revenue is as follows:

- *AAI submits that the CAGR of 42% and 55% in Domestic and International traffic respectively has been computed from a very low tariff base (Eg. Rs 69 per pax for UDF). Further, AERA has carried forward a shortfall of Rs 372 crores to be recovered from the subsequent control periods. AERA has allowed only 20-30% of the tariff hike requested for. While AAI is well aware about the impact of the current pandemic situation on the aviation industry, it is re-iterated that AAI has also been severely affected by the pandemic too. AAI has, in its submissions, projected operating expenses, capital expenditure and traffic keeping in mind the impact of pandemic. Hence, AAI submits that the increase sought in MYTP submissions is reasonable even in the background of the pandemic and requests AERA to consider full recovery of ARR in the current control period itself.*

- *Chennai is one of the largest airports in AAI and the tariff hike for the third control period has already been delayed for almost 6 months now. In addition to this, AERA proposes to increase the tariff only from 1st April 2022 and also proposes to carry forward the shortfall of about Rs 372 crores to the next control period. AAI has submitted in its comments that these two activities itself would severely burden the financials health of the airport and has requested for full recovery and has requested for tariff increase from 1st Jan 2022 itself.*

15.5. Authority's analysis on stakeholders' comments regarding Aeronautical Revenue for the Third Control Period

15.5.1. The Authority has noted AAI and SpiceJet's comment and AAI's response to the same on compensation for the amount payable to SpiceJet on account of landing charges paid for aircrafts with certified capacity of less than 80 seats operated by domestic scheduled operators. The Authority has deliberated on the same and notes the following:

15.5.2. The Authority notes that prior to the First Control Period, aircrafts operated by domestic scheduled operators having a certified capacity of less than 80 seats, were exempt from landing charges as notified by the Ministry of Civil Aviation (MoCA) in Order No. G-17108/07/2001-AAI ("MoCA Order") dated 09th February, 2004.

15.5.3. The Authority notes that the decision to exempt the aircraft with certified capacity of less than 80 seats operated by domestic scheduled operators from landing charges was based on the recommendation of Naresh Chandra Committee constituted by the GoI to chart the roadmap for rapidly rationalising and reforming the aviation sector based on which an Order was issued.

15.5.4. Despite the MoCA Order dated 09th February 2004, the Authority notes that neither AAI provided for this exemption in its tariff card of the First Control Period's MYTP/ATP, nor did any other stakeholder including SpiceJet object to the levying of such charges in the tariff card during the consultation process for the First Control Period tariff determination. The Authority also notes that the tariffs as per the First Control Period Order No. 38/2012-13 dated 04th February 2013 was effective from 01.03.2013 to 30.04.2018. Thereafter, the above-mentioned exemption was proposed by AAI in the Second Control Period's MYTP and which was approved by the Authority in the Second Control Period vide Order No. 03/2018-19 dated 16th April 2018 effective from 01st May 2018.

15.5.5. In view of the above points the Authority decides to compensate AAI only for the principal amount of Rs. 33,10,45,277 that was confirmed by AAI to SpiceJet vide its letter no. AAI/CH/REV/SJ dated 24th September 2021 and made available to the Authority vide SpiceJet letter no. AERA/250921 dated 24th September 2021.

15.5.6. Further, the Authority decides that there is no justification for providing interest on this amount as it is AAI and SpiceJet who respectively did not provide the exemption clause in their ATP as part of MYTP or did not raise the issue during the consultation process during the previous control periods. Therefore, users cannot be burdened with the amount beyond the principal amount because of the lapse on part of these entities. The Authority also noted the submission of M/s SpiceJet dated 27th October 2021 that this issue only pertains to Chennai and Kolkata airports, and they do not have any claims/dues in this regard at any other airport. Further, the views of M/s SpiceJet regarding not claiming interest conveyed through letter dated 27th January 2022 have also been noted.

15.5.7. Modalities for adjustment of this amount needs to be mutually decided between airline and the AAI.

15.5.8. The Authority also emphasises that this treatment is being accepted by the Authority as an exceptional case owing to the MoCA Order on this issue and the reasons as elaborated above. However, in normal circumstances, the Authority does not revisit the issue once true-up of any Control Period has been completed.

15.5.9. The Authority notes AOC, Chennai's comments regarding increase in UDF. The Authority addressed the same in the Para 9.5.10.

15.5.10. The Authority has taken note of AOC, Chennai's comment on space rents and has the following views regarding the same: Section 13(1) of the AERA Act, 2018 defines AERA's function related to tariff determination of aeronautical services at major airports. The Authority notes that the issue of an increase in space rents is not regulatory in nature and that it may be resolved amicably by the concerned parties.

15.5.11. The Authority notes IATA's comment on considering a larger carry-forward of ARR/target revenue to the Fourth Control Period. Considering the fact that the aviation sector is stressed, the Authority is of the view that carrying forward a portion of the target revenue will reduce the burden on stakeholders. However, at the same time, the Authority acknowledges that passing on the entire burden to the next control period could impact the cash flows of AAI. Further, carrying forward a higher amount of ARR to the next control period may be counter-productive due to true-up of the deferred ARR on the NPV basis and may not benefit the airport users.

15.5.12. The Authority notes IATA's comment and AAI's counter-comments regarding reduction in landing and UDF charges in the last quarter of the Third Control Period. The Authority has decided to reduce the tariff rates in the last quarter of the final year of the Third Control Period i.e., FY 2025-26, which may also continue till tariff determination for the Fourth Control Period in line with other airports where the tariff has been determined in FY 2021-22 in the background of the Covid-19 pandemic. The following factors have been considered for this decision:

i. To prevent abrupt correction in tariffs starting from the Fourth Control Period and rather follow a graded increase for benefit of all stakeholders
ii. To avoid legal complications as faced by the Authority 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
iii. The Authority has taken a conservative view on the airport traffic and financial projections and is of the view that actual recovery is likely to be better, thereby leading to higher revenue recovery than projected for the Third Control Period.
iv. Also, by the second half of the last year of the Third Control Period (FY 2025-26), 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 take suitable decisions for the Fourth Control Period.

15.5.13. The Authority has noted the nine points made by IndiGo. All these issues have been addressed by the Authority in their relevant chapters related to those building blocks/issues in Consultation Paper No. 16/2021-22 dated 07th September 2021.

15.5.14. **Regarding Shrinkage in Control Period**: The Authority has taken note of IndiGo's comment and its reference to Hon'ble TDSAT Order dated 16th December 2020 regarding the timely release of the order. The Authority has addressed the same in Para 14.5.3.

15.5.15. **Regarding compensation to AAI for landing charges**: The Authority notes IndiGo's comments on compensation for any pay back that would be done by AAI to SpiceJet regarding the landing charges of aircrafts with a maximum certified capacity of less than 80 seats. The Authority is of the view that the ARR of the Fourth Control Period may be adjusted by the principal amount of the dues to SpiceJet accrued between 01st March 2013 and 30th April 2018. The same is provided in greater detail in Para 15.5.1.

15.5.16. **Regarding Collection Charges:** The Authority notes IndiGo's comment and AAI's response thereon regarding collection charges. The Authority is of the opinion that collection charges are a policy matter between the Airport Operator and airlines and that the Authority does not intervene in matters related to the daily operations at airports.

15.5.17. The Authority has noted the points raised by SpiceJet and notes the following:

15.5.18. **Regarding Tendering Mechanism**: The Authority notes that the issue regarding tendering mechanism is not regulatory in nature. The Authority is of the view that the above matter may be taken up by the airport operator and the concerned stakeholders. However, the Authority is of the firm view that a robust tendering process needs to be followed in line with the established standards.

15.5.19. **Regarding Royalty**: The Authority has noted SpiceJet's comment and AAI's counter-comment on the issue of high royalty fees/license fees and revenue share payable to airport operators by the concessionaires as a pass-through expenditure and has addressed the same in Para 10.5.4.

15.5.20. **Regarding tariff**: The Authority has noted the points raised by SpiceJet and AAI's counter-comments thereof regarding tariff at Chennai International Airport. The Authority has addressed the same in Para 9.5.10.

15.5.21. **Regarding Government Restrictions:** The Authority has noted SpiceJet's comment regarding the exemption from space rentals between 25th March 2020 and 24th May 2020. The Authority notes that Section 13(1) of the AERA Act, 2018 defines AERA's function related to tariff determination of aeronautical services at major airports. The Authority notes that the issue of an exemption in space rents and landing is not in the purview of the Authority.

15.5.22. **Regarding Collection Charges**: The Authority has noted SpiceJet's comments regarding collection charges and has addressed the same in Para 15.5.16.

15.5.23. The Authority has noted the points raised by Blue Dart. The Authority reiterates that the existing rates at Chennai International Airport are the among lowest when compared to other major airports. While the percentage increase may indicate a steep rise in the tariffs, the aeronautical tariffs at Chennai International Airport based on the proposed revision are very much comparable to other major airports. The Authority decides to consider the tariff increment so as to keep in view best interests of all stakeholders as addressed in Para 9.5.10.

15.5.24. The Authority notes that the analysis of all stakeholder comments and changes decided by the Authority in other regulatory building blocks would have an impact in computing the aeronautical revenue for the Third Control Period. Thus, the Authority, after considering the above points, has recomputed the aeronautical revenue decided for the Third Control Period. The same is detailed in the table as follows:

Table 142: Aeronautical revenue for the Third Control Period decided by the Authority

Particulars (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Total PV of ARR including true-up (A)			**3,143.23**			**3,143.23**
Landing charges:						
Domestic	14.43	41.12	51.98	61.22	75.17	**243.92**
International	9.60	57.77	92.95	108.36	122.51	**391.19**
Subtotal (landing charges) (B)	**24.03**	**98.89**	**144.93**	**169.58**	**197.68**	**635.10**
Parking charges:						
Domestic	16.07	45.80	57.90	68.19	83.73	**271.69**
International	0.48	2.88	4.63	5.40	6.10	**19.49**
Subtotal (P&H charges) (C)	**16.55**	**48.68**	**62.53**	**73.59**	**89.84**	**291.18**
Other revenues						

Particulars (in Rs. Cr.)	2022	2023	2024	2025	2026	Total
Land leases	27.50	29.56	31.77	34.16	36.72	**159.70**
Revenue from ground handling	26.71	45.27	49.62	54.01	62.00	**237.61**
CUTE charges (royalty)	7.52	15.20	18.78	20.43	23.38	**85.31**
Revenue from AAICLAS	56.01	61.62	67.78	74.55	82.01	**341.97**
Subtotal (other revenues) (D)	**117.74**	**151.65**	**167.94**	**183.16**	**204.11**	**824.60**
UDF						
Domestic UDF	28.41	169.70	269.20	390.86	510.72	**1,368.88**
International UDF	4.63	43.13	129.12	193.43	227.25	**597.56**
Subtotal (UDF) (E)	**33.03**	**212.84**	**398.32**	**584.28**	**737.97**	**1,966.44**
Total revenue [F = B + C + D + E]	**191.34**	**512.05**	**773.72**	**1,010.61**	**1,229.60**	**3,717.32**
PV factor (G)	**1.00**	**0.89**	**0.80**	**0.71**	**0.64**	
PV of total revenue [H = F*G]	**191.34**	**457.26**	**617.02**	**719.70**	**781.96**	**2,767.29**
Total PV of revenue [I = Σ(H)]	**2,767.29**					**2,767.29**
(Surplus) / Shortfall [A – H]	**375.95**					**375.95**

15.5.25. The Authority decides to carry-forward an amount of Rs. 375.95 Cr. to the Fourth Control Period and adjust the same based on the aeronautical revenue achieved by Chennai International Airport in line with the actual traffic data of the Third Control Period.

15.6. Authority's decisions regarding aeronautical revenue for the Third Control Period

Based on the materials before it and its analysis, the Authority decides the following with respect to aeronautical revenue for the Third Control Period

15.6.1. To consider the aeronautical revenues as provided in Table 142.

15.6.2. To true up aeronautical revenue based on actual numbers for the Third Control Period at the time of determination of tariff for the Fourth Control Period.

16. SUMMARY OF AUTHORITY'S DECISIONS

The section below provides a summary of the Authority's decisions relating to relevant chapters regarding tariff determination for the Third Control Period.

Chapter 4: True up for the Second Control Period

4.12.1. To consider traffic volumes as per Table 8 for true-up of the Second Control Period.

4.12.2. To consider aeronautical RAB as per Table 24 for true-up of the Second Control Period.

4.12.3. To consider aeronautical depreciation as per Table 32 for true-up of the Second Control Period.

4.12.4. To consider FRoR as per Table 35 for true-up of the Second Control Period

4.12.5. To disallow return on land for the First and Second Control Periods

4.12.6. To consider operating expenses as per Table 57 for the true-up of the Second Control Period.

4.12.7. To consider the non-aeronautical revenue as per Table 63 for true-up of the Second Control Period.

4.12.8. To consider aeronautical revenue as per Table 68 for the true-up of the Second Control Period.

4.12.9. To consider aeronautical tax as per Table 72 for true-up of the Second Control Period.

4.12.10. To carry forward the over-recovery amount of Rs. 532.39 Cr. as on 31st March 2022 as per Table 76 to the Third Control Period.

Chapter 5: Traffic for the Third Control Period

5.6.1. The Authority has decided to consider the passenger traffic and ATM traffic as per Table 80.

5.6.2. The Authority decides to true-up the traffic for the TCP based on actuals, at the time of determination of traffic in the Fourth Control Period.

Chapter 6: Regulatory Asset Base and Depreciation for the Third Control Period

6.6.1. To readjust (reduce) 1% of the uncapitalised portion of the project cost from the ARR/target revenue in case any particular capital project is not capitalised as per the capitalisation schedule approved in the tariff order as per Para 6.5.1, during the true-up of the Third Control Period.

6.6.2. To consider a terminal building ratio of 90:10 for the Third Control Period as mentioned in Para 6.5.2.

6.6.3. To disallow financing allowance for the Third Control Period as mentioned in Para 6.5.3.

6.6.4. To consider the aeronautical capital additions given in Table 107 for the Third Control Period.

6.6.5. To consider depreciation given in Table 108 for the Third Control Period.

6.6.6. To consider the aeronautical RAB given in Table 109 for the Third Control Period.

6.6.7. To true-up the aeronautical capital additions, asset allocation, and depreciation for the Third Control Period based on the actual asset addition undertaken in the Third Control Period and subject to its reasonableness.

Chapter 7: Fair Rate of Return for the Third Control Period

7.6.1. To consider the cost of equity at 14.00% as per Para 7.2.6.

7.6.2. To consider the cost of debt at 6.21% as per Table 113.

7.6.3. To true-up the cost of debt for the Third Control Period based on actuals subject to its reasonableness and efficiency.

7.6.4. To consider the FRoR of 11.98% for the Third Control Period as per Table 116.

Chapter 8: Return on Land for the Third Control Period

8.6.1. To not to consider return on land in the Third Control Period as stated in Para 8.5.2.

Chapter 9: Operating and Maintenance Expenses for the Third Control Period

9.6.1. The Authority decides to consider O&M expenses as set out in Table 125 for the Third Control Period.

9.6.2. To true-up the O&M expenses for the Third Control Period based on actuals subject to reasonableness and efficiency, at the time of determination of tariff for the Fourth Control Period.

Chapter 10: Non-Aeronautical Revenue for the Third Control Period

10.6.1. To consider non-aeronautical revenue for the Third Control Period as per Table 130.

10.6.2. To true-up the non-aeronautical revenue if the same exceeds the projected amount in the tariff determination of the Fourth Control Period.

Chapter 11: Taxation for the Third Control Period

11.6.1. To consider aeronautical tax as per Para 11.5.1 (Table 133) for the Third Control Period.

11.6.2. To true up the aeronautical tax estimates based on actual tax outflow at the end of the Third Control Period.

Chapter 12: Inflation for the Third Control Period

12.6.1. To consider 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 of professional forecasters on macroeconomic indicators of RBI, as per Para 12.2.3 (Table 135).

Chapter 13: Quality of Services for the Third Control Period

13.6.1. To not consider any adjustment towards tariff determination for the Third Control Period on account of quality of service.

Chapter 14: Aggregate Revenue Requirement for the Third Control Period

14.6.1. To consider the ARR as per Table 139 as the eligible ARR for the Third Control Period.

14.6.2. To true up all building blocks based on actuals during the tariff determination exercise of the Fourth Control Period.

Chapter 15: Aeronautical Revenue for the Third Control Period

15.6.1. To consider the aeronautical revenues as provided in Table 142.

15.6.2. To true up aeronautical revenue based on actual numbers for the Third Control Period at the time of determination of tariff for the Fourth Control Period.

17. ORDER

17.1.1. In exercise of powers conferred by Section 13(1)(a) of the AERA Act, 2008 and based on the above decisions, the Authority hereby determines the aeronautical tariffs to be levied at Chennai International Airport, Chennai for the Third Control Period (01st April 2021 to 31st March 2026) as seen in Annexure I to the Order.

17.1.2. In exercise of powers conferred by Section 13(1)(b) of 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 effective from the current Control Period.

17.1.3. This tariff order shall be effective from 01st April 2022.

By the order of and in the name of the Authority

(Col. Manu Sooden)
Secretary

To,
The Chairperson
Airports Authority of India
Rajiv Gandhi Bhawan
Safdarjung Airport
New Delhi – 110003

Copy to:

1. **Secretary, Ministry of Civil Aviation**
   Rajiv Gandhi Bhawan,
   Safdarjung Airport,
   New Delhi – 110003

2. **Directorate General of Civil Aviation, for issue of AIC**

Airports Economic Regulatory Authority of India

18. LIST OF ANNEXURES

18.1. Annexure I: Annual Tariff Rate approved for the Third Control Period by the Authority

18.1.1. The Authority has examined the Annual Tariff Proposal submitted by Airports Authority of India. After examination as given in Chapter 15, the Authority has decided the following aeronautical tariffs for Chennai International Airport for the Third Control Period:

Table 143: Landing charges (domestic) for Third Control Period decided by the Authority

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026 (April to December)	FY 2026 (January to March)
		Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025	Tariff w.e.f. 01.01.2026
Up to 25 MT	Rs. 30 per MT	Rs. 55 per MT	Rs. 67 per MT	Rs. 72 per MT	Rs. 78 per MT	Rs. 70 per MT
Above 25 MT up to 50 MT	Rs. 750 plus Rs. 35 per MT in excess of 25 MT	Rs. 1,375 plus Rs. 65 per MT in excess of 25 MT	Rs. 1,675 plus Rs. 78 per MT in excess of 25 MT	Rs. 1,800 plus Rs. 84 per MT in excess of 25 MT	Rs. 1,950 plus Rs. 91 per MT in excess of 25 MT	Rs. 1,750 plus Rs. 82 per MT in excess of 25 MT
Above 50 MT up to 100	Rs. 1,625 plus Rs. 40 per MT in excess of 50 MT	Rs. 3,000 plus Rs. 74 per MT in excess of 50 MT	Rs. 3,625 plus Rs. 89 per MT in excess of 50 MT	Rs. 3,900 plus Rs. 96 per MT in excess of 50 MT	Rs. 4,225 plus Rs. 104 per MT in excess of 50 MT	Rs. 3,800 plus Rs. 93 per MT in excess of 50 MT
Above 100 MT to 200 MT	Rs. 3,625 plus Rs. 45 per MT in excess of 100 MT	Rs. 6,700 plus Rs. 83 per MT in excess of 100 MT	Rs. 8,075 plus Rs. 100 per MT in excess of 100 MT	Rs. 8,700 plus Rs. 108 per MT in excess of 100 MT	Rs. 9,425 plus Rs. 117 per MT in excess of 100 MT	Rs. 8,450 plus Rs. 105 per MT in excess of 100 MT
Above 200 MT	Rs. 8,125 plus Rs. 55 per MT in excess of 200 MT	Rs. 15,000 plus Rs. 102 per MT in excess of 200 MT	Rs. 18,075 plus Rs. 123 per MT in excess of 200 MT	Rs. 19,500 plus Rs. 132 per MT in excess of 200 MT	Rs. 21,125 plus Rs. 143 per MT in excess of 200 MT	Rs. 18,950 plus Rs. 128 per MT in excess of 200 MT

Table 144: Landing charges (international) for Third Control Period decided by the Authority

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026 (April to December)	FY 2026 (January to March)
Up to 25 MT	Rs. 60 per MT	Rs. 111 per MT	Rs. 134 per MT	Rs. 144 per MT	Rs. 156 per MT	Rs. 140 per MT
Above 25 MT up to 50 MT	Rs. 1,500 plus Rs. 65 per MT in excess of 25 MT	Rs. 2,775 plus Rs. 120 per MT in excess of 25 MT	Rs. 3,350 plus Rs. 145 per MT in excess of 25 MT	Rs. 3,600 plus Rs. 156 per MT in excess of 25 MT	Rs. 3,900 plus Rs. 169 per MT in excess of 25 MT	Rs. 3,500 plus Rs. 152 per MT in excess of 25 MT
Above 50 MT up to 100	Rs. 3,125 plus Rs. 75 per MT in excess of 50 MT	Rs. 5,775 plus Rs. 138 per MT in excess of 50 MT	Rs. 6,975 plus Rs. 167 per MT in excess of 50 MT	Rs. 7,500 plus Rs. 180 per MT in excess of 50 MT	Rs. 8,125 plus Rs. 195 per MT in excess of 50 MT	Rs. 7,300 plus Rs. 175 per MT in excess of 50 MT
Above 100 MT to 200 MT	Rs. 6,875 plus Rs. 90 per MT in excess of 100 MT	Rs. 12,675 plus Rs. 166 per MT in excess of 100 MT	Rs. 15,325 plus Rs. 200 per MT in excess of 100 MT	Rs. 16,500 plus Rs. 216 per MT in excess of 100 MT	Rs. 17,875 plus Rs. 234 per MT in excess of 100 MT	Rs. 16,050 plus Rs. 210 per MT in excess of 100 MT

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026 (April to December)	FY 2026 (January to March)
Above 200 MT	Rs. 15,875 plus Rs. 100 per MT in excess of 200 MT	Rs. 29,275 plus Rs. 185 per MT in excess of 200 MT	Rs. 35,325 plus Rs. 223 per MT in excess of 200 MT	Rs. 38,100 plus Rs. 240 per MT in excess of 200 MT	Rs. 41,275 plus Rs. 260 per MT in excess of 200 MT	Rs. 37,050 plus Rs. 234 per MT in excess of 200 MT

i. No landing charges shall be payable in respect of a) aircraft with a maximum certified passenger capacity of less than 80 seats, being operated by domestic schedule operators at airport and b) helicopters of all types C) DGCA approved flying school/flying training institute aircrafts.

ii. All domestic legs of international routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number assigned to such flights.

iii. Charges shall be calculated on the basis of nearest MT (i.e. 1000 kg).

iv. Flight operating under regional connectivity scheme will be completely exempted from Landing charges from the date of the scheme is operationalized by GOI.

Table 145: Parking charges up to two hours after free hours for the Third Control Period decided by the Authority*

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026 (April to December)	FY 2026 (January to March)
Up to 100 MT	Rs. 1.2 per MT per hour	Rs. 2.2 per MT per hour	Rs. 2.7 per MT per hour	Rs. 2.9 per MT per hour	Rs. 3.1 per MT per hour	Rs. 2.8 per MT per hour
Above 100 MT	Rs. 120 plus Rs. 1.6 per MT per hour in excess of 100 MT	Rs. 220 plus Rs. 3 per MT per hour in excess of 100 MT	Rs. 270 plus Rs. 3.6 per MT per hour in excess of 100 MT	Rs. 290 plus Rs. 3.8 per MT per hour in excess of 100 MT	Rs. 310 plus Rs. 4.2 per MT per hour in excess of 100 MT	Rs. 280 plus Rs. 3.7 per MT per hour in excess of 100 MT

*Housing charges subsumed within parking charges

Table 146: Parking charges beyond first four hours for the Third Control Period decided by the Authority

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026 (April to December)	FY 2026 (January to March)
Up to 100 MT	Rs. 2.4 per MT per hour	Rs. 4.4 per MT per hour	Rs. 5.3 per MT per hour	Rs. 5.8 per MT per hour	Rs. 6.2 per MT per hour	Rs. 5.6 per MT per hour
Above 100 MT	Rs. 240 plus Rs. 3.2 per MT per hour in excess of 100 MT	Rs. 440 plus Rs. 5.9 per MT per hour in excess of 100 MT	Rs. 530 plus Rs. 7.1 per MT per hour in excess of 100 MT	Rs. 580 plus Rs. 7.7 per MT per hour in excess of 100 MT	Rs. 620 plus Rs. 8.3 per MT per hour in excess of 100 MT	Rs. 560 plus Rs. 7.5 per MT per hour in excess of 100 MT

i. No parking charges shall be levied for the first two hours. While calculating free parking period, standard time of 15 minutes shall be added on account of time taken between touch down time and actual parking time on the parking stand. Another standard time of 15 minutes shall be added on account of taxing time of aircraft from parking stand to take off point. These periods shall be applicable for each aircraft irrespective of actual time taken in the movement of aircraft after landing and before take-off.

ii. For calculating chargeable parking time, part of an hour shall be rounded off to the nearest hour.

iii. Charges shall be calculated based on nearest MT.

iv. Charges for each period parking shall be rounded off to nearest rupee.

v. At the in-contact stands and open stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.

vi. It is proposed to waive off the night parking charges in principle for all domestic scheduled operators at Chennai Airport if the State Government has brought the rate of tax (VAT) on ATF < 5%. The above waiver of night parking charges (between 2200 hrs. to 0600 hrs) will be made applicable from the date of implementation of < 5% tax on ATF by the State Govt. In the event of upward revision in the tax rate of ATF by the State Govt., the relief of free night parking charges will also be deemed to be withdrawn.

vii. Flight operating under Regional Connectivity Scheme will be completely governed by AIC issued on this subject by DGCA.

viii. For unauthorized overstay of aircraft an additional charge of Rs. 20.00 per hour per MT beyond 24 hours is to be payable.

User Development Fees

Table 147: User Development Fees for the Third Control Period decided by the Authority

Passenger	2021-22 (existing UDF)	UDF decided by the Authority				
		2022-23	2023-24	2024-25	2025-26 (Q1 – Q3)	2025-26 (Q4)
		Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025	Tariff w.e.f. 01.01.2026
Domestic	69	205	295	395	455	410
International	69	300	450	615	690	625

Notes:

18.1.2. **UDF Collection:**

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 AAI 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 AAI within the credit period of 15 days or in case of any part payment.

b) No collection charges are payable to casual operator/non-scheduled operators.

c) For calculating the UDF in foreign currency, the RBI conversion rate as on the last day of the previous month for tickets issued in the 1st fortnight and rate as on 15th of the month for tickets issued in the 2nd fortnight shall be adopted.

d) No UDF will be levied for Transit Passengers.

18.1.3. **Aviation Security Fee (ASF):** Will continue to be charged as rate prescribed by MoCA from time to time.

18.1.4. **Exemption from levy and collection from UDF at the Airports:**

The Ministry of Civil Aviation, Govt. of India vide order no. AV.16011/002/2008-AAI & vide Letter no. AV.13024/659/2015-AS dated 30.11.2011 & 13.06.2019 respectively has directed AAI to exempt the following categories of persons from levy and collection of UDF.

a) Children (under the age of 2 years),
b) Holders of Diplomatic Passport,
c) Airlines crew on duty including sky marshals & airline crew on board for particular flight only (this would not include Dead Head Crew, or ground personnel),
d) Persons travelling on official duty on aircraft operated by Indian Armed Forces,
e) Persons traveling on official duty for United Nations Peace Keeping Missions.
f) Transit/transfer passengers (this exemption may be granted to all the passengers transiting up to 24 hrs. "A passenger is treated in transit only if onward travel journey is within 24 hrs. 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").
g) Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.

18.1.5. **GENERAL CONDITION:**

a) All the above Charges are excluding GST. GST at the applicable rates are payable in addition to above charges.

b) Flight operating under Regional Connectivity Scheme will be completely exempted from charges as per Order No. 20/2016-17 dated 31/03/2017 of the Authority from the date the scheme is operationalized by GOI.

18.2. Annexure II: Capital additions in the Second Control Period

A. Capital Additions approved in the Second Control Period Order and commissioned in the Second Control Period

Table 148: Capital additions approved by the Authority in Second Control Period and capitalised in Second Control Period

Project Name	Year	As per SCP Order (Rs. in Cr.)	As per Actuals (Rs. in Cr)	Difference	Remarks
Connectivity to Metro Rail to city side and provision of walkators	2019-20	85.57	38.34	47.23	There was a reduction in scope of work and hence the significant reduction in cost. Due to lesser height of the walkway, the air condition of this passage was dropped. Further, the proposal to build 4 escalators was removed. 2+2 travellators on each side was also removed along with the steel structure (connecting tube) due to design modifications and other constraints.
Augmentation of AC system	2017-18	12.00	8.31	3.69	Budgeted expenditure was Rs. 12.0 Cr. Actual tendered amount was Rs. 8.31 Cr.
Angular Taxi Track F1 (Balance portion) & C,D,F	2016-17	11.09	11.09	-	Work Completed
Ceremonial lounge	2017-18	10.00	7.56	2.44	Actual Cost
Augmentation power supply system	2017-18	13.00	6.27	6.73	Multiple works was combined and tendered together thereby resulting in overall saving
Augmentation of BHS	2017-18	9.00	21.31	(12.31)	Cost overrun due to increase in 16 additional counters, provision of Automatic Tag readers, Modification of BHS in mezzanine floor at Domestic and International Terminal.
SITC of 15MWp Solar PV Plant (SECI) Reylon sol	2016-17	7.86	8.50	(0.64)	Actual Cost
Energy Conservation	2018-19	7.00	3.93	3.07	Actual Cost
Re-construction of Taxiway "H" (Phase-I)	2017-18	7.00	4.11	7.89	Actual Cost

Project Name	Year	As per SCP Order (Rs. in Cr.)	As per Actuals (Rs. in Cr)	Difference	Remarks
Re-construction of T/w "H" (Phase-II)	2017-18	5.00			
Other Works (below Rs. 5 Cr.)	-	76.21	73.71	(2.50)	-
Total		**243.73**	**183.13**	**60.60**	-

B. Capital Additions approved in the Second Control Period Order but deferred to the Third Control Period

Table 149: Capital additions approved by the Authority in Second Control Period but deferred to Third Control Period

Project Name	Year	As per SCP Order (Rs. in Cr.)	Proposed by AAI in TCP (Rs. in Cr.)	Reasons for Change in cost
NITB Part - 1 (65% Civil and 35% Electrical)	2020-21	971.25	1,233.58	Cost working for the NITB Part – 1 was done using normative cost approach in SCP. Normative cost working was within the inflation adjusted limits. The MYTP submission considered this to be fully aeronautical in nature. The same has been proposed to be considered for revision in TCP.
Straightening of B-Taxiway from Bay No. 8 to Runway 30 along with parking bays and RET-I at a distance of 1831 m from the threshold of R/w 07 and RET25_1at a distance of 1908m from the threshold of R/w 25	2019-20	62.06	76.00	The stipulated amount is within the normative costs benchmarks.
Construction of 'R' Taxi track up to Runway 07/25 - Civil	2019-20	30.75	58.96	There has been a cost saving due to merger of various works in a single tender. Further, the total cost is within the normative cost limits.
C/o 'R' Taxitrack left out portion connecting Rwy 12-30	2019-20	23.27		
C/o 'N' Taxitrack (balance portion) connecting Rwy 07-25	2019-20	13.62		
Construction of 'R' Taxi track up to Runway 07/25 - Electrical	2019-20	0.61		
Modification of storm water drain - operational area	2017-18	4.50	530.00	To ensure the smooth outflow of water from the runways and to prevent waterlogging in the operational area of Chennai International Airport during excess rains. This project will ensure smooth flow of water from the operational area. The scope of work is under preparation.
Construction of fillet at Taxiway 'F' (Work renamed as: Construction of balance	2017-18	4.00	29.94	Scope of work has been changed wherein construction of fillet at Taxiway 'F' is

Project Name	Year	As per SCP Order (Rs. in Cr.)	Proposed by AAI in TCP (Rs. in Cr.)	Reasons for Change in cost
portion of link taxiway's 'N1' and 'F'.)				only a part of this project. Hence, there is an increase in cost.
Total		**1,110.06**	**1,928.48**	

C. Capital Additions approved in the Second Control Period Order but dropped

Table 150: Capital additions approved by the Authority in Second Control Period but dropped

Project Name	Year	As per SCP Order	Reasons for dropping
Ground Based Solar Power Plant	2020-21	46.25	Solar energy is being sought from the open access system - direct benefit in the operating expense. Chennai International Airport has land constraints.
C/o training facility cum fall back system close to technical block	2018-19	7.00	Proposal has been dropped
Re-Construction of dom.& international bays	2017-18	5.00	Shifting of AI hanger and IOCL fuel storage tanks was planned; however, not carried out.
Re-construction of. 'D' Taxi track	2017-18	3.00	New RET has been proposed, hence widening is not required.
New sewer line at Airside	2017-18	1.00	The existing T2 & T3 Buildings will have to be demolished for construction of NITB. Proposed work was awarded for connecting the sewer lines of T2 & T3, this was dropped as these 2 terminals were being modernised.
Cargo Assets	2016-17	2.15	Could not be deferred to FY18 (due to AAICLAS).
Const. of CISF Barracks, (Phase-II)	2017-18	4.00	-
C/o APHO building	2017-18	3.00	-
C/o compound wall-land handed over by state govt.	2017-18	0.95	-
Other minor capex works (below 1 Cr.)		2.40	
Total		**72.60**	

D. Capital additions incurred in the Second Control Period but not approved in the Second Control Period Order

Table 151: Capital additions not mentioned in Second Control Period submission but claimed by AAI in true-up

S No	Asset description	Amount (Rs. in Cr.)	Justification
1	SITC INLINE XBIS TSA/STANDARD 3 (EU) – International Terminal	27.18	As per BCAS Guidelines the inline XBS has been replaced for upgradation with CTX type. four new CTX inline Xray machine has been installed at international terminal (Replacing old ilbs Code :90037258)
2	SITC INLINE XBIS TSA/STANDARD 3 (EU) – Domestic Terminal	27.18	As per BCAS Guidelines the inline XBS has been replaced for upgradation with CTX type. four new CTX inline Xray machine has been installed at domestic terminal
3	S/o BHS- to accommodate CTX based ILBS	16.05	Earlier it was standalone Xray machines. As per recent BCAS Guidelines, inline XBS has been replaced for upgradation with CTX type. Baggage handling system for the same has been installed at international and domestic terminals (both T1 and T4).
4	BHS - Conversion of Arrival to Departure in T4	12.43	To utilise the existing unutilised hall to meet the requirement at international terminal. It is an additional requirement due to the conversion of arrival hall into departure hall. This is in line with Para 9.44 of Tariff Order of SCP.
5	Passenger Baggage Trolleys WITH BREAKS-CHQ II SLOT	15.65	Baggage trolley additional requirement for passenger facilitation.
6	New Project Office-Metro-Interior works Main	8.99	The office was earlier in T2 terminal which has been demolished now and this building has been constructed. This office was provided by the metro station in lieu of the land provided by AAI for the construction of the metro station. The remaining work was for interiors only. This space with an area of about 1400 sq mts is for engineers and support staff. These engineers have been working on various ongoing projects, future projects and major capital spends.
7	THREE SEATER CHAIRS TO CHN APT-CHQ SUPPLY	8.79	For passenger facilitation seater has been installed throughout the airport (both domestic and international terminals).
8	S/OF THREAT CONTAINMENT VESSEL-INSTASOL LLC	8.69	Purchase of Threat containment vessel. It is an additional requirement and is crucial for the safety of the passengers.

S No	Asset description	Amount (Rs. in Cr.)	Justification
9	VANDERLAND (INLINE XBIS transferred from Srinagar)	7.50	Asset transferred from Srinagar and put into use in Chennai International Airport. In new mezzanine floor of T4, there was a requirement from the airlines that only if the inline xray baggage machine is installed, operations would commence. Since this machine was available in Srinagar airport and not in use (because Srinagar is a hypersensitive airport), it was brought down to Chennai airport for commencing operations in T4. This work is proposed to be disallowed in the ARR calculations due to lack of details provided.
10	Rubber Removal Machine	5.28	Additional requirement and replacement of rubber removal system at Airport runway. This is important for smooth take-off and landing operations.
11	S/F FALL PROTECTION AND WALKWAY SYSTEM ON ROOF TOP	4.90	Acts as a staircase on the sloping roof for cleaning the roof/maintenance works. This walkway system has been installed in both T1 and T4. It also has harnesses which would be used as safety ropes while using the walkway by the maintenance staff. This mechanism is already built into the contracts for the proposed NITB although it was not there were T1 and T4 were modernized.
12	P/o Rosenbauer AFFRV-CFT – 4 units	12.51	Crash Fire Tender for every landing. Imported purchase hence purchased by CHQ. Old vehicle sent to smaller airport. (Madurai, Trichy, Coimbatore). The machines that were imported were of different quality (a total of 4 units were procured)
13	SCCTV SYSTEM FOR ADDITIONAL ZONE-CHN APT	3.93	Surveillance system with latest specifications for additional zone coverage. This is in addition to the existing system. Both international and domestic terminals.
14	DSITC of Philips LED fittings@T1&T4 (excl. arrival)	3.93	Existing Conventional light fittings were replaced with Energy Efficient LED Fittings in order to save energy. The same has been installed throughout the airport (T1 and T4).
15	CUTE & CUSS, SCANNER, at Chennai-SITA	3.59	Part of security system for scanning at Airport.
16	Upgradation of Existing 3nos.InlineXBIS	3.55	Old inline XBS has been upgraded as per BCAS guidelines in T4. It is an update to the existing system in international terminal. This XBIS system has further upgraded features like advanced software, better imaging, integration with BHS, etc.

S No	Asset description	Amount (Rs. in Cr.)	Justification
17	Beautification works in T-1	3.07	To enhance the interiors of existing Terminal -1 to match in-line with the design of the NITB. Art & Murals, Antique statues and sculptures, 3M stickers works has been done.
18	AUTOMATIC TRAY RETURN SYSTEM WITH DVHB	2.96	New automatic tray return system installed for passenger facilitation. This is a new system at the airport (6 in domestic. 4 in international). Previously it was manual.
19	PROVN. & INTEG. OF TEMP MONITORS WITH BMS	2.90	"Provision and Integration of temperature monitors at Terminal Building with BMS at Chennai Airport" is executed in order to have a better monitoring & recording of temperature in the terminal building on 24x7 basis. Temperature data loggers were installed with digital display in all the important areas of the terminal building and to monitor and record the air quality inside the terminal building as a passenger facility. Oxygen, carbon dioxide and carbon monoxide levels were checked, and the air quality was monitored through this system. Further, it was decided to display the parameters to the public and also to connect the data with the existing BMS System to have an overall view at one point.
20	ICC PH-II : PROV OF COLD STORAGE SYSTEM CHN APT	2.75	This was realised to be a part of the cargo unit and has been removed from the asset base of the Chennai International Airport.
21	Augmentation of Length OF Arrival Carousel at Domestic and International Terminals	3.39	Earlier, the loop length of the arrival carrousel was short and was used by 2-3 airlines simultaneously. This led to delays in receipt of baggage by passengers. Hence, there was a requirement to increase the loop length of all the arrival carrousels in the domestic terminal. This was done to facilitate faster receipt of baggage by passengers.
22	PROVISION OF AHU room & polycarbonate sheet	1.74	This was a requirement for the AC system as per Electrical department. Polycarbonate sheets help in avoiding leakages in the Air Handling Unit (AHU) room.
23	S/F MROV (Mini Remote Operated Vehicle for BDDS) – 1 unit	1.60	Remote operated bomb detection system in order to provide better safety for passengers.
24	Perimeter Lighting System-supply Of Power Cables	1.55	As per BCAS directive, perimeter lights should not face the perimeter road, instead it should focus on the perimeter wall. This led to changing of direction/location of the poles and light fittings. Due to the change in position there was reduction in the extent of illumination and hence, 80W LED fittings were fitted in place of 35W LED fittings to focus towards the perimeter wall.

S No	Asset description	Amount (Rs. in Cr.)	Justification
25	Fitting and isolating transformers at the Runway	1.49	Runway fittings are replaced for better Photometry. Has been done for the entire runway.
26	RFID Toll Booths – Misc. Civil Works	2.63	These are toll booths which have been constructed for entry and exit of cars in the airport and for flow movement of cars. Toll booth has been made by using of tensile fabric with MS roof truss and prefabricated booth. This work is proposed to be disallowed since they pertain to the car park, which is a non-aeronautical capex work.
27	Provision & placing of Immigration Counters at CAP	1.15	The counters have been provided in order to functioning of e-gates in the immigration counters. The counter has been provided by using of Solid Acrylic surface with plywood and SS, Corean Top, etc.
28	P/O crash rated electrohydraulic tyre killers	1.12	Crash prevention at airport entry gate- security related equipment for operational safety.
29	Other minor capex works	71.75	
30	**Total**	**268.08**	

E. Capital additions completed in the First Control Period but put to use in the Second Control Period

Table 152: Assets allocated to Chennai International Airport in 2017-18

S No.	Asset Description	Amount (Rs. in Cr.)
1	C/o Anna Terminal Bldg-Civil	27.55
2	Consultancy services for mega project	4.89
3	Deigning and printing of brochures for inauguration of NIDT (2850699 + 33875)	0.05
4	SS Que Management System, Dustbin, Boarding Card Pedestals, etc	0.06
5	Procurement of Artefacts	0.01
6	Arts, Murals & Sculpture Works for T4	0.09
7	Supply & Erection of SMC Watch Tower - Civil	0.08
8	C/o Anna Terminal Bldg-Civil	10.88
9	INTERNATIONAL BUILDING D&A CONVEYOR 8.8.13	2.38
10	C/o Anna Terminal Bldg-Elec	2.57
11	C/o Anna Terminal Bldg-Elex	0.00
12	INTERNATIONAL BUILDING ELECTRICAL	2.25
13	INTERNATIONAL BUILDING ELECTRONICS	0.81
	Total	**51.64**

18.3. Annexure III: Minutes of AUCC meeting

भारतीय विमानपत्तन प्राधिकरण चेन्नई हवाई अड्डा :
Airports Authority of India : Chennai Airport

No.AAM/MOD.PH-II/MOM/2021/ Dated : 03.08.2021

MINUTES OF THE AUCC –Airport Users Consultative Committee Meeting (virtual) held on 20.07.2021

Sub: Modernization of Chennai International Airport (Phase-II) – Stakeholders meeting held on 20.07.2021 @ 1130 hrs – MoM –Reg.

A stakeholder consultation meeting was convened by AAI on 20.07.2020 at 11.30 hours, in Chennai, vide video conferencing for Modernization of Chennai International Airport (Phase-II) works. **The list of participants is at Annexure-A.**

1. Airport Director, Chennai welcomed the stakeholders, and gave a small brief about the various ongoing proposals at Chennai airport for enhancing the passenger experience and he spoke about the Regional connectivity and its impact on the GDP and regional prosperity.

2. Following the APD's brief, a detailed presentation on the same was made by SM (Arch). The salient features of the proposed projects were explained and their effect on capacity and facility enhancement was elaborated.
   The Presentation explained in brief the unprecedented growth of Indian Aviation Industry stating that India is set on the path of being the largest Aviation Market by 2025.
   The salient features presented were:
   a. AAI, Chennai entrusted with the overall project worth Rs.2467 crores for modernization, upgradation of the existing infrastructure of Chennai Airport due to land constraints.
   b. Increase in immigration counters /customs and Check-in counters
   c. Additional Baggage belts / escalators /walkalators / inline baggage screening facility
   d. Extensive departure areas
   e. Sustainable building strategies /energy efficient with Griha 4 star rating
   f. Provision of solar power made in the Airport Premises
   g. State of the art facilities with emphasis on culture of Tamilnadu.

   Copy of the presentation is enclosed

3. GM Engg(Project) explained the reasons and need for the modernization of Phase-II.

4. **The Stakeholders enquired and raised their concerns about the facilities and their enhancements.** The same was addressed by AAI in its proposals in detail.

5. **Mr. Suresh Krishnan from Transport department enquired about the Domestic Terminals on either side of the NITB and whether it is possible to combine them.**

03/08

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण Airports Economic Regulatory Authority of India सत्यमेव जयते

GM Engg(Project) replied that the Terminals are inter-linked on both city-side and air-side by flyovers and air-side corridors respectively.

6. **AOC, Chairman Mr. Kumar enquired about the completion date of Phase - I & II and demolition of T3 for airlines to plan their interiors and migration works. He suggested all airline offices to be allotted space on the same floor. He also enquired about the city side counter allocation and the available size.**
   SM (Arch) replied that part plans indicating airline offices is already shared by commercial department and that 12 nos airline ticketing offices measuring 12sq.m. per module are available in city side which shall be allocated by Commercial Department as per request of Airlines.

7. **Mr. Yedukondalu AC from air cargo complex raised the concern about the number of car & bike parking in Customs office, frequent traffic jam between the Air Cargo Complex office and Customs office. He also enquired about renovation of custom office space.** The points are noted and actions will be initiated accordingly

8. **AOC enquired about retaining the office space in T4 till the completion of phase–II and the reconstruction of H-Taxi.** GM Engg(Project) confirmed that the airlines can retain their existing offices in T-4. He also explained that 15% of H-Taxi work is completed and remaining portion is ongoing as planned in Phases.

9. **Committee enquired about the IAD colony shifting, apron bays and shifting of control tower.** GM Engg(Project) informed that the same is under planning stage. Upon completion of the densification of colony on the other side of GST road, the metro colony shall be shifted and ATC works can commence only after the same.

10. **Mr. Saji from airlines enquired about the completion of additional 72m extension of Phase-I work.** GM Engg(Project) replied that due to Covid - 1st and 2nd wave, work was hampered a lot. The completion of Phase-I along with the extended portion is planned for December 2021 and commissioning is planned for March 2022, however subject to Covid behavior.

11. **Mr. Saji from airlines enquired the reason for the time gap between the completion and the commissioning.** GM Engg(Project) explained that the equipments and facilities provided need to be tested before commissioning, making allowance for the time taken for the practical test performance and safety audit as per norms. However, if testing is completed before the specified timeline, commissioning can be planned accordingly.

12. **Blue Dart Aviation (BDA) enquired about the proposal of shifting the Air India hangar and if so, the height of the hangar may be retained as same to accommodate bigger aircrafts. They also enquired about how many Cargo bays are planned in the New Apron.** SM (Arch) replied that the shifting is planned towards the coast guard area

03/08

adjacent to T-Taxi. Apron is equipped with MARS configuration(Multiple aircraft Ramping Systems) of parking from current numbers 3 nos.CODE-E aircrafts; 1 no.CODE-D aircraft ; 3 nos CODE-C aircrafts and 2 nos.CODE-B type aircrafts.

13. **Blue Dart Aviation also enquired about any hotel or transit facilities available in the new terminal.** SM(Arch) replied that space for sleeping pods and lounges are planned in the new terminal.

14. **DC Customs informed that the plans were studied in detail and was happy for the huge enhancement planned for passengers. However, she commented that the area allocated for customs at arrival level needs to be more.** SM (Arch) replied that detailed requirements have been received from customs. The same was reviewed by planning dept. and accommodated accordingly as per norms.

15. **Mr. Saji enquired about aircraft operations during the enhancement of CBR value works.** SM (Arch) replied that a separate plan shall be shared at the time of safety assessment with stakeholders before actual start of work.

16. **Transport department enquired about the connectivity of local train from Tirusulam Railway Station to Airport.** GM Engg(Project) explained that there is an existing subway from Tirusulam station to the airport near the metro station entry. Further walkalators are available connecting the Terminals from one end to the other.

17. **Committee enquired about any proposal for developing the land between 2 runways.** APD (Chennai) replied that in future, a satellite terminal is planned in the remote apron area with re-configuration of the parking bays.

18. **Vinu Dev Sachin, DD, BCAS enquired about whether provision for Biometric AEPC. Card reader are made.** SM (Arch) replied, that the new terminal building is already planned with provisions for the same.

The meeting ended with a thank you note to all.

03.08.2021.

(डॉ शरद कुमार/Dr Sharad Kumar)

विमानपत्तन निदेशक/Airport Director

18.4. Annexure IV: Summary of study of O&M expenses in the Second Control Period

Summary of study of Operation and Maintenance expenses of Chennai International Airport (Second Control Period 2016 to 2021)

1. Background

1.1. AERA decided to conduct a study on efficient O&M expenses for true-up of the Second Control Period. A brief description and the summary of the study is provided in this section.

1.2. Establishing efficient Operation and Maintenance (O&M) expenses is important for the effective execution of tariff determination for aeronautical services. Across airports in India, the O&M expenditure has consistently been increasing, driven by investments in expansion and modernisation of the airports.

1.3. The objective of the study is to understand and analyse the O&M expenses of Chennai International Airport. The detailed analysis of O&M expenses is expected to help in establishing whether the existing expense levels are over or under the efficient expense levels. This will help in assisting the Authority in determining the efficient costs for O&M for the purpose of tariff determination at Chennai International Airport.

2. Operation and Maintenance Expenses proposed by Chennai International Airport for the Second Control Period

2.1. The number of employees at Chennai International Airport in the Second Control Period has reduced from 778 in FY 2016-17 to 659 in FY 2020-21.

2.2. A comparison of actual O&M expenses and approved O&M expenses shows that actual expenses are Rs. 48 Cr. more than what was approved.

2.3. Further review of expense sub-heads shows that AAI's submission for pay roll costs, R&M expenses, utilities and outsourcing expenses was lower than what was approved by the Authority. AAI's submission on administrative and general expenses and other outflows is higher than what was approved by the Authority in the Second Control Period.

2.4. The biggest difference between approved and actual expenses can be attributed to administrative and general expenses – CHQ. While Rs. 119.80 Cr. was approved by the Authority in the Second Control Period Order, AAI submitted actuals of Rs. 288.75 Cr. for the Second Control Period.

2.5. Further, it is noted that while number of PAX and ATM fell significantly during FY 2020-21, O&M expenses submitted by AAI are higher in FY 2020-21 compared to FY 2019-20. The projections for FY2020-21 are discussed separately.

2.6. It is also noted that, while approving O&M expenses in the Second Control Period, the Authority was cognizant of the projected capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 1) in FY 2020-21. The same has now been deferred to the Third Control Period.

3. Historical benchmarking and trend analysis

3.1. The overall O&M expenses submitted by AAI are higher than those approved by Authority in the Second Control Period order. The key reasons for these are (a) growth rates applied by AAI in projecting O&M expenses for FY 2020-21 (b) apportionment of CHQ expenses of AAI to Chennai airport. However, O&M expenses per PAX and per ATM are lower in FY 2019-20 than in FY 2016-17.

3.2. Estimating O&M expenses for FY 2020-21 by taking a 7% growth rate for payroll costs and a 10% growth rate for other O&M expenses over the actuals of FY 2019-20 is not appropriate, considering that traffic in FY 2020-21 was significantly lower due to the pandemic, and considering the actual growth in O&M expenses between FY 2016-17 and FY 2017-20 is negative. The Authority may consider a 0% growth over FY 2019-20 expenses to estimate expenses of FY 2020-21.

3.3. R&M expenses of Chennai Airport range from 2.90% to 4.95% of the opening gross block. This is broadly in line with other airports and seems to be reasonable. It is noted that power recoveries are less than 12% of the total power charges at Chennai International Airport during the Second Control Period. This is significantly lower than other airports.

3.4. Apportionment expenses to CHQ requires further analysis of AAI's methodology/formula. In the absence of data on the methodology/formula used by AAI to compute, apportionment expenses, the Authority may choose to consider the lower of actual/approved apportionment expenses as per the Second Control Period Order.

4. Allocation of O&M expenses across aero and non-aero

4.1. It may be noted that the TBLR as per AAI submission is changing on an annual basis. The allocation ratios may not change on a year-on-year basis since they are determined on a design layout that is considered at the beginning of the concerned control period. This is the case in the DIAL Order (Order No. 57/2020-21 dated 30th December 2020), as also the MIAL Order (Order No. 64/2020-21 dated 27th February 2020. Thus, the Authority may consider using the approved allocation ratios to segregate common expenses.

5. Conclusion

5.1. After the above adjustments and reallocations discussed in the previous sections, the efficient O&M expenses for the Second Control Period have been considered as per the table below:

Table 153: Efficient O&M expenses for the Second Control Period as per the study

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021*	Total
Payroll costs – CHQ	4.13	18.67	34.07	27.39	27.41	**111.67**
Payroll costs – non CHQ	118.12	120.12	129.60	139.42	139.42	**646.68**
Payroll costs (A)	122.25	138.79	163.67	166.81	166.83	**758.35**

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021*	Total
Repair and maintenance (B)	92.49	101.02	72.44	72.66	72.76	**411.36**
Utilities & outsourcing expenses (C)	88.49	89.25	84.51	82.15	82.15	**426.54**
Admin and general expenses – non CHQ	4.52	5.71	10.23	15.13	14.97	**50.56**
Admin and general expenses - CHQ	26.30	21.70	22.80	23.90	25.10	**119.80**
Admin & Other expenses (D)	30.82	27.41	33.03	39.03	40.07	**170.36**
Other Outflows (E)	12.12	15.13	15.04	13.26	10.80	**66.36**
Working capital loan interest	-	-	-	-	0.30	**0.30**
Total O&M Expenses	**346.17**	**371.60**	**368.68**	**373.91**	**372.61**	**1,832.98**

* Estimated

5.2. AAI had proposed a total O&M expenditure (aeronautical) of Rs. 2,089.60 Cr. for the Second Control Period. Based on this study, the proposed O&M expenditure is Rs. 1,832.98 Cr. for the Second Control Period, thus resulting in a reduction of **Rs. 256.62 Cr.** for the Second Control Period.

19. APPENDICES

Appendix I: AAI's letter dated 18th August 2021

Sub: SpiceJet Letter dated 19.02.2021 'Landing Charges in respect of aircraft with a maximum certified capacity of less than 80 seats being operated by domestic schedule operator'

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

F.No. AAI/740/2021-JVC **18th August, 2021**

Mr. Ram Kishan,
Director (P&S)
Airports Economic Regulatory Authority of India,
New Delhi.

Sub: SpiceJet Letter dated 19.02.2021"Landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operator".

Sir,

This is with reference to AERA letter dated 30th April 2020 on the subject.

2. In this regard the submission of AAI is as follows:.

a) The MoCA Order dated 09.02.2004, inter alia, states that no landing charges shall be payable in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operators.

b) The tariffs for the said airports were determined after extensive stakeholders' consultations and landing exemption as per 2(a) above was not considered by AERA in the first control period. However it was considered in the 2nd control period although there was no change in the policy of MOCA from 1st control period to 2nd control period.

c) AAI has been levying Landing charges on International flights operated by less than 80 seater aircrafts in the 1st and 2nd Control Periods as per MoCA and AERA order. The issue of the applicability of the exemption of the landing charges in respect of International flights raised by the airlines is a matter of interpretation and AERA may take suitable decision.

d) The revision of any tariff order is AERA's discretion. However, if AERA is to consider the Airlines' request and allow the exemption from landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats in 1st Control Period, then it will be incumbent upon AERA to compensate AAI in the 3rd Control Period for revenue loss including interest through adjustment of the ARR of the first control period.

3. This issues with the approval of Competent authority.

Best regards,

Yours sincerely,

(V. Vidya) 18/08/21
Executive Director (JVC)

राजीव गांधी भवन
Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली-110003
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भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India

Appendix II - SpiceJet's Letter dated 19th February 2021

Sub: Landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operator

SpiceJet Limited
319 Udyog Vihar, Phase-IV,
Gurugram 122016, Haryana, India.
Tel: + 91 124 3913939
Fax: + 91 124 3913844

February 19, 2021

The Airports Economic Regulatory Authority of India.
AERA Building,
Administrative Complex,
Safdarjung Airport,
New Delhi – 110003

Subject: **Landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operator.**

Dear Sir,

With reference to the captioned subject, we wish to submit as follows:

1. SpiceJet Limited, is a scheduled air operator in India and hold a valid Air Operator Certificate bearing No. S-16 issued by the Director General of Civil Aviation. We are authorised to perform commercial air operations in accordance with Rule 134 of the Aircraft Rules, 1937. It is pertinent to mention here that amongst other aircraft we also operate Q400 aircraft with certified capacity of 78 seats.

2. We wish to bring to your attention that the Government of India (vide order F.No.Av.13011/02/2003-DT dated 21.7.2003) constituted Naresh Chandra Committee (the **"Committee"**) to chart a road map for rapidly rationalising and reforming the aviation sector in India. The Committee submitted its report, suggesting dramatic changes to revitalize the Indian civil aviation sector focusing on privatization, encouraging foreign investment, affordability, viability and safety.

   Please note that the Committee *inter-alia* recommended that airport charges should be substantially brought down to levels comparable with neighbouring South East Asian and Gulf countries. Based on this recommendation of the Committee, the Ministry of Civil Aviation, Government of India (**"MOCA"**), vide its order dated February 9, 2004 (**"MOCA Tariff Order"**) directed the Airport Authority of India (**"AAI"**) regarding reduction in airport charges and complete exemption from landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operator. Consequently, AAI vide its letter dated February 11, 2004 bearing no. Av.11014/22/2002-Rev/ (**"AAI Tariff Order"**) communicated to all airports about the implementation of MOCA Tariff Order. The relevant extract of the MOCA Tariff Order and AAI are reproduced herein below for ease of reference:

   "(iii) No landing charges shall be payable in respect of:-

   (a) aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic scheduled operators; and

   (b) Helicopters of all types."

Page 1 of 5

SpiceJet Limited

Registered Office: Indira Gandhi International Airport, Terminal 1D, New Delhi – 110037, India. Website : www.spicejet.com
CIN: L51909DL1984PLC288239

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The copies of MOCA Tariff Order and AAI Tariff Order are attached herewith for your ready reference and marked as **Annexure – 1** and **Annexure – 2**, respectively.

3. The Government of India promulgated the Airports Economic Regulatory Authority of India Act, 2008 (the **"AERA Act"**) on January 1, 2009 for establishment of Airports Economic Regulatory Authority (**"AERA"**) to regulate tariff and other charges for the aeronautical services rendered at airports. Effective establishment of the AERA under Section 3 of the AERA Act on May 12, 2009, the airports under AAI have been classified as "major airports" and "non-major airports". The tariffs for aeronautical services at "major airports" are determined by the AERA under Section 13(1)(a) of the AERA Act and for all other airports, the tariffs for aeronautical services are determined and approved by MOCA.

4. Please note that in terms of Section 3 of the AERA Act, AERA has issued orders bearing (i) No. 35/2012-13 on January 24, 2013 in the matter of determination of aeronautical tariff in respect of Netaji Subhash Chandra Bose International Airport, Kolkata for first Control Period (01.04.2011 – 31.03.2016); and (ii) No. 38/2012-13 on February 4, 2013 in the matter of determination of aeronautical tariff in respect of Chennai International Airport, Chennai for first Control Period (01.04.2011 – 31.03.2016) (collectively referred as **"First Control Period Orders"**).

While issuing the First Control Period Orders, AERA did not provide the exemption of landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, as recommended by the Committee and further approved by MOCA Tariff Order and AAI Tariff Order. It is pertinent to mention here that First Control Period Orders were issued on the basis of Multi Year Tariff Proposal (MYTP) for first control period as submitted by AAI. You will appreciate that while submitting MYTP for first control period to AERA, AAI did not submit the proposal for exemption of landing charges available in respect of aircraft with a maximum certified capacity of less than 80 seats in violation of the MOCA Tariff Order read with Section 22 of the Airports Authority of India Act, 1994 (the **"AAI Act"**).

Therefore, First Control Period Orders are based on wrong MYTP as submitted by AAI. This has defeated the very intent of recommendation of the Committee as well as violated the MOCA Tariff Order and Section 22 of the AAI Act and has caused irreparable loss to domestic schedule operator (like SpiceJet) vis-à-vis landing charges at Kolkata and Chennai Airport in respect of aircraft with a maximum certified capacity of less than 80 seats (like Q400 aircraft). Further, it also defeats the whole purpose of rationalising and reforming the aviation sector and especially promoting operations of smaller aircraft, wherein such exemption from landing charges was key to the decision making of the airline (including SpiceJet) to induct such small aircraft. Hence AAI is estopped from levy of such landing charges on this basis itself.

In other words, effective First Control Period Orders based on wrong MYTP of AAI, the AAI has wrongfully charged landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operator.

Please note that AAI has wrongfully charged us an amount of Rs.32,29,99,437 during First Control Period Orders towards landing charges of Q400 aircraft (78 seat) at Kolkata and

SpiceJet Limited

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भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
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Chennai Airport in the guise of the First Control Period Orders which was issued on erroneous MYTP of AAI and are in contradiction of recommendation of the Committee as well as MoCA Tariff Order. Summary of such wrongful charges are as follows and detailed calculation sheet is attached as **Annexure – 3**:

S. No.	Name of the Airport	Period	Amount (in Rs.)
1.	Netaji Subhash Chandra Bose International Airport, Kolkata	April 1, 2011 to November 30, 2017	2,79,82,821
2.	Chennai International Airport, Chennai	March 1, 2013 to April 30, 2018	29,50,16,616
	Total		**32,29,99,437**

5. Following the First Control Period Orders, AERA recognised the recommendation of the Committee and the MOCA Tariff Order and passed following orders under Section 13(1)(a) of the AERA Act allowing the complete exemption from landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, being operated by domestic schedule operator (**"Second Control Period Orders"**):

S. No.	Order No.	Control Period	Name of "major airport"
1.	23/2017-18 dated November 27, 2017	01.04.2016 – 31.03.2021	Netaji Subhash Chandra Bose International Airport, Kolkata
2.	03/2018-19 dated April 16, 2018	01.04.2016 – 31.03.2021	Chennai International Airport, Chennai

While AERA recognised the exemption to be allowed for landing charges in respect of aircraft with a maximum certified capacity of less than 80 seats, it did not rectify the wrongful charging of landing charges as mentioned in the First Control Period Orders.

Landing Charges on International Flights

6. We further wish to submit that even after the Second Control Period Orders, AAI continued to levy landing charges in respect Q400 aircraft (78 seat) at Kolkata and Chennai Airport particularly on the landing of international flights and is still continuing to levy the landing charges against the Second Control Period Orders and MOCA Tariff Order.

Please appreciate that we being a domestic schedule operator of Q400 aircraft with certified capacity of 78 seats are entitled to exemption from landing charges in respect of these aircraft in terms of Second Control Period Orders (for major airport) and MOCA Tariff Order (for non-major airport) irrespective of the fact whether we are operating international flight or domestic flight through these aircraft. However, AAI continued to levy landing charges in respect of such aircraft operated by us particularly on the landing of international flights at Kolkata, Chennai, Madurai, Guwahati and Trivandrum Airport and is still continuing to levy the landing charges against the Second Control Period Order (for major airport) and MOCA Tariff Order (for non-major airport).

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SpiceJet Limited

Registered Office: Indira Gandhi International Airport, Terminal 1D, New Delhi - 110037, India. Website : www.spicejet.com
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7. It is humbly submitted that the action of AAI in levying charges on landing of Q400 aircraft (78 seat) being an exempt category of aircraft is illegal and in violation of the Second Control Period Orders (for major airport) and MoCA Tariff Order (for non-major airport) and Section 22 of the AAI Act. The landing charges were wrongfully levied by AAI despite the same being exempt. Admittedly, SpiceJet is a domestic schedule operator and operated Q400 aircraft which are less than 80-seater and is therefore eligible to claim exemption from the payment of landing charges.

   A bare perusal of the Second Control Period Orders and MOCA Tariff Order in respect of landing charges would show that following twin conditions are required to be satisfied for claiming exemption from payment of landing charges:

   (a) aircraft with a maximum certified capacity of less than 80 seats; and
   (b) being operated by domestic scheduled operators

   None of the said orders makes a distinction between the domestic flights or international flights and therefore the levy of landing charges on international operations by AAI is arbitrary and illegal and against the said tariff orders.

8. It may be pointed out that until January 31, 2021 an amount of Rs.5,03,91,798 towards alleged landing charges on international operations was charged by AAI and the same was paid also by SpiceJet under a mistaken belief that the said amount was payable, whereas no amount was payable in respect of the exempted aircraft. Detailed calculation sheet is attached herewith and marked as **Annexure – 4**. It is submitted that AAI being State instrumentality ought to have been fair and transparent in its dealings and could not have allowed itself to unjustly enrich at the expense of SpiceJet.

9. Needless to say that the act of AAI to levy landing charges as mentioned in above paragraphs is in violation of the orders of AERA and MOCA and is also a punishable offence under Section 38 read with Section 41 of AERA Act.

In the view of the facts and circumstances as mentioned above, you are requested to kindly enquire, investigate and order under Section 14 of the AERA Act regarding wrongful charging of landing charges and consider our claims for following:

(a) Landing charges of Rs.32,29,99,437 in respect of Q400 aircraft (78 seat) at Kolkata and Chennai Airport during the period of First Control Period Orders of AERA. Accordingly direct AAI to make immediate refund said amount of Rs.32,29,99,437 along with interest @ 18% p.a. (i.e. Rs.Rs.29,27,20,067) upto Jan 31, 2021. Detailed sheet is annexed herewith as Annexure – 3.

(b) Landing charges of Rs.5,03,91,798 on international flights on Q400 aircraft (78 seat) operated by domestic scheduled operator (i.e. SpiceJet) at Kolkata, Chennai, Madurai, Guwahati and Trivandrum Airport. Accordingly, direct AAI to make immediate refund of said amount ofRs.5,03,91,798 along with interest @ 18% p.a. (i.e. Rs.2,83,66,742) upto Jan 31, 2021. Detailed sheet is annexed herewith as Annexure – 4.

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CIN: L51909DL1984PLC288239

भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
Airports Economic Regulatory Authority of India
सत्यमेव जयते

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We also request you to immediately direct AAI not to levy any landing charges on the landing of international flights operated by Q400 aircraft (78 seat) being operated by SpiceJet (which is a scheduled domestic operator) according to the orders of AERA and AAI Tariff Order.

We thank you in advance for your kind consideration in the matter and look forward to favourable disposal of the matter.

Thanking you,

Yours truly,
For SpiceJet Limited

SpiceJet Limited

Chandan Sand
Sr. VP (Legal) & Company Secretary

CC: (i) The Secretary,
The Ministry of Civil Aviation,
Rajiv Gandhi Bhawan, Block B,
Safdarjung Airport, New Delhi – 110003

(ii) The Chairman,
Airports Authority of India,
Rajiv Gandhi Bhawan,
Safdarjung Airport,
New Delhi – 110003

Encl.: As above.

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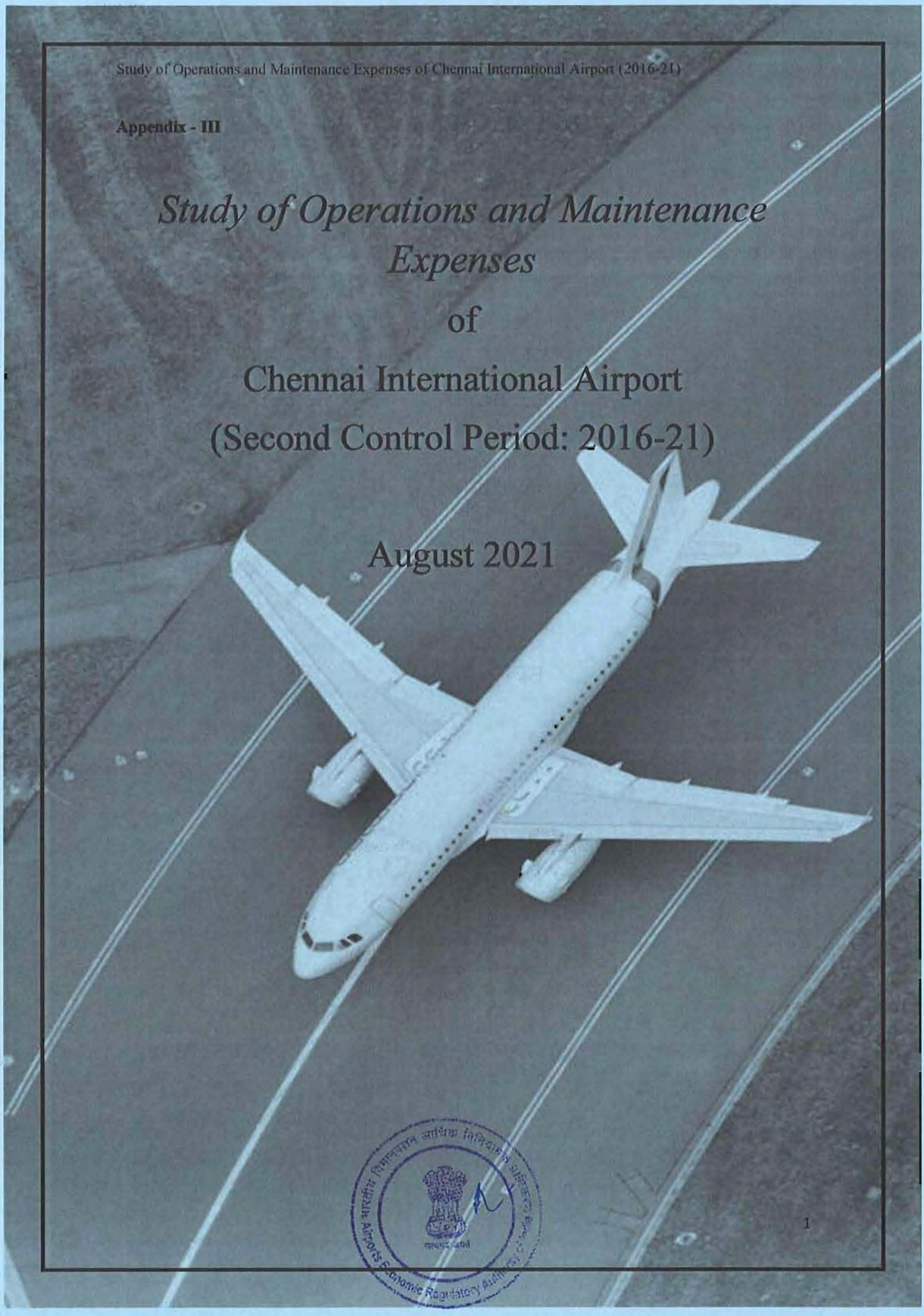
Appendix - III



Study of Operations and Maintenance Expenses

of

Chennai International Airport

(Second Control Period: 2016-21)

August 2021

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LIST OF TABLES AND FIGURES

1. OBJECTIVE OF THIS STUDY

1.1. Introduction

Chennai International Airport is owned and operated by the Airports Authority of India (AAI), a *Miniratna* Category-1 Public Sector Enterprise. AAI was constituted by an Act of Parliament and was established in 1995 through the merger of erstwhile National Airports Authority and International Airports Authority of India. The merged entity—AAI was entrusted with the responsibility of creating, upgrading, maintaining and managing civil aviation infrastructure in India, both on ground and in air space.

Chennai International Airport is one of the 'major airports' notified by Airports Economic Regulatory Authority of India under the provisions of the AERA Act 2008. Pursuant to the AERA Act 2008, AERA issued guidelines for the purpose of determination of aeronautical tariffs for major airports. Chennai International Airport had submitted Multi Year Tariff Proposal (MYTP) for the Second Control Period from FY 2016-17 to FY 2020-21. AERA issued the order for the Second Control Period on 16th April 2018.

AERA has adopted the hybrid till approach for determination of tariff of Chennai International Airport. As per the hybrid till approach, 30% of the non-aeronautical revenues are to be used to cross-subsidize the aeronautical revenues, i.e., the Aggregate Revenue Requirement. Tariffs for aeronautical services under the hybrid till approach are based on the various building blocks, i.e. aeronautical Regulatory Asset Base (RAB), aeronautical depreciation, aeronautical operational expenses and aeronautical tax.

Establishing efficient Operation and Maintenance (O&M) expenses is important for the effective execution of tariff determination for aeronautical services. Across airports in India, the O&M expenditure has consistently been increasing, driven by investments in expansion and modernisation of the airports.

The objective of the study is to understand and analyse the O&M expenses of Chennai International Airport. The detailed analysis of O&M expenses is expected to help in establishing whether the existing expense levels are over or under the efficient expense levels. This will help in assisting the Authority in determining the efficient costs for O&M for the purpose of tariff determination at Chennai International Airport.

Accordingly, AERA decided to conduct a study on efficient O&M expenses for true-up of the Second Control Period. The analysis of various components of O&M expenses from FY 2016-17 to FY 2019-20 has been done based on the trial balances. For FY 2020-21, the projections submitted by AAI were examined.

As part of this study, the following have been examined/ referred:

i. The AERA Act, 2008 with its amendment in 2019

ii. Airports Economic Regulatory Authority of India (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28 February 2011

iii. AERA Order No. 03 / 2018-19 dated 16 April 2018 [In the matter of determination of aeronautical tariffs in respect of Chennai International Airport, Chennai, for the Second Control Period (01.04.2016 to 31.03.2021)]

iv. Previous tariff orders of other airports

v. Trial Balances, clarifications, and details received from Chennai International Airport

2. WORK PERFORMED

2.1. Terms of Reference

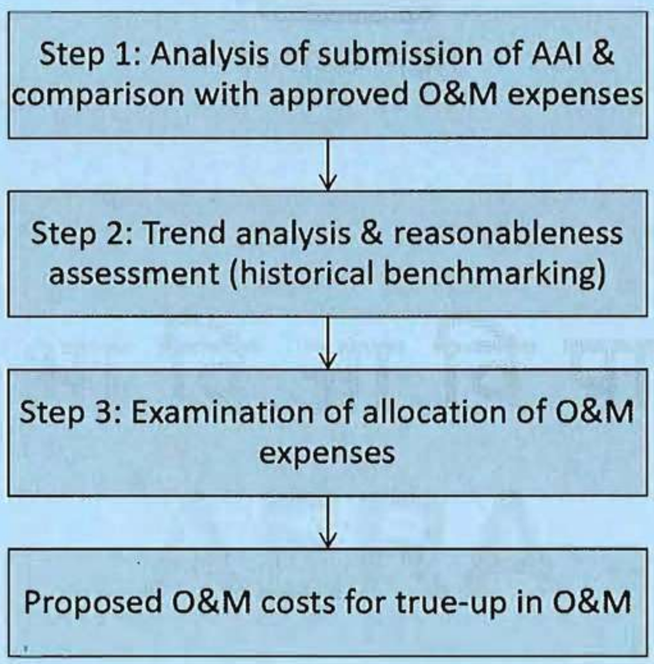
AERA has outlined the scope of work for a study on efficient O&M expenses and segregation of O&M expenses between aeronautical and non-aeronautical in clauses 3.1 (v) and 3.1 (vi) of Schedule 1 of its RFP No. 02/2020-21 for engagement of consultants to assist AERA in determination of tariffs for aeronautical services at Chennai International Airport, which state:

- "3.1 (v) – Asset / OPEX segregation between Aero and Non-Aero"
- "3.1 (vi) – Examine and recommend efficient costs for O&M as part of tariff determination process."

2.2. Methodology

The steps elaborated below have been followed for determining the efficient O&M expenses at Chennai International Airport in this study.

Figure 1: Approach for this study



Step 1: Analysis of submission of Chennai International Airport

As a first step, assessment of the O&M expenses has been done based on the inputs shared by AAI. The trial balances of Chennai International Airport from FY 2016-17 to FY 2019-20 were examined to verify the expenses incurred during the Second Control Period. The expenses for FY

2020-21 are as per the projections submitted by the AAI. The reasonableness of the operational expense projections for FY 2020-21 has been assessed based on these projections itself. The operator has submitted O&M expenses under the following heads:

- **Payroll costs:** Includes the following expenses:
  - Salaries and wages (basic pay, dearness allowance, and house rent allowance)
  - Overtime expenses
  - Other staff benefits (employee perks, EL encashment etc.)
  - Medical expenditure
  - Provident fund contributions
  - Staff recoveries
  - Apportionment of CHQ/RHQ expenses

- **Administrative and general expenses:** Includes the following expenses:
  - Rent, rates, and taxes (rent on office building, import license, and taxes on vehicles)
  - Insurance (vehicle, and plant & machinery insurance)
  - Advertising and publicity
  - Office expenses
  - Telephone charges
  - Printing and stationery
  - Legal expenses
  - Travelling expenses
  - Financing charges (apportionment of interest on loan taken at CHQ level)
  - Project expenses
  - Consultancy charges
  - Apportionment of admin (non-employee related overhead expenses) for CHQ/RHQ

- **Repair and maintenance (R&M) expenses:** Includes the following expenses:
  - R&M for civil works
  - R&M for electrical works
  - R&M for vehicles
  - R&M for furniture and fixtures
  - R&M for computers, IT, and hardware
  - Annual maintenance contract (AMC) charges

- **Utilities and outsourcing expenses:** Include the following expenses:
  - Power charges (net of recovery)
  - Water charges
  - Upkeep expenses
  - Watch and ward expenses

- **Other outflows:** Includes the following expenses:
  - Collection charges on UDF and PSF
  - Municipal taxes
  - Consumption of stores and spares
  - Hire charges
  - POL expenses
  - Other miscellaneous expenses

Step 2: Trend analysis & reasonableness assessment (historical benchmarking)

In order to understand the change / variation of the various elements of the O&M expenses, a trend analysis has been done for the First Control Period as well as the Second Control Period for the aeronautical portion of O&M expenses, as per AAI's submission.

The objective of the same is to understand the long term growth rates in these expenses and also the correlation between the year-on-year change in these expenses vis-à-vis the passenger traffic data. The study attempts to analyse the reasons for variance in the level and growth of O&M expenses as submitted by AAI for the Second Control Period in its MYTP vis-a-vis what was approved in the previous tariff orders for Chennai International Airport . The study attempts to understand whether AAI has been prudent in managing these expenses in line with the increase in passenger and ATM traffic. The major expenses submitted by AAI were studied in detail to assess the reasonableness of the same.

Step 3: Examination of allocation of O&M expenses

As the final step for establishment of the efficient O&M expenses for Chennai International Airport, the allocation of common expenses across aeronautical and non-aeronautical components by AAI has been analysed. Subsequently, wherever necessary, an alternate allocation principle has been suggested.

3. OPERATION AND MAINTENANCE EXPENSES PROPOSED BY CHENNAI INTERNATIONAL AIRPORT FOR THE SECOND CONTROL PERIOD

3.1. Analysis of approved O&M expenses and O&M expenses submitted by AAI

3.1.1. The Authority had approved O&M expenses of Rs. 2,041.26 Cr for the Second Control Period as shown in the table below:

Table 1: O&M expenses approved by the Authority in the Second Control Period

FY ending March 31 (Rs. Cr)	2017	2018	2019	2020	2021	Total
Payroll costs - non CHQ/RHQ	127.50	153.70	161.40	169.50	178.00	**790.10**
Payroll costs - CHQ/RHQ	21.30	26.00	27.20	28.60	30.00	**133.10**
Admin and general expenses - non CHQ/RHQ	4.44	4.27	4.70	5.17	5.69	**24.27**
Admin and general expenses - CHQ/RHQ	26.26	21.68	22.76	23.90	25.09	**119.69**
R&M expenses	87.90	82.40	89.70	97.00	105.30	**462.30**
Utilities and outsourcing expenses	95.30	85.30	86.70	88.30	90.10	**445.70**
Other outflows	13.60	12.20	12.80	13.40	14.10	**66.10**
Total operating expenditure	**376.29**	**385.55**	**405.26**	**425.87**	**448.28**	**2,041.26**

3.1.2. Chennai International Airport submitted O&M expenses of Rs. 2,089.6 Cr for the Second Control Period as shown in the table below:

Table 2: O&M expenses submitted by AAI in the Second Control Period

FY ending March 31 (Rs. Cr)	2017	2018	2019	2020	2021	Total
Number of employees	778	758	739	665	659	
Payroll costs - non CHQ/RHQ	118.11	120.09	129.58	139.41	149.16	**656.35**
Payroll costs - CHQ/RHQ	4.13	18.67	34.07	27.39	29.32	**113.59**
Admin and general expenses - non CHQ/RHQ	25.27	10.29	10.26	15.90	17.31	**79.04**
Admin and general expenses - CHQ/RHQ	84.69	62.63	37.41	50.74	53.28	**288.75**
R&M expenses	92.81	101.10	73.14	73.54	81.00	**421.59**
Utilities and outsourcing expenses	88.49	89.27	84.93	82.58	86.03	**431.30**
Other outflows	21.17	18.34	21.50	19.74	18.23	**98.97**
Total operating expenditure	**434.68**	**420.41**	**390.89**	**409.29**	**434.34**	**2,089.60**

3.2. Analysis

3.2.1. It can be observed in Table 2 that the number of employees at Chennai International Airport in the Second Control Period has reduced from 778 in FY 2016-17 to 659 in FY 2020-21.

3.2.2. A comparison of actual O&M expenses in Table 2 and approved O&M expenses in Table 1 shows that actual expenses are Rs. 48 Cr more than what was approved.

3.2.3. Further review of expense sub-heads show that AAI's submission for pay roll costs, R&M expenses, utilities and outsourcing expenses was lower than what was approved by the Authority. AAI's submission on administrative and general expenses and other outflows is higher than what was approved by the Authority in the Second Control Period.

3.2.4. The biggest difference between approved and actual expenses can be attributed to administrative and general expenses – CHQ/RHQ. While Rs. 119.80 Cr was approved by the Authority in the Second Control Period Order, AAI submitted actuals of Rs. 288.75 Cr for the Second Control Period.

3.2.5. Further, it is noted that while number of PAX and ATM fell significantly during FY 2020-21, O&M expenses submitted by AAI are higher in FY 2020-21 compared to FY 2019-20. The projections for FY2020-21 are discussed separately.

3.2.6. It is also noted that, while approving O&M expenses in the Second Control Period, the Authority was cognizant of the projected capitalisation of NITB Part - 1 in FY 2020-21. The same has now been deferred to the Third Control Period.

4. HISTORICAL BENCHMARKING AND TREND ANALYSIS

4.1. Trend Analysis of O&M Expenses of First and Second Control Period

4.1.1. In order to understand the change in various O&M expense heads over a longer period of time, the trend of O&M expenses has been analysed over the First and Second Control Period up to FY 2019-20 (as FY 2020-21 was impacted by the Covid-19 pandemics) against the change in traffic.

4.1.2. The following table provides a detailed summary comparing the trends between the First Control Period and Second Control Period in O&M expenses and in air traffic:

Table 3: Comparison between CAGR of First and Second Control Period

	First Control Period						Second Control Period					
FY ending March 31	**2012**	**2013**	**2014**	**2015**	**2016**	**CAGR**	**2017**	**2018**	**2019**	**2020**	**CAGR (FY16 to FY20)**	**2021**
PAX traffic (MPPA)	12.90	12.80	12.90	14.30	15.20	**4.19%**	18.36	20.36	22.54	22.27	**10.02%**	4.74
ATM (000's)	120.13	117.42	121.82	122.38	125.12	**1.02%**	147.77	155.12	178.08	167.98	**7.64%**	60.30
	Operation and Maintenance Expenses (Rs. Cr)											
Payroll costs - non CHQ/RHQ	112.90	105.60	117.90	127.40	124.60	**2.50%**	118.11	120.09	129.58	139.41	**2.85%**	149.16
Payroll costs - CHQ/RHQ	17.60	37.70	18.70	32.30	20.80	**4.26%**	4.13	18.67	34.07	27.39	**7.12%**	29.32
Admin and general expenses - non CHQ/RHQ	2.40	3.60	3.40	4.80	4.20	**15.02%**	25.27	10.29	10.26	15.90	**39.48%**	17.31
Admin and general expenses - CHQ/RHQ	32.50	27.10	18.80	26.80	27.20	**(4.35%)**	84.69	62.63	37.41	50.74	**16.87%**	53.28
R&M expenses	18.40	28.60	32.90	69.90	70.40	**39.86%**	92.81	101.10	73.14	73.54	**1.10%**	81.00
Utilities and outsourcing expenses	32.60	53.10	75.70	80.60	94.60	**30.52%**	88.49	89.27	84.93	82.58	**-3.34%**	86.03
Other outflows	40.10	29.70	14.90	8.60	17.60	**(18.61%)**	21.17	18.34	21.50	19.74	**2.90%**	18.23
Total operating expenditure	**256.50**	**285.40**	**282.30**	**350.40**	**359.40**	**8.80%**	**434.68**	**420.41**	**390.89**	**409.29**	**3.30%**	**434.34**

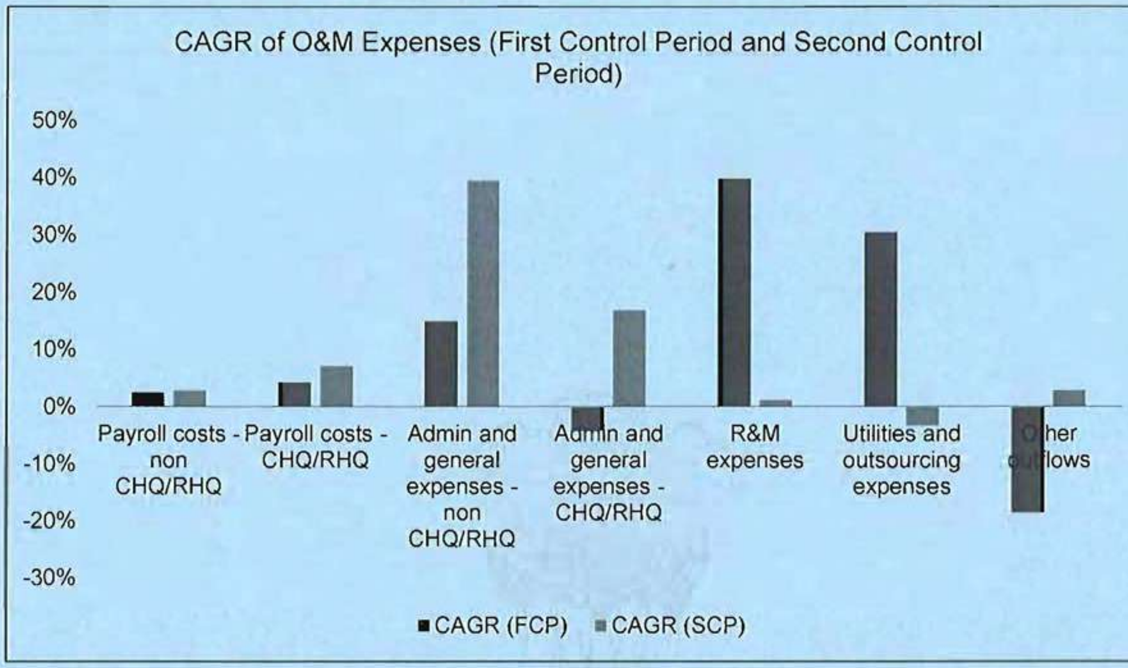
4.2. Summary

4.2.1. The CAGR of total operating expenses in the First Control Period and the Second Control Period is 8.80% and 3.30% respectively. Thus, there was a sharp deceleration in O&M expenses growth in the Second Control Period.

4.2.2. In the First Control Period, CAGR of total O&M expenses has been higher than the CAGR in passenger and ATM traffic. However, in the Second Control Period, the O&M expense CAGR has been lower than CAGR of PAX and ATM traffic.

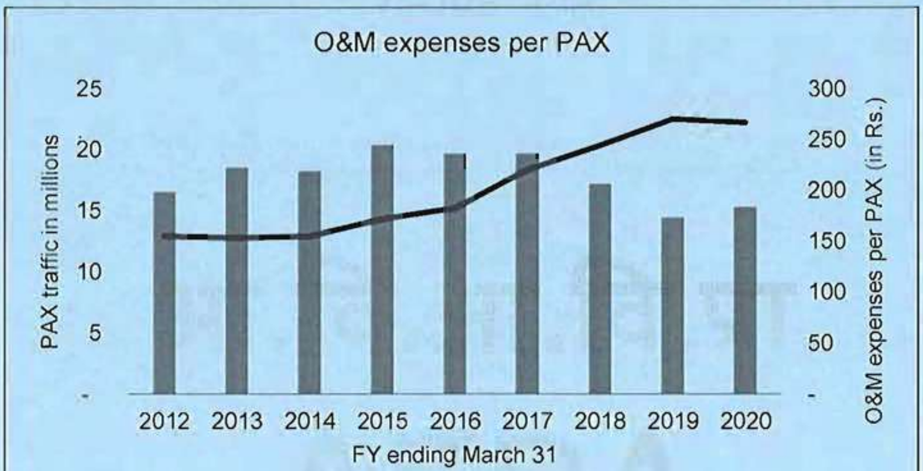
4.2.3. The following graph illustrates the difference between the CAGR during both these periods across various expense heads:

Figure 2: CAGR of O&M expenses (FCP and SCP)



4.2.4. The following graph compares the O&M expenses per PAX in the First Control Period and the Second Control Period with the passenger traffic:

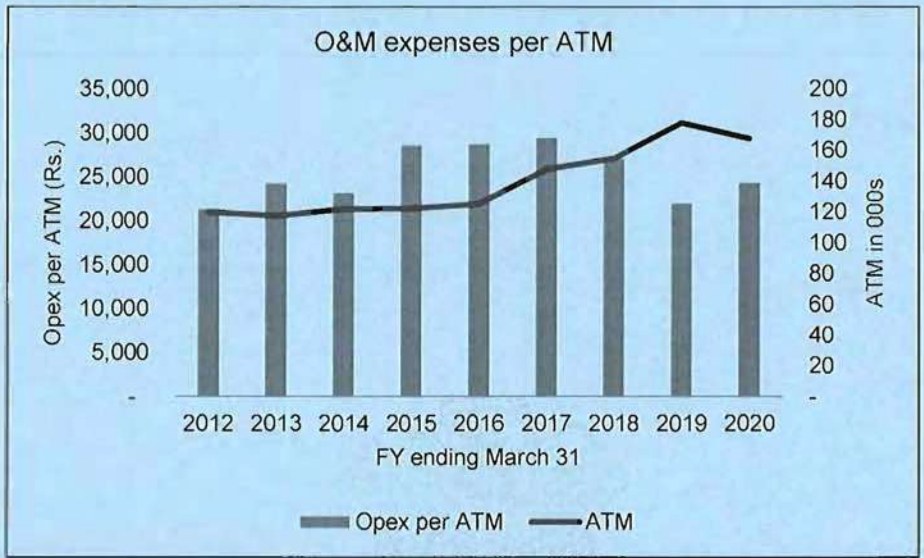
Figure 3: O&M expenses per PAX



4.2.5. It can be seen from the figure that the O&M per PAX is consistently decreasing in the Second Control Period, except in FY 2019-20, when it marginally increased due to the fall in PAX numbers due to the Covid-19 impact towards the end of the year.

4.2.6. The following graph compares the O&M expenses per ATM in the First Control Period and Second Control Period with the passenger traffic:

Figure 4: O&M expenses per ATM



4.2.7. It can be seen from the figure that the O&M expenses per ATM is decreasing in the Second Control Period, except in FY 2019-20 where the O&M expenses per ATM increased due to a fall in ATM traffic.

4.3. Analysis of O&M expenses in the Second Control Period

4.3.1. All O&M expenses other than utility and outsourcing expenses have seen a positive growth in the Second Control Period. Administrative and general expenses – CHQ/RHQ and administrative and general expenses – non CHQ/RHQ saw CAGR growth of 16.87% and 39.48% respectively

4.3.2. The following table compares the per PAX and per ATM O&M expenses in FY 2016-17 to those in FY 2019-20. Both the O&M expenses per PAX and O&M expenses per ATM have reduced between FY 2016-17 and FY 2019-20.

Table 4: Comparison of O&M per PAX and per ATM between FY 2016-17 and FY 2019-20

Parameter	2016-17	2019-20	Increase %
O&M expenses (Rs. Cr)	434.68	409.29	(5.84%)
PAX traffic MPPA	18.36	22.27	21.29%
O&M expenses per PAX (Rs/PAX)	236.72	183.81	(22.35%)
ATM ('000s)	147.77	167.98	13.68%
O&M expenses per ATM (Rs/ATM)	29,416.53	24,364.86	(17.17%)

Payroll Costs

4.3.3. The following figure compares the approved payroll costs as per the Second Control Period Order and the payroll costs submitted by AAI. Payroll expenses have increased since the beginning of the Second Control Period, while the number of employees decreased. However, the payroll costs submitted by AAI are lower than what was approved by the Authority throughout the Second Control Period.

Figure 5: Payroll costs in the Second Control Period

4.3.4. Payroll costs consist of the following sub-expenses:

i. Salaries and wages
ii. PF expenses
iii. Medical expenses
iv. Overtime
v. Other staff benefits

4.3.5. The following table examines the break-up of payroll costs approved by the Authority, and those submitted by AAI:

Table 5: Comparison between payroll costs approved by the Authority and submitted by AAI

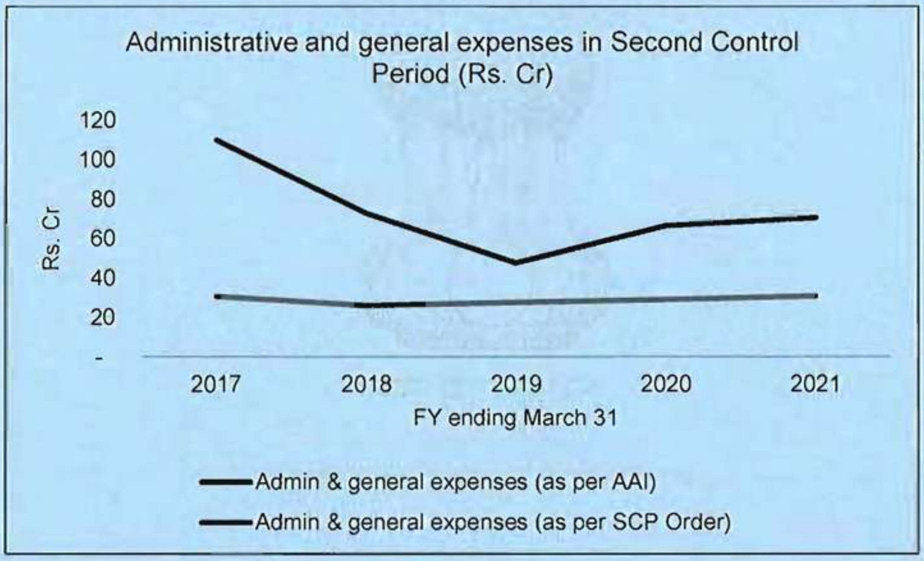
	Approved in SCP Order						**Submission by AAI**					
FY ending March 31	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Salaries and wages	102.42	122.50	128.62	135.05	141.81	**630.40**	70.59	65.95	74.61	75.55	80.84	**367.54**
PF expenses	4.39	5.14	5.39	5.66	5.94	**26.52**	7.51	7.25	8.94	8.25	8.83	**40.77**
Medical expenses	10.31	13.34	14.01	14.71	15.45	**67.83**	11.26	11.86	11.89	12.47	13.34	**60.82**
Overtime	6.83	8.61	9.04	9.49	9.97	**43.94**	6.11	5.65	4.62	7.48	8.00	**31.86**
Other staff benefits (net of staff recoveries)	3.58	4.43	4.65	4.89	5.13	**22.69**	22.85	29.62	29.79	35.95	38.46	**156.67**
Less: Common expenses for Cargo and ANS employees	-	(0.28)	(0.30)	(0.31)	(0.33)	**(1.22)**	(0.21)	(0.24)	(0.28)	(0.28)	(0.30)	**(1.31)**
Payroll costs - non CHQ/RHQ	**127.50**	**153.70**	**161.40**	**169.50**	**178.00**	**790.10**	**118.11**	**120.09**	**129.58**	**139.41**	**149.16**	**656.35**
Payroll costs - CHQ/RHQ	**21.30**	**26.00**	**27.20**	**28.60**	**30.00**	**133.10**	**4.13**	**18.67**	**34.07**	**27.39**	**29.32**	**113.59**
Total payroll costs	**148.80**	**179.70**	**188.60**	**198.10**	**208.00**	**923.20**	**122.24**	**138.77**	**163.64**	**166.80**	**178.49**	**769.94**

4.3.6. AAI's submission of payroll costs – non-CHQ/RHQ and payroll costs – CHQ/RHQ are lower than what was approved by the Authority. This is primarily because of the difference between approved salaries and wages and that submitted by AAI. AAI has submitted that the number of employees reduced from 778 in FY 2016-17 to 659 in FY 2020-21. Payroll costs – CHQ/RHQ has been discussed later in the study.

Administrative and General Expenses

4.3.7. Figure 2 compares the approved administrative and general expenses as per the Second Control Period Order and that submitted by AAI. The expenses submitted by AAI are higher than the approved amounts for all tariff years. It may be noted that the actual expenses submitted by AAI reduced year by year till FY 2018-19, after which they increased. The difference between actuals and approved can largely be attributed to admin and general expenses – CHQ/RHQ, which is discussed later.

Figure 6: Administrative and general expenses in the Second Control Period



4.3.8. Administrative and general expenses comprise the following sub-expenses:

i. Rent and taxes
ii. Communication expenses
iii. Travelling and conveyance expenses
iv. Advertisement
v. Office maintenance
vi. Printing and stationery
vii. Legal expenses
viii. Other professional charges
ix. Insurance
x. Recruitment
xi. Financing charges

4.3.9. The following table examines the break-up of administrative and general expenses approved by the Authority, and those submitted by AAI:

Table 6: Comparison between administrative and general expenses approved by the Authority and submitted by AAI

	Approved in SCP Order						Submission by AAI					
FY ending March 31	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Rent and taxes	0.00	0.00	0.00	0.00	0.00	**0.01**	0.04	0.01	0.09	0.01	0.01	**0.15**
Communication	0.52	0.50	0.56	0.61	0.67	**2.86**	0.43	0.46	0.42	0.35	0.38	**2.03**
Travelling and conveyance	1.97	1.92	2.11	2.32	2.55	**10.86**	1.46	1.51	2.15	1.22	1.34	**7.68**
Advertisement	0.87	0.79	0.87	0.96	1.05	**4.54**	1.57	0.50	1.60	0.89	0.98	**5.55**
Office maintenance	0.11	0.12	0.13	0.14	0.16	**0.66**	0.52	0.35	0.45	0.53	0.59	**2.44**
Printing and stationery	0.44	0.43	0.47	0.52	0.57	**2.44**	0.41	0.43	0.53	0.33	0.36	**2.06**
Legal charges	0.13	0.15	0.16	0.18	0.19	**0.81**	0.20	0.05	0.27	0.23	0.25	**1.00**
Other professional charges	0.29	0.29	0.32	0.36	0.39	**1.65**	0.00	0.42	0.00	0.00	0.00	**0.42**
Insurance	0.06	0.02	0.02	0.02	0.03	**0.15**	0.12	0.08	0.11	0.09	0.10	**0.50**
Recruitment	0.05	0.05	0.05	0.05	0.06	**0.26**	0.00	0.00	0.00	0.00	0.00	**0.00**
Finance charges	0.01	0.01	0.01	0.01	0.01	**0.03**	20.75	4.58	0.00	0.75	0.82	**26.91**
CSR expenses	-	-	-	-	-	-	-	1.90	4.63	11.35	12.48	**30.36**
Project expenses (net)	-	-	-	-	-	-	(0.23)	-	-	0.16	-	**(0.07)**
Administrative and general expenses – non CHQ/RHQ	**4.44**	**4.27**	**4.70**	**5.17**	**5.69**	**24.27**	**25.27**	**10.29**	**10.26**	**15.90**	**17.31**	**79.04**
Administrative and general expenses – CHQ/RHQ	**26.26**	**21.68**	**22.76**	**23.90**	**25.09**	**119.69**	**84.69**	**62.63**	**37.41**	**50.74**	**53.28**	**288.75**
Total Administrative and general expenses	**30.69**	**25.95**	**27.46**	**29.07**	**30.78**	**143.96**	**109.97**	**72.93**	**47.67**	**66.64**	**70.59**	**367.79**

4.3.10. While AAI's submission of administrative and general expenses – non CHQ/RHQ are higher than what was approved by the Authority, the key differences are on account of inclusion of financing charges and CSR expenses by AAI. Financing charges comprise of interest on loans that AAI has taken, which has been discussed in the next paragraph. CSR expenses, though not approved by the Authority in the Second Control Period Order, is now allowed after the Hon'ble TDSAT Order on BIAL that allowed airport operators to include CSR expenses for tariff determination. Administrative and general expenses – CHQ/RHQ has been discussed later in the study.

4.3.11. Para 14.16 of the Second Control Period tariff order proposed not to include financing charges in administration and general expenses as the expense consists of interest payments on long term debt. Therefore, the Authority may decide to exclude these expenses from O&M expenses for the Second Control Period.

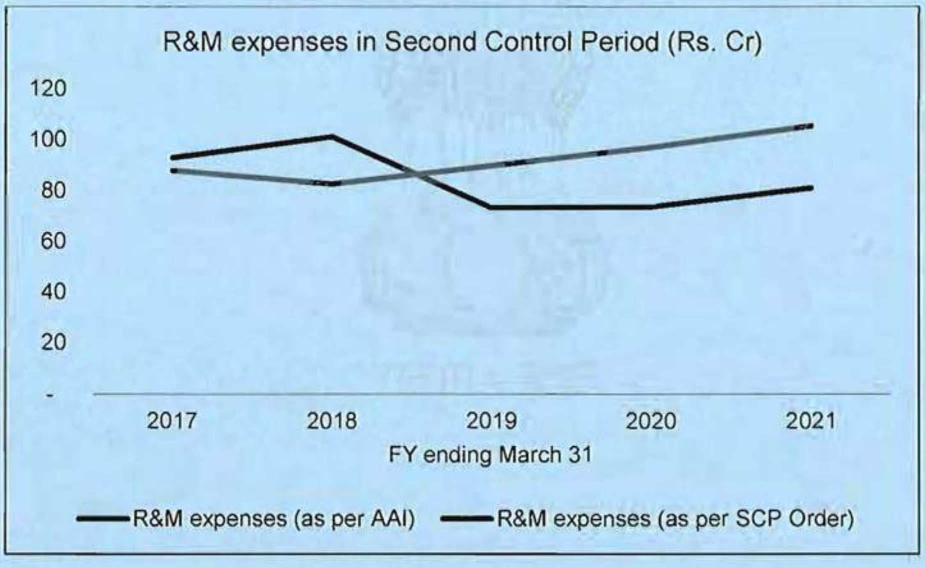
Repair and maintenance expenses

4.3.12. Repair and maintenance expenses consists of the following sub-expenses:

i. Repair and maintenance – civil works
ii. Repair and maintenance – plant and machinery
iii. Repair and maintenance – electrical installations
iv. Repair and maintenance – furniture and fittings
v. Repair and maintenance – computers, IT, and hardware
vi. AMC documents

4.3.13. The following figure compares the approved R&M expenses as per the Second Control Period Order and the R&M expenses submitted by AAI. The figure shows that the actual expenses submitted by AAI are higher than the approved amounts for FY 2016-17 and FY 2017-18 but are lower than the approved amounts from FY 2018-19 to FY2020-21.

Figure 7: R&M expenses in the Second Control Period



4.3.14. The following table examines the break-up of R&M expenses approved by the Authority and those submitted by AAI:

Table 7: Comparison between repair and maintenance expenses approved by the Authority and submitted by AAI

	Approved in SCP Order						Submission by AAI					
FY ending March 31	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Civil works	25.26	25.16	27.68	30.45	33.49	**142.04**	31.50	14.94	16.83	13.63	14.99	**91.88**
Plant and Machinery / Vehicle	0.86	0.83	0.91	1.00	1.10	**4.70**	1.47	0.87	0.56	1.80	1.98	**6.69**
Electrical Installations	32.43	32.65	35.91	39.50	43.45	**183.94**	41.70	64.57	37.96	38.33	42.16	**224.72**
Furniture & fittings	0.23	0.25	0.27	0.30	0.33	**1.37**	0.40	0.18	0.51	2.27	2.49	**5.86**
Computers, IT, hardware	29.17	23.53	24.97	25.78	26.91	**130.36**	17.75	20.54	17.28	17.52	19.27	**92.35**

	Approved in SCP Order						Submission by AAI					
FY ending March 31	2017	2018	2019	2020	2021	Total	2017	2018	2019	2020	2021	Total
AMC for digital signages (T1 and T4)	-	-	-	-	-	-	-	-	-	-	0.02	0.02
AMC for Automatic Electronic Access Retrieval System	-	-	-	-	-	-	-	-	-	-	0.08	0.08
Total R&M Expenses	87.94	82.41	89.74	97.03	105.28	462.40	92.81	101.10	73.14	73.54	81.00	421.59

4.3.15. The overall level of R&M expenses was analysed vis-à-vis the opening gross block of Chennai International Airport. The following table summarises R&M expenses as a percentage of the opening gross block in the Second Control Period:

Table 8: R&M analysis vis-à-vis opening gross block

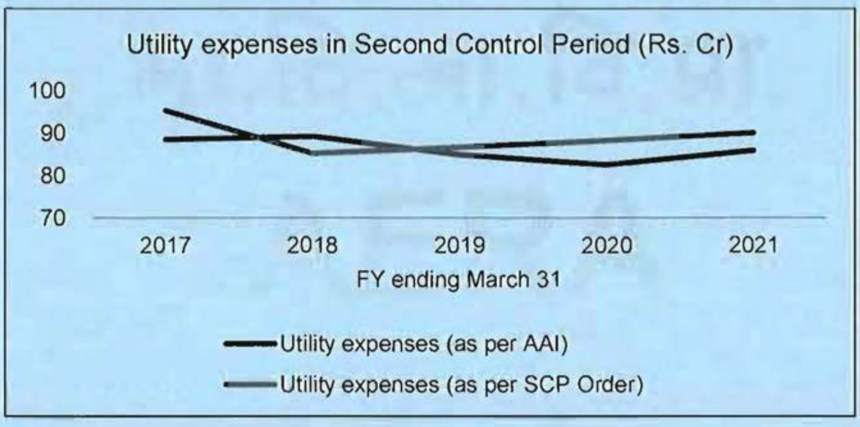
Parameter (Rs. Cr)	2016-17	2017-18	2018-19	2019-20	2020-21
R&M expenses	92.81	101.10	73.14	73.54	81.00
Opening gross block	1,875.25	2,307.41	2,366.59	2,536.05	2,716.91
R&AM expenses (% of opening gross block)	**4.95%**	**4.38%**	**3.09%**	**2.90%**	**2.98%**

4.3.16. R&M expenses of Chennai Airport range from 2.90% to 4.95% of the opening gross block. This is broadly in line with other airports and seems to be reasonable.

Utility and Outsourcing Expenses:

4.3.17. The following figure compares the approved utility expenses as per the Second Control Period Order and the utility expenses submitted by AAI. The actual expenses submitted by AAI are lower than the approved amounts for all tariff years of the Second Control Period other than FY 2017-18.

Figure 8: Utility expenses in the Second Control Period



4.3.18. The following table examines the break-up of utilities and outsourcing expenses approved by the Authority, and those submitted by AAI:

Table 9: Comparison between utilities and outsourcing expenses approved by the Authority and submitted by AAI

	Approved in SCP Order						Submission by AAI					
FY ending March 31	2017	2018	2019	2020	2021	Total	2017	2018	2019	2020	2021	Total
Power charges	77.71	69.08	69.08	69.08	69.08	**354.03**	67.29	62.07	54.14	48.04	48.04	**279.58**
Water charges	1.73	1.73	1.73	1.73	1.73	**8.67**	3.04	1.73	1.16	1.19	1.31	**8.44**
Upkeep expenses	10.14	10.96	12.05	13.26	14.59	**60.99**	11.82	21.84	24.87	28.90	31.79	**119.21**
Watch and ward expenses	5.69	3.51	3.86	4.24	4.67	**21.97**	6.34	3.63	4.77	4.45	4.89	**24.08**
Total Utilities and Outsourcing	**95.27**	**85.28**	**86.73**	**88.32**	**90.07**	**445.66**	**88.49**	**89.27**	**84.93**	**82.58**	**86.03**	**431.30**

4.3.19. It is noted that power recoveries are less than 12% of the total power charges at Chennai International Airport during the Second Control Period. This is significantly lower than other airports.

4.3.20. Within utilities and outsourcing expenses, there are significant differences between the approved and actuals for power charges and upkeep expenses. The fall in power expenses is because T-2 was demolished to start NITB Part – 1 construction. Further, upon analysis, it was found that the upkeep expenses increased because of the Environmental Support Services (ESS) and Mechanised Environmental Support Services (MESS) at Chennai International Airport.

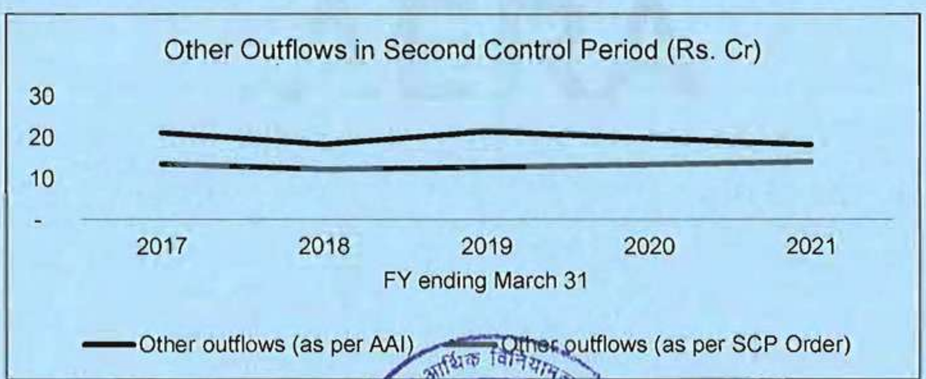
Other Outflows:

4.3.21. Other outflows have further been examined. The expense consists of the following sub-expenses:

i. Municipal taxes
ii. UDF and PSF collection charges
iii. Miscellaneous expenses

4.3.22. The following figure compares the approved other outflows as per the Second Control Period Order and the other outflows submitted by AAI. The figure shows that the actual expenses submitted by AAI are higher than the approved amounts for all tariff years of the Second Control Period.

Figure 9: Other Outflows in the Second Control Period



4.3.23. The following table examines the break-up of utilities and outsourcing expenses approved by the Authority, and those submitted by AAI:

Table 10: Comparison between other outflows approved by the Authority and submitted by AAI

	Approved in SCP Order						Submission by AAI					
FY ending March 31	2017	2018	2019	2020	2021	Total	2017	2018	2019	2020	2021	Total
Municipal taxes	5.13	5.13	5.13	5.13	5.13	25.65	4.60	5.26	4.71	4.50	4.95	24.02
UDF and PSF collection charges	2.79	2.96	3.13	3.32	3.52	15.73	1.89	5.75	5.90	3.86	0.77	18.16
Miscellaneous expenses*	5.63	4.13	4.54	4.99	5.49	24.79	14.68	7.33	10.89	11.37	12.51	56.79
Total other outflows	13.55	12.22	12.81	13.45	14.15	66.17	21.17	18.34	21.50	19.73	18.23	98.97

4.3.24. The primary difference between the approved outflows and outflows submitted by AAI is in miscellaneous expenses. Miscellaneous expenses include hire charges, consumption of stores and spares, POL charges, and other miscellaneous expenses.

4.4. AAI's estimation of O&M expenses for FY 2020-21

4.4.1. AAI has estimated FY 2020-21 expenses by applying a growth rate over the FY 2019-20 expenses. In the case of payroll costs, AAI applied a growth rate of 7% over FY 2019-20 levels to estimate FY 2020-21 payroll costs. For other O&M expenses, AAI applied a growth rate of 10% on FY 2019-20 levels to estimate FY 2020-21 expenses.

4.4.2. FY 2020-21 was severely impacted by Covid-19 pandemic. The PAX numbers declined by by 75% in FY 2020-21, from 22.3 million PAX in FY2019-20 to 5.5 million PAX in FY 2020-21. The ATM numbers declined by 37.5% in that year, from 1,67,982 in FY 2019-20 to 64,590 in FY 2020-21. This would imply that for a major part of this year, the airport facilities would have been shut or have remained under-utilized. While it is understood that fixed overheads, like manpower costs, would not have been impacted, there would be savings in other overheads like power costs, water charges, overtime, repairs & maintenance.

4.4.3. Further, it is also noted that the overall O&M expenses growth in the Second Control Period (up to FY2019-20) is at a CAGR of 3.30%. Of these, payroll costs increase at a CAGR of 3.49% as against 7% growth assumed by AAI for FY 2020-21 and all other O&M expenses increased at a CAGR of 3.17% as against 10% growth assumed by AAI.

4.4.4. Considering the above factors, the growth rate used by AAI to estimate FY 2020-21 expenses may be reconsidered by the Authority.

4.5. Analysis of apportionment of AAI's CHQ/RHQ expenses to Chennai International Airport

4.5.1. AAI manages 137 airports, of which 24 are international airports, 10 are Custom airport, and 103 are domestic airports.[1] AAI apportions its CHQ/RHQ expenses to the various

[1] As per AAI website, accessed on 31 August 2021

airports managed by it. However, AAI has not provided the methodology/formula by which the apportionment of CHQ/RHQ expenses is carried outs.

4.5.2. Chennai and Kolkata airports are two of AAI's largest airports. The following table compares the two airports' approved payroll costs - CHQ/RHQ and admin and general expenses – CHQ/RHQ. On a combined basis, the Authority has approved similar apportionment expenses for both airports.

Table 11: Comparison of approved payroll costs - CHQ/RHQ of Chennai and Kolkata Airports

FY ending March 31 (Rs. Cr)	2017	2018	2019	2020	2021	Total
Chennai						
Payroll costs - CHQ/RHQ	21.30	26.00	27.20	28.60	30.00	**133.10**
Admin and general expenses - CHQ/RHQ	26.26	21.68	22.76	23.90	25.09	**119.69**
Total	**47.56**	**47.68**	**49.96**	**52.50**	**55.09**	**252.79**
Kolkata						
Payroll costs - CHQ/RHQ	23.00	26.50	28.40	30.30	32.50	140.70
Admin and general expenses - CHQ/RHQ	18.80	18.50	19.50	20.40	21.40	98.60
Total	**41.80**	**45.00**	**47.90**	**50.70**	**53.90**	**239.30**

4.5.3. The following table compares the approved payroll costs – CHQ/RHQ for Chennai International Airport with the submitted amounts:

Table 12: Analysis of payroll costs - CHQ/RHQ

FY ending March 31 (Rs. Cr)	2017	2018	2019	2020	2021	Total
Payroll costs - CHQ/RHQ submitted by AAI	4.13	18.67	34.07	27.39	29.32	**113.59**
Payroll costs - CHQ/RHQ approved in SCP	21.30	26.00	27.20	28.60	30.00	**133.10**
Payroll costs – CHQ/RHQ submitted by AAI (as % of approved)	**19%**	**72%**	**125%**	**96%**	**98%**	**85%**

Table 13: Analysis of admin and general expenses - CHQ/RHQ

FY ending March 31 (Rs. Cr)	2017	2018	2019	2020	2021	Total
Admin and general costs - CHQ/RHQ submitted by AAI	84.69	62.63	37.41	50.74	53.28	**288.75**
Admin and general - CHQ/RHQ approved in SCP	26.26	21.68	22.76	23.90	25.09	**119.69**
Admin and general – CHQ/RHQ submitted by AAI (as % of approved)	**323%**	**289%**	**164%**	**212%**	**212%**	**241%**

4.5.4. While payroll costs – CHQ/RHQ submitted by AAI are 85% of what was approved in the Second Control Period, admin and general expenses – CHQ/RHQ submitted by AAI are 241% of what was approved in the Second Control Period, with a significant year on year variation.

4.5.5. Payroll costs – CHQ/RHQ, and admin and general expenses – CHQ/RHQ need to be further analysed, and the basis/formula for allocation followed by AAI needs to be better understood. Given lack of this information at the current stage, the Authority may choose to consider the lower of actual or approved apportionment of CHQ/RHQ expenses in the Second Control Period.

4.6. Summary of conclusions

4.6.1. The overall O&M expenses submitted by AAI are higher than those approved by Authority in the Second Control Period order. The key reasons for these are (a) growth rates applied by AAI in projecting O&M expenses for FY2020-21 (b) apportionment of CHQ/RHQ expenses of AAI to Chennai airport. However, O&M expenses per PAX and per ATM are lower in FY2019-20 than in FY2016-17.

4.6.2. R&M expenses of Chennai Airport range from 2.90% to 4.95% of the opening gross block. This is broadly in line with other airports and seems to be reasonable.

4.6.3. It is noted that power recoveries are less than 12% of the total power charges at Chennai International Airport during the Second Control Period. This is significantly lower than other airports.

4.6.4. Estimating O&M expenses for FY2020-21 by taking a 7% growth rate for payroll costs and a 10% growth rate for other O&M expenses over the actuals of FY 2019-20 is not appropriate, considering that traffic in FY 2020-21 was significantly lower due to the pandemic, and considering the actual growth in O&M expenses between FY 2016-17 and FY 2017-20 is negative. The Authority may consider a 0% growth over FY 2019-20 expenses to estimate expenses of FY 2020-21.

4.6.5. Apportionment expenses to CHQ/RHQ requires further analysis of AAI's methodology/formula. In the absence of data on the methodology/formula used by AAI to compute, apportionment expenses, the Authority may choose to consider the lower of actual/approved apportionment expenses as per the Second Control Period Order.

5. ALLOCATION OF O&M EXPENSES ACROSS AERO AND NON-AERO

5.1. Introduction to segregation of expenses

5.1.1. The following table summarizes the general principles for O&M expense categorization:

Table 14: General principles of O&M expense categorization

Expense Category	Expense Sub-Category / Description	Expense Classification
Manpower expenses	Salary, wages & bonus; Contribution to provident fund; Staff welfare expenses; New employee expenses	Common
A&G Expenses	Flood related expenses; Flood mitigation expenses	Aeronautical
	Rent; Rates and Taxes; Communication Expense; Travelling and Conveyance; Advertisement; Office Maintenance; Printing and Stationary	Common
	Auditor's Fees; Professional Charges	
	Insurance Costs; Bank Charges; Miscellaneous Expenses Scrap of assets; Foreign exchange loss; General charges Directors Sitting Fees; Rights Issue Expenses	
R&M Expenses	R&M costs for buildings, Plant & Machinery and Roads, Runways and culverts	Common
Other Expenses	Safety & Security expenses	Common
	Vehicle Running & Maintenance expenses	
	House Keeping expenses	

5.2. Examination of segregation and allocation by AAI

1.1.1. The classification of O&M expenses by AAI was found to be in line with the general principles discussed above. However, the basis for allocation of certain common costs needs to be analysed. The principles of classification followed by the airport operator are provided in the table below.

Table 15: Principles of classification and allocation used by AAI

Expense Category	Expense Sub-Category / Description	Expense Classification
Payroll costs	- Salaries and wages (basic pay, dearness allowance, and house rent allowance) - Overtime expenses - Other staff benefits (employee perks, EL encashment etc.) - Medical expenditure - Provident fund contributions - Staff recoveries - Apportionment of CHQ/RHQ expenses	Common. Employee head count ratio was used to allocate between aeronautical and non-aeronautical

Expense Category	Expense Sub-Category / Description	Expense Classification
Admin & General Expenses	- Rent, rates, and taxes (rent on office building, import license, and taxes on vehicles) - Insurance (vehicle, and plant & machinery insurance) - Advertising and publicity - Office expenses - Telephone charges - Printing and stationery - Travelling expenses - Financing charges (apportionment of interest on loan taken at central level) - Consultancy charges - Apportionment of admin (non-employee related overhead expenses) for CHQ/RHQ	Common: - TBLR was used for advertising - VEHR was used for insurance - EHCR was used for other expenses - 95% of CHQ/RHQ expenses was deemed aeronautical
	- Legal expenses	Aeronautical
R&M Expenses	- R&M for civil works - R&M for electrical works - R&M for vehicles - R&M for furniture and fixtures - R&M for computers, IT, and hardware	Common: - TBLR was used for electrical works - VEHR was used for R&M for vehicles - EHCR and EQTR was used for other R&M expenses
Utilities and outsourcing expenses	- Power charges - Water charges - Upkeep expenses	Common: - TBLR was used for upkeep expenses - Electricity ratio was used for power and water charges
	- Watch and ward expenses	Aeronautical
Other Outflows	- Consumption of stores and spares - POL expenses - Other miscellaneous expenses	Common: - EHCR, and TBLR were used to allocate common expenses
	- Collection charges on UDF and PSF - Municipal taxes - Hire charges	Aeronautical

5.2.1. The segregation of expenses carried out by AAI seems reasonable and is in line with the principles of segregation used by other AAI airports.

5.2.2. It may be noted that AAI has allocated various sub-expenses within O&M expenses based on the following ratios:

Table 16: Allocation ratios of common expenses as submitted by AAI

Particular	Ratios
Payroll Expenses	EHCR, 1EHCR (P&A)
Admin. And General Expenses	EHCR, TBLR, VEHR
Repair and Maintenance	EQTR, TBLR, VEHR, EHCR
Utilities and Outsourcing Expenses	Electricity
Other Outflows	EHCR and TBLR

Where:

- EHCR – Employee Head Count Ratio
- 1EHCR (P&A) – Employee Headcount Ratio excl. the security department
- TBLR – Terminal Building Ratio
- VEHR – Vehicle Ratio
- Electricity - Electricity ratio is based on the no. of units consumed by aero and non-aero departments.

5.2.3. A summary of the allocation ratios considered to be aeronautical based on the aforementioned ratios in AAI's submission is given below:

Table 17: Summary of allocation ratios submitted by AAI for the Second Control Period

Ratio (in %)	2017	2018	2019	2020	2021
TBLR	92.47	92.59	94.47	94.34	94.35
EHCR	98.18	98.18	98.18	98.18	97.77
1EHCR (P&A)	98.17	98.17	98.17	98.17	97.77
EQTR	99.73	99.73	99.73	99.73	99.55
VEHR	97.30	97.30	97.30	97.30	97.30
Electricity	99.99	99.99	99.99	99.99	99.99

5.2.4. A summary of the allocation ratios considered to be aeronautical based on the aforementioned ratios in AAI's submission is given below:

Table 18: Allocation ratios approved by the Authority for the Second Control Period

Particulars	% Aeronautical Expense (excl. Cargo)
Payroll Expenses	95
Apportionment of Admin CHQ/RHQ expenses	90
Retirement benefits provided at CHQ in respect of employees at Chennai International Airport	95
VEHR	98.19
TBLR	92.5
EQTR	88.14

5.3. Conclusion

5.3.1. It may be noted that the TBLR as per AAI submission is changing on an annual basis. The allocation ratios may not change on a year-on-year basis since they are determined on a design layout that is considered at the beginning of the concerned control period. This is the case in the DIAL Order (Order No. 57/2020-21 dated 30th December 2020), as also the MIAL Order (Order No. 64/2020-21 dated 27th February 2020. Thus, the Authority may consider using the approved allocation ratios to segregate common expenses.

6. OVERALL SUMMARY OF THE STUDY

6.1. Operation and Maintenance Expenses proposed by Chennai International Airport for the Second Control Period

6.1.1. It can be observed in Table 2 that the number of employees at Chennai International Airport in the Second Control Period has reduced from 778 in FY 2016-17 to 659 in FY 2020-21.

6.1.2. A comparison of actual O&M expenses in Table 2 and approved O&M expenses in Table 1 shows that actual expenses are Rs. 48 Cr more than what was approved.

6.1.3. Further review of expense sub-heads show that AAI's submission for pay roll costs, R&M expenses, utilities and outsourcing expenses was lower than what was approved by the Authority. AAI's submission on administrative and general expenses and other outflows is higher than what was approved by the Authority in the Second Control Period.

6.1.4. The study observed a significantly high difference between approved and actual O&M expenses attributable to administrative and general expenses – CHQ/RHQ of Rs. 169.06 Cr. While Rs. 119.80 Cr was approved by the Authority in the Second Control Period Order, AAI submitted actuals of Rs. 288.75 Cr for the Second Control Period. It is also observed that the allocation of such expenses does not seem to be transparent and needs to be examined in detail.

6.1.5. Further, it is noted that while number of PAX and ATM fell significantly during FY 2020-21, O&M expenses submitted by AAI are higher in FY 2020-21 compared to FY 2019-20. The projections for FY2020-21 are discussed separately.

6.1.6. It is also noted that, while approving O&M expenses in the Second Control Period, the Authority was cognizant of the projected capitalisation of NITB Part - 1 in FY 2020-21. The same has now been deferred to the Third Control Period.

6.2. Historical benchmarking and trend analysis

6.2.1. The overall O&M expenses submitted by AAI are higher than those approved by Authority in the Second Control Period order. The key reasons for these are (a) growth rates applied by AAI in projecting O&M expenses for FY 2020-21 (b) apportionment of CHQ/RHQ expenses of AAI to Chennai airport. However, O&M expenses per PAX and per ATM are lower in FY 2019-20 than in FY 2016-17.

6.2.2. Estimating O&M expenses for FY 2020-21 by taking a 7% growth rate for payroll costs and a 10% growth rate for other O&M expenses over the actuals of FY 2019-20 is not appropriate, considering that traffic in FY 2020-21 was significantly lower due to the pandemic, and considering the actual growth in O&M expenses between FY 2016-17 and FY 2017-20 is negative. The Authority may consider a 0% growth over FY 2019-20 expenses to estimate expenses of FY 2020-21.

6.2.3. R&M expenses of Chennai Airport range from 2.90% to 4.95% of the opening gross block. This is broadly in line with other airports and seems to be reasonable.

6.2.4. It is noted that power recoveries are less than 12% of the total power charges at Chennai International Airport during the Second Control Period. This is significantly lower than other airports.

6.2.5. Apportionment expenses to CHQ/RHQ requires further analysis of AAI's methodology/formula. In the absence of data on the methodology/formula used by AAI to compute, apportionment expenses, the Authority may choose to consider the lower of actual/approved apportionment expenses as per the Second Control Period Order.

6.3. Allocation of O&M expenses across aero and non-aero

6.3.1. It may be noted that the TBLR as per AAI submission is changing on an annual basis. The allocation ratios may not change on a year-on-year basis since they are determined on a design layout that is considered at the beginning of the concerned control period. This is the case in the DIAL Order (Order No. 57/2020-21 dated 30th December 2020), as also the MIAL Order (Order No. 64/2020-21 dated 27th February 2020. Thus, the Authority may consider using the approved allocation ratios to segregate common expenses.

6.4. Conclusion

6.4.1. After the above adjustments and reallocations discussed in the previous sections, the efficient O&M expenses for the Second Control Period have been considered as per the table below:

Table 19: Efficient O&M expenses for the Second Control Period as per the study

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
Payroll costs – CHQ/RHQ	4.13	18.67	34.07	27.39	27.41	**111.67**
Payroll costs – non CHQ/RHQ	118.12	120.12	129.60	139.42	139.42	**646.68**
Payroll costs (A)	122.25	138.79	163.67	166.81	166.83	**758.35**
Repair and maintenance (B)	92.49	101.02	72.44	72.66	72.76	**411.36**
Utilities & outsourcing expenses (C)	88.49	89.25	84.51	82.15	82.15	**426.54**
Admin and general expenses – non CHQ/RHQ	4.52	5.71	10.23	15.13	14.97	**50.56**
Apportionment of Admin Expenses for CHQ/RHQ	26.30	21.70	22.80	23.90	25.10	**119.80**
Admin & Other expenses (D)	30.82	27.41	33.03	39.03	40.07	**170.36**
Other Outflows (E)	12.12	15.13	15.04	13.26	10.80	**66.36**
Working capital loan interest	-	-	-	-	0.30	**0.30**
Total O&M Expenses	**346.17**	**371.60**	**368.68**	**373.91**	**372.61**	**1,832.98**

6.4.2. AAI had proposed a total O&M expenditure (aeronautical) of Rs. 2,089.60 Cr. for the Second Control Period. Based on this study, the proposed O&M expenditure is Rs. 1,832.98 Cr. for the Second Control Period, thus resulting in a reduction of **Rs. 256.62 Cr.** for the Second Control Period.