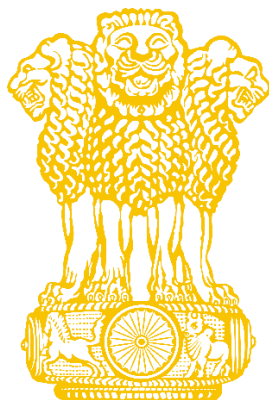


**F. No. AERA/20010/MYTP/AAI-Chennai/CP-III/2021-26**

**CONSULTATION PAPER NO. 16/2021-22**



**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: 07 September, 2021**

**AERA BUILDING**

**ADMINISTRATIVE COMPLEX**

**SAFDARJUNG AIRPORT**

**NEW DELHI 110003**

## Stakeholder Comments

The Authority is aware of the fact that the Aviation Sector is undergoing unprecedented turbulence and uncertainty on account of the COVID-19 global pandemic and associated lockdown situation in major cities around the world which has resulted in restrictions in air travel both domestic and international. The Authority has released this Consultation Paper currently in which the proposals have been put forward based on the Authority's analysis and observations on the Multi Year Tariff Proposal (MYTP) submitted by the Airport Operator. The Authority, after considering the views of the airport operators, industry bodies such as aviation expert agencies such as IATA, ACI and CAPA etc. on this matter, and after analyzing various scenarios, has made necessary adjustments in traffic, operating expenditure and non-aeronautical revenues on account of the expected substantial changes in the prevailing business scenario. The Authority shall consider written evidence-based feedback, comments and suggestions of all the stakeholders on the proposals made in the Consultation Paper and pass a suitable Order determining the tariff for airport services.

This Consultation Paper is being issued to seek comments from Stakeholders to ensure determination of Aeronautical Tariff for the Third Control Period in a timely manner. Accordingly, the Consultation Paper has been prepared on the information, details and clarifications provided by AAI till the date of issue of this Consultation Paper including Unaudited Financial Statements for FY 2020-21. The analysis laid down in this Consultation Paper will be updated based on the audited Financial Statements for FY 2020-21, if received before the issue of Multi Year Tariff Order (MYTO) and based on other clarifications/ details to be provided by AAI during Consultation Process which will be considered appropriately at the time of issue of MYTO.

Thus, in accordance with the provisions of Section 13(4) of the AERA Act, the written comments on Consultation Paper No. 16/2021-22 dated 07 September 2021 are invited from the Stakeholders, preferably in electronic form at the following address:

Director (P&S, Tariff)  
Airports Economic Regulatory Authority of India (AERA),  
AERA Administrative Complex,  
Safdarjung Airports, New Delhi – 110002, India  
Email: [director-ps@aera.gov.in](mailto:director-ps@aera.gov.in), [gita.sahu@aera.gov.in](mailto:gita.sahu@aera.gov.in), with copy to [secretary@aera.gov.in](mailto:secretary@aera.gov.in)

Stakeholder Consultation Meeting	21/09/2021
Last Date for submission of stakeholder's comments	06/10/2021
Last Date for submission of counter comments	18/10/2021

Comments and counter comments will be posted on AERA website [www.aera.gov.in](http://www.aera.gov.in).  
For any clarification/information, Director (P&S, Tariff) may be contacted at Telephone Number: +91-11-24695048.

## 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
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
<b>Units of Measurement</b>	
Mn	Million
Rs	Rupees
Cr	Crore
FY	Financial Year

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

## TABLE OF CONTENTS

<b>1. BRIEF ON CHENNAI INTERNATIONAL AIRPORT .....</b>	<b>13</b>
1.1. Introduction.....	13
<b>2. MULTI-YEAR TARIFF PROPOSAL SUBMISSION BY AAI FOR CHENNAI INTERNATIONAL AIRPORT .....</b>	<b>16</b>
2.1. Introduction.....	16
2.2. Methodology for Tariff Determination.....	18
2.3. Control Period .....	19
2.4. Construct of the Consultation Paper.....	19
<b>3. TRUE UP FOR THE SECOND CONTROL PERIOD .....</b>	<b>20</b>
3.1. Issues raised by AAI pertaining to true-up for the Second Control Period .....	20
3.2. True-up of Traffic for the Second Control Period.....	20
3.3. True-up of Regulatory Asset Base .....	22
3.4. True-up of Aeronautical Depreciation.....	31
3.5. True-up of the Fair Rate of Return.....	35
3.6. True-up of Return on Land .....	36
3.7. True-up of Operating and Maintenance (O&M) Expenses.....	37
3.8. True-up of Non-Aeronautical Revenues.....	44
3.9. True-up of Aeronautical Revenue .....	47
3.10. True-up of Aeronautical Taxes .....	48
3.11. True-Up of Aggregate Revenue Requirement .....	50
3.12. Authority's proposals regarding true-up of Second Control Period.....	52
<b>4. TRAFFIC FOR THE THIRD CONTROL PERIOD .....</b>	<b>54</b>
4.1. AAI's submission regarding Traffic in Third Control Period.....	54
4.2. Authority's analysis regarding Traffic for Third Control Period.....	55
4.3. Authority's Proposal regarding Traffic for the Third Control Period .....	56
<b>5. REGULATORY ASSET BASE AND DEPRECIATION FOR THIRD CONTROL PERIOD .....</b>	<b>57</b>
5.1. AAI's submission regarding RAB and Depreciation for the Third Control Period.....	57
5.2. Authority's examination of RAB and Depreciation for Third Control Period .....	61
5.3. Authority's Proposals regarding RAB and Depreciation for the Third Control Period .....	80
<b>6. FAIR RATE OF RETURN FOR THE THIRD CONTROL PERIOD .....</b>	<b>82</b>
6.1. AAI's submission regarding the FRoR for the Third Control Period .....	82
6.2. Authority's examinations regarding Fair Rate of Return for the Third Control Period .....	83
6.3. Authority's Proposals regarding Fair Rate of Return for the Third Control Period.....	85
<b>7. RETURN ON LAND FOR THE THIRD CONTROL PERIOD .....</b>	<b>86</b>

7.1. AAI's submissions regarding Return on Land for the Third Control Period .....	86
7.2. Authority's examination regarding Return on Land for the Third Control Period .....	86
7.3. Authority's Proposal regarding Return on Land for the Third Control Period.....	87
<b>8. OPERATING &amp; MAINTENANCE EXPENSES FOR THIRD CONTROL PERIOD ..</b>	<b>88</b>
8.1. AAI's Submissions regarding O&M Expenses for the Third Control Period .....	88
8.2. Authority's examination of O&M expenses in the Third Control Period: .....	89
8.3. Authority's Proposal regarding O&M expenses for the Third Control Period.....	92
<b>9. NON-AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD .....</b>	<b>93</b>
9.1. AAI's Submissions regarding Non-Aeronautical Revenue for the Third Control Period.....	93
9.2. Authority's examinations regarding Non-Aeronautical Revenue for the Third Control Period . .....	94
9.3. Authority's Proposals regarding Non-Aeronautical Revenue for the Third Control Period ..	96
<b>10. TAXATION FOR THE THIRD CONTROL PERIOD .....</b>	<b>97</b>
10.1. AAI's Submissions regarding Taxation for the Third Control Period .....	97
10.2. Authority's examinations regarding Aeronautical Tax for the Third Control Period .....	97
10.3. Authority's Proposals regarding Aeronautical Tax for the Third Control Period .....	98
<b>11. INFLATION FOR THE THIRD CONTROL PERIOD .....</b>	<b>99</b>
11.1. AAI's Submission regarding Inflation for the Third Control Period .....	99
11.2. Authority's examination regarding Inflation for the Third Control Period .....	99
11.3. Authority's Proposal regarding Inflation for the Third Control Period.....	99
<b>12. QUALITY OF SERVICES FOR THE THIRD CONTROL PERIOD .....</b>	<b>100</b>
12.1. AAI's Submissions regarding Quality of Services for the Third Control Period .....	100
12.2. Authority's examination regarding Quality of Services for the Third Control Period.....	100
12.3. Authority's Proposals regarding Quality of Services for the Third Control Period.....	100
<b>13. AGGREGATE REVENUE REQUIREMENT FOR THE THIRD CONTROL PERIOD .....</b>	<b>101</b>
13.1. AAI's Submissions regarding Aggregate Revenue Requirement for the Third Control Period.. .....	101
13.2. Authority's examination regarding Aggregate Revenue Requirement for the Third Control Period.....	102
13.3. Authority's Proposal regarding Aggregate Revenue Requirement for the Third Control Period .....	103
<b>14. AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD.....</b>	<b>104</b>
14.1. AAI's submission regarding Aeronautical Revenue for the Third Control Period.....	104
14.2. Authority's examination regarding Aeronautical Revenue for the Third Control Period .....	105
14.3. Authority's Proposal Regarding Aeronautical Revenue for the Third Control Period .....	107
<b>15. SUMMARY OF AUTHORITY'S PROPOSALS .....</b>	<b>108</b>
Chapter 3: True up for the Second Control Period.....	108

Chapter 4: Traffic for the Third Control Period.....	108
Chapter 5: Regulatory Asset Base and Depreciation for the Third Control Period .....	108
Chapter 6: Fair Rate of Return for the Third Control Period.....	109
Chapter 7: Return on Land for the Third Control Period .....	110
Chapter 8: Operating and Maintenance Expenses for the Third Control Period .....	110
Chapter 9: Non-Aeronautical Revenue for the Third Control Period .....	110
Chapter 10: Taxation for the Third Control Period .....	110
Chapter 11: Inflation for the Third Control Period .....	110
Chapter 12: Quality of Services for the Third Control Period.....	110
Chapter 13: Aggregate Revenue Requirement for the Third Control Period .....	110
Chapter 14: Aeronautical Revenue for the Third Control Period .....	111
<b>16. STAKEHOLDER CONSULTATION TIMELINE.....</b>	<b>112</b>
<b>17. LIST OF ANNEXURES .....</b>	<b>113</b>
17.1. Annexure I: Annual tariff submitted by AAI for the Third Control Period .....	113
17.2. Annexure II: Annual Tariff proposed by the Authority for Consultation Process.....	117
17.3. Annexure III: Capital additions in the Second Control Period .....	122
17.4. Annexure IV: Capital expenditure proposed to be considered by the Authority for the Third Control Period due to inclusion of CWIP .....	134
17.5. Annexure V: Minutes of AUCC meeting .....	136
17.6. Annexure VI: Summary of study of O&M expenses in the Second Control Period.....	138
<b>18. APPENDICES .....</b>	<b>141</b>

**Appendix I: AAI's letter dated 18 August 2021**

**Appendix II: M/s SpiceJet Ltd. Letter dated 19 February 2021**

**Appendix III: Study of Operation and Maintenance Expenses of Chennai International Airport  
(2016-21)**



# List of Tables

Table 1: Infrastructure and Technical details of Chennai International Airport.....	13
Table 2: Terminal Building details of Chennai International Airport.....	14
Table 3: Passenger and ATM traffic at Chennai International Airport during Second Control Period .....	14
Table 4: Traffic submitted by AAI for true up of Second Control Period .....	20
Table 5: Traffic considered by the Authority as per Tariff Order for the Second Control Period.....	21
Table 6: Actual traffic volumes for FY 2020-21 as considered by the Authority .....	21
Table 7: Traffic volumes proposed to be considered for true up of the Second Control Period by the Authority .....	22
Table 8: Opening RAB submitted by AAI for true up of Second Control Period .....	22
Table 9: Aeronautical Asset Addition submitted by AAI for true up of Second Control Period .....	22
Table 10: RAB submitted by AAI for true up of Second Control Period .....	23
Table 11: RAB considered by the Authority as per Tariff Order for the Second Control Period.....	23
Table 12: Opening RAB proposed to be considered for true up of the Second Control Period by the Authority .....	24
Table 13: 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.....	25
Table 14: Capital additions incurred in the Second Control Period but not approved in the Second Control Period Order.....	26
Table 15: Capital additions proposed to be disallowed for true up of the Second Control Period by the Authority.....	27
Table 16: Comparison of Allocation ratios as approved by the Authority and as submitted by AAI.	28
Table 17: Summary of aeronautical capital additions proposed to be considered for true-up of the Second Control Period by the Authority .....	28
Table 18: Aeronautical capital addition proposed to be considered for true up of the Second Control Period by the Authority .....	30
Table 19: RAB proposed to be considered for true up of the Second Control Period by the Authority .....	30
Table 20: Useful life considered by AAI for FY17 and FY18 .....	31
Table 21: Useful life considered by AAI from FY 2018-19 onwards.....	31
Table 22: Aeronautical depreciation submitted by AAI for true up of Second Control Period.....	32
Table 23: Depreciation Rates as considered by the Authority from FY 2014-15 to FY 2017-18 .....	33
Table 24: Depreciation Rates considered by the Authority from FY2018-19 onwards.....	33
Table 25: Year wise depreciation as approved by the Authority as per the tariff order of the Second Control Period.....	34
Table 26: Aeronautical depreciation proposed to be considered for true up of Second Control Period by the Authority .....	35
Table 27: FRoR submitted by AAI for true up of Second Control Period .....	35
Table 28: FRoR proposed to be considered for true up of the Second Control Period by the Authority .....	36
Table 29: Return on land submitted by AAI for true up of Second Control Period .....	36
Table 30: Payroll costs submitted by AAI for Second Control Period .....	37
Table 31: Administrative and general expenses submitted by AAI for Second Control Period.....	38
Table 32: R&M expenses submitted by AAI for Second Control Period .....	38
Table 33: Utilities and outsourcing expenses submitted by AAI for Second Control Period .....	38
Table 34: Other Outflows as submitted by AAI for Second Control Period.....	38
Table 35: Aeronautical O&M expenses submitted by AAI for true up for Second Control Period ...	39

Table 36: Allocation ratios of common O&M expenses as approved in the tariff order of Second Control Period.....	40
Table 37: O&M Expenses as approved by the Authority in the tariff order of the Second Control Period .....	40
Table 38: Allocation ratios of common expenses as submitted by AAI .....	41
Table 39: Summary of percentage of common expenses levied on aeronautical portion for each year as submitted by AAI.....	41
Table 40: Payroll costs proposed to be considered for true up of the Second Control Period by the Authority .....	42
Table 41: Administrative and general expenses proposed to be considered for true up of the Second Control Period by the Authority .....	42
Table 42: R&M expenses proposed to be considered for true up of the Second Control Period by the Authority .....	43
Table 43: Utilities and outsourcing expenses proposed to be considered for true up of the Second Control Period by the Authority .....	43
Table 44: Other outflows proposed to be considered for true up of the Second Control Period by the Authority .....	43
Table 45: O&M Expenses proposed to be considered for true up of the Second Control Period by the Authority .....	44
Table 46: Non-aeronautical revenue submitted by AAI for true up of Second Control Period.....	44
Table 47: Non-aeronautical Revenue as per the tariff order of the Second Control Period .....	45
Table 48: Summary of Concession Agreements for non-aeronautical services as submitted by AAI 46	
Table 49: Non-aeronautical revenue proposed to be considered for true up of the Second Control Period by the Authority .....	46
Table 50: Aeronautical revenue submitted by AAI for true up of Second Control Period .....	47
Table 51: Aeronautical revenue as approved by the Authority in the tariff order of Second Control Period .....	47
Table 52: Aeronautical revenue proposed to be considered for true up of the Second Control Period by the Authority .....	48
Table 53: Aeronautical Taxes submitted by AAI for true up of Second Control Period .....	48
Table 54: Aeronautical Taxes as approved by the Authority in the tariff order of Second Control Period .....	49
Table 55: Aeronautical Taxes proposed to be considered for true up of the Second Control Period by the Authority.....	50
Table 56: ARR submitted by AAI for true up of Second Control Period .....	50
Table 57: ARR as approved by the Authority in the tariff order of Second Control Period .....	51
Table 58: ARR proposed to be considered for true up of the Second Control Period by Authority... 51	
Table 59: ATM and Passenger Traffic for Third Control Period submitted by AAI.....	54
Table 60: CAGR for passenger traffic and ATM traffic at Chennai International Airport .....	55
Table 61: Traffic projections proposed to be considered for Third Control Period by the Authority. 55	
Table 62: Aeronautical capital additions deferred from the Second Control Period to the Third Control Period submitted by AAI .....	57
Table 63: New Aeronautical Capital Additions for the Third Control Period submitted by AAI .....	58
Table 64: Other Capital Additions for the Third Control Period submitted by AAI .....	58
Table 65: Allocation of assets to be capitalized in Third Control Period submitted by AAI .....	58
Table 66: Additions to RAB for the Third Control Period submitted by AAI .....	59
Table 67: Depreciation rates as per AAI's Submission and the Authority.....	59
Table 68: Aeronautical Depreciation for Third Control Period submitted by AAI .....	60
Table 69: RAB at Chennai International Airport during Third Control Period submitted by AAI .... 60	
Table 70: Aeronautical capital additions deferred from the Second Control Period to Third Control Period submitted by AAI.....	61

Table 71: Normative Cost calculation for NITB submitted by AAI.....	64
Table 72: Normative Cost of NITB Part – 1 proposed to be considered by the Authority .....	64
Table 73: Revised capitalisation plan for modification of stormwater drain proposed to be considered for Third Control Period by the Authority.....	65
Table 74: Normative Cost Calculation for Pavement Works deferred from SCP to TCP submitted by AAI.....	66
Table 75: Aeronautical capital additions deferred from the Second Control Period to Third Control Period proposed to be considered by the Authority .....	68
Table 76: New aeronautical capital additions for the Third Control Period submitted by AAI .....	68
Table 77: Normative cost calculation of pavement works for Third Control Period submitted by AAI .....	71
Table 78: New Aeronautical Capital Additions for the Third Control Period proposed to be considered by the Authority.....	73
Table 79: Other Aeronautical Capital Additions as submitted for the Third Control Period as submitted by AAI.....	74
Table 80: Other Aeronautical Capital Additions for the Third Control Period as proposed to be considered by the Authority.....	75
Table 81: Aeronautical Capital Additions for the Third Control Period proposed to be considered by the Authority.....	76
Table 82: Allocation ratios for the Third Control Period submitted by AAI .....	79
Table 83: Description of allocation ratios as submitted by AAI .....	79
Table 84: Depreciation proposed to be considered by the Authority for Third Control Period .....	80
Table 85: RAB proposed to be considered by the Authority for Third Control Period .....	80
Table 86: Debt computation for Third Control Period submitted by AAI .....	82
Table 87: Equity computation for Third Control Period submitted by AAI .....	82
Table 88: FRoR for Third Control Period submitted by AAI.....	83
Table 89: Debt computation proposed to be considered for Third Control Period by the Authority..	84
Table 90: Equity computation proposed to be considered for Third Control Period by the Authority	84
Table 91: FRoR proposed to be considered for Third Control Period by the Authority .....	84
Table 92: Return on land for Third Control Period submitted by AAI.....	86
Table 93: Growth in O&M Expenses for the Third Control Period submitted by AAI .....	88
Table 94: O&M Expenses submitted by AAI for the Third Control Period submitted by AAI .....	88
Table 95: Allocation of expenses as submitted for the Third Control Period as submitted by AAI...	89
Table 96: Aeronautical allocation of O&M expenses at other AAI airports .....	89
Table 97: Allocation of O&M expenses for the Third Control Period as proposed to be considered by the Authority.....	90
Table 98: O&M expenses for the Third Control Period as proposed to be considered by the Authority .....	91
Table 99: Growth rates of O&M expenses for the Third Control Period proposed to be considered by the Authority.....	92
Table 100: Summary of assumptions for non-aeronautical revenue for Third Control Period submitted by AAI.....	93
Table 101: Non-aeronautical revenue for the Third Control Period submitted by AAI.....	94
Table 102: Consumption of non-aeronautical services (as a % of FY 2019-20) submitted by AAI ..	95
Table 103: Non-aeronautical revenue proposed to be considered for Third Control Period by the Authority .....	96
Table 104: Aeronautical taxes submitted by AAI for Third Control Period .....	97
Table 105: Aeronautical taxes proposed to be considered by the Authority for Third Control Period .....	97
Table 106: Inflation submitted by AAI for Third Control Period.....	99
Table 107: WPI (non-food manufactured products) as per RBI's 69th round of survey .....	99

Table 108: ASQ Ratings for Chennai International Airport from 2017-20.....	100
Table 109: Aggregate Revenue Requirement submitted by AAI for Third Control Period.....	101
Table 110: Aggregate Revenue Requirement proposed to be considered by the Authority for the Third Control Period .....	102
Table 111: Aeronautical revenue as submitted by AAI .....	104
Table 112: Aeronautical revenues and shortfall proposed to be considered in the Third Control Period by the Authority .....	106
Table 113: Landing charges (domestic) for Third Control Period submitted by AAI .....	113
Table 114: Landing charges (international) for Third Control Period submitted by AAI.....	113
Table 115: Parking charges up to two hours after first two free hours for Third Control Period submitted by AAI.....	114
Table 116: Parking charges beyond first four hours for Third Control Period submitted by AAI ...	114
Table 117: User Development Fees for the Third Control Period submitted by AAI .....	115
Table 118: Landing charges (domestic) for Third Control Period proposed to be considered by the Authority .....	117
Table 119: Landing charges (international) for Third Control Period proposed to be considered by the Authority.....	117
Table 120: Parking charges up to two hours after free hours for the Third Control Period proposed to be considered by the Authority* .....	118
Table 121: Parking charges beyond first four hours for the Third Control Period proposed to be considered by the Authority.....	118
Table 122: User Development Fees proposed to be considered for the Third Control Period by the Authority .....	120
Table 123: Capital additions approved by the Authority in Second Control Period and capitalised in Second Control Period.....	122
Table 124: Capital additions approved by the Authority in Second Control Period but deferred to Third Control Period .....	124
Table 125: Capital additions approved by the Authority in Second Control Period but dropped ....	126
Table 126: Capital additions not mentioned in Second Control Period submission but claimed by AAI in true-up.....	128
Table 127: Assets allocated to Chennai International Airport in 2017-18 .....	132
Table 128: Difference between capital expenditure submitted by AAI and proposed to be considered by the Authority in FY22 due to inclusion of CWIP in capital expenditure .....	134
Table 129: Efficient O&M expenses for the Second Control Period as per the study .....	139

## 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 to be 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 22 August 2021), 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

Technical Details of Chennai International Airport	
	Dimension : 3120 m X 45 m Suitable for : A321 type of aircraft
No. of Apron Bays	86 NOS.
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. (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, largely on account of Covid-19 impact.

1.1.7. Since the traffic at Chennai International Airport is more than 3.5 Million Passengers Per Annum (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:

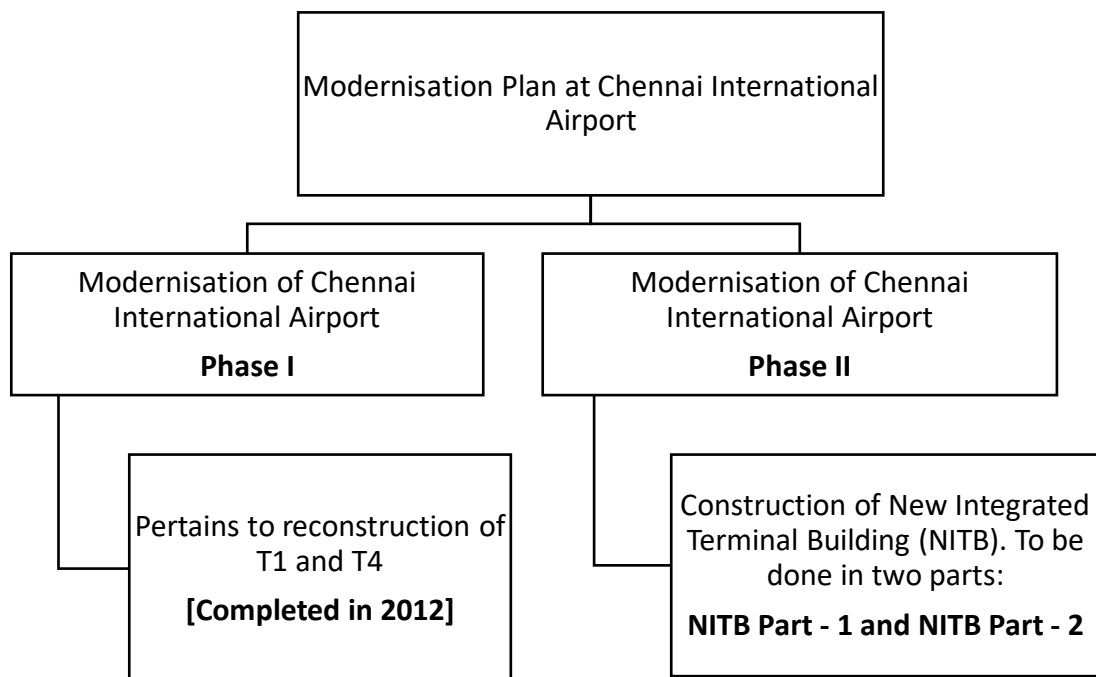
**Table 3: Passenger and ATM traffic at Chennai International Airport during Second Control Period**

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
<b>Total</b>	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
<b>Total</b>	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 is 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, 2009. 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 has categorised the aeronautical services, 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 and Direction No. 5 dated 28.02.2011; and
- ii. Order No. 05 dated 02.08.2010; Order No. 12 dated 10.01.2011 and Direction No. 4 dated 10.01.2011
- iii. Order No. 07/2016-17 dated 13.06.2016
- iv. Order No. 14/2016-17 dated 23.01.2017
- v. Order No. 20/2016-17 dated 31.03.2017
- vi. Order No. 35/2017-18 dated 12.01.2018 and Amendment No. 01 to Order No. 35/2017-18 dated 09.04.2018
- vii. Order No. 42/2018-19 dated 05.03.2019

2.1.5. 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 4<sup>th</sup> February 2013 for the First Control Period and Order No. 03/2018-19 dated 16<sup>th</sup> April 2018 for the Second Control Period. The MYTP submitted by AAI for Chennai International Airport is available on the AERA website.

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 document 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 Consultation Paper 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. This Consultation Paper discusses tariff determination for aeronautical services at Chennai International Airport excluding cargo operations. The tariffs related to cargo operations at Chennai

International Airport will be determined separately since its operations are carried out by AAICLAS.

- 2.1.11. To review the submissions made by AAI, further details and clarifications were sought by AERA. Details have been submitted by AAI on various dates between March - August 2021.

## 2.2. Methodology for Tariff Determination

- 2.2.1. 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.

- 2.2.2. 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.

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

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

$$ARR_t = (FRR \times RAB_t) + D_t + O_t + T_t - 30\% \text{ of } NAR_t$$

Where:

- $t$  is the Tariff Year in the Control Period;
- $ARR_t$  is the Aggregate Revenue Requirement for year  $t$ ;
- $FRR$  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  $t$

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

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

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  $t$

### **2.3. Control Period**

- 2.3.1. As per AERA guidelines issued on 28<sup>th</sup> 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 commences from 1<sup>st</sup> April 2016 and the Third Control Period commences from 1<sup>st</sup> April 2021.

### **2.4. Construct of the Consultation Paper**

- 2.4.1. This Consultation Paper is structured under various chapters; Against each of the components submitted by AAI, the Authority provides its analysis and proposals.
- 2.4.2. In Chapter 3, the Authority lists out AAI’s submissions on true-up for regulatory building blocks, along with the summaries of decisions taken by the Authority as per the Second Control Period Order. This is followed by the Authority’s examination of and proposals regarding true-up of the regulatory blocks for the Second Control Period.
- 2.4.3. Chapters 4-12 summarise AAI’s submissions and the Authority’s examination of AAI’s submissions along with its proposals with respect to various regulatory building blocks in the Third Control Period.
- 2.4.4. Chapter 13 presents AAI’s submission regarding the Aggregate Revenue Requirement for the Third Control Period. This is followed by the Authority’s proposal to consider a revised ARR based on the examination of various regulatory building blocks for the Third Control Period.
- 2.4.5. Chapter 14 examines aeronautical revenue for the Third Control Period submitted by AAI.
- 2.4.6. Chapter 15 summarises the Authority’s proposals regarding each of the regulatory building blocks.
- 2.4.7. The Authority had also commissioned a study with respect to Chennai International Airport viz., “Study of Operations and Maintenance Expenses of Chennai International Airport,” for the purpose of tariff determination. The recommendations of this study have been used in this Consultation Paper.
- 2.4.8. **The Authority seeks views of stakeholders regarding the proposals put forward for tariff determination for the Third Control Period in this Consultation Paper.**

### 3. TRUE UP FOR THE SECOND CONTROL PERIOD

#### 3.1. Issues raised by AAI pertaining to true-up for the Second Control Period

3.1.1. 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.

3.1.2. 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

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

- a. Record AAI's submission regarding different regulatory blocks for true-up of the Second Control Period.
- b. Recap the Authority's decisions regarding regulatory 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 block for the Second Control Period.

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

#### 3.2. True-up of Traffic for the Second Control Period

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

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

**Table 4: Traffic submitted by AAI for true up of Second Control Period**

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

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

- 3.2.2. 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.
- 3.2.3. 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.
- 3.2.4. 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 5: Traffic considered by the Authority as per Tariff Order for the Second Control Period**

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

**Authority's examination of Traffic Projections for the Second Control Period**

- 3.2.5. The Authority has noted that the traffic projections for FY 2020-21 were estimated by AAI at the time of submitting the MYTP. The Authority proposes to consider the actual FY 2020-21 traffic volumes as obtained from the AAI website (as on 22 August 2021). A summary of the same is provided below.

**Table 6: Actual traffic volumes for FY 2020-21 as considered by the Authority**

<b>FY ending 31 March</b>	<b>Formula</b>	<b>2021</b>
<b>Domestic passengers (In Millions)</b>		
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)
<b>International Passengers (In Millions)</b>		
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)
<b>ATM Domestic (in '000s)</b>		
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)
<b>ATM International (in '000s)</b>		
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)

- 3.2.6. In addition to the above change proposed, the Authority notes 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 proposes 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 7.

**Table 7: 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
<b>Passenger Traffic (Mn)</b>					
Domestic	13.15	14.84	16.60	16.47	4.90
International	5.21	5.52	5.94	5.80	0.59
<b>Total</b>	<b>18.36</b>	<b>20.36</b>	<b>22.54</b>	<b>22.27</b>	<b>5.49</b>
<b>Air Traffic Movement ('000s)</b>					
Domestic	111.33	117.29	138.92	130.21	52.77
International	36.44	37.83	39.16	37.77	11.82
<b>Total</b>	<b>147.77</b>	<b>155.12</b>	<b>178.08</b>	<b>167.98</b>	<b>64.59</b>

### 3.3. True-up of Regulatory Asset Base

#### AAI's submissions regarding true up of Regulatory Asset Base (RAB) for the Second Control Period

- 3.3.1. 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 8: 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
Others including - Roads, Bridges, Culverts; Cargo Building; Residential Building; Boundary walls; Plant and machinery; etc.	294.90
<b>Total</b>	<b>2,148.67</b>

- 3.3.2. 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 9: 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	<b>510.41</b>

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

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

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
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	<b>510.41</b>
Disposals/Transfers (C)	(1.45)	(1.13)	(9.74)	(5.46)	-	<b>(17.78)</b>
Depreciation (D)	(142.42)	(134.82)	(149.06)	(157.07)	(162.18)	<b>(745.55)</b>
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**

3.3.4. 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 R 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.”

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

**Table 11: RAB considered by the Authority as per Tariff Order for the Second Control Period**

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
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	<b>1,434.30</b>
Disposals/Transfers (C)	-	-	-	-	-	-

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Depreciation (D)	138.1	132.2	142.8	146.7	182.9	<b>742.70</b>
Addition of T-4 assets from 01.10.2018 (half yearly) adjusted for half yearly depreciation (E)	-	-	25.8	-	-	<b>25.80</b>
Closing Aeronautical RAB (A+B-C-D+E) (F)	1,978.6	1,852.3	1,755.1	1,850.1	2,690.4	-
<b>Average RAB (G) = (A+F)/2</b>	<b>2,020.1</b>	<b>1,858.3</b>	<b>1,803.7</b>	<b>1,815.6</b>	<b>2,270.3</b>	-
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			

### **Authority's examination of the Regulatory Asset Base for the Second Control Period**

#### **Opening RAB for FY 2016-17**

- 3.3.6. The Authority notes 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 noted a discrepancy amounting to Rs. 87.17 Cr. between the approved and submitted RAB. Pertaining to this, the Authority 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. The Authority 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 the Authority.
- 3.3.7. 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.

**Table 12: Opening RAB proposed to be considered for true up of the Second Control Period by the Authority**

<b>Particulars (Rs. Cr.)</b>	<b>Value as on 01.04.2016</b>
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
<b>Total</b>	<b>2,061.53</b>



**Aeronautical Capital Additions**

3.3.8. The Authority has 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 has 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

3.3.9. In the subsequent paragraphs, the Authority has discussed the groups listed above in the same sequence. After the group-wise detailing, the Authority has 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**

3.3.10. The Authority notes 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 (III) A). The capital additions that were approved and commissioned in the Second Control Period comprised largely of non-terminal building capital additions.

3.3.11. 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 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.

3.3.12. The Authority 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 13: 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

3.3.13. The Authority does not propose 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

3.3.14. The Authority 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 has been provided in Annexure III (B). The Authority is 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 considered to analyse them in the chapter on capital expenditure for the Third Control Period (refer Chapter 5).

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

3.3.15. The Authority 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 III (C).

3.3.16. 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 explained that the solar energy is currently 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

3.3.17. The Authority 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 III (D) and also in the following table.

**Table 14: 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
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
<b>Total</b>	<b>268.08</b>

3.3.18. The Authority has analysed the AAI proposal and notes that most of these works are 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 are certain non-security related works that are proposed to be disallowed by the Authority. They are provided in the table below:

**Table 15: 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	-

3.3.19. Further, the Authority proposes to apply the terminal building ratio as approved in the Second Control Period Order on common capital additions (as discussed in Para 3.3.26). Consequently, the capital additions allocated to aeronautical are further reduced by Rs. 0.15 Cr.

3.3.20. Based on the above analysis, the Authority proposes 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**

3.3.21. The Authority also notes 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 III (E).

3.3.22. The Authority proposes 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**

3.3.23. The Authority considers that giving an assured return on the equity investment even on the work-in-progress assets would result in reducing the risks associated with equity investment in capital projects. Further, the airport operator is given a fair rate of return on equity when the capital assets are capitalised.

- 3.3.24. Further, the Authority notes that in case of greenfield developments, the airport operator would have to wait for a considerable length of time before getting the return on the large capital outlay incurred by it as these projects take longer durations to commission and operationalise. It was with this consideration that the Authority had earlier provided financing allowance in initial stages to such airports. The Authority 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.

#### **Allocation of Assets in the Second Control Period**

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

**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

- 3.3.26. 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.

#### **The total aeronautical capital additions considered by the Authority for true-up of the Second Control Period**

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

**Table 17: 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	<b>Approved and commissioned in SCP</b>			
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

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
	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	<b>Approved in SCP but deferred to TCP</b>			
	NITB Part 1 - Civil	485.63	-	-
	NITB Part 1 - Electrical	485.63	-	-
II	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	<b>Approved in SCP but dropped</b>			
	Ground Based Solar Power Plant	46.25	-	-
	Training facility cum fall back system	7.00	-	-
	Re-Construction of domestic & intl bays	5.00	-	-
III	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	<b>Not approved in SCP but capitalised</b>			
	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
IV	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	<b>Completed in First Control Period and put to use in SCP (Para 5.49 of SCP Order)</b>			
	Const of Anna Terminal Building-Civil	-	38.43	38.43
	Consultancy services for mega project	-	4.89	4.89
V	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
	<b>Other Items</b>			
	Financing Allowance (F)	-	3.37	-
	Cargo assets (G)	4.29	4.19	4.19

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
	Capital Expenditure later classified as R&M (H)	3.50	-	-
	<b>Grand Total (A to H)</b>	<b>1,434.18</b>	<b>510.41</b>	<b>493.64</b>

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

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

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

**Table 19: 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 12)	2,061.53	1,867.12	1,792.01	1,813.07	1,837.55	-
Aeronautical Assets Capitalised during the year (B) (Table 18)	61.92	57.41	176.20	183.22	14.89	<b>493.64</b>
Disposals/Transfers (C) (Table 10)	(1.45)	(1.13)	(9.74)	(5.46)	-	<b>(17.77)</b>
Depreciation (D) (Table 26)	(139.02)	(131.40)	(145.40)	(153.28)	(158.39)	<b>(727.49)</b>
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	-

FY ending March 31 (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
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					-

### 3.4. True-up of Aeronautical Depreciation

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

- 3.4.1. 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 20: 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
15	CFT	15

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

**Table 21: 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

S.N.	Asset Class	Useful life in years as per AAI	Useful life in years as per Order No. 35/2017-18
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

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

**Table 22: 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	<b>98.81</b>
Roads, Bridges & culvert	1.97	1.95	5.43	5.46	5.41	<b>20.22</b>
Terminal/Other Buildings	40.29	38.74	40.01	41.44	41.52	<b>202.01</b>
Cargo Building	2.11	-	-	-	-	<b>2.11</b>
Building - Residential	0.12	0.16	0.2	0.2	0.2	<b>0.88</b>
Security Fencing	-	0.13	0.3	0.38	0.38	<b>1.19</b>
Boundary Wall	1	0.99	2.98	2.98	2.98	<b>10.94</b>
Computer, IT Hardware & Access.	1.33	1.31	1.71	1.11	0.96	<b>6.41</b>
Computer Software	0.39	0.02	0.02	0.06	0.08	<b>0.56</b>
Plant and Machinery	10.86	11.32	13.38	15.03	16.27	<b>66.86</b>
Tools & Equipment	0.86	0.97	2.43	3.28	3.68	<b>11.22</b>
Other Vehicles	0.25	0.29	0.44	0.53	0.58	<b>2.1</b>
Electrical Installations	58.09	54.2	55.77	57.79	57.73	<b>283.59</b>
Office Equipment	0.05	0.08	0.11	0.32	0.4	<b>0.97</b>
Furniture & Fixtures	1.37	1.57	3.05	3.80	5.16	<b>14.95</b>
X-Ray Baggage	2.48	1.07	1.23	3.07	5.13	<b>12.98</b>
CFT	1.5	2.14	2.33	1.91	1.88	<b>9.77</b>
Total	<b>142.42</b>	<b>134.81</b>	<b>149.06</b>	<b>157.07</b>	<b>162.17</b>	<b>745.55</b>

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

- 3.4.4. 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.
- 3.4.5. 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.



- 3.4.6. 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 23: 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

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

**Table 24: 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

No.	Asset Class	Rate as per Authority (in %)
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

3.4.8. 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 25: 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	<b>742.7</b>

**Authority's examination of Aeronautical Depreciation for the Second Control Period**

- 3.4.9. The Authority proposes 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 has 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.
- 3.4.10. The Authority has 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 noted that there has been an adjustment in average RAB to the extent of Rs. 1.84 Cr.
- 3.4.11. 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.
- 3.4.12. The Authority 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 proposes to recalculate the depreciation for the Second Control Period after considering the deduction of financing allowance for the First Control Period.
- 3.4.13. Having considered the abovementioned points, the Authority recalculated depreciation for the Second Control Period as follows:

**Table 26: Aeronautical depreciation proposed to be considered for true up of Second Control Period by the Authority**

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

**3.5. 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**

3.5.1. 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%.

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

**Table 27: FRoR submitted by AAI for true up of Second Control Period**

<b>FY ending March 31 (in %)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Cost of Equity	14.00	14.00	14.00	14.00	14.00
Cost of Debt	-	-	-	-	6.21
<b>Means of Finance Proportion</b>					
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**

3.5.3. 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**

3.5.4. The Authority 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%, the Authority recalculates the FRoR for the Second Control Period to be 13.92%.

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

**Table 28: FRoR proposed to be considered for true up of the Second Control Period by the Authority**

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
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%				

### **3.6. True-up of Return on Land**

#### **AAI’s submission regarding True up of Return on Land for the Second Control Period**

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

**Table 29: Return on land submitted by AAI for true up of Second Control Period**

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

3.6.2. 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**

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

3.6.4. 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**

3.6.5. 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."*

3.6.6. The Authority 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. 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. Moreover, since return on land should be sought prospectively and not retrospectively, the Authority is of the opinion that return on land will not be included in the true up calculation.

### **3.7. 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**

3.7.1. 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 30: Payroll costs submitted by AAI for Second Control Period**

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

- **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/RHQ 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 31: 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/RHQ	25.28	10.3	10.26	15.9	17.31	<b>79.04</b>
Apportionment of Admin Expenses for CHQ/RHQ	84.69	62.63	37.41	50.74	53.28	<b>288.75</b>
<b>Total Admin &amp; General Expenses</b>	<b>109.97</b>	<b>72.93</b>	<b>47.67</b>	<b>66.64</b>	<b>70.59</b>	<b>367.79</b>

- **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 32: R&M expenses submitted by AAI for Second Control Period**

FY Ending 31 March (Rs. Cr.)	2017	2018	2019	2020	2021	Total
<b>Total R&amp;M Expenses</b>	92.81	101.10	73.14	73.54	81.00	<b>421.59</b>

- **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 33: Utilities and outsourcing expenses submitted by AAI for Second Control Period**

FY Ending 31 March (in Rs. Cr.)	2017	2018	2019	2020	2021	Total
<b>Total utilities &amp; outsourced expenses</b>	88.49	89.27	84.93	82.58	86.03	<b>431.30</b>

**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 34: Other Outflows as submitted by AAI for Second Control Period**

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

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

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

**Table 35: Aeronautical O&M expenses submitted by AAI for true up for Second Control Period**

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

\*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**

- 3.7.3. 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.”

- 3.7.4. 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/RHQ overheads apportionment costs (admin. and general expenditure of CHQ/RHQ) by 5% per annum.

**Allocation Ratios of Common Expenses**

- 3.7.5. 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 36: 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/RHQ 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**

- 3.7.6. The Authority had proposed not to include financing charges as a part of O&M expenses for the Second Control Period.
- 3.7.7. 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.
- 3.7.8. The Authority had decided to consider the O&M expenditure as per the following table:

**Table 37: 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/RHQ	21.3	26.0	27.2	28.6	30.0	<b>133.1</b>
Payroll costs – non CHQ/RHQ	127.5	153.7	161.4	169.5	178.0	<b>790.2</b>
Pay roll costs (A)	148.8	179.7	188.7	198.1	208.0	<b>923.3</b>
Repair & maintenance (B)	87.9	82.4	89.7	97.0	105.3	<b>462.3</b>
Utilities & outsourcing expenses (C)	95.3	85.3	86.7	88.3	90.1	<b>445.7</b>
Admin and general expenses - non CHQ/RHQ	4.40	4.30	4.70	5.20	5.70	<b>24.30</b>
Admin and general expenses - CHQ/RHQ	26.30	21.70	22.80	23.90	25.10	<b>119.80</b>
Admin. & other expenses* (D)	30.7	26.0	27.5	29.1	30.8	<b>144.1</b>
Other outflows (E)	13.6	12.2	12.8	13.4	14.1	<b>66.1</b>
<b>Total operating expenditure (A to E)</b>	<b>376.3</b>	<b>385.5</b>	<b>405.4</b>	<b>426.0</b>	<b>448.3</b>	<b>2,041.5</b>

\*includes CSR expense



**Authority's examination regarding O&M Expenses for the Second Control Period**

- 3.7.9. The Authority has 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 have been taken into consideration while truing up O&M expenses of the Second Control Period. A summary of the study is given in Annexure VI and the detailed study in Appendix – III.
- 3.7.10. The Authority notes that AAI has allocated various sub-expenses within O&M expenses based on the following ratios:

**Table 38: 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.

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

**Table 39: 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
Electricity	99.99	99.99	99.99	99.99	99.99

- 3.7.12. The Authority also notes that the TBLR as per the MYTP 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 and as stated in Para 3.3.26.

- 3.7.13. 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 has been included in the MYTP submission, the Authority decided to exclude these expenses from O&M expenses for the Second Control Period.
- 3.7.14. The Authority has examined AAI's submission regarding CSR expenses under admin. and general expenses. Basis para 81 of Hon'ble TDSAT Order on BIAL, the Authority has decided that CSR expenses would be allowed as cost of the airport operator and thereby includes it in the trueing up exercise of the Second Control Period for Chennai International Airport.
- 3.7.15. The Authority 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. The Authority proposes to consider the approved expenditure as per the Second Control Period tariff order for the true-up calculation.
- 3.7.16. The Authority notes that O&M expenses for FY 2020-21 have 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 is 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 proposes to estimate the FY 2020-21 expenses by considering nil growth over FY 2019-20.
- 3.7.17. The Authority proposes 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 proposes 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 proposes to consider the following payroll expenses in the Second Control Period:

**Table 40: Payroll costs proposed to be considered for true up of the Second Control Period by the Authority**

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

\* less – redeployed employees

- 3.7.18. The Authority proposes to consider apportionment of admin expenses for CHQ/RHQ 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/RHQ, 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 41: Administrative and general expenses proposed to be considered for true up of the Second Control Period by the Authority**

<b>FY Ending 31 March (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Admin and general expenses – non CHQ/RHQ*	4.52	5.71	10.23	15.13	14.97*	<b>50.56</b>

Apportionment of Admin Expenses for CHQ/RHQ	26.30	21.70	22.80	23.90	25.10	<b>119.80</b>
<b>Total Admin &amp; General Expenses</b>	<b>30.82</b>	<b>27.41</b>	<b>33.03</b>	<b>39.03</b>	<b>40.07</b>	<b>170.36</b>

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

- 3.7.19. The Authority proposes 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 proposes 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 proposes to consider the following R&M expenses for the Second Control Period:

**Table 42: R&M expenses proposed to be considered for true up of the Second Control Period by the Authority**

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

\* includes AMC charges for digital signages and ATRS

- 3.7.20. The Authority notes that AAI's utilities and outsourcing expenses are inefficient with power recovery contributing to just 12% of the power charges incurred. The Authority would like to understand why power recoveries are low in Chennai International Airport and will examine this in more detail in the Third Control Period tariff order. The Authority proposes 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 proposes 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 proposes to consider the following utilities and outsourcing expenses for the Second Control Period:

**Table 43: Utilities and outsourcing expenses proposed to be considered for true up of the Second Control Period by the Authority**

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

- 3.7.21. The Authority proposes to consider the actual FY 2020-21 passenger traffic to compute the collections from UDF charges. Additionally, the Authority proposes to consider miscellaneous expenses as approved by the Authority in the Second Control Period Order. The Authority 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, the Authority proposes to consider the following other outflows for the Second Control Period:

**Table 44: Other outflows proposed to be considered for true up of the Second Control Period by the Authority**

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

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

3.7.23. The Authority has 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 45: O&M Expenses proposed to be considered for true up of the Second Control Period by the Authority**

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

### 3.8. True-up of Non-Aeronautical Revenues

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

3.8.1. 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 46: Non-aeronautical revenue submitted by AAI for true up of Second Control Period**

<b>FY Ending 31 March (Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Revenue from Rent and services</b>						
Land rent & leases	29.46	22.95	28.54	11.76	11.76	<b>104.48</b>
Building residential	-	-	-	-	-	<b>-</b>
Building non residential	32.31	21.70	26.20	23.24	23.24	<b>126.68</b>
<b>Revenue related to passenger traffic</b>						
Duty free shops	57.38	62.06	72.10	77.11	4.58	<b>273.24</b>
Flight kitchen	8.31	8.48	9.86	8.57	1.64	<b>36.87</b>
Car rentals	4.61	8.09	18.82	16.13	3.09	<b>50.73</b>
Car parking	21.14	23.48	24.99	19.28	3.69	<b>92.58</b>
Admission tickets	4.39	6.59	8.79	0.70	0.13	<b>20.61</b>
MRO	-	-	-	0.55	0.11	<b>0.66</b>

<b>FY Ending 31 March (Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Other income	11.37	16.82	14.16	16.52	3.16	<b>62.03</b>
Land Rent & Leases - hanger	1.01	6.27	6.45	7.10	1.36	<b>22.18</b>
Restaurant / snack bars	17.76	19.65	21.50	24.00	4.59	<b>87.51</b>
T.R. Stall	35.28	46.13	53.41	71.09	13.61	<b>219.51</b>
Hoarding & display	21.49	34.50	41.49	62.61	11.99	<b>172.07</b>
<b>Total</b>	<b>244.52</b>	<b>276.71</b>	<b>326.31</b>	<b>338.67</b>	<b>82.95</b>	<b>1,269.16</b>

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

- 3.8.2. 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.
- 3.8.3. 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 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.
- 3.8.4. 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.
- 3.8.5. 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 47: Non-aeronautical Revenue as per the tariff order of the Second Control Period**

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

**Authority's examination regarding Non-Aeronautical Services for the Second Control Period**

- 3.8.6. The Authority has studied AAI's submission with respect to non-aeronautical revenue. The analysis conducted by the Authority is discussed below.
- 3.8.7. It was 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 notes that non-aeronautical revenues and traffic volumes in FY 2020-21 have reduced by 76% and 75% respectively.
- 3.8.8. The Authority 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 48: 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
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

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

3.8.10. The Authority notes that the non-aeronautical revenue for FY 2020-21 submitted by AAI was based on the estimated passenger and ATM traffic. The Authority proposes to recalculate the non-aeronautical revenue for FY 2020-21 based on the actual traffic (as per AAI website as accessed on 26 August 2021). Accordingly, the Authority proposes to consider the following non-aeronautical revenue for the Second Control Period:

**Table 49: 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
<b>Revenue from Rent and Services</b>						
Land Rent & Leases	29.46	22.95	28.54	11.76	11.76	<b>104.48</b>
Building Non Residential	32.31	21.70	26.20	23.24	23.24	<b>126.68</b>
<b>Revenue related to passenger traffic</b>						
Duty Free Shops	57.38	62.06	72.10	77.11	7.08	<b>275.73</b>
Flight Kitchen	8.31	8.48	9.86	8.57	1.90	<b>37.13</b>
Car Rentals	4.61	8.09	18.82	16.13	3.58	<b>51.22</b>
Car Parking	21.14	23.48	24.99	19.28	4.28	<b>93.17</b>
Admission Tickets	4.39	6.59	8.79	0.70	0.16	<b>20.63</b>
MRO	-	-	-	0.55	0.12	<b>0.68</b>
Other Income	11.37	16.82	14.16	16.52	3.67	<b>62.54</b>
Land Rent & Leases- hanger	1.01	6.27	6.45	7.10	1.58	<b>22.40</b>
Restaurant / snack bars	17.76	19.65	21.50	24.00	5.33	<b>88.24</b>
T.R. Stall	35.28	46.13	53.41	71.09	15.79	<b>221.70</b>
Hoarding & Display	21.49	34.50	41.49	62.61	13.91	<b>173.99</b>
<b>Total</b>	<b>244.52</b>	<b>276.71</b>	<b>326.31</b>	<b>338.67</b>	<b>92.40</b>	<b>1,278.61</b>

### 3.9. True-up of Aeronautical Revenue

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

3.9.1. 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

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

**Table 50: Aeronautical revenue submitted by AAI for true up of Second Control Period**

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

#### Decisions taken by the Authority regarding aeronautical revenue for the Second Control Period

3.9.3. 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.”*

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

**Table 51: Aeronautical revenue as approved by the Authority in the tariff order of Second Control Period**

<b>FY ending 31 March (Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Landing	299.9	305.6	35.7	37.9	40.1	<b>719.2</b>
Parking & Housing	7.3	7.5	1.5	0.9	1.0	<b>18.2</b>
UDF	282.9	301.8	96.2	82.2	89.7	<b>852.8</b>

<b>FY ending 31 March (Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
FTP + ITP and lease rentals	129.2	131.7	45.8	38.2	39.1	<b>384.0</b>
Ground handling charges and lease rentals	49.6	50.6	53.6	56.8	60.2	<b>270.8</b>
Royalty from CUTE	19.3	21.0	22.9	25.0	27.3	<b>115.5</b>
Cargo revenue	193.8	-	-	-	-	<b>193.8</b>
<b>Total approved revenue</b>	<b>982.0</b>	<b>818.2</b>	<b>255.7</b>	<b>241.0</b>	<b>257.4</b>	<b>2554.3</b>

#### **Authority's examination of Aeronautical Revenues for the Second Control Period**

3.9.5. The Authority has 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

3.9.6. The Authority notes 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 stated that, although the revision in tariff were released in the Second Control Period Order dated 16 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.

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

**Table 52: Aeronautical revenue proposed to be considered for true up of the Second Control Period by the Authority**

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

### **3.10. True-up of Aeronautical Taxes**

#### **AAI's submission regarding True up of Aeronautical Taxes for the Second Control Period**

3.10.1. 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 53: 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	<b>2,674.64</b>
O&M Expense (B)	434.68	420.41	390.89	409.29	434.34	<b>2,089.61</b>
Total Interest and Financing Charges (C)	-	-	-	-	3.89	<b>3.89</b>
Depreciation (D)	172.41	172.07	165.40	169.07	161.06	<b>840.01</b>
Total expenditure (E) = (B to D)	607.09	592.47	556.30	578.35	599.29	<b>2,933.50</b>
Profit Before Tax (F) = (A – E)	371.49	250.27	(111.24)	(305.68)	(463.69)	<b>(258.85)</b>
Set-off of prior period tax losses (G)	-	-	-	-	-	<b>-</b>
PBT after set-off of losses (H) = (F – G)	371.49	250.27	(111.24)	(305.68)	(463.69)	<b>(258.85)</b>
Tax [34.944% up to FY 2018-19 & 25.17% from FY 2019-20] (I)	129.81	87.45	-	-	-	<b>217.26</b>
Profit After Tax (J) = (H – I)	241.68	162.82	(111.24)	(305.68)	(463.69)	<b>(476.11)</b>

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

- 3.10.2. 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.”*

- 3.10.3. 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.

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

**Table 54: 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	<b>2,577.5</b>
Aeronautical O&M	328.7	337.9	355.4	373.5	393.2	<b>1,788.7</b>
CHQ/RHQ Overheads	47.5	47.6	50.0	52.5	55.1	<b>252.7</b>
Depreciation as per IT Act	185.1	173.2	160.0	155.7	215.4	<b>729.4</b>
Profit Before Tax	419.7	259.5	(285.6)	(340.7)	(406.3)	<b>(353.4)</b>
Tax	145.3	89.8	-	-	-	<b>235.1</b>

**Authority’s examination of Aeronautical Taxes for the Second Control Period**

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

**Table 55: Aeronautical Taxes proposed to be considered for true up of the Second Control Period by the Authority**

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

**3.11. True-Up of Aggregate Revenue Requirement****AAI's submission of ARR for the Second Control Period**

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

**Table 56: ARR submitted by AAI for true up of Second Control Period**

<b>FY Ending 31 March (Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
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	<b>1,357.22</b>
Add: Depreciation [4]	142.42	134.82	149.06	157.07	162.18	<b>745.56</b>
Add: Working Capital Interest [5]	-	-	-	-	3.89	<b>3.89</b>
Add: Operating expenses [6]	434.68	420.41	390.89	409.29	434.34	<b>2,089.60</b>
Add: Taxation [7]	129.81	87.45	-	-	-	<b>217.27</b>
Less: 30% of Non - Aeronautical revenue [8]	(73.36)	(83.01)	(97.89)	(101.60)	(24.89)	<b>(380.75)</b>
Return on Land [9]	0.81	0.81	0.84	0.77	0.45	<b>3.69</b>
Return on FCP for Land [10]	6.72	-	-	-	-	<b>6.72</b>
Financing Allowance for FCP [11]	89.54	-	-	-	-	<b>89.54</b>
Over-recovery of FCP as on 31 March 2017 [12]	(874.41)	-	-	-	-	<b>(874.41)</b>
ARR [13] = [3] + [4] + [5] + [6] + [7] + [8] + [9] + [10] + [11] + [12]	151.85	829.40	707.96	733.67	835.47	<b>3,258.34</b>
Aeronautical Revenue [14]	978.58	842.74	445.05	272.67	135.60	<b>2,674.65</b>
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	<b>4,647.98</b>
PV (Discounted aeronautical	1,884.17	1,423.36	659.36	354.36	154.59	<b>4,475.84</b>

<b>FY Ending 31 March (Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
revenues) [16]						
PV (Under)/ Over-recovery of the current control period as on 31 March 2022 [17] = [16] - [15]	1,591.79	22.54	(389.50)	(599.11)	(797.84)	<b>(172.13)</b>
True Up Over-recovery for SCP [Σ (17)] as on 31 March 2022	<b>(172.13)</b>					

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

3.11.2. 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 57: ARR as approved by the Authority in the tariff order of Second Control Period**

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

**Authority's examination regarding ARR for the Second Control Period**

3.11.3. As per AAI's submission, interest on working capital loan was provided separately as a purely aeronautical expense in the ARR working. However, Authority has 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 has recalculated the ARR as follows:

**Table 58: ARR proposed to be considered for true up of the Second Control Period by Authority**

<b>FY Ending 31 March (Rs Cr.)</b>	<b>Ref</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Average RAB [1]	Table 19	2,022.26	1,829.57	1,802.54	1,825.31	1,765.80	<b>9,245.48</b>
FRoR [2] (% p.a.)	Table 28	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	<b>1,287.08</b>
Add: Depreciation [4]	Table 26	139.02	131.40	145.40	153.28	158.39	<b>727.49</b>
Add: Operating expenses [5]	Table 45	346.17	371.60	368.68	373.91	372.91	<b>1,833.29</b>
Add: Taxation [6]	Table 55	160.94	104.95	-	-	-	<b>265.89</b>

FY Ending 31 March (Rs Cr.)	Ref	2017	2018	2019	2020	2021	Total
Less: 30% of Non - Aeronautical revenue [7]	Table 49	(73.36)	(83.01)	(97.89)	(101.60)	(27.72)	<b>(383.58)</b>
Return on Land [8]	Para 3.6.6	-	-	-	-	-	-
Return on Land for FCP [9]	Para 3.6.6	-	-	-	-	-	-
Financing Allowance for FCP [10]	Para 3.3.6	-	-	-	-	-	-
Over-recovery of FCP as on 31 March 2017 [11]		(874.41)	-	-	-	-	<b>(874.41)</b>
ARR [12] = [3] + [4] + [5] + [6] + [7] + [8] + [9] + [10] + [11]		(20.11)	779.64	667.13	679.70	749.41	<b>2,855.76</b>
Aeronautical revenues [13]	Table 52	978.58	842.74	445.05	272.67	141.03	<b>2,680.08</b>
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	<b>3,996.73</b>
PV (Discounted aeronautical revenues) [15]		1,877.67	1,419.43	658.00	353.87	160.67	<b>4,469.63</b>
PV (Under)/ Over recovery of the current control period as on 31 March 2022 [16] = [15] - [14]		1,916.26	106.28	(328.33)	(528.24)	(693.07)	<b>472.90</b>
True Up Over-recovery for SCP [Σ (16)] as of 31 March 2022		<b>472.90</b>					

3.11.4. The Authority notes that there is an over-recovery of Rs. 472.90 Cr. in the Second Control and proposed to readjust the same in the ARR computation of the Third Control Period.

### **3.12. Authority's proposals regarding true-up of Second Control Period**

Based on the discussion in the earlier sections, the Authority proposes the following changes regarding the true-up of the Second Control Period

- 3.12.1. To accept the actual traffic volumes of FY 2020-21 for true-up of the Second Control Period – as detailed in Table 6.
- 3.12.2. To consider passenger and ATM traffic as detailed in Table 7 for true-up of the Second Control Period.
- 3.12.3. To consider aeronautical RAB as per Table 19 for true-up of the Second Control Period.
- 3.12.4. To consider aeronautical depreciation as per Table 26 for true-up of the Second Control Period.
- 3.12.5. To consider FRoR as per Table 28 for the true-up of the Second Control Period.
- 3.12.6. To disallow return on cost of land pertaining to First and Second Control Periods.
- 3.12.7. To consider operating expenses as per Table 45 for true-up of the Second Control Period.
- 3.12.8. To consider the non-aeronautical revenue as per Table 49 for the true-up of the Second Control Period.

- 3.12.9. To consider aeronautical revenue as per Table 52 for true-up of the Second Control Period.
- 3.12.10. To consider aeronautical tax as per Table 55 for true-up of the Second Control Period.
- 3.12.11. To carry forward the over-recovery amount of the Second Control Period of Rs. 472.90 Cr. as on 31 March 2022 as per Table 58 to the Third Control Period.

#### 4. TRAFFIC FOR THE THIRD CONTROL PERIOD

##### 4.1. AAI's submission regarding Traffic in Third Control Period

- 4.1.1. 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 59: ATM and Passenger Traffic for Third Control Period submitted by AAI**

FY ending March 31	2020	2021	2022	2023	2024	2025	2026
<b>Passenger Traffic (Mn)</b>							
<b>Domestic</b>	<b>16.47</b>	<b>4.90</b>	<b>8.05</b>	<b>10.87</b>	<b>14.68</b>	<b>16.88</b>	<b>19.41</b>
% growth over previous year		-70%	64%	35%	35%	15%	15%
% of FY20		30%	49%	66%	89%	102%	118%
<b>International</b>	<b>5.80</b>	<b>0.59</b>	<b>0.86</b>	<b>1.46</b>	<b>2.20</b>	<b>3.08</b>	<b>4.15</b>
% growth over previous year		-90%	46%	70%	51%	40%	35%
% of FY20		10%	15%	25%	38%	53%	72%
<b>Total</b>	<b>22.27</b>	<b>5.5</b>	<b>8.91</b>	<b>12.34</b>	<b>16.87</b>	<b>19.95</b>	<b>23.56</b>
% growth over previous year		-75%	62%	38%	37%	18%	18%
% of FY20		25%	40%	55%	76%	90%	106%
<b>Air Traffic Movement ('000s)</b>							
<b>Domestic</b>	<b>130.21</b>	<b>52.77</b>	<b>84.15</b>	<b>100.98</b>	<b>121.18</b>	<b>133.29</b>	<b>146.62</b>
% growth over previous year		-59%	59%	20%	20%	10%	10%
% of FY20		41%	65%	78%	93%	102%	113%
<b>International</b>	<b>37.77</b>	<b>11.82</b>	<b>20.52</b>	<b>23.60</b>	<b>25.96</b>	<b>28.03</b>	<b>30.00</b>
% growth over previous year		-69%	74%	15%	10%	8%	7%
% of FY20		31%	54%	62%	69%	74%	79%
<b>Total</b>	<b>167.98</b>	<b>64.59</b>	<b>104.67</b>	<b>124.58</b>	<b>147.13</b>	<b>161.33</b>	<b>176.62</b>
% growth over previous year		-62%	62%	19%	18%	10%	9%
% of FY20		38%	62%	74%	88%	96%	105%

- 4.1.2. 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.

#### 4.2. **Authority's analysis regarding Traffic for Third Control Period**

- 4.2.1. The Authority has taken note of the impact that COVID-19 pandemic has 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 also evaluated recent trends in air traffic (Passenger and ATMs) for the purpose of traffic projections.
- 4.2.2. As per AAI's submission, the domestic and international pre-pandemic passenger traffic level is expected to return by FY 2024-25 and FY 2027-28 respectively; same assumptions have been used in the case of ATM traffic. However, it has been observed that the IATA report expects pre-Covid-19 level traffic to return by CY 2024. Moreover, ACI report suggests that domestic and international traffic will return to pre-Covid-19 levels by CY 2023 and CY 2024 respectively.
- 4.2.3. The Authority notes 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 has again hit the sector adversely. The Authority is cognizant of the impact that the second wave has had on the aviation sector and accordingly has remained conservative in its estimation of traffic.
- 4.2.4. The Authority has computed the 5-year CAGR and 3-year CAGR using the actual traffic data till FY 2019-20, as FY 2019-20 has 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 60: CAGR for passenger traffic and ATM traffic at Chennai International Airport**

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

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

**Table 61: Traffic projections proposed to be considered for Third Control Period by the Authority**

<b>FY ending March 31</b>	<b>2020 (actuals)</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
<b>Passenger Traffic (in Mn.)</b>							
<b>Domestic</b>	<b>16.47</b>	<b>4.90</b>	<b>11.20</b>	<b>17.29</b>	<b>18.12</b>	<b>19.76</b>	<b>23.05</b>
% growth over previous year		-70%	128%	54%	5%	9%	17%
% of FY20 traffic		30%	68%	105%	110%	120%	140%
<b>International</b>	<b>5.80</b>	<b>0.59</b>	<b>1.34</b>	<b>4.35</b>	<b>5.80</b>	<b>6.27</b>	<b>6.73</b>

<b>FY ending March 31</b>	<b>2020 (actuals)</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
% growth over previous year		-90%	127%	225%	33%	8%	7%
% of FY20 traffic		10%	23%	75%	100%	108%	116%
<b>Total</b>	<b>22.27</b>	<b>5.50</b>	<b>12.54</b>	<b>21.65</b>	<b>23.92</b>	<b>26.03</b>	<b>29.79</b>
% growth over previous year		-75%	128%	73%	10%	9%	14%
% of FY20 traffic		25%	56%	97%	107%	117%	134%
<b>Air Traffic Movement (in 000's)</b>							
<b>Domestic</b>	<b>130.21</b>	<b>52.77</b>	<b>88.73</b>	<b>137.00</b>	<b>143.53</b>	<b>156.58</b>	<b>182.67</b>
% growth over previous year		-59%	68%	54%	5%	9%	17%
% of FY20 traffic		41%	68%	105%	110%	120%	140%
<b>International</b>	<b>37.77</b>	<b>11.82</b>	<b>8.54</b>	<b>27.86</b>	<b>37.15</b>	<b>40.12</b>	<b>43.09</b>
% growth over previous year		-69%	-28%	226%	33%	8%	7%
% of FY20 traffic		31%	23%	74%	98%	106%	114%
<b>Total</b>	<b>167.98</b>	<b>64.59</b>	<b>97.27</b>	<b>164.87</b>	<b>180.68</b>	<b>196.69</b>	<b>225.76</b>
% growth over previous year		-62%	51%	69%	10%	9%	15%
% of FY20 traffic		38%	58%	98%	108%	117%	134%

#### **4.3. Authority's Proposal regarding Traffic for the Third Control Period**

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

- 4.3.1. 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.
- 4.3.2. To true-up the traffic of Third Control Period based on the actuals at the time of tariff determination of the Fourth Control Period.



## 5. REGULATORY ASSET BASE AND DEPRECIATION FOR THIRD CONTROL PERIOD

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

5.1.1. 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

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

#### I. Aeronautical capital additions deferred from the Second Control Period

5.1.3. 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

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

**Table 62: 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
	<b>Total</b>		<b>1,928.73</b>	<b>21.99</b>	<b>49.34</b>	<b>48.82</b>	<b>2,048.88</b>

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

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

**Table 63: 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
	<b>Total</b>		<b>1,816.70</b>	<b>27.61</b>	<b>52.98</b>	<b>30.72</b>	<b>1,928.01</b>

**III. Other aeronautical capital additions for the Third Control Period**

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

**Table 64: 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
	<b>Total</b>		<b>137.15</b>	<b>2.28</b>	<b>5.85</b>	<b>7.53</b>	<b>152.81</b>

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

5.1.7. 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 65: 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**

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

**Table 66: 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	<b>340.78</b>
Roads, Bridges & culvert	48.59	0.02	57.53	0.04	0.04	<b>106.22</b>
Terminal/Other Buildings	710.91	11.57	706.88	304.56	354.31	<b>2,088.24</b>
Building - Residential	-	-	189.93	0.08	0.07	<b>190.07</b>
Computer, IT Hardware & Access.	100.69	3.38	105.27	3.24	6.37	<b>218.95</b>
Plant and Machinery	-	3.79	0.00	5.64	2.20	<b>11.64</b>
Electrical Installations	233.20	47.87	223.63	1.28	128.59	<b>634.57</b>
Office Equipment	-	-	-	-	-	-
Furniture & Fixtures	48.46	0.02	0.02	0.02	0.02	<b>48.54</b>
X-Ray Baggage	277.12	0.13	206.64	0.19	0.16	<b>484.25</b>
CFT	-	4.44	1.07	0.95	0.00	<b>6.45</b>
<b>Total</b>	<b>1,637.64</b>	<b>106.20</b>	<b>1,543.94</b>	<b>349.14</b>	<b>492.79</b>	<b>4,129.71</b>

### **Depreciation**

5.1.9. AAI has computed depreciation based on the rates prescribed by AERA vide Order No. 35/2017-18 dated 12 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 67: 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

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

**Table 68: 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	<b>138.35</b>
Roads, Bridges & culvert	7.84	9.38	11.88	14.73	14.74	<b>58.58</b>
Terminal/Other Buildings	52.50	64.51	76.46	93.22	104.20	<b>390.89</b>
Building - Residential	0.20	0.19	3.36	6.52	6.52	<b>16.79</b>
Security Fencing	0.38	0.38	0.38	0.38	0.38	<b>1.92</b>
Boundary wall (operational)	2.98	2.98	2.68	2.05	2.02	<b>12.71</b>
Other Buildings - Unclassified	0.85	0.78	0.78	0.69	0.69	<b>3.79</b>
Computer, IT Hardware & Access.	17.95	34.85	52.60	70.32	45.48	<b>221.21</b>
Computer Software	0.08	0.08	0.07	0.03	-	<b>0.25</b>
Plant and Machinery	16.58	16.67	16.69	16.76	17.02	<b>83.72</b>
Tools & Equipment	3.41	3.41	3.40	3.40	3.40	<b>17.02</b>
Office Furniture & Fixtures	3.60	3.60	3.57	3.12	2.15	<b>16.04</b>
Other Vehicles	0.57	0.57	0.52	0.44	0.35	<b>2.45</b>
Electrical Installations	68.81	78.83	56.03	62.86	68.88	<b>335.41</b>
Office Equipment	0.39	0.34	0.30	0.09	0.01	<b>1.12</b>
Furniture & Fixtures	4.38	7.44	6.93	6.93	6.94	<b>32.61</b>
X-Ray Baggage	14.26	23.47	30.36	37.25	37.26	<b>142.61</b>
CFT	1.22	1.36	1.54	1.60	1.64	<b>7.36</b>
Total	<b>219.09</b>	<b>275.78</b>	<b>295.97</b>	<b>350.25</b>	<b>341.73</b>	<b>1,482.82</b>

### **RAB for Third Control Period**

5.1.11. 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 69: 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	<b>4,129.71</b>
Deletions [3]	-	-	-	-	-	-
Depreciation [4]	219.09	275.78	295.97	350.25	341.73	<b>1,482.82</b>
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]	<b>2,489.17</b>	<b>3,113.66</b>	<b>3,652.85</b>	<b>4,276.28</b>	<b>4,351.25</b>	-

**5.2. Authority's examination of RAB and Depreciation for Third Control Period**

5.2.1. The Authority has analysed the RAB and capital additions submitted by AAI for the Third Control Period. For the purpose of analysis, the Authority has 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

5.2.2. The Authority 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 the Authority 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.

5.2.3. Thus, the Authority 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.

5.2.4. The Authority has 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 has accordingly proposed capital additions for the Third Control Period.

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

5.2.5. 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 70: 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 – 1) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	971.25	601.67	262.33
		A.2	Electrical Part 1		187.79	
		A.3	Baggage Handling System Part 1		197.47	
		A.4	Passenger Boarding Bridge & Visual Docking Guidance System Part 1		44.31	
		A.5	Interior works (Civil) Part 1		47.25	
		A.6	Others		155.10	
		A	<b>Sub-total (NITB Part 1)</b>	<b>971.25</b>	<b>1,233.58</b>	<b>262.33</b>

Reference	Project / Group	No.	Particulars (in Rs. Cr.)	Approved in SCP	Proposed Cost in TCP	Cost overrun
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>B</b>	<b>Sub-total (Storm Water Drain)</b>	<b>4.50</b>	<b>530.00</b>	<b>525.50</b>
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)
		<b>C</b>	<b>Pavement works (sub-total)</b>	<b>134.31</b>	<b>165.15</b>	<b>30.84</b>
	Total			<b>1,110.06</b>	<b>1,928.73</b>	<b>818.67</b>
	Financing Allowance			-	21.99	21.99
	IDC			-	49.34	49.34
	Project division expenses capitalized (Exp. Cap)			-	48.82	48.82
	<b>Total (including FA, IDC and Exp. Cap)</b>			<b>1,110.06</b>	<b>2,048.88</b>	<b>938.82</b>

**(A) Modernization of Chennai International Airport, Phase II (NITB Part – 1)**

- 5.2.6. The Authority has 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 has submitted a revised aeronautical cost of Rs. 1,233.58 Cr. for the Third Control Period. AAI submitted that the revised cost is based on the actual awarded amount.
- 5.2.7. 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) is 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 which 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 V.
- 5.2.8. 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.
- 5.2.9. 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.

- 5.2.10. AAI 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.
- 5.2.11. 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 proposes 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.
- 5.2.12. The Authority acknowledges 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 is of the opinion that capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 1) would be due in FY 2022-23. Despite the physical progress of construction being 71%, the Authority believes that operationalising the building will take at least 6 months thereby making the commissioning possible only in FY 2022-23. Thus, the Authority proposes to postpone the commissioning to FY 2022-23.
- 5.2.13. The Authority notes that the non-aeronautical component of TBLR is in the range of 5-8%. This is 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 encourages AAI to incorporate larger non-aeronautical component at the airport (especially so since a new integrated terminal is being capitalised). Thus, the Authority proposes to consider a TBLR of 90:10 for the Third Control Period.
- 5.2.14. 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 notes that the normative cost working of modernization of Chennai International Airport, Phase II NITB Part - 1 and NITB Part – 2, is 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 notes 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.
- 5.2.15. 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 71: 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
<b>Total</b>	<b>1,233.58</b>	<b>1,202.59</b>
<b>Total Cost</b>		<b>2,436.18</b>
<b>Total area proposed to be constructed (in sq.m.)</b>		<b>2,23,027</b>
<b>Cost per sq.m. (Rs.)</b>		<b>1,09,232</b>

5.2.16. Since the modernization of Chennai International Airport, Phase II is getting capitalised (and as a result – operational) in two parts, the Authority is of the opinion that the normative cost analysis of the two should also be done separately. Moreover, a separate analysis for both the parts will ensure that the quality and passenger experience remain uniform across the NITB. Thus, the Authority analyses 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 72. Since the cost per sq. m. is less than the inflation adjusted normative cost of Rs. 1,08,160 per sq m., the Authority proposes to consider the amount submitted by AAI for modernization of Chennai International Airport, Phase II (NITB Part – 1).

**Table 72: 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**

5.2.17. The Authority notes 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 is as recommended by the study.

5.2.18. 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 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 noted that Phase I of the storm water drainage is in the final stage of being tendered. The 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 is scheduled to be completed in FY 2024-25, the Authority is 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 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 73: 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**

5.2.19. 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 is 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.

5.2.20. 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 have 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 74: 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.	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
		Total Pavement area (excluding 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.

5.2.21. The Authority noted that financing allowance and the methodology for computation of the same was detailed in the airport guidelines and the same would need to be provided to the Airport Operator. However, the Airport Operator has computed financing allowance on the entire WIP amount being capitalised, whereas the Authority is of the view that such an allowance is essentially the IDC for a project and should be provided only on the debt portion of the project funds. Accordingly, the Authority 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.

**Aeronautical capital additions proposed to be considered by the Authority for capital works deferred from the Second Control Period to the Third Control Period**

5.2.22. Based on the examination in the paragraphs above, the Authority proposes to consider the capital additions of projects deferred from the Second Control Period to the Third Control Period as provided in Table 75.

**Table 75: 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)
		<b>A</b>	<b>Sub-total (Terminal Building Phase I)</b>	<b>1,233.58</b>	<b>1,123.09</b>	(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>B</b>	<b>Sub-total (Storm Water Drain)</b>	<b>530.00</b>	<b>165.05</b>	(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	-
		<b>C</b>	<b>Pavement works (sub-total)</b>	<b>165.15</b>	<b>165.15</b>	-
	Total			<b>1,928.73</b>	<b>1,453.29</b>	(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)
	<b>Total (including FA, IDC and Exp. Cap)</b>			<b>2,048.88</b>	<b>1,497.01</b>	(551.87)

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

5.2.23. Details regarding the new capital additions for the Third Control Period as submitted by AAI is given in Table 76:

**Table 76: 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
		<b>D</b>	<b>Sub-total (NITB Part – 2)</b>	<b>1,202.59</b>
E	Residential Colony			184.93
		E.1	PIDS	40.00
		E.2	Body Scanner	47.50
F	Security Equipment	E.3	DARK	41.54
		E.4	Others	26.93
		<b>E</b>	<b>Sub-total (Security Equipment)</b>	<b>155.97</b>
		G.1	Resurfacing of Main Runway 07-25	30.00
G		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
		<b>G</b>	<b>Pavement works (sub-total)</b>	<b>109.00</b>
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.1	Additions/alterations to existing toilets in TB	9.50
K	Others	K.2	Artistic painting works at city side.	5.00
		K.3	Other works	28.86
		<b>K</b>	<b>Others (sub-total)</b>	<b>43.36</b>
	Total			<b>1,816.70</b>
	Financing Allowance			27.61
	IDC			52.98
	Project division expenses capitalized (Exp. Cap)			30.72
	<b>Total (including IDC)</b>			<b>1,928.01</b>

5.2.24. The Authority has 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)**

5.2.25. 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, the Authority 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, the Authority 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, the Authority 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,

the Authority 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).

- 5.2.26. The Authority further proposes 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 proposes 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**

- 5.2.27. AAI has proposed to build a new residential colony which is due to be completed in FY 2023-24. The Authority has 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 is of the opinion that the construction of the residential colony can be completed by FY 2023-24 and does not propose any change to the cost allocated to Chennai International Airport.

#### **(F) Security Equipment**

- 5.2.28. AAI has 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 is directly purchased by AAI, the Authority proposes 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 is under scrutiny by Finance Department. A total of 19 body scanners have 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 is under preparation. The scope of work included SITC of 8 units of SBDS for Chennai Airport for which the tender is expected to be invited by 1st week of June 2021.
  - d. X-ray Baggage Inspection System (XBIS): A tender regarding this is 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.
- 5.2.29. The Authority does not propose any changes to the capitalisation plan pertaining to security equipment for the Third Control Period.

**(G) Construction/strengthening of pavement work**

5.2.30. Capital additions pertaining to pavement related works that are 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 proposes 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 have 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 77: 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.

- 5.2.31. The Authority 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. The Authority proposes 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**

- 5.2.32. This work involves replacement of airport assets consisting of civil, electrical, HVAC, AS & IT in Terminal T1 and T4. This work also includes 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 is of the opinion that this work should be dropped. Upon physical inspection, the floor tiles did not seem depleted and are expected to have a life of at least 5 years from FY 2020-21.

The Authority is also of the opinion that the work of a false ceiling must not be pursued in the existing terminal buildings. The Authority acknowledges AAI's comment on the electricity saving that may occur due to a prolonged cooling effect by the false ceiling. However, the Authority believes 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**

- 5.2.33. This work includes 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 does not propose any changes in this.

**(J) Resurfacing of perimeter road**

- 5.2.34. 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 includes the expansion of the perimeter road so that two CFTs can pass simultaneously, the Authority proposes to consider this work to be a capital addition to the airport and does not propose any other material change.

**(K) Others**

- 5.2.35. (K.1.) Additions/alterations to toilets: Upon site visit by AERA's consultant, it was observed that the work involves a complete modification of toilets in T1 and T4. Since these are essential to maintain quality passenger experience, the Authority proposes 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 is 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 depict the local theme of Chennai using traditional materials.



(K.3.) Other works include 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.)

5.2.36. Based on the examination by the Authority in the paragraphs above on new capital additions proposed in the Third Control Period, the Authority proposes to consider the capital additions as detailed in the table below:

**Table 78: 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)
		<b>D</b>	<b>Sub-total (NITB Part 2)</b>	<b>1,202.59</b>	-	(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	-
		<b>E</b>	<b>Sub-total (Security Equipment)</b>	<b>155.97</b>	<b>155.97</b>	-
G		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	-
		<b>G</b>	<b>Pavement works (sub-total)</b>	<b>109.00</b>	<b>76.77</b>	(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)
		<b>K</b>	<b>Others (sub-total)</b>	<b>43.36</b>	<b>43.04</b>	(0.32)
	Total			<b>1,816.70</b>	<b>520.72</b>	(1,295.98)
	Financing Allowance			27.61	-	(27.61)

Reference	Project / Group	No.	Particulars	Submitted by AAI (1)	Proposed by Authority (2)	Difference (3) = (2) – (1)
	IDC			52.98	2.99	(49.99)
	Project division expenses capitalized (Exp. Cap)			30.72	9.67	(21.05)
	<b>Total (including IDC)</b>			<b>1,928.01</b>	<b>533.38</b>	<b>(1,394.63)</b>

### III. Other Capital Additions for the Third Control Period

5.2.37. Details regarding the other capital works (in order to maintain efficiency at the airport) that were submitted by AAI are as follows:

**Table 79: 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
		<b>N</b>	<b>IT related (sub-total)</b>	<b>20.54</b>
	Total			<b>137.15</b>
	Financing Allowance			2.28
	IDC			5.85
	Project division expenses capitalized (Exp. Cap)			7.53
	<b>Total (including IDC)</b>			<b>152.81</b>

5.2.38. The Authority has 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

5.2.39. 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 submitted that these expenses would pertain to:

- Ground lighting and perimeter lighting facilities
- Internal and external electrification of T1 and T4
- Fire-fighting and fire alarm works in T1 and T4

5.2.40. In its submission, AAI claimed that the amount would get capitalised in FY 2025-26. Upon inquiry, AAI 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 is 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 does not propose any change for other electrical works.

**(M) Replacement of vehicles**

5.2.41. Replacement of vehicles pertain 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 does not propose any change in the vehicle replacement plans since it contributes in maintaining a smooth flow of operations at the airport.

**(N) IT Related:**

5.2.42. Details regarding IT related expenses are provided as follows:

(N.1.) Replacement of computers and hardware: This capital expenditure includes 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.

5.2.43. The Authority proposes the following other capital additions for the Third Control Period after considering the abovementioned points:

**Table 80: 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	<b>IT related (sub-total)</b>	-	<b>20.54</b>	
	Total			<b>137.15</b>	<b>133.58</b>	(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)
	<b>Total (including IDC)</b>			<b>152.81</b>	<b>145.34</b>	7.47

**Total aeronautical capital additions proposed by the Authority in the Third Control Period**

5.2.44. 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 81: Aeronautical Capital Additions for the Third Control Period proposed to be considered by the Authority**

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)
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	-

REGULATORY ASSET BASE AND DEPRECIATION FOR THE THIRD CONTROL PERIOD

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)

## REGULATORY ASSET BASE AND DEPRECIATION FOR THE THIRD CONTROL PERIOD

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	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 5.2.13

### **Aeronautical Allocation of Assets for the Third Control Period**

5.2.45. The following table summarises the allocation ratios considered by AAI in its MYTP submission:

**Table 82: 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

5.2.46. The Authority 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 83: 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.

5.2.47. The Authority 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, the Authority proposes to consider a TBLR of 90:10 for the Third Control Period. The Authority seeks stakeholder comments in this regard.

### **Depreciation for the Third Control Period**

5.2.48. The Authority notes that AAI has considered a depreciation rate of 20.00% for Computer Software for the Third Control Period. This is not in line with the depreciation rate of 16.67% as mentioned in Order No. 35/2017-18. The Authority proposes to revise the depreciation rate. Moreover, the following table summarizes the revised depreciation working after incorporating the changes in capex plan:

**Table 84: 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	<b>133.82</b>
Roads, Bridges & culvert	5.53	6.64	8.65	9.15	9.16	<b>39.13</b>
Terminal/Other Buildings	38.55	49.79	61.05	63.98	66.99	<b>280.36</b>
Building – Residential	0.18	0.18	3.32	6.46	6.45	<b>16.60</b>
Security Fencing	0.38	0.38	0.38	0.38	0.38	<b>1.91</b>
Boundary wall (operational)	2.98	2.98	2.68	2.05	2.02	<b>12.71</b>
Other Buildings - Unclassified	0.85	0.78	0.78	0.69	0.69	<b>3.79</b>
Computer, IT Hardware & Access.	2.16	17.21	31.88	32.54	23.71	<b>107.51</b>
Computer Software	0.06	0.06	0.06	0.06	0.02	<b>0.27</b>
Plant and Machinery	16.11	16.18	16.20	16.25	16.50	<b>81.23</b>
Tools & Equipment	3.40	3.40	3.40	3.40	3.40	<b>17.00</b>
Office Furniture & Fixtures	3.43	3.43	3.41	2.95	1.98	<b>15.20</b>
Other Vehicles	0.57	0.57	0.52	0.44	0.35	<b>2.45</b>
Electrical Installations	58.82	68.31	45.19	43.59	46.10	<b>262.01</b>
Office Equipment	0.39	0.34	0.30	0.09	0.01	<b>1.12</b>
Furniture & Fixtures	4.36	7.41	6.90	6.91	6.91	<b>32.49</b>
X-Ray Baggage	6.34	14.70	21.46	21.63	21.64	<b>85.78</b>
CFT	1.22	1.35	1.51	1.57	1.60	<b>7.25</b>
<b>Total</b>	<b>167.98</b>	<b>220.10</b>	<b>235.47</b>	<b>240.81</b>	<b>236.26</b>	<b>1,100.63</b>

**RAB for the Third Control Period**

5.2.49. Considering the above, the RAB for the Third Control Period as considered by the Authority is shown below:

**Table 85: 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	<b>2,175.73</b>
Deletions [3]	-	-	-	-	-	-
Depreciation [4]	167.98	220.10	235.47	240.81	236.26	<b>1,100.63</b>
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	-

**5.3. Authority's Proposals regarding RAB and Depreciation for the Third Control Period**

Based on the materials before it and its analysis, the Authority proposes the following with respect to RAB and depreciation for the Third Control Period

- 5.3.1. To reduce (adjustment) 1% of the project cost from the ARR in case any particular capital project is not completed/capitalised as per the approved capitalisation schedule. The same will be examined during the true up of the Third Control Period, at the time of determination of tariff for the Fourth Control Period.



- 5.3.2. To consider a terminal building ratio of 90:10 as per the IMG and IATA recommendations for capital additions pertaining to the Third Control Period.
- 5.3.3. To revise the cost of Phase I of modernisation of storm water drainage from Rs. 210.00 Cr. to Rs. 165.05 Cr. as per the contracted amount as per Table 73. Further, to postpone the capitalisation of phase II and III of modernization storm water drainage to the Fourth Control Period as Phase I is to be capitalised in FY 2024-25 (only after which Phase II and III can commence).
- 5.3.4. To disallow financing allowance for capital additions in the Third Control Period as per Para 5.2.21.
- 5.3.5. To consider capital additions for works deferred from the Second Control Period to the Third Control Period as per Table 75.
- 5.3.6. To consider capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 2) in the Fourth Control Period based on the forecasted timeline of completion and delays due to the Covid-19 pandemic.
- 5.3.7. To consider the resurfacing of main runway as an operation and maintenance expense as per Para 5.2.30.
- 5.3.8. To consider a cost of Rs. 32.77 Cr. for “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” as per the normative cost working detailed in Table 77.
- 5.3.9. To not consider the provision of false ceiling and replacement of floor tiles as per Para 5.2.32.
- 5.3.10. To consider capital additions for new capital works in the Third Control Period as per Table 78.
- 5.3.11. To consider other capital additions in the Third Control Period as per Table 80.
- 5.3.12. To true-up the total aeronautical asset addition given in Table 81 for the Third Control Period.
- 5.3.13. To true up the asset allocation of the assets capitalised in the Third Control Period based on the actual asset addition in the Fourth Control Period.
- 5.3.14. To consider a depreciation rate of 16.67% for computer software as per Order No. 35/2017-18, as mentioned in Para 5.2.48.
- 5.3.15. To consider aeronautical depreciation in the Third Control Period as per Table 84.
- 5.3.16. To true up the depreciation of the Third Control Period based on the actual asset additions and the actual date of capitalisation during the tariff determination of the Fourth Control Period.
- 5.3.17. To consider the RAB for the Third Control Period as per Table 85.
- 5.3.18. To true up the RAB for the Third Control Period based on actuals, at the time of determination of tariff for the Fourth Control Period.

## 6. FAIR RATE OF RETURN FOR THE THIRD CONTROL PERIOD

### 6.1. AAI's submission regarding the FRoR for the Third Control Period

- 6.1.1. 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

- 6.1.2. 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.
- 6.1.3. 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 86: 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

- 6.1.4. The cost of equity as submitted by AAI for the Third Control Period is 16.00% per annum.
- 6.1.5. The equity projections of Chennai International Airport for the Third Control Period as submitted by AAI is summarized in the table below:

**Table 87: 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

- 6.1.6. 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 88: FRoR for Third Control Period submitted by AAI**

<b>FY Ending 31 March (in Rs. Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
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

## **6.2. Authority's examinations regarding Fair Rate of Return for the Third Control Period**

### **Debt and Cost of Debt**

- 6.2.1. The Authority has 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 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.
- 6.2.2. With regard to the discussion in the para above, the Authority has noted a confirmation via AAI's email vide 18.05.2021 ("Information required from AAI- Chennai Airport") wherein Jt. General Manager (Fin.), AAI verified the term loan facility details as mentioned in Para 6.2.1. Additionally, it was 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.
- 6.2.3. The Authority notes that as per the MTYP submission for Chennai International Airport, AAI has 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 86. The Authority proposes to include the same. The Authority is 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 is 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.
- 6.2.4. The Authority also notes that AAI has accounted for depreciation in its submission of debt proportion. The Authority proposes to rectify the same and recalculate the debt proportion (excluding depreciation) for Chennai International Airport in the Third Control Period.
- 6.2.5. The Authority has 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 89: 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**

- 6.2.6. The Authority has analysed the cost of equity pertaining to Chennai International Airport as submitted by AAI for the Third Control Period. The Authority acknowledges 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 is 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 has 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 considers an optimal gearing ratio of 48%:52% and determines 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 proposes to maintain a cost of equity of 14.00% across the Third Control Period.
- 6.2.7. Considering the changes in the capitalisation plan for the Third Control Period and the cost of equity, the Authority has recalculated the equity computation of Chennai International Airport. The same has been summarized in the table below.

**Table 90: 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**

- 6.2.8. The FRoR as recalculated by the Authority after considering the points discussed above is summarized in the table below.

**Table 91: 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

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>202</b>
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
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%				

### **6.3. Authority's Proposals regarding Fair Rate of Return for the Third Control Period**

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

- 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).
- 6.3.4. To true up the FRoR during the tariff determination exercise for the Fourth Control Period.

## 7. RETURN ON LAND FOR THE THIRD CONTROL PERIOD

### 7.1. AAI's submissions regarding Return on Land for the Third Control Period

7.1.1. 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.

7.1.2. 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:*

$$\text{Equated Annual Instalment} = \frac{[\text{Cost} \times \text{Rate} (1 + \text{Rate})^{30}]}{(1 + \text{Rate})^{30} - 1}$$

Where,

Cost: Actual cost of land

Rate: Actual cost of debt or SBI base rate plus 2% whichever is lower."

7.1.3. 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 92: 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

### 7.2. Authority's examination regarding Return on Land for the Third Control Period

7.2.1. The Authority has examined AAI's submission regarding return on land. The Authority 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 etc") 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."*

7.2.2. 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.

7.2.3. 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."*

7.2.4. 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.

### **7.3. Authority's Proposal regarding Return on Land for the Third Control Period**

Based on the materials before it and its analysis, the Authority proposes the following with respect to return on land for the Third Control Period

7.3.1. To not allow return on land for the Third Control Period as per Para 7.2.4 since the land has been handed over to Chennai International Airport free of cost and free of encumbrances.

## 8. OPERATING & MAINTENANCE EXPENSES FOR THIRD CONTROL PERIOD

### 8.1. AAI's Submissions regarding O&M Expenses for the Third Control Period

8.1.1. 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

8.1.2. 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.

8.1.3. AAI has also submitted that expenses related to CHQ/RHQ apportionment under payroll expenses and admin and general expenses, were done on the basis of revenue of AAI airports.

8.1.4. The following table summarises the growth rates in O&M expenses submitted by AAI in the Third Control Period:

**Table 93: 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/RHQ	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/RHQ	10.00%	10.00%	10.00%	10.00%	10.00%
Administration and general expenses – CHQ/RHQ	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%
<b>Total</b>	<b>7.50%</b>	<b>16.02%</b>	<b>7.02%</b>	<b>17.28%</b>	<b>7.44%</b>

8.1.5. The following table summarises the O&M expenses submitted by AAI in the Third Control Period:

**Table 94: 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/RHQ	159.47	179.17	191.71	215.39	230.46	<b>976.20</b>
Payroll expenses – CHQ	31.38	35.25	37.72	42.38	45.34	<b>192.07</b>
Administration and general expenses – non CHQ/RHQ	19.04	20.95	23.04	25.34	27.88	<b>116.25</b>
Administration and general expenses – CHQ/RHQ	55.94	58.74	61.67	64.76	68.00	<b>309.11</b>
Repairs and maintenance	90.60	104.46	114.63	136.59	153.66	<b>599.94</b>



<b>FY ending March 31 (Rs Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
Utilities and outsourcing expenses	89.83	120.04	125.02	166.69	173.23	<b>674.81</b>
Other outflows	20.66	23.13	25.98	28.81	31.95	<b>130.53</b>
<b>Total</b>	<b>466.92</b>	<b>541.73</b>	<b>579.78</b>	<b>679.95</b>	<b>730.52</b>	<b>2,998.90</b>

8.1.6. 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 95: Allocation of expenses as submitted for the Third Control Period as submitted by AAI**

<b>FY ending March 31 (Rs Cr.)</b>	<b>Aero %</b>	<b>Non-aero %</b>
Payroll expenses – non CHQ/RHQ	98.19%	1.81%
Payroll expenses – CHQ	98.17%	1.83%
Administration and general expenses – non CHQ/RHQ	99.39%	0.61%
Administration and general expenses –CHQ/RHQ	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%
<b>Total</b>	<b>98.30%</b>	<b>1.70%</b>

## **8.2. Authority's examination of O&M expenses in the Third Control Period:**

8.2.1. The Authority observes that AAI has allocated 95% of Administration and General expenses - CHQ/RHQ to aeronautical expenses. The Authority finds it to be appropriate based on AERA's decision for other AAI airports. For payroll expenses – CHQ/RHQ, the Authority notes that AAI has allocated 98.17% of the expense as aeronautical based on the employment headcount excluding the security department. The Authority finds this to be appropriate.

8.2.2. The Authority 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 96: Aeronautical allocation of O&M expenses at other AAI airports**

<b>FY ending March 31 (Rs Cr.)</b>	<b>Patna</b>	<b>Kolkata</b>	<b>Jaipur</b>
Payroll expenses – non CHQ/RHQ	97%	88%	94%
Payroll expenses – CHQ/RHQ	95%	88%	95%
Administration and general expenses – non CHQ/RHQ	99%	96%	88%
Administration and general expenses –CHQ/RHQ	95%	85%	90%
Repairs and maintenance	95%	89%	93%
Utilities and outsourcing expenses	90%	91%	93%
Other outflows	100%	93%	100%

8.2.3. The Authority notes 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 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 proposes to consider the revised FY 2020-21 expenses as the base year.

- 8.2.4. The Authority proposes the following allocation of O&M expenses into aeronautical and non-aeronautical based on a terminal building ratio of 90:10:

**Table 97: Allocation of O&M expenses for the Third Control Period as proposed to be considered by the Authority**

<b>FY ending March 31 (Rs Cr.)</b>	<b>Aero %</b>	<b>Non-aero %</b>
Payroll expenses – non CHQ/RHQ	98.19%	1.81%
Payroll expenses – CHQ	98.17%	1.83%
Administration and general expenses – non CHQ/RHQ	96.30%	3.70%
Administration and general expenses –CHQ/RHQ	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%
<b>Total</b>	<b>98.30%</b>	<b>1.70%</b>

- 8.2.5. The Authority notes 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 finds 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 does not expect modernization of Chennai International Airport, Phase II (NITB Part – 2) to get commissioned in the Third Control Period, the Authority proposes to disallow the use of an additional growth rate of 5% in FY 2024-25.

- 8.2.6. AAI has submitted utilities and outsourcing expenses after accounting for recoveries made from concessionaires. The Authority notes that 99.99% of the power charges under utilities and outsourcing expenses has been allocated as aeronautical and that upkeep expenses have been allocated to aeronautical on the basis of the terminal building ratio. The Authority notes 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 proposes 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%.

- 8.2.7. The Authority notes that AAI has applied an additional growth in FY 2022-23 and FY 2024-25 each, to account for the terminal building expansion:

- A growth of 10% was applied on upkeep expenses under utility and outsourcing expenses in FY 2022-23 and FY 2024-25
- A growth of 40% was applied on power charges under utility and outsourcing expenses in FY 2022-23 and FY 2024-25

Since the Authority does not expect modernization of Chennai International Airport, Phase II (NITB Part – 2) to be commissioned in the Third Control Period, the Authority proposes to disallow the additional growth proposed by AAI in FY 2024-25.

- 8.2.8. The Authority considers the additional 10% growth rate for upkeep expenses in FY 2022-23 to be reasonable. The Authority notes that there will 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 proposes a 33% increase in power charges in FY 2022-23, as opposed to the 40% increase submitted by AAI.

- 8.2.9. The Authority 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. The Authority also notes that the recovery percentage is even lower than that in the Second Control Period. The Authority 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. The Authority invites stakeholder comments on the same and proposes to analyse this further in the Third Control Period Order.
- 8.2.10. The Authority proposes to consider capital expenditure submitted by AAI on resurfacing of main runway worth Rs. 30.00 Cr. as R&M expenditure.
- 8.2.11. In line with the efficiency study, the Authority proposes 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.
- 8.2.12. The Authority proposes to consider a 5% per annum growth rate for administrative and general expenses – CHQ/RHQ over that proposed to be considered in the Second Control Period.
- 8.2.13. The Authority notes that AAI submitted CSR projections for the Third Control Period using a growth rate. The Authority proposes 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 results in zero CSR expenses in the Third Control Period.
- 8.2.14. AAI has proposed to charge off the interest on loans availed by AAI under administrative and general expenses – non CHQ/RHQ. The Authority proposes not to consider these financing charges as O&M expenses.
- 8.2.15. For collection charges on UDF under other outflows, AAI considered the growth rate to be the same as that of passenger traffic. The Authority proposes to use the same fundamental approach, as it finds the same to be a reasonable driver. For other expenses under other outflows, the Authority proposed to consider a growth rate of 7.5% instead of 10% as submitted by AAI.
- 8.2.16. After incorporating the above observations by the Authority, the revised O&M expenses have been summarised below:

**Table 98: O&M expenses for the Third Control Period as proposed to be considered by the Authority**

<b>FY ending March 31 (Rs Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
Payroll expenses – non CHQ/RHQ	149.06	167.47	179.19	191.73	205.15	<b>892.60</b>
Payroll expenses – CHQ	29.32	32.95	35.25	39.61	42.38	<b>179.51</b>
Administration and general expenses – non CHQ/RHQ	3.96	4.36	4.79	5.27	5.8	<b>24.18</b>
Administration and general expenses – CHQ/RHQ	26.36	27.67	29.06	30.51	32.03	<b>145.63</b>
Repairs and maintenance	76.89	85.54	104.79	120.04	114.53	<b>501.79</b>
Utilities and outsourcing expenses	78.74	102.06	106.3	110.95	116.08	<b>514.13</b>
Other outflows	18.43	21.13	22.82	24.59	26.75	<b>113.71</b>
<b>Total</b>	<b>382.76</b>	<b>441.17</b>	<b>482.20</b>	<b>522.70</b>	<b>542.72</b>	<b>2,371.55</b>

8.2.17. Based on the above O&M expenses, the Authority proposes to consider the following revised growth rates in O&M expenses:

**Table 99: Growth rates of O&M expenses for the Third Control Period proposed to be considered by the Authority**

<b>FY ending March 31 (Rs Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Payroll expenses – non CHQ/RHQ	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/RHQ	-73.51%*	10.10%	9.86%	10.02%	10.06%
Administration and general expenses – CHQ/RHQ	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%
<b>Total</b>	<b>2.73%</b>	<b>15.26%</b>	<b>9.30%</b>	<b>8.40%</b>	<b>3.83%</b>

\*growth rate negative because CSR expenses have reduced from Rs. 11.35 Cr. in FY 2020-21 to zero in FY 2021-22

### **8.3. Authority's Proposal regarding O&M expenses for the Third Control Period**

Based on the materials before it and its analysis, the Authority proposes the following with respect to O&M expenses for the Third Control Period

- 8.3.1. To consider asset allocation as set out in Table 97 in the Third Control Period.
- 8.3.2. To consider aeronautical O&M expenditure as detailed in Table 98 for the Third Control Period.
- 8.3.3. To true up the O&M expenses for the Third Control Period based on actuals during the tariff determination of the Fourth Control Period.

## 9. NON-AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

### 9.1. AAI's Submissions regarding Non-Aeronautical Revenue for the Third Control Period

9.1.1. 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 100: Summary of assumptions for non-aeronautical revenue for Third Control Period submitted by AAI**

Particular	Sub Head	Assumptions
Trading Concessions	<ol style="list-style-type: none"> <li>1. Restaurant/Snack Bars</li> <li>2. T.R Stalls</li> <li>3. Hoarding and Display</li> </ol>	<p>Growth assumptions for Third Control Period are:</p> <ol style="list-style-type: none"> <li>(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.</li> <li>(b) For FY 2022-23, AAI expects to achieve 80% of the pre-pandemic revenue.</li> <li>(c) FY 2023-24 onwards, AAI assumes a constant growth rate of 4% over FY 2019-20 revenue.</li> </ol>
Rent and Services	<ol style="list-style-type: none"> <li>1. Land Rent and Leases</li> <li>2. Land Rent and Leases – Hangars</li> <li>3. Building – Non-Residential</li> </ol>	<ol style="list-style-type: none"> <li>(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.</li> <li>(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%.</li> <li>(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.</li> </ol>

NON-AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

Particular	Sub Head	Assumptions
Miscellaneous	<ol style="list-style-type: none"> <li>1. Duty Free Shops</li> <li>2. Flight Kitchen</li> <li>3. Car Rentals</li> <li>4. Car Parking</li> <li>5. Admission Tickets</li> <li>6. MRO</li> </ol>	<p>(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.</p> <p>(b) For FY 2022-23, AAI expects to achieve 80% of the pre-pandemic revenue.</p> <p>(c) FY 2023-24 onwards, AAI assumes a constant growth rate of 4% over the FY 2019-20 revenue.</p>

9.1.2. Revenue from Non-Aeronautical services for Third Control Period, as submitted by AAI, is as follows:

**Table 101: Non-aeronautical revenue for the Third Control Period submitted by AAI**

FY ending March 31 (Rs. Cr.)	2022	2023	2024	2025	2026	Total
<b>Revenue from Rent and Services</b>						
Land Rent & Leases	11.76	12.65	13.59	14.61	15.71	<b>68.32</b>
Building Non Residential	29.62	31.85	34.24	36.80	39.56	<b>172.07</b>
<b>Revenue related to passenger traffic</b>						
Duty Free Shops	8.59	15.58	60.78	74.75	91.79	<b>251.49</b>
Flight Kitchen	2.57	3.80	6.76	8.31	10.21	<b>31.65</b>
Car Rentals	4.84	7.15	12.71	15.63	19.20	<b>59.53</b>
Car Parking	5.79	8.55	15.20	18.69	22.95	<b>71.18</b>
Admission Tickets	0.21	0.31	0.55	0.68	0.84	<b>2.59</b>
MRO	0.17	0.25	0.44	0.54	0.66	<b>2.02</b>
Other Income	4.96	7.32	13.02	16.01	19.66	<b>60.97</b>
Land Rent & Leases- hanger	2.13	3.15	5.59	6.88	8.45	<b>26.20</b>
Restaurant / snack bars	7.21	10.64	18.91	23.26	28.57	<b>88.59</b>
T.R. Stall	21.35	31.51	56.03	68.90	84.62	<b>262.41</b>
Hoarding & Display	18.80	27.75	49.35	60.69	74.53	<b>231.12</b>
<b>Total</b>	<b>118.01</b>	<b>160.49</b>	<b>287.16</b>	<b>345.76</b>	<b>416.75</b>	<b>1,328.17</b>

**9.2. Authority's examinations regarding Non-Aeronautical Revenue for the Third Control Period**

9.2.1. The Authority has noted that revenues from the following non-aeronautical services have been projected using a growth rate, as these revenues are based on existing allotments and leases:

- Land rent and leases
- Building (non-residential)

9.2.2. The Authority has 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

9.2.3. 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 notes that non-aeronautical revenue has increased in the Third Control Period by only 4.6% which is even less than inflation rate. The Authority invites stakeholder comments on the same. The Authority also proposes to conduct a detailed study on non-aeronautical revenue before tariff determination of the Fourth Control Period.

9.2.4. The Authority has carefully examined AAI's submission regarding various non-aeronautical revenue streams for the Third Control Period and has the following observations:

**Revenue from Rent and Services**

9.2.5. The Authority has 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 has used a growth of 7.5% per annum to estimate revenue from land rent and leases.

**Revenue related to passenger traffic**

9.2.6. 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:

**Table 102: Consumption of non-aeronautical services (as a % of FY 2019-20) submitted by AAI**

<b>FY ending March 31 (Rs. Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
% of FY 2019-20 consumption	75%	80%	104%	108%	112%

9.2.7. The Authority has 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 further proposes to link the traffic rates without accounting for changes in consumption behaviour (as opposed to AAI's submission in Table 102). The following non-aeronautical revenue projections have been arrived at after incorporating the traffic projections for the Third Control Period as considered by the Authority in Para 4.2.5 (Table 61):

**Table 103: Non-aeronautical revenue proposed to be considered for Third Control Period by the Authority**

<b>FY ending March 31 (Rs. Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
<b>Revenue from Rent and Services</b>						
Land Rent & Leases	6.63	11.44	12.64	13.75	15.74	<b>60.19</b>
Building Non Residential	13.09	22.59	24.96	27.16	31.08	<b>118.88</b>
<b>Revenue related to passenger traffic</b>						
Duty Free Shops	43.43	74.97	82.84	90.15	103.15	<b>394.55</b>
Flight Kitchen	4.83	8.34	9.21	10.02	11.47	<b>43.87</b>
Car Rentals	9.08	15.68	17.32	18.85	21.57	<b>82.51</b>
Car Parking	10.86	18.75	20.71	22.54	25.79	<b>98.65</b>
Admission Tickets	0.40	0.68	0.76	0.82	0.94	<b>3.60</b>
MRO	0.31	0.54	0.59	0.65	0.74	<b>2.83</b>
Other Income	9.30	16.06	17.74	19.31	22.10	<b>84.51</b>
Land Rent & Leases- hanger	4.00	6.90	7.63	8.30	9.50	<b>36.32</b>
Restaurant / snack bars	13.52	23.33	25.78	28.06	32.10	<b>122.79</b>
T.R. Stall	40.04	69.11	76.37	83.11	95.09	<b>363.71</b>
Hoarding & Display	35.27	60.87	67.26	73.20	83.75	<b>320.34</b>
<b>Total</b>	<b>190.76</b>	<b>329.25</b>	<b>363.81</b>	<b>395.92</b>	<b>453.03</b>	<b>1,732.76</b>

### **9.3. Authority's Proposals regarding Non-Aeronautical Revenue for the Third Control Period**

Based on the materials before it and its analysis, the Authority proposes the following with respect to non-aeronautical revenue for the Third Control Period

- 9.3.1. To consider the non-aeronautical revenues as per Para 9.2.7 (Table 103) for the Third Control Period.
- 9.3.2. To undertake a detailed study on non-aeronautical revenue before the tariff determination of the Fourth Control Period.
- 9.3.3. To true up non-aeronautical revenues for the Third Control Period at the time of determination of tariff of the Fourth Control Period.



## 10. TAXATION FOR THE THIRD CONTROL PERIOD

### 10.1. AAI's Submissions regarding Taxation for the Third Control Period

10.1.1. 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 104: Aeronautical taxes submitted by AAI for Third Control Period**

<b>FY ending March 31 (Rs Cr.)</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>Total</b>
Aeronautical Revenue [1]	758.73	994.14	1,292.06	1,542.87	1,841.67	<b>6,429.46</b>
Operational Expenses [2]	466.92	541.73	579.78	679.95	730.52	<b>2,998.90</b>
Total Interest and Finance charges [3]	5.36	57.46	60.61	97.64	88.81	<b>309.88</b>
Dep. as per Income Tax Act[4]	265.59	349.93	403.17	458.23	424.94	<b>1,901.85</b>
Total expenses. [5] = [2 + 3 + 4]	737.86	949.12	1,043.57	1,235.81	1,244.27	<b>5,210.63</b>
PBT [6] = [1 – 5]	20.86	45.02	248.49	307.05	597.40	<b>1,218.83</b>
Set-off of prior period tax losses [7]	(20.86)	(45.02)	(248.49)	(307.05)	(259.18)	<b>(880.61)</b>
<b>PBT after set-off of prior period tax losses [8]</b>	-	-	-	-	338.22	<b>338.22</b>
<b>Tax (25.17%) [9] = 25.17%*[8]</b>	-	-	-	-	85.13	<b>85.13</b>

### 10.2. Authority's examinations regarding Aeronautical Tax for the Third Control Period

10.2.1. The Authority notes that AAI has calculated income tax based on the aeronautical revenues projected. The Authority has 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 105: Aeronautical taxes proposed to be considered by the Authority for Third Control Period**

<b>FY ending March 31 (Rs Cr.)</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
Aeronautical Revenue [1]	185.46	512.14	752.13	984.15	1,239.09	<b>3,672.97</b>
Operational Expenses [2]	382.76	441.17	482.20	522.70	542.72	<b>2,371.55</b>
Total Interest and Finance charges [3]	5.97	33.32	36.93	37.49	65.91	<b>179.62</b>
Dep. As WDV as per income tax [4]	166.03	266.63	327.61	292.24	263.88	<b>1,316.39</b>
Total expense.[5] = [2 + 3 + 4]	554.76	741.12	846.74	852.43	872.51	<b>3,867.56</b>
PBT [6] = [1 – 5]	(369.30)	(228.98)	(94.61)	131.72	366.59	<b>(194.58)</b>
Set-off of prior period tax losses [7]	-	-	-	(131.72)	(366.59)	<b>(498.31)</b>
PBT after set-off of prior period tax losses [8]	(369.30)	(228.98)	(94.61)	-	-	<b>(692.89)</b>
<b>Tax (25.17%) [9] = 25.17%*[8]</b>	-	-	-	-	-	<b>-</b>

**10.3. Authority's Proposals regarding Aeronautical Tax for the Third Control Period**

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

- 10.3.1. To consider aeronautical tax as per Para 10.2.1 (Table 105) for the Third Control Period.
- 10.3.2. To true up the aeronautical tax estimates based on actual tax outflow at the end of the Third Control Period.

## 11. INFLATION FOR THE THIRD CONTROL PERIOD

### 11.1. AAI's Submission regarding Inflation for the Third Control Period

- 11.1.1. 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 106: 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

### 11.2. Authority's examination regarding Inflation for the Third Control Period

- 11.2.1. The Authority has analysed the submission made by AAI regarding inflation for the Third Control Period. The Authority has 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).
- 11.2.2. The Authority, however, proposes 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 is of the view that the same would be consistent with the recent macroeconomic developments.
- 11.2.3. Based on the recent inflation forecast by the RBI, the Authority proposes 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 107: 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

### 11.3. Authority's Proposal regarding Inflation for the Third Control Period

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

- 11.3.1. 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 69<sup>th</sup> round of survey of professional forecasters on macroeconomic indicators of RBI, as per Para 11.2.3 (Table 107).

## 12. QUALITY OF SERVICES FOR THE THIRD CONTROL PERIOD

### 12.1. AAI's Submissions regarding Quality of Services for the Third Control Period

12.1.1. AAI has not made any submissions related to Quality of Service as part of its MYTP submission made in March 2021.

12.1.2. 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;”

12.1.3. 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).

12.1.4. The following table summarises the annual ASQ ratings of Chennai International Airport obtained during the Second Control Period:

**Table 108: ASQ Ratings for Chennai International Airport from 2017-20**

Year	ASQ Rating
2017	4.60
2018	4.65
2019	4.58
2020	4.67

12.1.5. 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.

12.1.6. 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.

### 12.2. Authority's examination regarding Quality of Services for the Third Control Period

12.2.1. 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.

### 12.3. Authority's Proposals regarding Quality of Services for the Third Control Period

Based on the materials before it and its analysis, the Authority proposes the following with respect to quality of services for the Third Control Period

12.3.1. To not consider any adjustment towards tariff determination for the Third Control Period on account of quality of service.

### 13. AGGREGATE REVENUE REQUIREMENT FOR THE THIRD CONTROL PERIOD

#### 13.1. AAI's Submissions regarding Aggregate Revenue Requirement for the Third Control Period

13.1.1. 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 109: Aggregate Revenue Requirement 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	$C = \frac{A+B}{2}$	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	$E = C \times D$	330.09	413.50	459.81	538.22	551.03	<b>2,292.65</b>
O&M Expenses	F	466.92	541.73	579.78	679.95	730.52	<b>2,998.90</b>
Working Capital Interest	G	-	-	-	-	-	-
Depreciation	H	219.09	275.78	295.97	350.25	341.73	<b>1,482.82</b>
Tax	I	-	-	-	-	85.13	<b>85.13</b>
Return on Land	J	0.45	0.45	0.45	0.45	0.45	<b>2.26</b>
Under-recovery of Second Control Period as on 31 March 2022	K	172.13	-	-	-	-	<b>172.13</b>
Aggregate Revenue Requirement (including true-up)	$L = \text{SUM}(E:K)$	1,188.68	1,231.47	1,336.01	1,568.88	1,708.86	<b>7,033.90</b>
Non-Aeronautical Revenue	M	(118.01)	(160.49)	(287.16)	(345.76)	(416.75)	<b>(1,328.17)</b>
Less: 30% Non-Aeronautical Revenue	$N = 30\% \times M$	(35.40)	(48.15)	(86.15)	(103.73)	(125.02)	<b>(398.45)</b>
Net ARR	$O = L + N$	1,153.28	1,183.32	1,249.86	1,465.15	1,583.84	<b>6,635.44</b>
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 31 March 2022	$R = O \times Q$	1,153.28	1,044.59	986.01	1,026.66	983.05	<b>5,193.59</b>
Passengers (in mns)	S	<b>40.82</b>					<b>40.82</b>
Yield Per Passenger (in Rs.)	$T = \frac{R}{S} \times 10$	<b>1,272.26</b>					<b>1,272.26</b>

13.1.2. Accordingly, the yield per passenger as submitted by AAI at the beginning of the Third Control Period is Rs. 1,272.26 Cr. Based on the ARR of Rs. 5,193.59 Cr. (in present value terms), AAI has submitted a tariff rate card which is provided in Annexure I.

### 13.2. Authority's examination regarding Aggregate Revenue Requirement for the Third Control Period

13.2.1. 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, the ARR proposed by the Authority for the Third Control Period is given in the table below:

**Table 110: Aggregate Revenue Requirement 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 85)	A	1,694.05	1,886.26	2,935.94	2,990.22	2,964.03	-
Closing RAB (Table 85)	B	1,886.26	2,935.94	2,990.22	2,964.03	2,769.16	-
Average RAB (Table 85)	C = Av(A+B)	1,790.15	2,411.10	2,963.08	2,977.13	2,866.60	-
FRoR (%) (Table 91)	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	<b>1,555.06</b>
O&M Expenses (Table 98)	F	382.76	441.17	482.20	522.70	542.72	<b>2,371.55</b>
Working Capital Interest (Table 98)	G	2.42	-	-	-	-	<b>2.42</b>
Depreciation (Table 84)	H	167.98	220.10	235.47	240.81	236.26	<b>1,100.63</b>
Tax (Table 105)	I	-	-	-	-	-	-
Return on Land (Para 0)	J	-	-	-	-	-	-
Over-recovery of Second Control Period (Table 58) as on 31 March 2022	K	(472.90)	-	-	-	-	<b>(472.90)</b>
Aggregate Revenue Requirement (including true-up)	L = SUM(E:K)	294.26	949.51	1,071.89	1,119.42	1,121.67	<b>4,556.75</b>
Non-Aeronautical Revenue (Table 103)	M	(190.76)	(329.25)	(363.81)	(395.92)	(453.03)	<b>(1,732.76)</b>
Less: 30% Non- Aeronautical Revenue	N = 30% *M	(57.23)	(98.77)	(109.14)	(118.78)	(135.91)	<b>(519.83)</b>
Net ARR	O = L + N	237.04	850.73	962.75	1,000.64	985.76	<b>4,036.92</b>
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 31 March 2022	R = O*Q	237.04	759.89	768.12	713.11	627.48	<b>3,105.64</b>
Passengers (in mns) (Table 61)	S	<b>56.96</b>					<b>56.96</b>

# AGGREGATE REVENUE REQUIREMENT FOR THE THIRD CONTROL PERIOD

FY ending March 31 (in Rs Cr.)	Ref	2022	2023	2024	2025	2026	Total
Yield Per Passenger (in Rs.)	T = (R/S)*10	545.20					545.20

13.2.2. 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. Based on the ARR, the Authority has proposed tariffs for the Third Control Period in Annexure II.

## **13.3. Authority's Proposal regarding Aggregate Revenue Requirement for the Third Control Period**

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

- 13.3.1. To consider the ARR as per Table 110 as the eligible ARR for the Third Control Period.
- 13.3.2. To true up all building blocks based on actuals during the tariff determination exercise of the Fourth Control Period.

## 14. AERONAUTICAL REVENUE FOR THE THIRD CONTROL PERIOD

### 14.1. AAI's submission regarding Aeronautical Revenue for the Third Control Period

14.1.1. AAI has proposed to increase the aeronautical tariffs as applicable from 1 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 1st 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 1350 per embarking passenger (increase of 1857% from existing rate of Rs 69) 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 is proposed.

14.1.2. Aviation Security Fee (ASF): Will continue to be charged as rate prescribed by MoCA.

14.1.3. The annual tariff proposal submitted by AAI is given in Annexure I.

14.1.4. As per AAI's submission, aeronautical revenue is as given below:

**Table 111: Aeronautical revenue as submitted by AAI**

<b>FY Ending 31 March (in Rs. Cr.)</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
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
<b>Total</b>	<b>135.60</b>	<b>758.73</b>	<b>994.14</b>	<b>1,292.06</b>	<b>1,542.87</b>	<b>1,841.67</b>	<b>6,429.46</b>

### AAI's additional submission on landing charges for aircrafts with maximum capacity of less than 80 seats

14.1.5. 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.

#### **14.2. Authority's examination regarding Aeronautical Revenue for the Third Control Period**

- 14.2.1. The Authority notes that air traffic demand has been widely impacted due to challenges posed by the Covid-19 pandemic and the resultant slowdown in the economy. Moreover, airport operators have ongoing capital expenditure projects as also other planned works, thus resulting in a higher ARR. Further, the Authority notes that the existing traffic base is not sufficient for complete recovery of ARR in the Third Control Period and that this would require a significant increase in tariffs.
- 14.2.2. The Authority is cognizant of the situation and is 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 will create substantial recovery burden and lead to steep tariff increases in the Fourth Control Period. Besides, it would also adversely impact the cash flows of the airport operator in the Third Control Period. The Authority, however, is 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 notes that the airport operator has the provision of the true up of any shortfalls in revenue recovery in the Fourth Control Period.
- 14.2.3. Based on the above analysis, the Authority proposes not to increase any aeronautical tariff both for domestic and international traffic in the current financial year 2021-22ss and proposes to revise the Landing and Parking charges and UDF from 01 April 2022.
- 14.2.4. Further, the Authority proposes 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.
- 14.2.5. The Ministry of Civil Aviation has 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.
- 14.2.6. The Authority proposes to consider ground handling charges and royalty from CUTE charges based on the traffic growth rates proposed in Table 61.
- 14.2.7. Based on the above annual tariff proposal of the Authority for this consultation paper is attached in Annexure II.

#### **Authority's examination of AAI's additional submission on landing charges for aircrafts with maximum capacity of less than 80 seats**

- 14.2.8. Ministry of Civil Aviation vide letter dated 09<sup>th</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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.

14.2.12. The Authority has determined the aeronautical revenues with the proposed aeronautical charges as follows (Ref Annexure-II):

**Table 112: 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
<b>Total PV of ARR including true-up (A)</b>	<b>3,105.64</b>					<b>3,105.64</b>
<b>Landing charges:</b>						
Domestic	14.19	63.56	95.34	121.98	166.89	<b>461.97</b>
International	6.43	60.78	116.05	146.98	185.14	<b>515.38</b>
<b>Subtotal (landing charges) (B)</b>	<b>20.62</b>	<b>124.35</b>	<b>211.39</b>	<b>268.96</b>	<b>352.04</b>	<b>977.35</b>
<b>Parking charges:</b>						
Domestic	1.86	8.32	12.49	15.98	21.86	<b>60.50</b>
International	0.06	0.54	1.03	1.31	1.65	<b>4.59</b>
<b>Subtotal (P&amp;H charges) (C)</b>	<b>1.92</b>	<b>8.87</b>	<b>13.52</b>	<b>17.28</b>	<b>23.51</b>	<b>65.09</b>
<b>Other revenues</b>						
Land leases	29.03	31.21	33.55	36.07	38.77	<b>168.64</b>
Revenue from ground handling	24.42	41.39	45.36	49.38	56.68	<b>217.24</b>
CUTE charges (royalty)	10.18	17.58	19.42	21.14	24.19	<b>92.50</b>
Revenue from AAICLAS	56.01	61.62	67.78	74.55	82.01	<b>341.97</b>
<b>Subtotal (other revenues) (D)</b>	<b>119.65</b>	<b>151.80</b>	<b>166.11</b>	<b>181.14</b>	<b>201.65</b>	<b>820.36</b>
<b>UDF</b>						
Domestic UDF	38.64	167.06	245.06	347.48	460.00	<b>1,258.25</b>
International UDF	4.63	60.08	116.05	169.28	201.90	<b>551.92</b>
<b>Subtotal (UDF) (E)</b>	<b>43.27</b>	<b>227.14</b>	<b>361.11</b>	<b>516.76</b>	<b>661.90</b>	<b>1,810.17</b>
<b>Total revenue [F = B + C + D + E]</b>	<b>185.46</b>	<b>512.15</b>	<b>752.13</b>	<b>984.15</b>	<b>1,239.09</b>	<b>3,672.97</b>
<b>PV factor (G)</b>	<b>1.00</b>	<b>0.89</b>	<b>0.80</b>	<b>0.71</b>	<b>0.64</b>	
<b>PV of total revenue [H = F*G]</b>	185.46	457.46	600.08	701.35	788.75	<b>2,733.09</b>
<b>Total PV of revenue [I = Σ(H)]</b>	<b>2,733.09</b>					<b>2,733.09</b>
<b>(Surplus) / Shortfall [A – H]</b>	<b>372.55</b>					<b>372.55</b>

14.2.13. The Authority proposes to carry-forward the shortfall of Rs. 372.55 Cr. (as per Table 112) 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 proposes 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.

#### **14.3. Authority's Proposal Regarding Aeronautical Revenue for the Third Control Period**

Based on the materials before it and its analysis, the Authority proposes the following with respect to aeronautical revenue for the Third Control Period

- 14.3.1. The Authority proposes to elicit the views of stakeholders before taking final decision, on the matter regarding the landing charges for aircrafts with a maximum capacity of 80 seats, with respect to AAI and M/s SpiceJet Ltd.
- 14.3.2. To consider the aeronautical revenues as provided in Table 112.
- 14.3.3. 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.

## 15. SUMMARY OF AUTHORITY'S PROPOSALS

---

The section below provides a summary of the Authority's proposals relating to relevant chapters regarding tariff determination for the Third Control Period.

### **Chapter 3: True up for the Second Control Period**

- 3.12.1. To accept the actual traffic volumes of FY 2020-21 for true-up of the Second Control Period – as detailed in Table 6.
- 3.12.2. To consider passenger and ATM traffic as detailed in Table 7 for true-up of the Second Control Period.
- 3.12.3. To consider aeronautical RAB as per Table 19 for true-up of the Second Control Period.
- 3.12.4. To consider aeronautical depreciation as per Table 26 for true-up of the Second Control Period.
- 3.12.5. To consider FRoR as per Table 28 for the true-up of the Second Control Period.
- 3.12.6. To disallow return on cost of land pertaining to First and Second Control Periods.
- 3.12.7. To consider operating expenses as per Table 45 for true-up of the Second Control Period.
- 3.12.8. To consider the non-aeronautical revenue as per Table 49 for the true-up of the Second Control Period.
- 3.12.9. To consider aeronautical revenue as per Table 52 for true-up of the Second Control Period.
- 3.12.10. To consider aeronautical tax as per Table 55 for true-up of the Second Control Period.
- 3.12.11. To carry forward the over-recovery amount of the Second Control Period of Rs. 472.90 Cr. as on 31 March 2022 as per Table 58 to the Third Control Period.

### **Chapter 4: Traffic for the Third Control Period**

- 4.3.1. 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
- 4.3.2. To true-up the traffic of Third Control Period based on the actuals at the time of tariff determination of the Fourth Control Period.

### **Chapter 5: Regulatory Asset Base and Depreciation for the Third Control Period**

- 5.3.1. To reduce (adjustment) 1% of the project cost from the ARR in case any particular capital project is not completed/capitalised as per the approved capitalisation schedule. The same will be examined during the true up of the Third Control Period, at the time of determination of tariff for the Fourth Control Period.
- 5.3.2. To consider a terminal building ratio of 90:10 as per the IMG and IATA recommendations for capital additions pertaining to the Third Control Period.
- 5.3.3. To revise the cost of Phase I of modernisation of storm water drainage from Rs. 210.00 Cr. to Rs. 165.05 Cr. as per the contracted amount as per Table 73. Further, to postpone the

capitalisation of phase II and III of modernization storm water drainage to the Fourth Control Period as Phase I is to be capitalised in FY 2024-25 (only after which Phase II and III can commence).

- 5.3.4. To disallow financing allowance for capital additions in the Third Control Period as per Para 5.2.21.
- 5.3.5. To consider capital additions for works deferred from the Second Control Period to the Third Control Period as per Table 75.
- 5.3.6. To consider capitalisation of modernization of Chennai International Airport, Phase II (NITB Part – 2) in the Fourth Control Period based on the forecasted timeline of completion and delays due to the Covid-19 pandemic.
- 5.3.7. To consider the resurfacing of main runway as an operation and maintenance expense as per Para 5.2.30.
- 5.3.8. To consider a cost of Rs. 32.77 Cr. for “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” as per the normative cost working detailed in Table 77.
- 5.3.9. To not consider the provision of false ceiling and replacement of floor tiles as per Para 5.2.32.
- 5.3.10. To consider capital additions for new capital works in the Third Control Period as per Table 78.
- 5.3.11. To consider other capital additions in the Third Control Period as per Table 80.
- 5.3.12. To true-up the total aeronautical asset addition given in Table 81 for the Third Control Period.
- 5.3.13. To true up the asset allocation of the assets capitalised in the Third Control Period based on the actual asset addition in the Fourth Control Period.
- 5.3.14. To consider a depreciation rate of 16.67% for computer software as per Order No. 35/2017-18, as mentioned in Para 5.2.48.
- 5.3.15. To consider aeronautical depreciation in the Third Control Period as per Table 84.
- 5.3.16. To true up the depreciation of the Third Control Period based on the actual asset additions and the actual date of capitalisation during the tariff determination of the Fourth Control Period.
- 5.3.17. To consider the RAB for the Third Control Period as per Table 85.
- 5.3.18. To true up the RAB for the Third Control Period based on actuals, at the time of determination of tariff for the Fourth Control Period.

#### **Chapter 6: Fair Rate of Return for the Third Control Period**

- 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).
- 6.3.4. To true up the FRoR during the tariff determination exercise for the Fourth Control Period.

**Chapter 7: Return on Land for the Third Control Period**

- 7.3.1. To not allow return on land for the Third Control Period as per Para 7.2.4 since the land has been handed over to Chennai International Airport free of cost and free of encumbrances.

**Chapter 8: Operating and Maintenance Expenses for the Third Control Period**

- 8.3.1. To consider asset allocation as set out in Table 97 in the Third Control Period.
- 8.3.2. To consider aeronautical O&M expenditure as detailed in Table 98 for the Third Control Period.
- 8.3.3. To true up the O&M expenses for the Third Control Period based on actuals during the tariff determination of the Fourth Control Period.

**Chapter 9: Non-Aeronautical Revenue for the Third Control Period**

- 9.3.1. To consider the non-aeronautical revenues as per Para 9.2.7 (Table 103) for the Third Control Period.
- 9.3.2. To undertake a detailed study on non-aeronautical revenue before the tariff determination of the Fourth Control Period.
- 9.3.3. To true up non-aeronautical revenues for the Third Control Period at the time of determination of tariff of the Fourth Control Period.

**Chapter 10: Taxation for the Third Control Period**

- 10.3.1. To consider aeronautical tax as per Para 10.2.1 (Table 105) for the Third Control Period.
- 10.3.2. To true up the aeronautical tax estimates based on actual tax outflow at the end of the Third Control Period.

**Chapter 11: Inflation for the Third Control Period**

- 11.3.1. 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 11.2.3 (Table 107).

**Chapter 12: Quality of Services for the Third Control Period**

- 12.3.1. To not consider any adjustment towards tariff determination for the Third Control Period on account of quality of service.

**Chapter 13: Aggregate Revenue Requirement for the Third Control Period**

- 13.3.1. To consider the ARR as per Table 110 as the eligible ARR for the Third Control Period.
- 13.3.2. To true up all building blocks based on actuals during the tariff determination exercise of the Fourth Control Period.

**Chapter 14: Aeronautical Revenue for the Third Control Period**

- 14.3.1. The Authority proposes to elicit the views of stakeholders before taking final decision, on the matter regarding the landing charges for aircrafts with a maximum capacity of 80 seats, with respect to AAI and M/s SpiceJet Ltd.
- 14.3.2. To consider the aeronautical revenues as provided in Table 112.
- 14.3.3. 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. STAKEHOLDER CONSULTATION TIMELINE

---

- 16.1.1. In accordance with the provisions of Section 13(4) of the AERA Act 2008, the proposal contained in the Summary of Proposals (Chapter 15 above) read with the Authority's analysis, is hereby put forth for Stakeholder Consultation. To assist the stakeholders in making their submissions in a meaningful and constructive manner, necessary documents are enclosed (Annexure – I to VI). For removal of doubts, it is clarified that the contents of this Consultation Paper may not be construed as any Order or Direction of the Authority. The Authority shall pass an Order, in the matter, only after considering the submissions of the stakeholders in response hereto and by making such decision fully documented and explained in the Tariff Order in terms of the provisions of the Act.
- 16.1.2. The Authority welcomes written evidence-based feedback, comments and suggestions from stakeholders on the proposal made in Chapter 15 above latest by (06/10/2021).

**Secretary****Airports Economic Regulatory Authority of India****AERA Building, Administrative Complex, Safdarjung Airport,****New Delhi – 110003****Email: [secretary@aera.gov.in](mailto:secretary@aera.gov.in), [director-ps@aera.gov.in](mailto:director-ps@aera.gov.in), [gita.sahu@aera.gov.in](mailto:gita.sahu@aera.gov.in)****Tel: 011-24695043; Fax: 011-24695039****Chairperson**



## 17. LIST OF ANNEXURES

### 17.1. Annexure I: Annual tariff submitted by AAI for the Third Control Period

#### Existing tariffs and tariff proposal submitted by AAI

- 17.1.1. As part of the MYTP, AAI submitted a tariff card for all five years of the third control period. This tariff card has been reproduced in this annexure. The Authority examined AAI's MYTP, along with all regulatory building blocks. The Authority's examination has been discussed in this consultation paper in the previous chapters.
- 17.1.2. AAI has proposed the implementation date of tariff from 01 April 2021 and that a 4% growth rate per annum be used thereafter. The Authority proposes to continue the existing tariffs till 31 March 2022 and revise the landing and parking charges, and UDF charges from 01 April 2022.
- 17.1.3. The tariff card proposed for the Second Control Period has been reproduced here. This is based on tariff card proposed by AAI, revised with the changes proposed by the Authority. For the purpose of comparison, the existing aeronautical charges have been provided along with each charge.

#### **Landing Charges**

**Table 113: Landing charges (domestic) for Third Control Period submitted by AAI**

Weight of the Aircraft	Existing Rate Per Landing (in Rs.)	Proposed Rate per Landing by AAI (in Rs.)
Up to 25 MT	Rs. 30 per MT	Rs. 439 per MT
Above 25 MT up to 50 MT	Rs. 750 plus Rs. 35 per MT in excess of 25 MT	Rs. 10,975 plus Rs. 510 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. 23,725 plus Rs. 581 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. 52,775 plus Rs. 653 per MT in excess of 100 MT
Above 200 MT	Rs. 8,125 plus Rs. 55 per MT in excess of 200 MT	Rs. 1,18,075 plus Rs. 796 per MT in excess of 200 MT

**Table 114: Landing charges (international) for Third Control Period submitted by AAI**

Weight of the Aircraft	Existing Rate Per Landing (in Rs.)	Proposed Rate per Landing by AAI (in Rs.)
Up to 25 MT	Rs. 60 per MT	Rs. 914 per MT
Above 25 MT up to 50 MT	Rs. 1,500 plus Rs. 65 per MT in excess of 25 MT	Rs. 22,850 plus Rs. 989 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. 47,575 plus Rs. 1150 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. 1,05,075 plus Rs. 1376 per MT in excess of 100 MT
Above 200 MT	Rs. 15,875 plus Rs. 100 per MT in excess of 200 MT	Rs. 2,42,675 plus Rs. 1527 per MT in excess of 200 MT

- i. 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 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.

#### **Parking Charges:**

**Table 115: Parking charges up to two hours after first two free hours for Third Control Period submitted by AAI**

Weight of the Aircraft	Existing parking charges (in INR)	Parking charges proposed by AAI (In INR)
Up to 100 MT	Rs. 1.2 per MT per hour	Rs. 15.8 per MT per hour
Above 100 MT	Rs. 120 plus Rs. 1.6 per MT per hour in excess of 100 MT	Rs. 1,580 plus Rs. 21.1 per MT in excess of 100 MT

\* Housing charges are proposed to be categorised as parking charges

**Table 116: Parking charges beyond first four hours for Third Control Period submitted by AAI**

Weight of the Aircraft	Existing parking charges (in INR)	Parking charges proposed by AAI (In INR)
Up to 100 MT	Rs. 2.3 per MT per hour	Rs. 30.4 per MT per hour
Above 100 MT	Rs. 230 plus Rs. 3.1 per MT per hour in excess of 100 MT	Rs. 3,040 plus Rs. 40.9 per MT 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  $\leq 5\%$ . The above waiver of night parking charges (between 2200 hrs. to 0600 hrs) will be made applicable from the date of implementation of  $\leq 5\%$  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.

### **Fuel Throughput Charges**

17.1.4. The Ministry of Civil Aviation has discontinued the levy of Fuel Throughput Charges (FTC) from all airports w.e.f. 15th January 2020 vide MoCA letter no. F.No. AV-13030/216/2016-ER (Pt.2) dated 8th January 2020.

### **User Development Fees**

**Table 117: User Development Fees for the Third Control Period submitted by AAI**

Passenger	Existing UDF	Proposed by AAI (FY 2021-22)
Domestic	69	630
International	69	1,350

### **Notes:**

#### **17.1.5. UDF Collection:**

- a) UDF Collection Charges: If payment is made in accordance with period prescribed under credit policy of AAI, then collection charges at Rs. 5.00 per departing passenger shall be paid by AAI. No collection charges shall be paid in case the airline fails to pay the UDF invoice to AAI within the prescribed credit period or in case of part payment. To be eligible to claim this collection charges, the airlines should have no overdue on any account with AAI.
- 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 15<sup>th</sup> of the month for tickets issued in the 2nd fortnight shall be adopted.
- d) Revised UDF charges will be applicable on tickets issued on or after 1 April 2021.
- e) No UDF will be levied for transit passengers.

17.1.6. **Aviation Security Fee (ASF)**: Will continue to be charged as rate prescribed by MoCA.

#### **17.1.7. 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.

**17.1.8. 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.

## 17.2. Annexure II: Annual Tariff proposed by the Authority for Consultation Process

17.2.1. The Authority has examined the Annual Tariff Proposal submitted by Airports Authority of India. After examination as given in Chapter 14.2, the Authority has proposed the following aeronautical tariffs for Chennai International Airport for the Third Control Period for consultation process:

**Table 118: Landing charges (domestic) for Third Control Period proposed to be considered by the Authority**

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026
	Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025
Up to 25 MT	Rs. 30 per MT	Rs. 87 per MT	Rs. 125 per MT	Rs. 146 per MT	Rs. 171 per MT
Above 25 MT up to 50 MT	Rs. 750 plus Rs. 35 per MT in excess of 25 MT	Rs. 2,175 plus Rs. 102 per MT in excess of 25 MT	Rs. 3,115 plus Rs. 145 per MT in excess of 25 MT	Rs. 3,653 plus Rs. 170 per MT in excess of 25 MT	Rs. 4,284 plus Rs. 200 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. 4,713 plus Rs. 116 per MT in excess of 50 MT	Rs. 6,748 plus Rs. 166 per MT in excess of 50 MT	Rs. 7,914 plus Rs. 195 per MT in excess of 50 MT	Rs. 9,281 plus Rs. 228 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. 10,513 plus Rs. 131 per MT in excess of 100 MT	Rs. 15,054 plus Rs. 187 per MT in excess of 100 MT	Rs. 17,654 plus Rs. 219 per MT in excess of 100 MT	Rs. 20,704 plus Rs. 257 per MT in excess of 100 MT
Above 200 MT	Rs. 8,125 plus Rs. 55 per MT in excess of 200 MT	Rs. 23,564 plus Rs. 160 per MT in excess of 200 MT	Rs. 33,741 plus Rs. 228 per MT in excess of 200 MT	Rs. 39,570 plus Rs. 268 per MT in excess of 200 MT	Rs. 46,405 plus Rs. 314 per MT in excess of 200 MT

**Table 119: Landing charges (international) for Third Control Period proposed to be considered by the Authority**

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026
	Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025
Up to 25 MT	Rs. 60 per MT	Rs. 174 per MT	Rs. 249 per MT	Rs. 292 per MT	Rs. 343 per MT
Above 25 MT up to 50 MT	Rs. 1,500 plus Rs. 65 per MT in excess of 25 MT	Rs. 4,350 plus Rs. 189 per MT in excess of 25 MT	Rs. 6,229 plus Rs. 270 per MT in excess of 25 MT	Rs. 7,305 plus Rs. 317 per MT in excess of 25 MT	Rs. 8,567 plus Rs. 371 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. 9,063 plus Rs. 218 per MT in excess of 50 MT	Rs. 12,977 plus Rs. 311 per MT in excess of 50 MT	Rs. 15,219 plus Rs. 365 per MT in excess of 50 MT	Rs. 17,848 plus Rs. 428 per MT in excess of 50 MT
Above 100 MT to 200 MT	Rs. 6,875	Rs. 19,939	Rs. 28,550	Rs. 33,482	Rs. 39,266

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026
	<b>Tariff w.e.f. 01.10.2021</b>	<b>Tariff w.e.f. 01.04.2022</b>	<b>Tariff w.e.f. 01.04.2023</b>	<b>Tariff w.e.f. 01.04.2024</b>	<b>Tariff w.e.f. 01.04.2025</b>
	plus Rs. 90 per MT in excess of 100 MT	plus Rs. 261 per MT in excess of 100 MT	plus Rs. 374 per MT in excess of 100 MT	plus Rs. 438 per MT in excess of 100 MT	plus Rs. 514 per MT in excess of 100 MT
Above 200 MT	Rs. 15,875 plus Rs. 100 per MT in excess of 200 MT	Rs. 46,041 plus Rs. 290 per MT in excess of 200 MT	Rs. 65,925 plus Rs. 415 per MT in excess of 200 MT	Rs. 77,313 plus Rs. 487 per MT in excess of 200 MT	Rs. 90,669 plus Rs. 571 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 120: Parking charges up to two hours after free hours for the Third Control Period proposed to be considered by the Authority\***

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026
	<b>Tariff w.e.f. 01.10.2021</b>	<b>Tariff w.e.f. 01.04.2022</b>	<b>Tariff w.e.f. 01.04.2023</b>	<b>Tariff w.e.f. 01.04.2024</b>	<b>Tariff w.e.f. 01.04.2025</b>
Up to 100 MT	Rs. 1.2 per MT per hour	Rs. 3.5 per MT per hour	Rs. 5.0 per MT per hour	Rs. 5.8 per MT per hour	Rs. 6.9 per MT per hour
Above 100 MT	Rs. 120 plus Rs. 1.6 per MT per hour in excess of 100 MT	Rs. 350 plus Rs. 4.6 per MT per hour in excess of 100 MT	Rs. 500 plus Rs. 6.6 per MT per hour in excess of 100 MT	Rs. 580 plus Rs. 7.8 per MT per hour in excess of 100 MT	Rs. 690 plus Rs. 9.1 per MT per hour in excess of 100 MT

\*Housing charges subsumed within parking charges

**Table 121: Parking charges beyond first four hours for the Third Control Period proposed to be considered by the Authority**

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026
	<b>Tariff w.e.f. 01.10.2021</b>	<b>Tariff w.e.f. 01.04.2022</b>	<b>Tariff w.e.f. 01.04.2023</b>	<b>Tariff w.e.f. 01.04.2024</b>	<b>Tariff w.e.f. 01.04.2025</b>
Up to 100 MT	Rs. 2.3 per MT per hour	Rs. 6.7 per MT per hour	Rs. 9.6 per MT per hour	Rs. 11.2 per MT per hour	Rs. 13.1 per MT per hour

Weight of the Aircraft	FY 2022 (existing rate)	FY 2023	FY 2024	FY 2025	FY 2026
Above 100 MT	Rs. 230 plus Rs. 3.1 per MT per hour in excess of 100 MT	Rs. 670 plus Rs. 9.0 per MT per hour in excess of 100 MT	Rs. 960 plus Rs. 12.9 per MT per hour in excess of 100 MT	Rs. 1,120 plus Rs. 15.1 per MT per hour in excess of 100 MT	Rs. 1,310 plus Rs. 17.7 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.

### **Fuel Throughput Charges**

- 17.2.2. The Ministry of Civil Aviation has discontinued the levy of Fuel Throughput Charges (FTC) from all airports w.e.f. 15th January 2020 vide MoCA letter no. F.No. AV-13030/216/2016-ER (Pt.2) dated 8th January 2020. Accordingly, the Authority has not proposed any Fuel Throughput Charges

### User Development Fees

**Table 122: User Development Fees proposed to be considered for the Third Control Period by the Authority**

Passenger	2021-22 (existing UDF)	UDF proposed by the Authority			
		2022-23	2023-24	2024-25	2025-26
	Tariff w.e.f. 01.10.2021	Tariff w.e.f. 01.04.2022	Tariff w.e.f. 01.04.2023	Tariff w.e.f. 01.04.2024	Tariff w.e.f. 01.04.2025
Domestic	69	190	270	350	400
International	69	275	400	540	600

#### Notes:

##### 17.2.3. UDF Collection:

- 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.
- No collection charges are payable to casual operator/non-scheduled operators.
- 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 15<sup>th</sup> of the month for tickets issued in the 2nd fortnight shall be adopted.
- No UDF will be levied for Transit Passengers.

**17.2.4. Aviation Security Fee (ASF):** Will continue to be charged as rate prescribed by MoCA from time to time.

##### 17.2.5. 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.

- Children (under the age of 2 years),
- Holders of Diplomatic Passport,
- 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),
- Persons travelling on official duty on aircraft operated by Indian Armed Forces,
- Persons traveling on official duty for United Nations Peace Keeping Missions.
- 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").
- Passengers departing from the Indian airports due to involuntary re-routing i.e. technical problems or weather conditions.



**17.2.6. 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.

### 17.3. Annexure III: 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 123: Capital additions approved by the Authority in Second Control Period and capitalised in Second Control Period**

Project Name	Year	As per SCP Order	As per Actuals	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

Project Name	Year	As per SCP Order	As per Actuals	Difference	Remarks
Re-construction of Taxiway "H" (Phase-I)	2017-18	7.00	4.11	7.89	Actual Cost
Re-construction of T/w "H" (Phase-II)	2017-18	5.00			
Other Works (below Rs. 5 Cr.)	-	76.21	73.71	(2.50)	-
<b>Total</b>		<b>243.73</b>	<b>183.13</b>	<b>60.60</b>	-

**B. Capital Additions approved in the Second Control Period Order but deferred to the Third Control Period****Table 124: Capital additions approved by the Authority in Second Control Period but deferred to Third Control Period**

Project Name	Year	As per SCP Order	Proposed by AAI in TCP	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		

Project Name	Year	As per SCP Order	Proposed by AAI in TCP	Reasons for Change in cost
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' ( <u>Work renamed as:</u> Construction of balance portion of link taxiway's 'N1' and 'F'.)	2017-18	4.00	29.94	Scope of work has been changed wherein construction of fillet at Taxiway 'F' is only a part of this project. Hence, there is an increase in cost.
<b>Total</b>		<b>1,110.06</b>	<b>1,928.48</b>	

### C. Capital Additions approved in the Second Control Period Order but dropped

**Table 125: 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	-

Project Name	Year	As per SCP Order	Reasons for dropping
Other minor capex works (below 1 Cr.)		2.40	
<b>Total</b>		<b>72.60</b>	

**D. Capital additions incurred in the Second Control Period but not approved in the Second Control Period Order****Table 126: Capital additions not mentioned in Second Control Period submission but claimed by AAI in true-up**

S No	Asset description	Amount	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).



S No	Asset description	Amount	Justification
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.
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).

S No	Asset description	Amount	Justification
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.
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 carrouseles 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

S No	Asset description	Amount	Justification
			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.
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	<b>Total</b>	<b>268.08</b>	

**E. Capital additions completed in the First Control Period but put to use in the Second Control Period****Table 127: Assets allocated to Chennai International Airport in 2017-18**

S No.	Asset Description	Amount
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

S No.	Asset Description	Amount
	Total	51.64

**17.4. Annexure IV: Capital expenditure proposed to be considered by the Authority for the Third Control Period due to inclusion of CWIP**

Detailed difference between capex submitted by AAI and proposed to be considered by the Authority in FY22 due to inclusion of opening balance of CWIP in capital expenditure:

**Table 128: Difference between capital expenditure submitted by AAI and proposed to be considered by the Authority in FY22 due to inclusion of CWIP in capital expenditure**

S.N.	Asset Head	Asset Description	Capex submitted by AAI (Rs. Cr.)	Capex proposed to be considered by Authority (Rs. Cr.)	Difference
1	Runways, taxiways, and aprons	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 and associated works at Chennai Airport, Chennai.	32.77	1.52	31.25
2	Runways, taxiways, and aprons	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.	10.00	1.28	8.72
3	Runways, taxiways, and aprons	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 Resurfacing of Secondary Runway 12-30 at Chennai Airport, Chennai.	44.00	8.13	35.87
4	Runways, taxiways, and aprons	Construction of 'R' Taxi track up to Runway 07/25 - Civil - C/o 'R' Taxitrack left out portion connecting Rwy 12-30 - Construction of 'R' Taxi track up to Runway 07/25 – Electrical	58.96	7.55	51.41
5	Runways, taxiways, and aprons	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	76.25	69.64	6.61

S.N.	Asset Head	Asset Description	Capex submitted by AAI (Rs. Cr.)	Capex proposed to be considered by Authority (Rs. Cr.)	Difference
		distance of 1908m from the threshold of R/w 25			
6	Roads, bridges, and culverts	MLCP Link Bridge	2.48	2.00	0.48
7	Terminal / Other Buildings	Modernization of Chennai International Airport, Phase II (NITB Part – 1) - Incl. AS, IT MEP & Civil (Excl. Interior), Furnitures	601.67	156.38	445.29
8	Electrical Installations	Miscellaneous electrical installations for NITB Part - 1	187.79	187.47	0.32
9	Roads, bridges, and culverts	Passenger Boarding Bridge & Visual Docking Guidance system Part 1	44.31	39.45	4.86
<b>Total</b>			<b>1,058.23</b>	<b>473.42</b>	<b>584.81</b>

## 17.5. Annexure V: 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

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 - 1<sup>st</sup> and 2<sup>nd</sup> 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

## **17.6. Annexure VI: 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/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.
- 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/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.
- 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/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.

### 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 129: Efficient O&M expenses for the Second Control Period as per the study**

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Payroll costs – CHQ/RHQ	4.13	18.67	34.07	27.39	27.41	<b>111.67</b>
Payroll costs – non CHQ/RHQ	118.12	120.12	129.60	139.42	139.42	<b>646.68</b>
Payroll costs (A)	122.25	138.79	163.67	166.81	166.83	<b>758.35</b>

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Repair and maintenance (B)	92.49	101.02	72.44	72.66	72.76	<b>411.36</b>
Utilities & outsourcing expenses (C)	88.49	89.25	84.51	82.15	82.15	<b>426.54</b>
Admin and general expenses – non CHQ/RHQ	4.52	5.71	10.23	15.13	14.97	<b>50.56</b>
Apportionment of Admin Expenses for CHQ/RHQ	26.30	21.70	22.80	23.90	25.10	<b>119.80</b>
Admin & Other expenses (D)	30.82	27.41	33.03	39.03	40.07	<b>170.36</b>
Other Outflows (E)	12.12	15.13	15.04	13.26	10.80	<b>66.36</b>
Working capital loan interest	-	-	-	-	0.30	<b>0.30</b>
<b>Total O&amp;M Expenses</b>	<b>346.17</b>	<b>371.60</b>	<b>368.68</b>	<b>373.91</b>	<b>372.61</b>	<b>1,832.98</b>

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.

## 18. APPENDICES

Appendix I: AAI's letter dated 18 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

18<sup>th</sup> 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 30<sup>th</sup> 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 2<sup>nd</sup> control period although there was no change in the policy of MOCA from 1<sup>st</sup> control period to 2<sup>nd</sup> control period.
- c) AAI has been levying Landing charges on International flights operated by less than 80 seater aircrafts in the 1<sup>st</sup> and 2<sup>nd</sup> 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 1<sup>st</sup> Control Period, then it will be incumbent upon AERA to compensate AAI in the 3<sup>rd</sup> 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

सफ़दरजंग हवाई अड्डा नई दिल्ली-110003  
Safdarjung Airport, New Delhi-110003

दूरभाष : 24632950  
Phone : 24632950

Appendix II - SpiceJet's Letter dated 19 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



Registered Office: Indira Gandhi International Airport, Terminal 1D, New Delhi – 110037, India. Website : [www.spicejet.com](http://www.spicejet.com)  
 CIN: L51909DL1984PLC288239





**SpiceJet Limited**  
 319 Udyog Vihar, Phase-IV,  
 Gurugram 122016, Haryana, India.  
 Tel: + 91 124 3913939  
 Fax: + 91 124 3913844

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

Page 2 of 5



Registered Office: Indra Gandhi International Airport, Terminal 1D, New Delhi – 110037, India. Website : [www.spicejet.com](http://www.spicejet.com)  
 CIN: L51909DL1984PLC288239





**SpiceJet Limited**  
319 Udyog Vihar, Phase-IV,  
Gurgaon 122016, Haryana, India.  
Tel: + 91 124 3913939  
Fax: + 91 124 3913844

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
<b>Total</b>			<b>32,29,99,437</b>

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).

Page 3 of 5



Registered Office: Indira Gandhi International Airport, Terminal 1D, New Delhi – 110037, India. Website : [www.spicejet.com](http://www.spicejet.com)  
CIN: L51909DL1984PLC288239



**SpiceJet Limited**  
 319 Udyog Vihar, Phase-IV,  
 Gurugram 122016, Haryana, India.  
 Tel: + 91 124 3913939  
 Fax: + 91 124 3913844

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.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 of Rs.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.

Page 4 of 5



Registered Office: Indira Gandhi International Airport, Terminal 1D, New Delhi – 110037, India. Website : [www.spicejet.com](http://www.spicejet.com)  
 CIN: L51909DL1984PLC288239



**SpiceJet Limited**  
 319 Udyog Vihar, Phase-IV,  
 Gurugram 122016, Haryana, India.  
 Tel: + 91 124 3913939  
 Fax: + 91 124 3913844

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

  
 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.

Page 5 of 5

Registered Office: Indira Gandhi International Airport, Terminal 1D, New Delhi – 110037, India. Website : [www.spicejet.com](http://www.spicejet.com)  
 CIN: L51909DL1984PLC288239



**Appendix - III**

*Study of Operations and Maintenance  
Expenses*

of

Chennai International Airport  
(Second Control Period: 2016-21)

August 2021



## TABLE OF CONTENTS

<b>LIST OF TABLES AND FIGURES .....</b>	<b>3</b>
<b>1. OBJECTIVE OF THIS STUDY .....</b>	<b>4</b>
1.1. Introduction.....	4
<b>2. WORK PERFORMED.....</b>	<b>6</b>
2.1. Terms of Reference .....	6
2.2. Methodology .....	6
<b>3. OPERATION AND MAINTENANCE EXPENSES PROPOSED BY CHENNAI INTERNATIONAL AIRPORT FOR THE SECOND CONTROL PERIOD .....</b>	<b>9</b>
3.1. Analysis of approved O&M expenses and O&M expenses submitted by AAI .....	9
3.2. Analysis .....	10
<b>4. HISTORICAL BENCHMARKING AND TREND ANALYSIS.....</b>	<b>11</b>
4.1. Trend Analysis of O&M Expenses of First and Second Control Period .....	11
4.2. Summary.....	11
4.3. Analysis of O&M expenses in the Second Control Period .....	13
4.4. AAI's estimation of O&M expenses for FY 2020-21 .....	20
4.5. Analysis of apportionment of AAI's CHQ/RHQ expenses to Chennai International Airport .....	20
4.6. Summary of conclusions.....	22
<b>5. ALLOCATION OF O&amp;M EXPENSES ACROSS AERO AND NON-AERO .....</b>	<b>23</b>
5.1. Introduction to segregation of expenses .....	23
5.2. Examination of segregation and allocation by AAI .....	23
5.3. Conclusion .....	25
<b>6. OVERALL SUMMARY OF THE STUDY .....</b>	<b>26</b>
6.1. Operation and Maintenance Expenses proposed by Chennai International Airport for the Second Control Period.....	26
6.2. Historical benchmarking and trend analysis .....	26
6.3. Allocation of O&M expenses across aero and non-aero.....	27
6.4. Conclusion .....	27

## LIST OF TABLES AND FIGURES

Table 1: O&M expenses approved by the Authority in the Second Control Period .....	9
Table 2: O&M expenses submitted by AAI in the Second Control Period .....	9
Table 3: Comparison between CAGR of First and Second Control Period.....	11
Table 4: Comparison of O&M per PAX and per ATM between FY 2016-17 and FY 2019-20.....	13
Table 5: Comparison between payroll costs approved by the Authority and submitted by AAI.....	14
Table 6: Comparison between administrative and general expenses approved by the Authority and submitted by AAI .....	16
Table 7: Comparison between repair and maintenance expenses approved by the Authority and submitted by AAI .....	17
Table 8: R&M analysis vis-à-vis opening gross block.....	18
Table 9: Comparison between utilities and outsourcing expenses approved by the Authority and submitted by AAI .....	19
Table 10: Comparison between other outflows approved by the Authority and submitted by AAI .....	20
Table 11: Comparison of approved payroll costs - CHQ/RHQ of Chennai and Kolkata Airports .....	21
Table 12: Analysis of payroll costs - CHQ/RHQ.....	21
Table 13: Analysis of admin and general expenses - CHQ/RHQ .....	21
Table 14: General principles of O&M expense categorization.....	23
Table 15: Principles of classification and allocation used by AAI.....	23
Table 16: Allocation ratios of common expenses as submitted by AAI.....	25
Table 17: Summary of allocation ratios submitted by AAI for the Second Control Period .....	25
Table 18: Allocation ratios approved by the Authority for the Second Control Period .....	25
Table 19: Efficient O&M expenses for the Second Control Period as per the study .....	27
Figure 1: Approach for this study.....	6
Figure 2: CAGR of O&M expenses (FCP and SCP).....	12
Figure 3: O&M expenses per PAX .....	12
Figure 4: O&M expenses per ATM.....	13
Figure 5: Payroll costs in the Second Control Period.....	14
Figure 6: Administrative and general expenses in the Second Control Period .....	15
Figure 7: R&M expenses in the Second Control Period.....	17
Figure 8: Utility expenses in the Second Control Period.....	18
Figure 9: Other Outflows in the Second Control Period.....	19

# 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

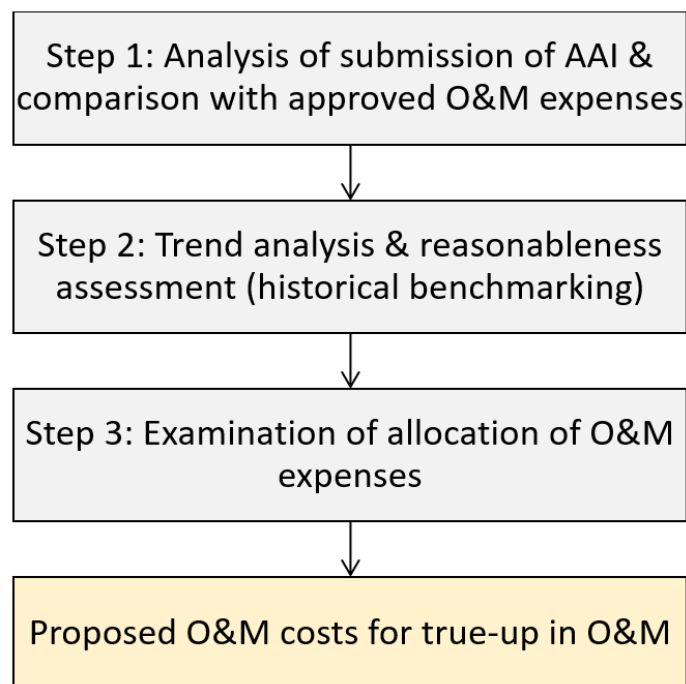
AERA has outlined the scope of work for a study on efficient O&M expenses and segregation of O&M expenses between aeronautical and non-aeronautical in clauses 3.1 (v) and 3.1 (vi) of Schedule 1 of its RFP No. 02/2020-21 for engagement of consultants to assist AERA in determination of tariffs for aeronautical 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**

<b>FY ending March 31 (Rs. Cr)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Payroll costs - non CHQ/RHQ	127.50	153.70	161.40	169.50	178.00	<b>790.10</b>
Payroll costs - CHQ/RHQ	21.30	26.00	27.20	28.60	30.00	<b>133.10</b>
Admin and general expenses - non CHQ/RHQ	4.44	4.27	4.70	5.17	5.69	<b>24.27</b>
Admin and general expenses - CHQ/RHQ	26.26	21.68	22.76	23.90	25.09	<b>119.69</b>
R&M expenses	87.90	82.40	89.70	97.00	105.30	<b>462.30</b>
Utilities and outsourcing expenses	95.30	85.30	86.70	88.30	90.10	<b>445.70</b>
Other outflows	13.60	12.20	12.80	13.40	14.10	<b>66.10</b>
<b>Total operating expenditure</b>	<b>376.29</b>	<b>385.55</b>	<b>405.26</b>	<b>425.87</b>	<b>448.28</b>	<b>2,041.26</b>

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**

<b>FY ending March 31 (Rs. Cr)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Number of employees	778	758	739	665	659	
Payroll costs - non CHQ/RHQ	118.11	120.09	129.58	139.41	149.16	<b>656.35</b>
Payroll costs - CHQ/RHQ	4.13	18.67	34.07	27.39	29.32	<b>113.59</b>
Admin and general expenses - non CHQ/RHQ	25.27	10.29	10.26	15.90	17.31	<b>79.04</b>
Admin and general expenses - CHQ/RHQ	84.69	62.63	37.41	50.74	53.28	<b>288.75</b>
R&M expenses	92.81	101.10	73.14	73.54	81.00	<b>421.59</b>
Utilities and outsourcing expenses	88.49	89.27	84.93	82.58	86.03	<b>431.30</b>
Other outflows	21.17	18.34	21.50	19.74	18.23	<b>98.97</b>
<b>Total operating expenditure</b>	<b>434.68</b>	<b>420.41</b>	<b>390.89</b>	<b>409.29</b>	<b>434.34</b>	<b>2,089.60</b>

### **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
<b>Total operating expenditure</b>	<b>256.50</b>	<b>285.40</b>	<b>282.30</b>	<b>350.40</b>	<b>359.40</b>	<b>8.80%</b>	<b>434.68</b>	<b>420.41</b>	<b>390.89</b>	<b>409.29</b>	<b>3.30%</b>	<b>434.34</b>

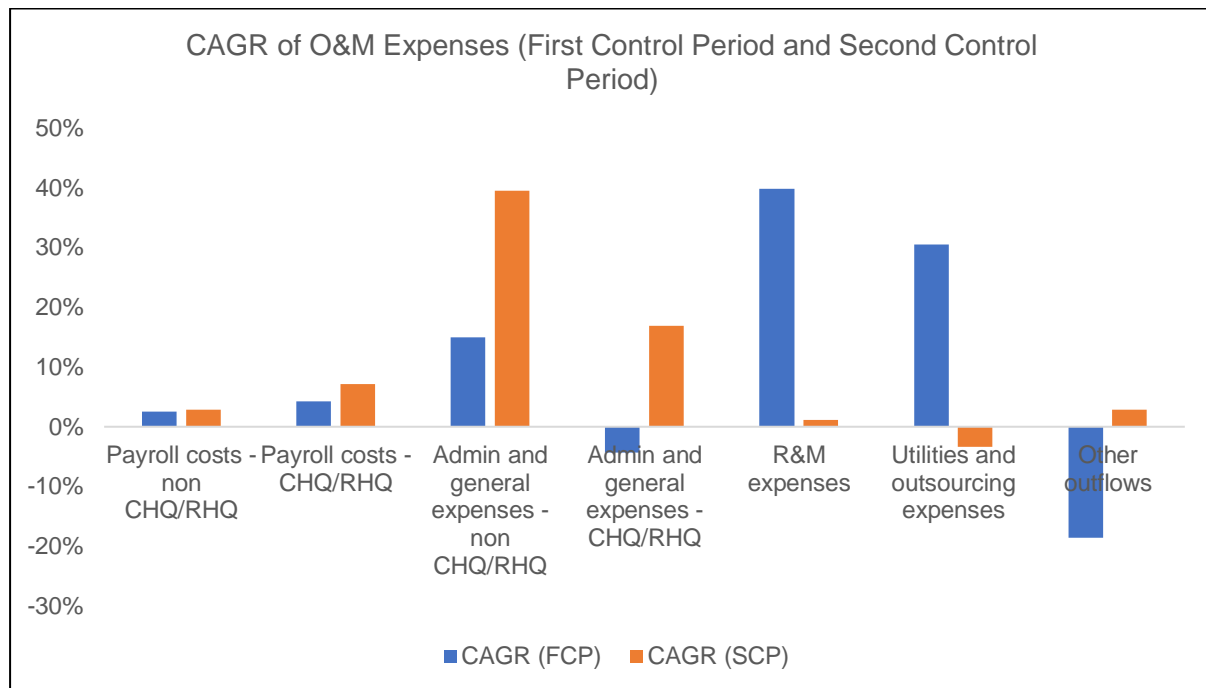
### 4.2. Summary

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.

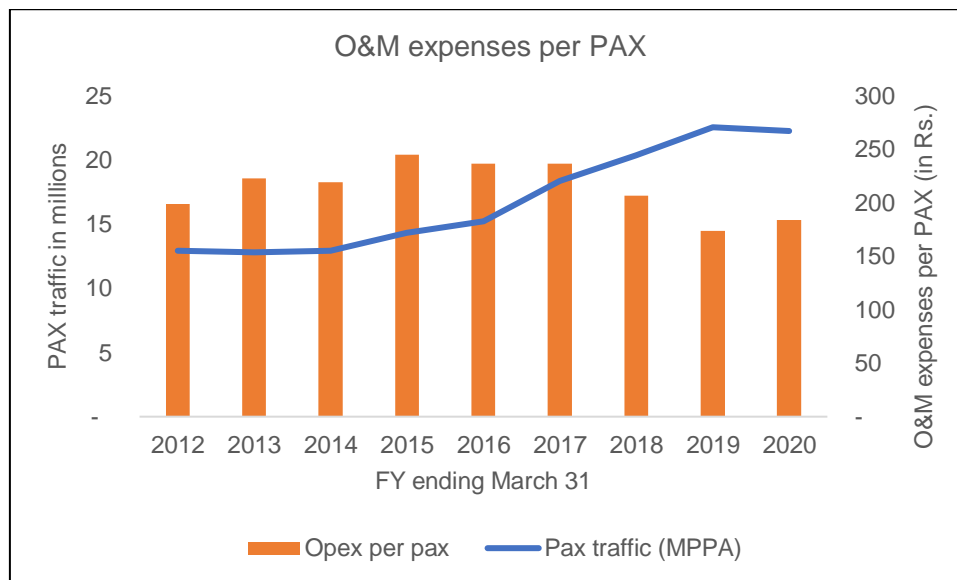
4.2.3. The following graph illustrates the difference between the CAGR during both these periods across various expense heads:

**Figure 2: CAGR of O&M expenses (FCP and SCP)**



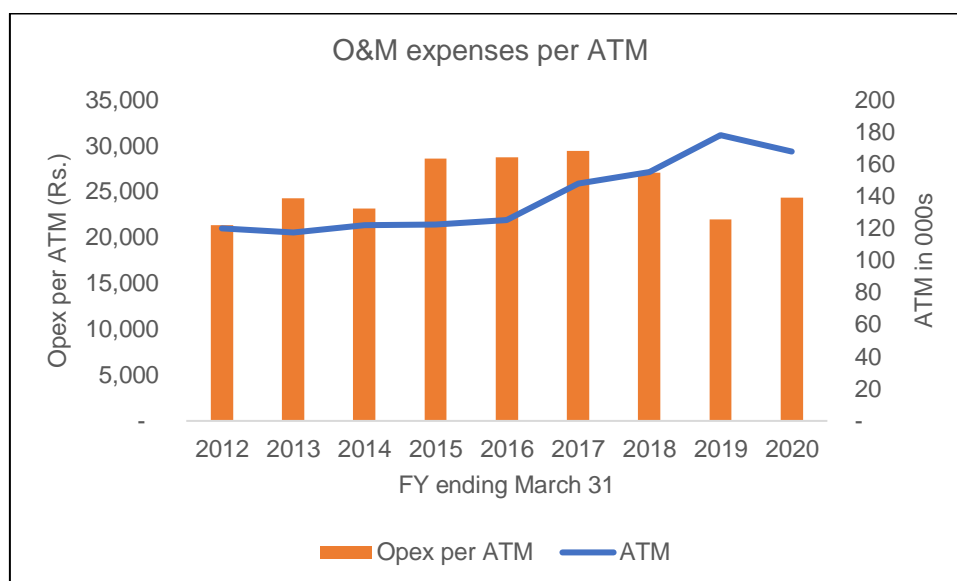
4.2.4. The following graph compares the O&M expenses per PAX in the First Control Period and the Second Control Period with the passenger traffic:

**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.

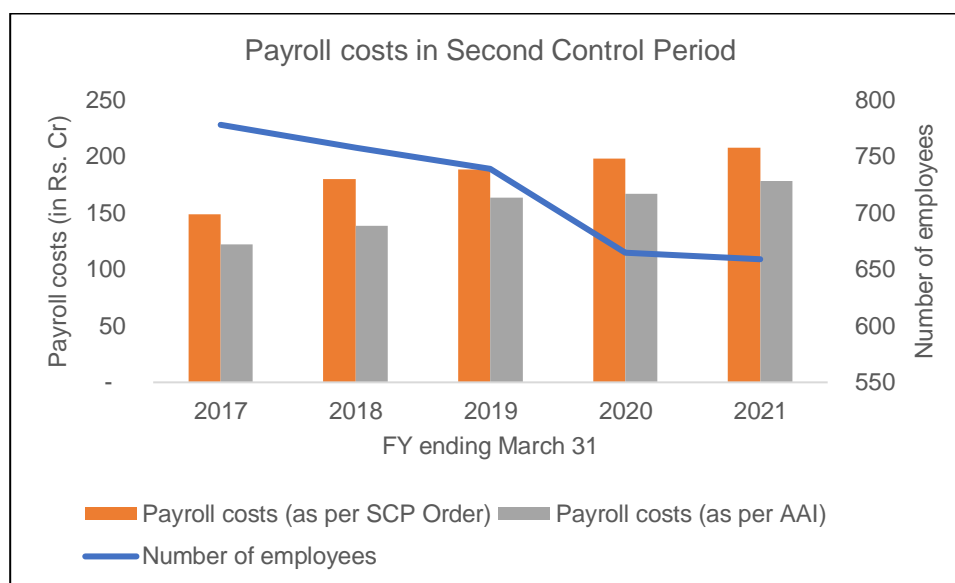
**Table 4: Comparison of O&M per PAX and per ATM between FY 2016-17 and FY 2019-20**

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**

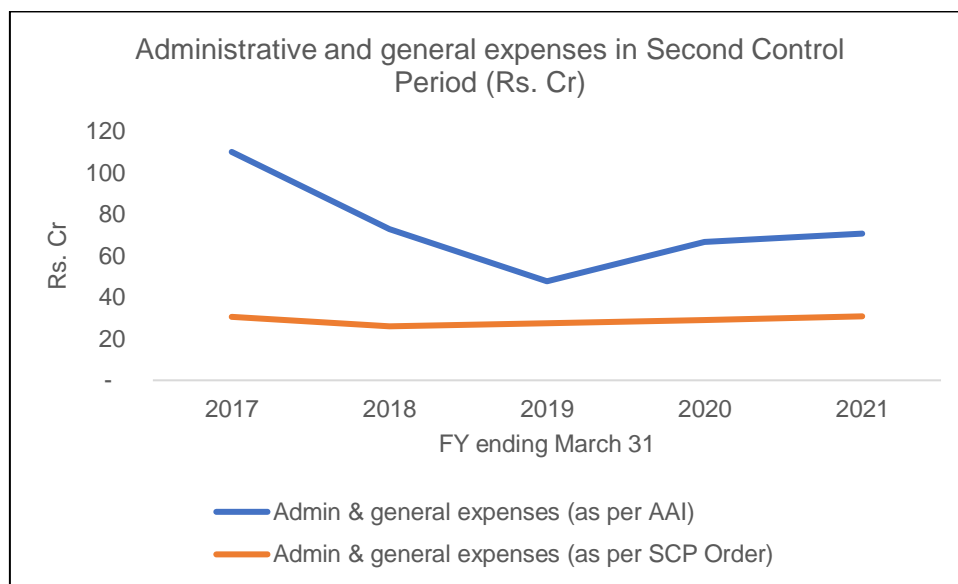
	Approved in SCP Order						Submission by AAI					
FY ending March 31	2017	2018	2019	2020	2021	Total	2017	2018	2019	2020	2021	Total
Salaries and wages	102.42	122.50	128.62	135.05	141.81	<b>630.40</b>	70.59	65.95	74.61	75.55	80.84	<b>367.54</b>
PF expenses	4.39	5.14	5.39	5.66	5.94	<b>26.52</b>	7.51	7.25	8.94	8.25	8.83	<b>40.77</b>
Medical expenses	10.31	13.34	14.01	14.71	15.45	<b>67.83</b>	11.26	11.86	11.89	12.47	13.34	<b>60.82</b>
Overtime	6.83	8.61	9.04	9.49	9.97	<b>43.94</b>	6.11	5.65	4.62	7.48	8.00	<b>31.86</b>
Other staff benefits (net of staff recoveries)	3.58	4.43	4.65	4.89	5.13	<b>22.69</b>	22.85	29.62	29.79	35.95	38.46	<b>156.67</b>
Less: Common expenses for Cargo and ANS employees	-	(0.28)	(0.30)	(0.31)	(0.33)	<b>(1.22)</b>	(0.21)	(0.24)	(0.28)	(0.28)	(0.30)	<b>(1.31)</b>
<b>Payroll costs - non CHQ/RHQ</b>	<b>127.50</b>	<b>153.70</b>	<b>161.40</b>	<b>169.50</b>	<b>178.00</b>	<b>790.10</b>	<b>118.11</b>	<b>120.09</b>	<b>129.58</b>	<b>139.41</b>	<b>149.16</b>	<b>656.35</b>
<b>Payroll costs - CHQ/RHQ</b>	<b>21.30</b>	<b>26.00</b>	<b>27.20</b>	<b>28.60</b>	<b>30.00</b>	<b>133.10</b>	<b>4.13</b>	<b>18.67</b>	<b>34.07</b>	<b>27.39</b>	<b>29.32</b>	<b>113.59</b>
<b>Total payroll costs</b>	<b>148.80</b>	<b>179.70</b>	<b>188.60</b>	<b>198.10</b>	<b>208.00</b>	<b>923.20</b>	<b>122.24</b>	<b>138.77</b>	<b>163.64</b>	<b>166.80</b>	<b>178.49</b>	<b>769.94</b>

- 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					
<b>FY ending March 31</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Rent and taxes	0.00	0.00	0.00	0.00	0.00	<b>0.01</b>	0.04	0.01	0.09	0.01	0.01	<b>0.15</b>
Communication	0.52	0.50	0.56	0.61	0.67	<b>2.86</b>	0.43	0.46	0.42	0.35	0.38	<b>2.03</b>
Travelling and conveyance	1.97	1.92	2.11	2.32	2.55	<b>10.86</b>	1.46	1.51	2.15	1.22	1.34	<b>7.68</b>
Advertisement	0.87	0.79	0.87	0.96	1.05	<b>4.54</b>	1.57	0.50	1.60	0.89	0.98	<b>5.55</b>
Office maintenance	0.11	0.12	0.13	0.14	0.16	<b>0.66</b>	0.52	0.35	0.45	0.53	0.59	<b>2.44</b>
Printing and stationery	0.44	0.43	0.47	0.52	0.57	<b>2.44</b>	0.41	0.43	0.53	0.33	0.36	<b>2.06</b>
Legal charges	0.13	0.15	0.16	0.18	0.19	<b>0.81</b>	0.20	0.05	0.27	0.23	0.25	<b>1.00</b>
Other professional charges	0.29	0.29	0.32	0.36	0.39	<b>1.65</b>	0.00	0.42	0.00	0.00	0.00	<b>0.42</b>
Insurance	0.06	0.02	0.02	0.02	0.03	<b>0.15</b>	0.12	0.08	0.11	0.09	0.10	<b>0.50</b>
Recruitment	0.05	0.05	0.05	0.05	0.06	<b>0.26</b>	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
Finance charges	0.01	0.01	0.01	0.01	0.01	<b>0.03</b>	20.75	4.58	0.00	0.75	0.82	<b>26.91</b>
CSR expenses	-	-	-	-	-	-	-	1.90	4.63	11.35	12.48	<b>30.36</b>
Project expenses (net)	-	-	-	-	-	-	(0.23)	-	-	0.16	-	<b>(0.07)</b>
<b>Administrative and general expenses – non CHQ/RHQ</b>	<b>4.44</b>	<b>4.27</b>	<b>4.70</b>	<b>5.17</b>	<b>5.69</b>	<b>24.27</b>	<b>25.27</b>	<b>10.29</b>	<b>10.26</b>	<b>15.90</b>	<b>17.31</b>	<b>79.04</b>
<b>Administrative and general expenses – CHQ/RHQ</b>	<b>26.26</b>	<b>21.68</b>	<b>22.76</b>	<b>23.90</b>	<b>25.09</b>	<b>119.69</b>	<b>84.69</b>	<b>62.63</b>	<b>37.41</b>	<b>50.74</b>	<b>53.28</b>	<b>288.75</b>
<b>Total Administrative and general expenses</b>	<b>30.69</b>	<b>25.95</b>	<b>27.46</b>	<b>29.07</b>	<b>30.78</b>	<b>143.96</b>	<b>109.97</b>	<b>72.93</b>	<b>47.67</b>	<b>66.64</b>	<b>70.59</b>	<b>367.79</b>

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.

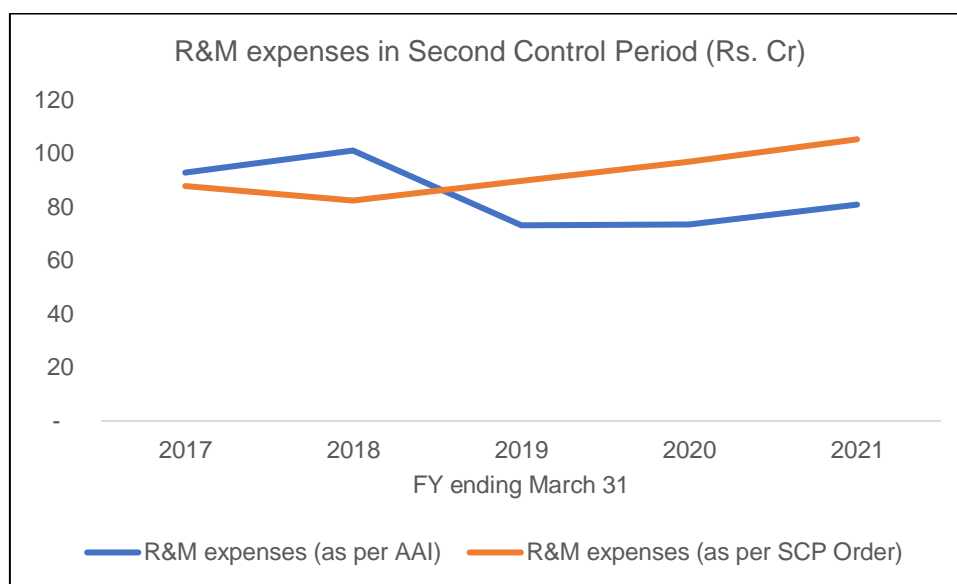
### Repair and maintenance expenses

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	130.35	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
<b>Total R&amp;M Expenses</b>	<b>87.94</b>	<b>82.41</b>	<b>89.74</b>	<b>97.03</b>	<b>105.28</b>	<b>462.40</b>	<b>92.81</b>	<b>101.10</b>	<b>73.14</b>	<b>73.54</b>	<b>81.00</b>	<b>421.59</b>

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**

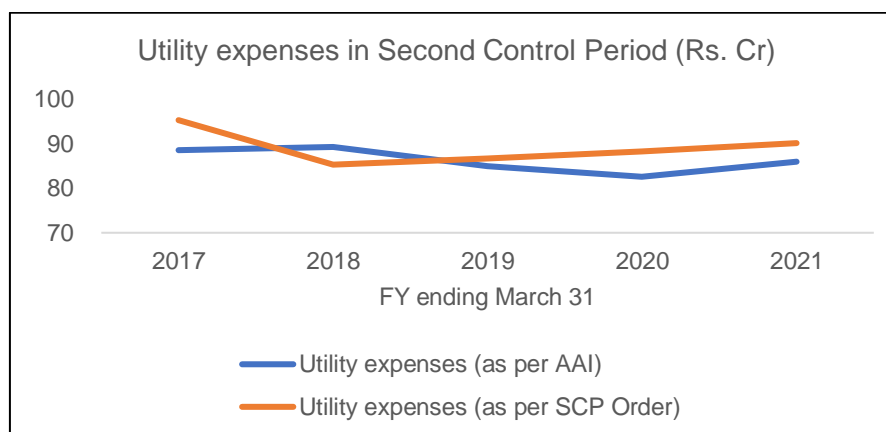
Parameter (Rs. Cr)	2016-17	2017-18	2018-19	2019-20	2020-21
R&M expenses	92.81	101.10	73.14	73.54	81.00
Opening gross block	1,875.25	2,307.41	2,366.59	2,536.05	2,716.91
R&AM expenses (% of opening gross block)	<b>4.95%</b>	<b>4.38%</b>	<b>3.09%</b>	<b>2.90%</b>	<b>2.98%</b>

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.

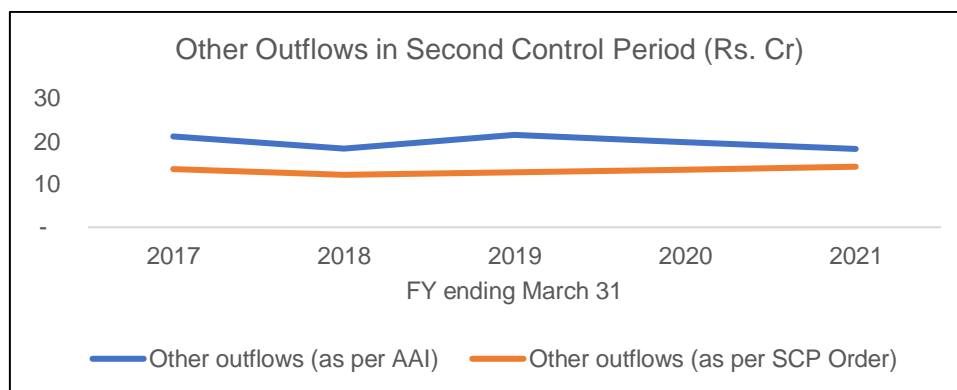
4.3.20. Within utilities and outsourcing expenses, there are significant differences between the approved and actuals for power charges and upkeep expenses. The fall in power expenses is because T-2 was demolished to start NITB Part – 1 construction. Further, upon analysis, it was found that the upkeep 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 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.<sup>1</sup> AAI apportions its CHQ/RHQ expenses to the various

<sup>1</sup> 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 out.

- 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**

<b>FY ending March 31 (Rs. Cr)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Chennai</b>						
Payroll costs - CHQ/RHQ	21.30	26.00	27.20	28.60	30.00	<b>133.10</b>
Admin and general expenses - CHQ/RHQ	26.26	21.68	22.76	23.90	25.09	<b>119.69</b>
<b>Total</b>	<b>47.56</b>	<b>47.68</b>	<b>49.96</b>	<b>52.50</b>	<b>55.09</b>	<b>252.79</b>
<b>Kolkata</b>						
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
<b>Total</b>	<b>41.80</b>	<b>45.00</b>	<b>47.90</b>	<b>50.70</b>	<b>53.90</b>	<b>239.30</b>

- 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**

<b>FY ending March 31 (Rs. Cr)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Payroll costs - CHQ/RHQ submitted by AAI	4.13	18.67	34.07	27.39	29.32	<b>113.59</b>
Payroll costs - CHQ/RHQ approved in SCP	21.30	26.00	27.20	28.60	30.00	<b>133.10</b>
<b>Payroll costs - CHQ/RHQ submitted by AAI (as % of approved)</b>	<b>19%</b>	<b>72%</b>	<b>125%</b>	<b>96%</b>	<b>98%</b>	<b>85%</b>

**Table 13: Analysis of admin and general expenses - CHQ/RHQ**

<b>FY ending March 31 (Rs. Cr)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Admin and general costs - CHQ/RHQ submitted by AAI	84.69	62.63	37.41	50.74	53.28	<b>288.75</b>
Admin and general - CHQ/RHQ approved in SCP	26.26	21.68	22.76	23.90	25.09	<b>119.69</b>
<b>Admin and general - CHQ/RHQ submitted by AAI (as % of approved)</b>	<b>323%</b>	<b>289%</b>	<b>164%</b>	<b>212%</b>	<b>212%</b>	<b>241%</b>

- 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	<ul style="list-style-type: none"> <li>- Salaries and wages (basic pay, dearness allowance, and house rent allowance)</li> <li>- Overtime expenses</li> <li>- Other staff benefits (employee perks, EL encashment etc.)</li> <li>- Medical expenditure</li> <li>- Provident fund contributions</li> <li>- Staff recoveries</li> <li>- Apportionment of CHQ/RHQ expenses</li> </ul>	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	<ul style="list-style-type: none"> <li>- Rent, rates, and taxes (rent on office building, import license, and taxes on vehicles)</li> <li>- Insurance (vehicle, and plant &amp; machinery insurance)</li> <li>- Advertising and publicity</li> <li>- Office expenses</li> <li>- Telephone charges</li> <li>- Printing and stationery</li> <li>- Travelling expenses</li> <li>- Financing charges (apportionment of interest on loan taken at central level)</li> <li>- Consultancy charges</li> <li>- Apportionment of admin (non-employee related overhead expenses) for CHQ/RHQ</li> </ul>	Common: <ul style="list-style-type: none"> <li>- TBLR was used for advertising</li> <li>- VEHR was used for insurance</li> <li>- EHCR was used for other expenses</li> <li>- 95% of CHQ/RHQ expenses was deemed aeronautical</li> </ul>
	<ul style="list-style-type: none"> <li>- Legal expenses</li> </ul>	Aeronautical
R&M Expenses	<ul style="list-style-type: none"> <li>- R&amp;M for civil works</li> <li>- R&amp;M for electrical works</li> <li>- R&amp;M for vehicles</li> <li>- R&amp;M for furniture and fixtures</li> <li>- R&amp;M for computers, IT, and hardware</li> </ul>	Common: <ul style="list-style-type: none"> <li>- TBLR was used for electrical works</li> <li>- VEHR was used for R&amp;M for vehicles</li> <li>- EHCR and EQTR was used for other R&amp;M expenses</li> </ul>
Utilities and outsourcing expenses	<ul style="list-style-type: none"> <li>- Power charges</li> <li>- Water charges</li> <li>- Upkeep expenses</li> </ul>	Common: <ul style="list-style-type: none"> <li>- TBLR was used for upkeep expenses</li> <li>- Electricity ratio was used for power and water charges</li> </ul>
	<ul style="list-style-type: none"> <li>- Watch and ward expenses</li> </ul>	Aeronautical
Other Outflows	<ul style="list-style-type: none"> <li>- Consumption of stores and spares</li> <li>- POL expenses</li> <li>- Other miscellaneous expenses</li> </ul>	Common: <ul style="list-style-type: none"> <li>- EHCR, and TBLR were used to allocate common expenses</li> </ul>
	<ul style="list-style-type: none"> <li>- Collection charges on UDF and PSF</li> <li>- Municipal taxes</li> <li>- Hire charges</li> </ul>	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**

<b>FY ending March 31 (in Rs. Cr.)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
Payroll costs – CHQ/RHQ	4.13	18.67	34.07	27.39	27.41	<b>111.67</b>
Payroll costs – non CHQ/RHQ	118.12	120.12	129.60	139.42	139.42	<b>646.68</b>
Payroll costs (A)	122.25	138.79	163.67	166.81	166.83	<b>758.35</b>
Repair and maintenance (B)	92.49	101.02	72.44	72.66	72.76	<b>411.36</b>
Utilities & outsourcing expenses (C)	88.49	89.25	84.51	82.15	82.15	<b>426.54</b>
Admin and general expenses – non CHQ/RHQ	4.52	5.71	10.23	15.13	14.97	<b>50.56</b>
Apportionment of Admin Expenses for CHQ/RHQ	26.30	21.70	22.80	23.90	25.10	<b>119.80</b>
Admin & Other expenses (D)	30.82	27.41	33.03	39.03	40.07	<b>170.36</b>
Other Outflows (E)	12.12	15.13	15.04	13.26	10.80	<b>66.36</b>
Working capital loan interest	-	-	-	-	0.30	<b>0.30</b>
<b>Total O&amp;M Expenses</b>	<b>346.17</b>	<b>371.60</b>	<b>368.68</b>	<b>373.91</b>	<b>372.61</b>	<b>1,832.98</b>

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.